

Improving Household Hazardous Waste Collection Options for East Central Illinois

Susan Monte

Champaign County Regional
Planning Commission

Bart Bartels

Deepika Sreedhar

Jayanthi Gopal

Illinois Sustainable Technology Center



Improving Household Hazardous Waste Collection Options for East Central Illinois

Susan Monte

Champaign County Regional Planning Commission

Bart Bartels

Deepika Sreedhar

Jayanthi Gopal

Illinois Sustainable Technology Center

June 2016

Submitted to the
Illinois Sustainable Technology Center
Prairie Research Institute
University of Illinois at Urbana-Champaign
www.istc.illinois.edu

The report is available on-line at:
http://www.istc.illinois.edu/info/library_docs/TR/TR063.pdf

Printed by the Authority of the State of Illinois
Bruce Rauner, Governor

This report is part of ISTC's Research Report Series. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

Acknowledgements

This research was funded in part by the Illinois Sustainable Technology Center (Grant No. HWR13229), a division of the Prairie Research Institute at the University of Illinois at Urbana-Champaign, and in part by The Lumpkin Family Foundation.

Disclaimer

This advisory report was produced under contract by the Champaign County Regional Planning Commission. The statements and conclusions contained in this report are those of the contractor and not necessarily those of the Illinois Sustainable Technology Center or The Lumpkin Family Foundation. The report should not be cited or quoted as official policy or direction.

The Champaign County Regional Planning Commission makes no warranty, expressed or implied, and assumes no liability for the information contained in the succeeding text. Any mention of commercial products or processes shall not be construed as an endorsement of such products or processes.

Table of Contents

Acknowledgements.....	iii
List of Tables	v
List of Figures	vi
List of Abbreviations	viii
Abstract	iix
1. Introduction and Study Area Description	1
2. Definitions and Regulations.....	7
3. Potential Dangers of HHW	19
4. Existing HHW Collection Programs in Illinois	23
5. HHW Best Management Practices.....	51
6. Next Steps	65
7. References.....	79
Appendix A: Local Government Toolkit – Improving HHW Collection Options in Illinois.....	89
Appendix B: At Your Door Special Collection Program	139
Appendix C: Evaluation of the Proper Management of Household Hazardous Waste in Illinois	146
Appendix D: Sample HHW Storage Locker Specifications	151
Appendix E: Permit Application Forms for a HHW Collection Facility.....	155
Appendix F: EPA Site Considerations for One-Day HHW Collections.....	157
Appendix G: Selected Demographic Characteristics of Study Area Counties	161
Appendix H: Excerpt of RCRA Exclusions from Hazardous Waste Definition	163
Appendix I: Household Hazardous Waste Collection Program Act.....	167
Appendix J: Public Act 96-0121 EPA Household Waste Drop-Off.....	170
Appendix K: Illinois Solid Waste Management Act	174
Appendix L: Local Solid Waste Disposal Act.....	190
Appendix M: Solid Waste Planning and Recycling Act.....	195
Appendix N: Waste Oil Recovery Act.....	202
Appendix O: Title 35 Illinois Administrative Code Part 733: Universal Waste Rule, Subparts A and B	206
Appendix P: Mercury Switch Removal Act	228
Appendix Q: Mercury Thermostat Collection Act	237
Appendix R: News Article Regarding Emissions Monitoring at Sauget Incinerator	246
Appendix S: IEPA One-Day HHW Collection Results for Study Area	249
Appendix T: Existing Collection Options in Study Area for Specific Types of HHW	285
Appendix U: Summary of Discussions at Information Meetings Held in Study Area.....	291

List of Tables

Table 1. List of acceptable wastes at IEPA-sponsored one-day HHW collections	7
Table 2. Excerpt of EPA description of hazardous waste.....	8
Table 3. Excerpt of EPA listed wastes description	8
Table 4. Excerpt of EPA characteristic wastes description	9
Table 5. Examples of household products with high concentration of hazardous ingredients.....	19
Table 6. Health effects associated with HHW exposure.....	21
Table 7. Different disposal methods for HHW categories.....	40
Table 8. Heritage Environmental Services disposal methods for HHW categories	41
Table 9. Partners for Waste Paint Solutions Paint Collection and Disposition	45
Table 10. Additions to the State’s Universal Waste Rule.....	58
Table 11. Study Area County One-Day HHW Collection Cost Data.....	66
Table 13. Preliminary SWOT Assessment of Option A.....	73
Table 14. Preliminary SWOT Assessment of Option B	74
Table 15. Preliminary SWOT Assessment of Option C	75
Table 16. Additional Potential Costs that May Impact Each Option, but Prove Difficult to Monetize	76
Table 17. Additional Potential Benefits that May Impact Each Option, but Prove Difficult to Monetize	77

List of Figures

Figure 1. Study area location	1
Figure 2. Population demographics of counties in study area	2
Figure 3. Land area of each county in study area	3
Figure 4. Study area population density	4
Figure 5. Location of HHW collection facilities in Illinois	23
Figure 6. Naperville HHW facility collection trends.....	24
Figure 7. Entrance drive to Naperville HHW collection facility	25
Figure 8. Entry to Naperville HHW facility	25
Figure 9. Drop-off area at Naperville HHW facility.....	26
Figure 10. Secured storage units at Naperville HHW facility	26
Figure 11. Covered storage area at Naperville HHW facility.....	27
Figure 12. Outdoor storage area at Naperville HHW collection facility	27
Figure 13. Rock River Reclamation District gated entrance	28
Figure 14. Rockford HHW facility onsite office	29
Figure 15. Covered outdoor work area at Rockford HHW facility	29
Figure 16. Bulk oil container at Rockford HHW facility	30
Figure 17. Bulk paint collector at Rockford HHW facility	30
Figure 18. Paved outdoor storage area at Rockford HHW facility.....	31
Figure 19. Outdoor storage at Rockford HHW facility	31
Figure 20. SWALCO facility in Gurnee	33
Figure 21. SWALCO facility covered HHW drop-off area.....	33
Figure 22. Interior storage area at SWALCO facility.....	34
Figure 23. Drainage trench along interior perimeter of storage areas at SWALCO facility	34
Figure 24. High-expansion foam fire suppression system over interior storage areas	35
Figure 25. Interior storage bays at SWALCO facility	35
Figure 26. Exterior views of Chicago HCCR facility.....	36
Figure 27. Interior work area at Chicago HCCR facility.....	37
Figure 28. Interior electronics collection storage area at Chicago HCCR facility	37
Figure 29. Exterior HHW storage units at Chicago HCCR facility.....	38
Figure 30. HHW collected at IEPA one-day collections (1988-2012)	39
Figure 31. HHW collected at Jackson County one-day HHW collections (2007-2011)	42
Figure 32. HHW collected at Ecology Action Center one-day HHW collection in 2012	43
Figure 33. Total HHW collected in study area counties at IEPA one-day HHW collections held to date.....	49
Figure 34. Estimated amount of HHW collected in the study area, in the years that a one-day HHW collection event was held	49
Figure 35. Comparison of categories of HHW collected in the study area at one-day HHW collections held to date.....	50

Figure 36. Number of HHW collection events in U.S. from 1980 to 1997 51
Figure 37. Illinois counties with and without an operating landfill 69
Figure 38. Fifteen-mile radii around three largest population centers in study area 71

List of Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESQWG	Conditionally Exempt Small Quantity Waste Generator
CFL	compact fluorescent lamp/light
CFR	Code of Federal Regulations
DOT	Department of Transportation
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibility
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HHW	Household Hazardous Waste
IDPH	Illinois Department of Public Health
ILCSMA	Illinois Counties Solid Waste Management Association
IEPA	Illinois Environmental Protection Agency
ILCS	Illinois State Compiled Statutes
IDOT	Illinois Department of Transportation
IRA	Illinois Recycling Association
LQG	Large Quantity Generator
NAHMMA	North American Hazardous Materials Management Association
NIMBY	Not in My Back Yard
NWPSC	Northwest Product Stewardship Council
OSH Act	Occupational Safety and Health Act
OSHA	Occupational Safety and Health Administration
PPI	Product Policy Institute
PSI	Product Stewardship Institute
RCRA	Resource Conservation and Recovery Act
RPC	Regional Planning Commission
SQG	Small Quantity Generator
SWOT	Strengths, Weaknesses, Opportunities, Threats
TSDf	Treatment, Storage, and Disposal Facility

Abstract

This background report contains information compiled as part of a study effort to develop a strategy to improve household hazardous waste (HHW) collection options available to residents of a seven-county study area in East Central Illinois. The report includes an overview of HHW collection activity statewide and a detailed review of existing HHW collection options in the study area as of January 2013. The report summarizes federal and state regulations relevant to HHW collection, best management practices associated with HHW, and challenges associated with HHW collection in the study area. The report includes input from interested persons and stakeholders regarding preferred HHW collection options, a review of cost comparisons typical of start-up, operation, and processing of a HHW collection facility vs. a one-day HHW collection in Illinois, and a preliminary “strengths, weaknesses, opportunities, threats” (SWOT) assessment regarding three potential HHW collection options for the study area.

1. Introduction and Study Area Description

This background report contains information compiled as part of initial efforts to develop a strategy to improve household hazardous waste (HHW) collection options available to residents of a seven-county study area in East Central Illinois.

Study Area

This section describes the seven-county study area and includes a review of currently identified stakeholders in the study area who are presently engaged or potentially interested in local efforts to identify and implement a strategy to improve HHW collection options.

The selected study area includes the counties of Champaign, Clark, Coles, Cumberland, Douglas, Edgar and Vermilion (Figure 1).

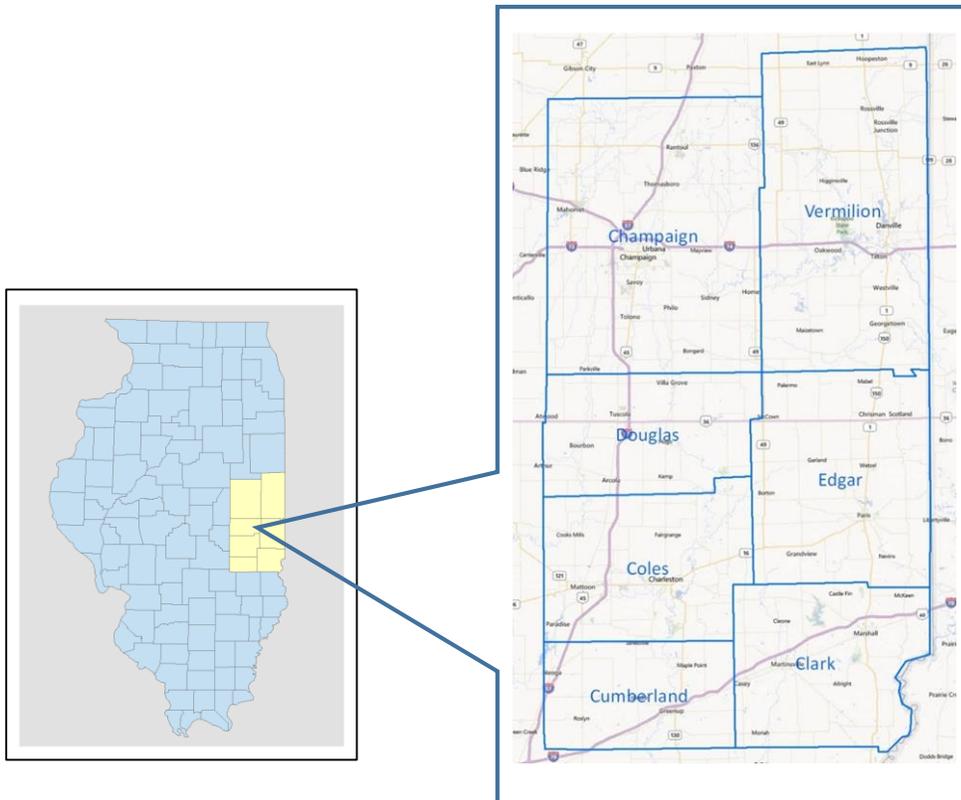


Figure 1. Study area location.

Demographic characteristics for each county in the study area, including population, municipalities, population living in unincorporated area vs. within a municipality, and land area are summarized in Appendix G. A comparison of population demographics for study area counties is shown in Figure 2. A comparison of the land area of each study area county is shown in Figure 3. Population density of the study area counties, based on 2010 U.S. Census Bureau data, is shown in Figure 4.

2010 U.S. Census
Population

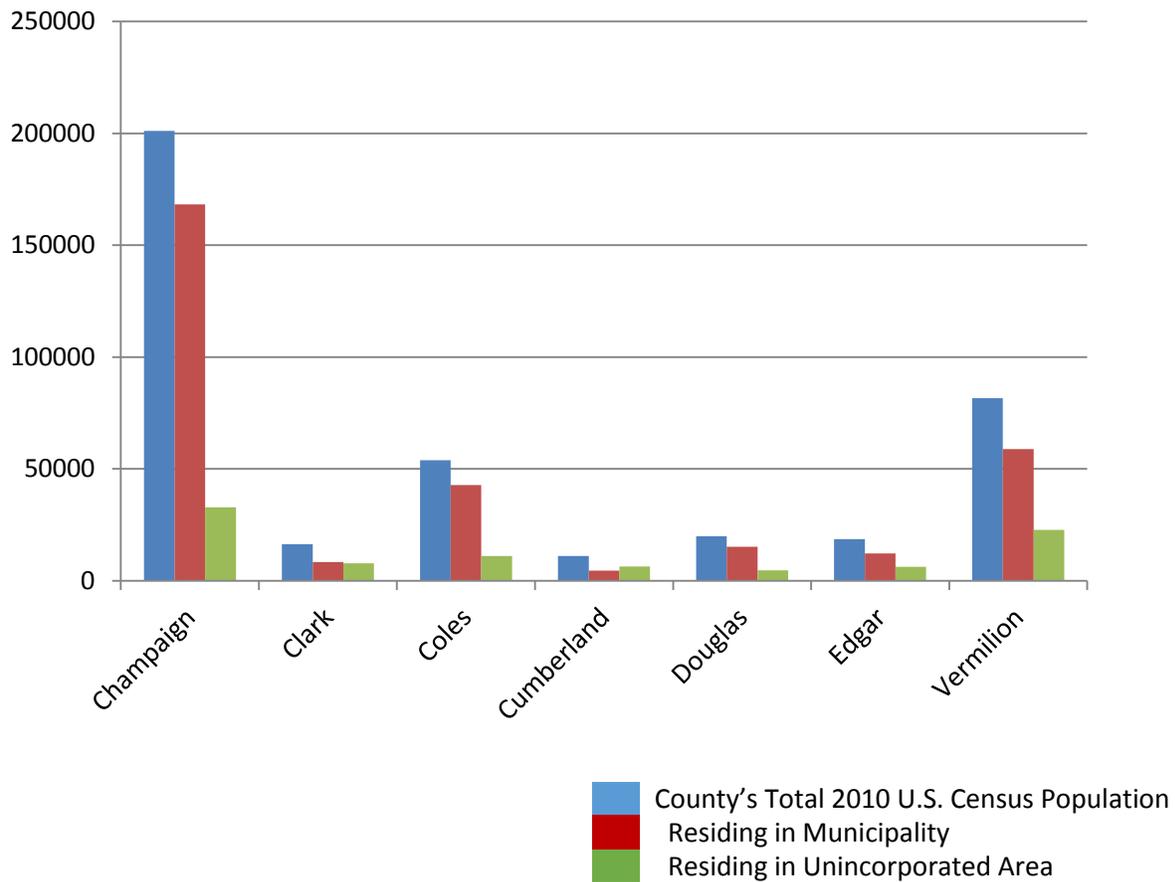


Figure 2. Population demographics of counties in study area.

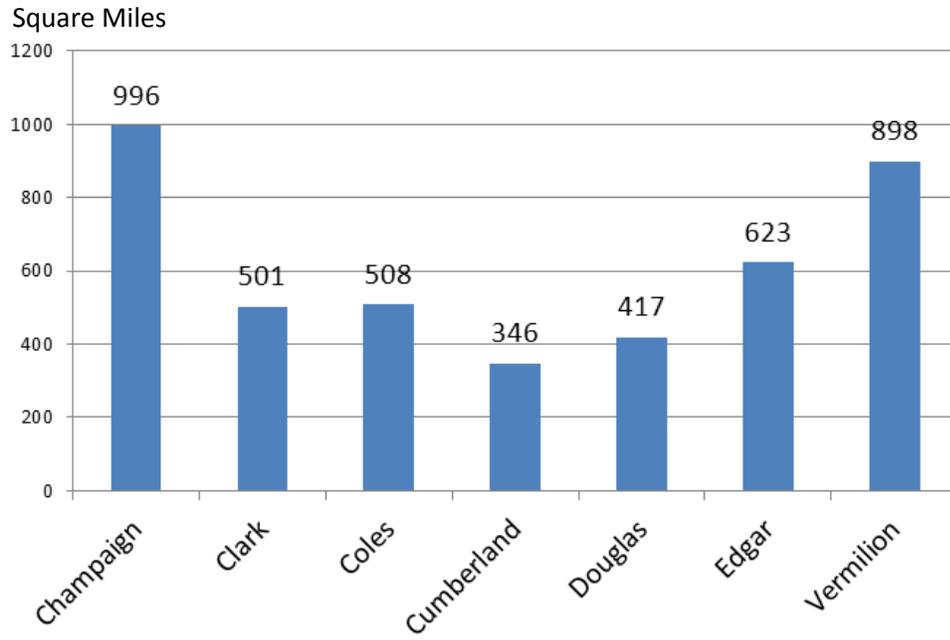


Figure 3. Land area of each county in study area.

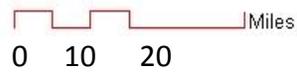
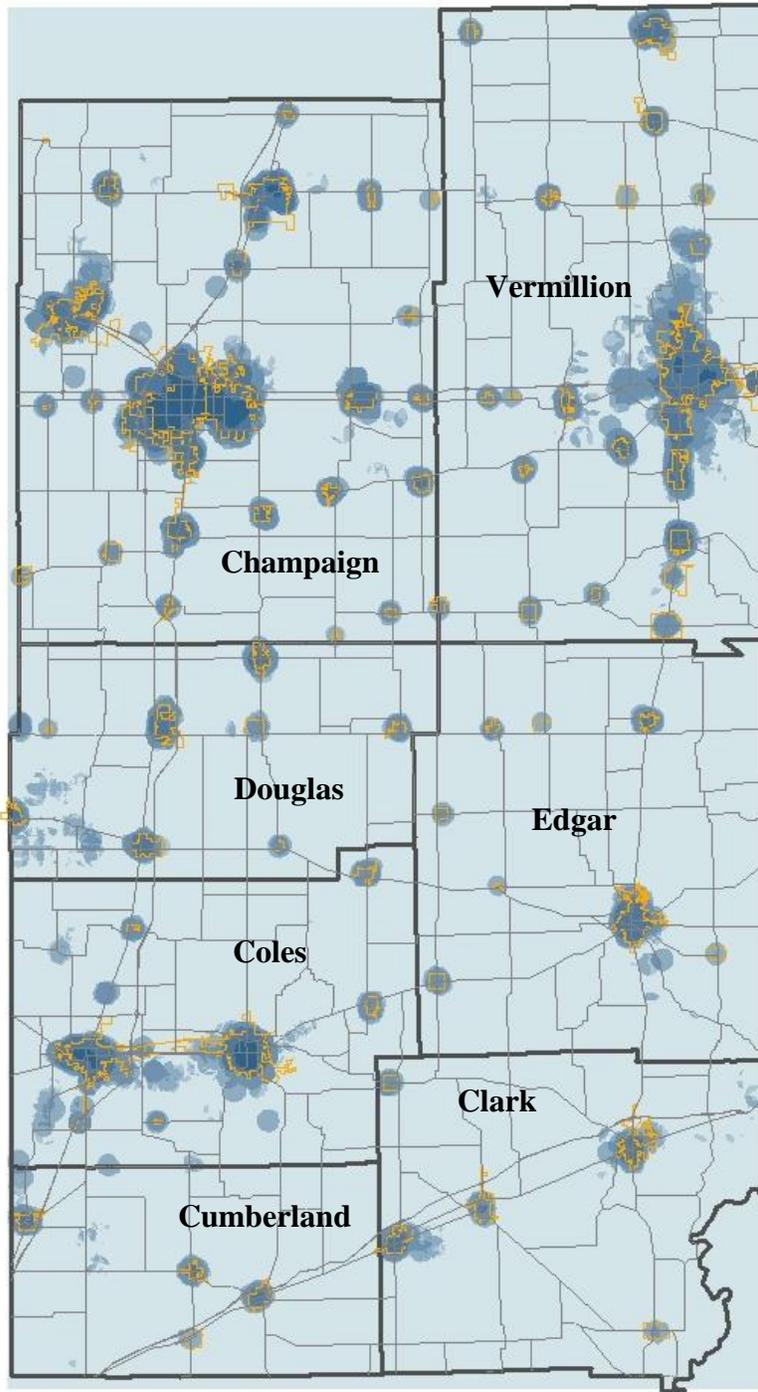


Figure 4. Study area population density.

Champaign County. Champaign County represents the largest county in the study area in terms of population, number of persons living in unincorporated areas, total number of municipalities, and overall land area. Champaign County and a number of municipalities within Champaign County have allocated limited staff and other resources to encourage residents to recycle solid waste and HHW. The Cities of Champaign and Urbana have dedicated one or more full-time staff to generally address issues of recycling and broader planning for sustainability within their city. Smaller municipalities participate in area-wide recycling collections as their limited resources allow. Champaign County designates staff time for recycling coordinator duties, as part of its planning contract with the Champaign County Regional Planning Commission, to allow the coordination of local recycling collection efforts with other local government jurisdictions in the county. The University of Illinois' Students for Environmental Concerns group regularly funds projects related to student awareness and outreach related to environmental issues. Active non-profit environmental groups in Champaign County include: Prairie Rivers Network, based in Champaign, which actively promotes clean rivers and lakes and safe drinking water in Illinois; and Faith-in-Place, a Chicago-based organization with an active local branch that coordinates religious leaders to address environmental sustainability issues. The League of Women Voters of Champaign County (LWVCC) has an active interest in environmental protection. Its president expressed interest in having LWVCC members hear a presentation regarding the study efforts to identify improved HHW collection options locally.

Clark County. Clark County represents the second smallest county in the study area, in terms of total population. The Village of Marshall is the county seat, with the largest municipal population in the County. The Illinois Environmental Protection Agency (hereafter, IEPA) state contact listed as "Recycling Coordinator" for the county is the Clark County Health Department Administrator, with an office in Martinsville. This person receives phone inquiries from Clark County residents regarding recycling options for HHW and other recycling questions. We are not aware of active environmental groups in Clark County.

Coles County. Coles County represents the third most populated county in the study area. The City of Charleston, which serves as county seat, has the largest municipal population in the county and is home to Eastern Illinois University. The IEPA state contact listed as "Recycling Coordinator" for Coles County is the Solid Waste Coordinator/Planner at the Coles County Regional Planning and Development Commission (CCRPDC). CCRPDC offers planning assistance with regard to solid waste services to Coles and surrounding counties, including completing five-year updates to solid waste management plans; carrying out related public outreach efforts; and submitting DCEO recycling grant applications (Coles County Regional Planning and Development, 2012). The Lincoln Heritage Resource Conservation and Development Council is a non-profit organization which has been involved in recent efforts to support area-wide recycling of electronics in the study region. An officer of the organization, who also serves as a director of the Coles County Soil and Water Conservation District, recently expressed interest in following study efforts to identify improved HHW collection options locally.

Cumberland County. Cumberland County represents the smallest county in the study area in terms of total population and land area. The centrally located Village of Toledo serves as county seat. The IEPA state contact listed as "Recycling Coordinator" for the county is the Cumberland

County Health Department Administrator, with an office in Toledo. This person receives phone inquiries from Cumberland County residents regarding recycling options for HHW and other recycling questions. We are not aware of active environmental groups in Cumberland County.

Douglas County. Douglas County represents the fourth largest county in the study area, in terms of total population. The land area of Douglas County is second smallest of the counties in the study area. The City of Tuscola is the most populated in the county and serves as county seat. The IEPA state contact listed as “Recycling Coordinator” for the county is the Douglas County Health Department Administrator, with an office in Tuscola. This person receives phone inquiries from Douglas County residents regarding recycling options for HHW and other recycling questions. We are not aware of active environmental groups in Douglas County.

Edgar County. Edgar County represents the fifth largest county in the study area in terms of total population, and the third largest county in terms of land area. The most populated and centrally located city, Paris, serves as county seat. The IEPA state contact listed as “Recycling Coordinator” for the county is the Edgar County Public Health District Environmental Officer, with an office in Paris. This person fields phone inquiries from Edgar County residents regarding recycling options for HHW and other recycling questions. We are not aware of active environmental groups in Edgar County.

Vermillion County. Vermillion County represents the second largest county in the study area in terms of population, number of persons living in unincorporated areas, total number of municipalities, and overall land area. The IEPA state contact listed as “Recycling Coordinator” for the county is the Vermillion County Health Department, Director of Environmental Health, based in Danville. This person is a key contact regarding local recycling collections. The Director of Environmental Health receives phone inquiries from Vermillion County residents regarding recycling options for HHW and other recycling questions. Vermillion County is the only county in the study area with operational landfills located within its boundaries and with one or more landfill operator host agreements in place:

- Brickyard Disposal and Recycling Inc. in the Danville area, operated by Brickyard Disposal and Recycling, a subsidiary of Allied Waste Industries (parent company Republic Industries, Inc.), with a remaining estimated capacity of 17 years as of January 1, 2012, and slated to close in 2027.
- Illinois Landfill in the Hoopston area, operated by Illinois Landfill, Inc., a subsidiary of Allied Waste Industries (parent company Republic Industries, Inc.), with a remaining estimated capacity of 185 years as of January 1, 2012, and slated to close in 2197.

Keep Vermillion County Beautiful (KVCB) is an active, non-profit environmental interest organization in Vermillion County. KVCB partners with businesses and local governments to coordinate and sponsor electronics collections, clean ups, and beautification projects. KVCB currently has 89 members: 15 villages and cities, 8 townships, and 66 businesses, civic groups, government groups, plus 20 individuals, families, and neighborhood associations (Keep Vermillion County Beautiful, 2015).

2. Definitions and Regulations

This chapter contains a basic review of the major federal and Illinois state laws regarding HHW as a basis for understanding how HHW is defined, regulated, and managed in Illinois. Also included is an overview of federal and Illinois state laws regarding “hazardous waste” definitions and regulations, as a basis for understanding the separate management options which relate to hazardous waste, and a subcategory of hazardous waste known as “universal waste.”

Definitions

HHW. Authors Galvin and Dickey (2008) observed that the term “household hazardous waste” (HHW) evolved in 1981, soon after enactment of federal regulations in the U.S. to strengthen solid waste management and hazardous waste management.

The U.S. Environmental Protection Agency (hereafter, EPA) (2013a) broadly defines HHW as: “leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients ... [and that] require special care when you dispose of them”.

The Illinois Household Hazardous Waste Collection Program Act definition of HHW states: “Household hazardous waste” means a consumer-disposed waste product intended for household use generally containing constituents that make its disposal in municipal waste landfills or incinerators undesirable. Household hazardous waste includes, but is not limited to, the following: (1) Waste oil, (2) Petroleum Distillate-Based Solvents, (3) Oil based liquid paint, paint strippers, and paint thinners, (4) Herbicides and pesticides except, for purposes of the Act, antimicrobial and disinfectant products are excluded” (415 ILCS 90/3).

Hundreds of household products may qualify as HHW. Table 1 contains the IEPA (2013a) description of the many types of HHW which are accepted for collection.

In simple terms, HHW are products or items intended for use by a household and disposed of by a household which are hazardous.

Table 1. List of acceptable wastes at IEPA-sponsored one-day HHW collections.

Oil-based paint	Household batteries	Paint thinners
Used motor oil	Herbicides	Pesticides
Drain cleaners	Insecticides	Lawn chemicals
Solvents	Old gasoline	Antifreeze
Pool chemicals	Hobby chemicals	Cleaning products
Aerosol paint	Mercury-containing devices	Fluorescent lamp bulbs
Double-bagged & wetted asbestos	Old/outdated medicines & pharmaceuticals	

Hazardous Waste. In Illinois, HHW collected at IEPA-sponsored HHW collection programs is managed as “hazardous waste.” The Resource Conservation and Recovery Act (RCRA) Subtitle C definition of “hazardous waste” is complex and includes four categories as summarized in Table 2 (EPA, 2011).

HHW is considered exempt from RCRA Subtitle C hazardous waste regulations. Appendix H is an excerpt from the “RCRA Orientation Manual 2011” developed by EPA (2011) which summarizes RCRA exclusions from the hazardous waste definition (e.g., HHW, agricultural waste, treated wood and used oil filters).

Listed Wastes. Table 3 summarizes the EPA (2013b) description of “listed wastes.”

Table 2. Excerpt of EPA description of hazardous waste.

Listed	Wastes that EPA has determined are hazardous. The lists include the F-list (wastes from common manufacturing and industrial processes), K-list (wastes from specific industries), and P- and U-lists (wastes from commercial chemical products).
Characteristic	Wastes that do not meet any of the listings above but that exhibit ignitability, corrosivity, reactivity, or toxicity.
Universal	Batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs).
Mixed	Waste that contains both radioactive and hazardous waste components.

Table 3. Excerpt of EPA listed wastes description.

F-List	(non-specific source wastes) Wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources. ... 40 CFR §261.31 .
K-List	(source-specific wastes) Certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. ... 40 CFR §261.32 .
P-List and U-List	(discarded commercial chemical products) Specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded. ... 40 CFR §261.33 .

Characteristic Wastes. EPA (2013c) describes the RCRA hazardous wastes category “characteristic wastes” as meeting the criteria of being: ignitable, corrosive, reactive, or toxic. Table 4 provides a summary of the EPA (2013c) description of characteristic wastes.

Universal Wastes. A separate set of federal statutes were enacted in the mid-1990’s to streamline the management of selected hazardous wastes designated as “universal wastes” (40 CFR Part 273). RCRA identified certain hazardous wastes which are prevalent (e.g., rechargeable batteries, certain pesticides, mercury-containing equipment, and compact fluorescent bulbs) as “universal wastes” to encourage more widespread collection by retail stores or private or public collection programs (EPA, 2012a). Universal waste statutes (40 CFR Part 273, Subpart G) allow that states can modify the universal waste rule in order to add additional universal wastes at the state level.

Mixed Wastes. “Mixed wastes” are a type of hazardous waste designated in RCRA Subtitle C statutes and described by EPA (2012b) as containing both radioactive and hazardous waste components. The mixed waste treatment and regulation process is complex, involving the U.S. Nuclear Regulatory Commission and the U.S. Department of Energy regulation of the radioactive portion of mixed waste under the authority of the Atomic Energy Act, and EPA regulation of the hazardous waste portion of mixed waste under RCRA authority.

Table 4. Excerpt of EPA characteristic wastes description.

Ignitable	Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60°C (140°F). Examples include waste oils and used solvents. ... 40 CFR §261.21 .
Corrosive	Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels. Battery acid is an example. ... 40 CFR §261.22 .
Reactive	Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water. Examples include lithium-sulfur batteries and explosives. ... 40 CFR §261.23 .
Toxic	Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute ground water. ... 40 CFR §261.24 .

Federal Regulations

This section documents a review conducted in January 2013 regarding federal statutes relevant to HHW management, including: RCRA statutes which deal with materials that are currently destined for disposal or recycling, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which deals with cleaning up inactive and abandoned hazardous waste sites (EPA, 2011). Because the option of managing HHW as a “hazardous waste” is encouraged by EPA and often occurs in Illinois, this section additionally reviews selected federal statutes relevant to “hazardous waste” management, including: Used Oil Recycling Act; Hazardous Materials Transportation Act; Emergency Planning and Community Right-to-Know Act; Occupational Safety and Health Act; Controlled Substances Act; and Secure and Responsible Drug Disposal Act.

Resource Conservation and Recovery Act (RCRA). RCRA amended the Solid Waste Disposal Act in 1976 to include “cradle-to-grave” requirements for active and future programs for management of “solid waste” and management of “hazardous waste” in the U.S. RCRA regulations are contained in Title 40 of the Code of Federal Regulations (CFR) Parts 239 through 299. The EPA (2011) “RCRA Orientation Manual 2011,” is a useful resource and general framework for understanding the RCRA program definitions, standards, and regulations.

At the federal level, RCRA Subtitle C provisions address “hazardous waste” regulatory programs and RCRA Subtitle D provisions address “solid waste” regulatory programs. RCRA Subtitle D provisions require that, at a minimum, HHW must be managed in accordance with all state and local requirements for the management of solid waste. RCRA Subtitle C provisions regarding regulation of hazardous wastes are primarily intended to address the management of commercial and industrial hazardous wastes, and include this exemption [40 CFR261.4(b)(1)] for “household waste” (aka HHW) requirements:

- (b) “Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:
 - (1) Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. “Household waste” means any material (including garbage, trash, and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).”

EPA Policy Directive. Galvin and Dickey (2008) point out that the EPA issued a policy directive in 1988 to recommend that state and local HHW collection programs manage collected HHW as hazardous waste and not as municipal solid waste. The EPA policy directive clarifies that managing HHW as hazardous waste provides a greater level of environmental protection and a greater level of protection for HHW collection programs to avoid potential liability under CERCLA.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of

1980, as amended, also known as “Superfund,” is the environmental program established to address abandoned hazardous waste sites in the U.S. (EPA, 2011).

CERCLA provisions (42 U.S.C. § 9601 et seq.) do not exempt hazardous waste generated by households. As noted in the 1988 EPA policy directive, under CERCLA, a HHW collection facility could be liable for any future hazardous waste related clean-up and remediation costs. A feasibility study by Patrick Engineering (2009) for an Illinois HHW facility in Peoria County advises that HHW facility owners and operators should “obtain and maintain insurance, request that service providers list the agency as ‘additionally insured,’ and always ask for ‘occurrences’ versus ‘claims made’ coverage.”

Used Oil Recycling Act. The Used Oil Recycling Act of 1980 amended the RCRA program to further encourage the widespread recycling of used oil. The Act and its subsequent amendments (40 CFR Part 279) provide a separate program of recycling regulations for used oil, including restrictions on the burning of used oil for energy recovery and widely applicable used oil management standards (EPA, 2011).

Hazardous Materials Transportation Act. The Hazardous Materials Transportation Act (49 USC Chapter 51) provides authority to the U.S. Department of Transportation’s (DOT) Office of Hazardous Materials Transportation to regulate national and international shipping and packaging of hazardous materials, including how they are classified and labeled. DOT regulates only shipments of carriers engaged in interstate commerce, and the state departments of transportation (e.g., IDOT in Illinois) regulate shipments by carriers that do not cross state lines.

The Act (49 USC § 5103) broadly defines “hazardous materials” to include all types of hazardous waste. The Act pertains to all persons involved in the preparation of the transportation of hazardous materials. The Hazardous Materials Transportation Uniform Safety Act of 1990 requires information regarding a hazardous material shipment be readily available for inspectors or emergency responders in the event of an accident or disaster involving the hazardous materials being transported.

Emergency Planning and Community Right-to-Know Act. The Emergency Planning and Community Right-to-Know Act of 1986 (also referred to as SARA Title III) established requirements regarding reporting on hazardous and toxic chemicals. The provisions require the establishment of Local Emergency Planning Committees (LEPCs).

Occupational Safety and Health Act. The Occupational Safety and Health Act of 1970 (OSH Act) requires that employers meet applicable health and safety standards to provide safe work settings for employees and provide certain requisite “training, outreach, education, and assistance” to keep workplaces free of serious recognized hazards (U.S. Department of Labor, 2013a).

OSH Act standards (29 CFR 1910.120) apply to the collecting, storing, and transporting of HHW. Subpart P applies to the treatment, storage, and disposal facilities (TSDF) of hazardous waste. The U.S. Department of Labor’s, Occupation Safety and Health Administration (OSHA)

office manages the administration and enforcement of OSH Act provisions on behalf of private sector and federal government employees (U.S. Department of Labor, 2013a).

Controlled Substances Act. The Controlled Substances Act (21 USC § 812) was enacted as Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970 as the federal drug policy which forms the basis for regulations (21 CFR Parts 1300-1321) regarding the manufacture, importation, possession, use, and distribution of certain substances (DOJ, 2013a). The Act establishes a closed system of distribution for those authorized to handle controlled substances (DOJ, 2013b). The system mandates registration of all persons authorized by the U.S. Drug Enforcement Administration (DEA) to handle controlled substances, maintenance of accurate inventories of all transactions involving controlled substances, and the secure storage of controlled substances.

The Act establishes five schedules (classifications). The DEA and Food and Drug Administration (FDA) may determine classification of substances on each schedule based on these criteria: potential for abuse, currently accepted medical use in treatment in the U.S., and international treaties. An updated and complete list of the schedules is published annually in Title 21 Code of Federal Regulations (CFR) § 1308.11 through 1308.15 (DOJ, 2013c).

Secure and Responsible Drug Disposal Act. Enacted in 2010, the Secure and Responsible Drug Disposal Act (§ 3397) authorizes the Attorney General to amend the Controlled Substances Act so that individuals can more easily and safely dispose of controlled substances while reducing the chance of diversion. The Product Stewardship Institute (PSI, 2013a) notes that the Act is intended to facilitate changes, but itself does not explicitly authorize creation of drug take-back programs, nor does it require any entity to establish delivery or disposal programs.

Illinois Regulations

This section describes a review conducted in January, 2013 of selected state statutes relevant to HHW collection and management in Illinois and certain separate Illinois statutes relevant to hazardous waste management. These separate provisions (apart from HHW collection and management provisions) include Illinois statutes regarding the management of used oil, universal wastes, and regulated manufacturer “take-back” programs for the recycling or refurbishing of electronics items in Illinois.

Illinois Environmental Protection Act. The main statutes which provide authority to IEPA regarding HHW collection are contained in the Environmental Protection Act (415 ILCS 5/) and Title 35 of the Illinois Administrative Code of Regulations. The IEPA Bureau of Land’s Division of Land Pollution Control is tasked with administering provisions of the Environmental Protection Act "to ensure that hazardous and nonhazardous wastes are managed in an environmentally sound manner and to implement regulatory programs such as the Resource Conservation and Recovery Act (RCRA) and the Solid Waste program" (IEPA, n.d.).

Household Hazardous Waste Collection Program Act. The Household Hazardous Waste Collection Act (415 ILCS 90/1) was passed in 1991 to address a need for HHW collection centers throughout the state (see Appendix I). Section 2 of the Act defined two types of HHW

collection facilities: a “collection center” (a secured site for use as a base HHW collection facility), and a “regional collection center” (a facility intended for HHW storage). Section 4 of the Act directed IEPA to conduct and sponsor pilot projects to develop a plan for “collecting small quantities of HHW from households in the state” until March 1995, and to develop and distribute public information about HHW alternatives and HHW recycling options.

Section 5 of the HHW Collection Act called for IEPA development of a statewide plan for collection of HHW by March 1995. Section 6 of the Act called for the IEPA to:

“establish a grant program for local governments that desire to provide a local or regional [HHW] ... collection center. Grants shall be authorized to cover collection center costs associated with capital outlay for preparing a facility or site to safely serve as a collection center and to cover costs of administration, public awareness, and local amnesty day programs. The total cost for administration and public awareness shall not exceed 10% of the grant award. Grants shall be available on a competitive basis to local governments that: (1) design a collection center which is approved by the agency; and (2) provide up to 33% of the capital outlay money needed for the facility as matching money” (415 ILCS 90/6).

Section 7 of the Act directed the IEPA to provide an evaluation of the program developed in accordance with the HHW Collection Act for to the State by January 1995, including:

1. “An assessment of the need for a continuation of existing programs.
2. The need for the development and implementation of new programs, including appropriate funding mechanisms.
3. Any legislative and administrative action necessary to fully implement a comprehensive HHW program in Illinois” (415 ILCS 90/7).

Public Act 96-0121 EPA Household Waste Drop-Off. Public Act 96-0121, effective August 2009, amends the Illinois Environmental Protection Act (415 ILCS 5/22.55) to include key provisions regarding HHW collection (see Appendix J). Subsection 22.55(c)(1) describes current universal waste provisions in Illinois: “A household waste drop-off point must not accept waste other than the following types of household waste: pharmaceutical products, personal care products, batteries other than lead-acid batteries, paints, automotive fluids, compact fluorescent light bulbs, mercury thermometers, and mercury thermostats.”

The Act regulates collection of the items in the above-noted provision at “household waste drop-off points” which are defined in Section 22.55(b) as: “the portion of a site or facility used solely for the receipt and temporary storage of household waste.” Subsection 22.55(c)(2) requires that a household waste drop-off point “must be located at a site or facility where the types of products accepted at the household waste drop-off point are lawfully sold, distributed, or dispensed.” This subsection specifies an exception to the location requirement for household waste drop-off points “operated by a government or school entity, or by an association or other organization of government or school entities.” Section 22.55(d) contains requirements for one-day household waste collection events, and authorizes IEPA to establish rules and conditions for the approval of such events, including acceptance of waste, temporary storage and off-site transfer of the waste, and the transfer and ultimate disposition of the waste.

Section 22.55(e) authorizes, but does not require, IEPA to expand operation of household waste drop-off points as follows:

“As necessary to address different circumstances, the regulations may contain different requirements for different types of household waste and different types of household waste drop-off points, and the regulations may modify the requirements set forth in subsection (c) of this section. The regulations may include, but are not limited to, the following:

- i. Identification of additional types of household waste that can be collected at household waste drop-off points,
- ii. Identification of the different types of household wastes that can be received at different household waste drop-off points,
- iii. The maximum amounts of each type of household waste that can be stored at household waste drop-off points at any one time, and
- iv. The maximum time periods each type of household waste can be stored at household waste drop-off points.”

Illinois Solid Waste Management Act. The Illinois Solid Waste Management Act (415 ILCS 20/) was passed in 1985. As amended, the Act authorizes the Department of Commerce and Economic Opportunity (DCEO) as the lead state agency to implement its provisions (415 ILCS 20/6) (See Appendix K).

Subsection 2(b) of the Act establishes the following state policy for solid waste management hierarchy:

“It is the purpose of this Act to reduce reliance on land disposal of solid waste, to encourage and promote alternative means of managing solid waste, and to assist local governments with solid waste planning and management. In furtherance of those aims, while recognizing that landfills will continue to be necessary, this Act establishes the following waste management hierarchy, in descending order of preference, as State policy:

- (1) volume reduction at the source;
- (2) recycling and reuse;
- (3) combustion with energy recovery;
- (4) combustion for volume reduction;
- (5) disposal in landfill facilities” (415 ILCS 20/2(b)).

Section 7 required the former Illinois Department of Energy and Natural Resources (DENR) to evaluate and report by January, 1992: “the need for continuation of existing programs, development and implementation of new programs and appropriate funding mechanisms; and recommending legislative and administrative action to fully implement a comprehensive solid waste management program in Illinois” (415 ILCS 20/7). Section 7 additionally requires that an education program be implemented regarding solid waste management and recycling, to cover these topics: “the solid waste management alternatives of recycling, composting, and source reduction; resource allocation and depletion; solid waste planning; reuse of materials; pollution prevention; and household hazardous waste” (415 ILCS 20/7).

Section 7.1 of the Illinois Solid Waste Management Act required the former DENR to: (1) study development of cost effective, environmentally sound, and technically feasible waste paint disposal options for small businesses (including paint contractors), auto body shops, and households; (2) develop waste paint reduction public education materials; and (3) recommend measures to address the reduction and management of waste paint by November 1992 (415 ILCS 20/7.1).

Section 7.2. directed the [Illinois] Department of Agriculture (IDOA) to develop and implement a pesticide container collection project by June, 1991 in order to:

1. “collect and recycle empty, triple-rinsed pesticide containers;
2. develop, demonstrate, and promote proper pesticide container management; and
3. evaluate current pesticide container management methods and the cause and extent of problems associated with pesticide containers.”

IDOA was to make recommendations to the state by November, 1991 regarding management of pesticide containers (415 ILCS 20/7.2).

In 2012, the Illinois Solid Waste Management Act was amended to require an appointed Task Force to conduct a review of the status of recycling and solid waste management planning in Illinois. Topics for Task Force review were to include:

“county recycling and waste management planning; current and potential policies and initiatives in Illinois for waste reduction, recycling, composting, and reuse; funding for State and local oversight and regulation of solid waste activities; funding for State and local support of projects that advance solid waste reduction, recycling, reuse, and composting efforts; and the proper management of household hazardous waste.”

The Task Force is to prepare and submit recommendations to the Governor and the General Assembly by January, 2015 (415 ILCS 20/10).

Local Solid Waste Disposal Act. The Local Solid Waste Disposal Act was passed in 1985 to provide authority to local government jurisdictions to prepare and implement solid waste management plans and to efficiently use, as feasible, products or by-products generated in the “disposal process” (415 ILCS 10/1) (See Appendix L).

Solid Waste Planning and Recycling Act. The Solid Waste Planning and Recycling Act (415 ILCS 15/) was enacted in 1985 (See Appendix M). The Act is intended “to provide incentives for decreased generation of municipal waste, to require certain counties to develop comprehensive management plans that place substantial emphasis on recycling and other alternatives to landfills, to encourage municipal recycling and source reduction, and to promote composting of yard waste” (415 ILCS 15/2(b)).

Subsection 4(a) of the Act required local governments to develop and adopt a plan for the management of municipal waste generated within its boundaries, as follows:

“By March 1, 1991, each county with a population of 100,000 or more and each municipality with a population of 1,000,000 or more, and by March 1, 1995, each county with a population of less than 100,000, shall submit to the Agency an officially adopted

plan for the management of municipal waste generated within its boundaries. Such plan shall conform to the waste management hierarchy established as State policy in subsection (b) of Section 2 of the Illinois Solid Waste Management Act” (415 ILCS 15/4(a)).

Section 6 of the Act requires that each county waste management plan include a recycling program and that the recycling program be implemented to meet specified target recycling diversion rates for municipal waste generated in the county (415 ILCS 15/6). Subsection 7(c) of the Act indicates that DCEO shall:

“assist counties in implementing recycling programs under this Act, and may, pursuant to appropriation, make grants and loans from the Solid Waste Management Fund to counties or other units of local government for that purpose, to be used for capital assistance or for the payment of recycling diversion credits or for other recycling program purposes, in accordance with such guidelines as may be adopted by [DCEO]” (415 ILCS 15/7(c)).

Waste Oil Recovery Act. The Waste Oil Recovery Act (815 ILCS 440/) was enacted in 1980 (See Appendix N). The purpose of the Act is to support the recycling of all forms of used petroleum-based oils in accordance with the state policy hierarchy of waste management practices (815 ILCS 440/4). Section 2.8 of the Act provides authority to DCEO to implement the Act (815 ILCS 440/2.8). Section 5 sets the voluntary standard of more than 500 gallons per year of lubricating oil to be recycled by retail sellers of used oil (815 ILCS 440/5).

Section 8 of the Act mandates DCEO to conduct public information and educational programs designed to inform the public of state efforts “in regard to the recycling of oil in order to conserve a vital natural resource” (815 ILCS 440/8).

Universal Waste Rule. Title 35 of the Illinois Administrative Code, Part 733 contains “Standards for Universal Waste Management in Illinois” (Illinois Pollution Control Board, n.d.) (See Appendix O). In Illinois, the following hazardous waste qualifies as universal waste: batteries as described in Section 733.102; pesticides as described in Section 733.103; mercury-containing equipment as described in Section 733.104; and lamps as described in Section 733.105.

Section 733.180 contains details regarding the process for those seeking to petition that a hazardous waste or category of hazardous waste be considered as a universal waste in Illinois. The EPA must approve and list the hazardous waste as a universal waste before Illinois lawmakers can consider regulations to manage it as a universal waste.

Mercury Switch Removal Act. The Mercury Switch Removal Act (415 ILCS 97/), as amended, establishes a take-back program for mercury switches in vehicles (See Appendix P and End-of-Life Vehicle Solutions, 2012). The Act requires manufacturers of vehicles in Illinois that contain mercury switches to implement mercury switch collection program to facilitate removal of mercury switches from “end of life vehicles before the vehicles are flattened, crushed, shredded, or otherwise processed for recycling” (415 ILCS 97/15).

Mercury Thermostat Collection Act. The Mercury Thermostat Collection Act (415 ILCS 98/), as amended, establishes a voluntary collection program for thermostat manufacturers to achieve target collection goals (415 ILCS 98/25) (See Appendix Q).

Mercury-Added Product Prohibition Act. The Mercury-Added Product Prohibition Act (410 ILCS 46/), as amended, contains provisions effective as of January, 2004 which “prohibit the sale, distribution, or promotional gifts of mercury fever thermometers” in Illinois (410 ILCS 46/5(b)).

Electronic Products Recycling and Reuse Act. The Electronic Products Recycling and Reuse Act (415 ILCS 150/) was enacted in 2008, and as amended, establishes a regulated manufacturer ‘take-back’ program for the recycling and refurbishing of electronic items in Illinois. Subsection 5(a) of the Act recognizes that, in addition to the metals, plastics, glass, and other valuable materials that may be resold for reuse in new products, many electronic products contain lead, mercury, cadmium, hexavalent chromium, and other materials that pose environmental and health risks that must be managed.

In 2011, Public Act 97-287 was passed to ban 17 electronic products from landfill disposal in Illinois beginning January 1, 2012. The landfill ban includes: TVs, computers (including desktops, laptops, notebooks, and tablets), monitors, printers, computer peripherals, VCRs/DVD players, gaming systems, MP3 players, scanners, fax machines, and small-scale servers.

Illinois Hazardous Materials Transportation Act. The Illinois Hazardous Materials Transportation Act (430 ILCS 30/) authorizes IDOT to work in conjunction with DOT to “improve the regulatory and enforcement authority of the [DOT]” in implementing safety provisions associated with transportation of hazardous materials in Illinois.

Illinois Public Employee Only State Plan. The Illinois Public Employee Only State Plan was approved as a developmental plan under Section 18 of the Occupational Safety and Health Act of 1970 and 29 CFR 1956 (U.S. Department of Labor, 2013b). As indicated on the OSHA website (2013b), the Illinois Department of Labor Public Employee Safety and Education Division is responsible for implementing the plan and other OSHA activities in the public sector in Illinois, whereas federal OSHA has full authority to implement OSH Act provisions pertaining to private sector and federal government employees in Illinois.

Illinois Controlled Substances Act. The Illinois Controlled Substances Act (720 ILCS 570/) provides regulatory authority to agencies in Illinois (such as the Illinois Department of Human Services, Illinois Department of Corrections, and Illinois State Police) to implement federal regulatory standards such as the Controlled Substances Act (21 USC § 812) for management of controlled substances in the state (720 ILCS 570/100).

3. Potential Dangers of HHW

This chapter reviews examples of the types of harm HHW can cause to people and the environment, justifying the importance of responsible HHW management.

Hazardous Household Products

Hammet (1996) describes the dangers associated with the four general types of HHW, and warns that a household product should be considered hazardous if it exhibits or is labeled to indicate any of the following characteristics:

- corrosive - capable of eating away materials and destroying living tissue when contact occurs
- explosive and/or reactive - can cause an explosion or release poisonous fumes when exposed to air, water, or other chemicals
- toxic - poisonous, either immediately (acutely toxic) or over a long period of time (chronically toxic)
- radioactive - can damage and destroy cells and chromosomal material (known to cause cancer, mutations, and fetal harm)

Household products contain many of the same toxic chemicals used in industry, small businesses, and agriculture. Table 5 lists examples of household products that contain high concentrations of hazardous ingredients, as noted by Galvin and Dickey (2008).

Table 5. Examples of household products with high concentration of hazardous ingredients.

Household Product	Hazardous Ingredient
Spot removers, paint thinners, charcoal lighter fluids	100% petroleum naphtha
Moth balls	100% paradichlorobenzene or 100% naphthalene
Solvents	100% methyl ethyl ketone
Paint removers	85% methylene chloride
Garden insecticides	50% malathion

Home Poisoning Incidents

As of July 1, 2011, there were 2.3 million human toxic exposures to chemical products in U.S. households in that year alone, of which 0.08% were fatal (Bronstein et al., 2012). Bronstein et al. evaluated National Poison Data System case data reports for 2011 and found the most frequently involved substance classes involved in reported human exposure incidents were analgesics (11.7%), cosmetics/personal care products (8%), household cleaning substances (7%), sedatives/hypnotics/antipsychotics (6.1%), and foreign bodies/toys/miscellaneous (4.1%). The most common exposures among children younger than five years were to cosmetics and personal care products (14%), analgesics (9.9%), household cleaning substances (9%), foreign bodies/toys/miscellaneous (6.9%), and topical preparations (6.6%). Eighty-three percent of all human exposures were oral, 7% were dermal, 6% were nasal, and 4% were ocular. These results provide insights regarding both unintentional and intentional exposures to toxic substances as a significant cause of fatalities in the U.S.

In 2014, the Illinois Poison Center (IPC) helpline fielded 79,400 calls from across the state. Ninety percent of IPC helpline inquiries in 2014 were for advice on treating someone exposed to a potentially harmful substance, and an estimated 46 percent of the poison exposure calls in 2014 involved children ages 5 and younger (2014).

Chronic Health Effects and Environmental Risk from Product Use

Chronic health effects can be seen for repeated or long-term exposure to chemical substances. Based on Nightingale and Donnette (2002) and Cancer Prevention Coalition (n.d.), Table 6 presents the common health effects associated with HHW exposure. Some toxic products also bioaccumulate: they are stored in the fatty tissues of the body and accumulate to an extent that they can affect the kidney, liver, central nervous system and immune system, and lead to paralysis or sterility. Certain chemicals have carcinogenic effects, while others can result in mutations of genetic material. Exposure of teratogens and embryotoxins to expectant mothers can cause birth defects, abnormalities, developmental delays, or death in the offspring (Ferrettiet al., 2010; Nightingale and Donnette, 2002).

Paints, pesticides, glues, cleaning chemicals, and air fresheners used indoors can emit toxic components in the air that are over two to five times greater than outdoor levels (Wallace, 1987). Protracted exposure to formaldehyde and pesticides can lead to multiple chemical sensitivities (Nightingale and Donnette, 2002). Exposure to oil-based paints, exterior latex paints containing lead and mercury, and solvents can affect women's reproductive health and lead to developmental disabilities and birth defects in children (Illinois Teratogen Information Service, 2014).

Storm water runoff can also lead to environmental pollution from HHWs. Pesticides and fertilizers enter waterways and pollute the environment by producing potentially toxic algal blooms (Biello, 2008). Many common chemicals contain estrogen agonists, which can enter the environment and cause hormone disruptive effects on wildlife (Alleva et al., 1998).

Table 6. Health effects associated with HHW exposure.

Type of HHW	Hazardous Ingredients Contained	Health Effects
Drain and oven cleaners	Lye, sulfuric acid, sodium bisulfate	Eye and skin damage, respiratory problems
Spot remover	Trichloroethane, ethylene dichloride, benzene, toluene, tetrachloroethylene	Skin and lung irritation, central nervous system depression, liver and kidney damage, carcinogenicity, neurotoxicity
Oil-based paint, paint remover	Petroleum distillates, methylene chloride, toluene, acetone, methanol	Eye, skin, and lung irritation, headaches, nausea, respiratory problems, muscle weakness, liver and kidney damage
Garden insecticides	Diazinon (banned), acephate, malathion, chlorpyrifos (banned), bendiocarb	Skin, eye, and lung irritation; headache, dizziness, nausea, muscle cramps, coma, organ damage, neurotoxicity
Antifreeze	Ethylene glycol	Central nervous system depression, vomiting, drowsiness, respiratory failure, kidney damage
Household cleaning products	Aliphatic petroleum solvent, ammonia, butyl cellosolve, diethanolamine, calcium carbonate, pine oil, bleach	Eye irritation and corneal damage, liver and kidney damage, carcinogenicity, neurotoxicity, bronchitis, blood disorders, central nervous system depression
Car cleaners	Aliphatic petroleum distillate, isoparaffinic hydrocarbon, ammonia, naphthalene, xylene	Eye and skin irritation, corneal damage, chemical burns, neurotoxicity

Mercury is a potent neurotoxin that is persistent and bioaccumulative in fish and wildlife. Ingestion of fish or wildlife with bioaccumulated mercury can lead to impaired nervous system development in infants, and exposure can have adverse impacts on developing or adult cardiovascular systems (National Research Council, 2000).

Health Hazards and Environmental Risks from Improper Disposal

According to the EPA (2013a), 250.4 million tons of municipal solid waste was generated in 2011. HHW disposal amounted to 530,000 tons that year (2013a), representing 0.21% of the total waste collected from households in 2011. Nightingale and Donnette (2002) summarize a series of compelling studies regarding the health risks, environmental risks, and fire risks associated with HHW storage, spills, and accidental exposure.

There have been several reported instances in which hazardous wastes have had dangerous consequences in landfills, recycling facilities, and transfer stations. In Oregon, there were

multiple cases of pool chlorine mixing with liquids to form toxic chlorine gas in a transfer station (Austin, 1997). In 1998, landfill workers were exposed to lethal fumes from pesticides and other chemicals (Brown, 1998). The presence of hazardous materials in recycling facilities or transfer stations can also aggravate fires or explosions caused by non-hazardous materials.

Hazardous chemicals that are poured down the drain during use or disposal enter either septic systems or wastewater treatment facilities. Hazardous components can affect natural biological ecosystems in septic tanks and render them useless, thus allowing pathogens to enter the groundwater without being neutralized in the tanks (Pennsylvania State University, 1998).

Hazardous substances that are disposed with trash can enter landfills, where they can destroy the synthetic liner and allow toxic substances to enter the soil and groundwater. Additionally, precipitation can wash away or dissolve hazardous wastes and expose the soil and groundwater to toxic materials. Furthermore, hazardous materials thrown directly on the ground enter soil and contaminate groundwater (Pennsylvania State University, 1998). Mercury emitted in such operations is highly soluble and can enter waterways (Pennsylvania State University, 1998).

4. Existing HHW Collection Programs in Illinois

This chapter provides an overview of existing HHW collection programs and HHW collection activity in Illinois, including the study area.

HHW Collection Facilities in Illinois

As of January, 2013, the only four existing HHW collection facilities in Illinois were located in northeast and north central Illinois, as shown in Figure 5. No HHW collection facilities were located outside the Rockford and Chicago metropolitan areas.

Naperville. The Naperville HHW collection facility is open to residents statewide. However, most participation in the program is from residents of DuPage County and nearby Will County, Kane County, and Cook County, with only 2% of participants coming from other areas. Figure 6 shows the volume of HHW collected by the facility (Kimberly Allen, personal communication, April 20, 2013). The spike in HHW collection in 2000 may relate to publicity associated with HHW collection facility expansion which occurred during that time.

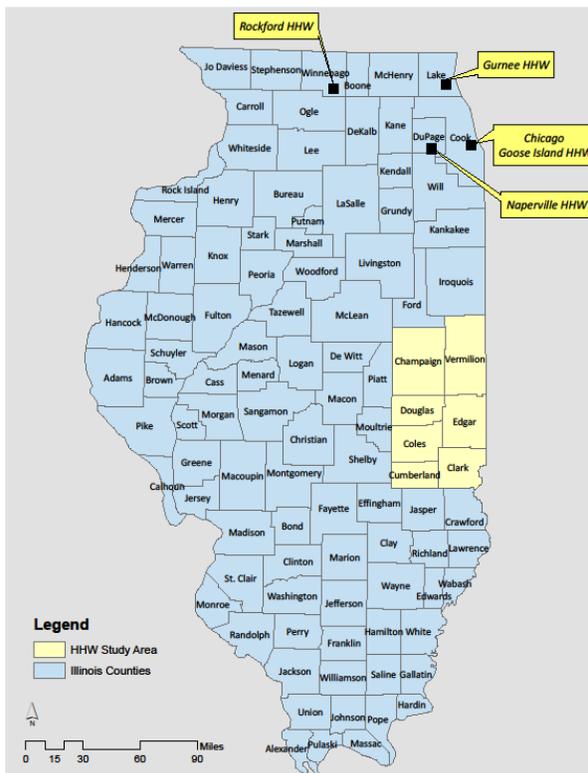


Figure 5. Location of HHW collection facilities in Illinois.

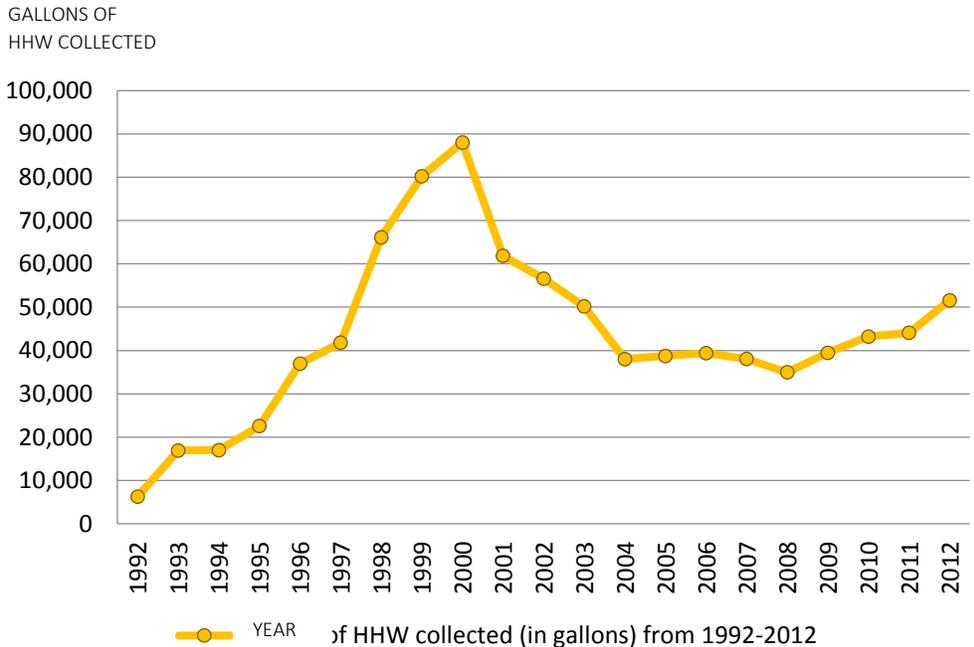


Figure 6. Naperville HHW facility collection trends.

As of January, 2013, the Naperville HHW drop-off facility was located behind the City of Naperville Fire Station No. 4, at the corner of Route 59 and Brookdale Road (Figures 7 and 8). As of 2013, the HHW Collection Facility site was located at the rear of the Naperville Fire Station #4 premises. (Plans to replace the facility are underway.) The entrance drive to the HHW Collection Facility was via the Fire Station parking lot. The City of Naperville Department of Public Works operates the Naperville HHW collection facility. The facility is open on Saturdays and Sundays between 9 a.m. and 2 p.m., year-round, excluding holidays. Items not accepted at the facility include electronics, latex-based paint, smoke detectors, peanut oil, and fire extinguishers.

Open since 1992, the facility was constructed in phases on land utilized by the City of Naperville Fire Department. The facility is a steel frame and concrete block building with a covered unloading area (Figure 9), a second material storage structure (Figure 10), and a secondary paint-bulking unit. The second container storage building and the garage for unloading vehicles were constructed in 2000 (Figure 11). In 2002, permission was granted to store partial drums of bulk flammable liquids, oil paint, antifreeze, and non-pourable materials in the pour-off garage in order to increase state agency savings from fewer collections. An oil tank was also installed at that time.¹ The facility also maintains an outdoor storage area (Figure 12).

¹ Information for the Naperville facility obtained from the Illinois EPA Bureau of Land Inventory Database, at <http://epadata.epa.state.il.us/land/inventory/>

DuPage County, Will County, Kane County, the City of Aurora, and City of Naperville provide funding for the facility operating costs. Typically, incoming HHW is handled by HAZMAT-certified firefighters, while non-certified staff greet visitors, record demographics, and direct vehicles (Kimberly Allen, personal communication, April 20, 2013). IEPA serves as “generator” for the facility and finances HHW off-site transportation and disposition by Heritage Environmental Services, a hazardous waste contractor.



Figure 7. Entrance drive to Naperville HHW collection facility.



Figure 8. Entry to Naperville HHW facility.



Figure 9. Drop-off area at Naperville HHW facility.



Figure 10. Secured storage units at Naperville HHW facility.



Figure 11. Covered storage area at Naperville HHW facility.



Figure 12. Outdoor storage area at Naperville HHW collection facility.

Rockford. The Rockford HHW Collection Facility opened in 1995 and is a collaborative effort of the City of Rockford, the Rock River Water Reclamation District, and the IEPA. The facility is located west of the Rock River at 3333 Kishwaukee Street in Rockford on land owned by the Rock River Water Reclamation District.

The facility is open to all Illinois residents. HHW collection at the facility occurs on Saturdays between 8 a.m. and 4 p.m. and Sundays between 12 p.m. and 4 p.m. year-round, excluding holidays. Items not accepted at the facility include yard waste, farm chemicals, business wastes, ammunition, explosives, compressed gases, and radioactive wastes.

Access to the Rockford HHW Facility is through the gated, secure entryway of the Rock River Water Reclamation District premises, as shown in Figure 13. The Rockford HHW collection facility consists of a construction trailer for office space (Figure 14), a pre-fabricated explosion-proof building with a storage capacity of 80 55-gallon drums, covered outdoor work areas (Figure 15), bulk oil (Figure 16) and bulk paint (Figure 17) collection containers, and paved surface outdoor storage areas (Figures 18 and 19).

The City of Rockford provides facility operation costs. The IEPA serves as “generator” for the facility and provides funds for HHW transport and disposition by hazardous waste contractor Clean Harbors, Inc.²



Figure 13. Rock River Reclamation District gated entrance.

² Information for the Rockford facility obtained from the Illinois EPA Bureau of Land Inventory Database, at <http://epadata.epa.state.il.us/land/inventory/>



Figure 14. Rockford HHW facility onsite office.



Figure 15. Covered outdoor work area at Rockford HHW facility.



Figure 16. Bulk oil container at Rockford HHW facility.



Figure 17. Bulk paint collector at Rockford HHW facility.



Figure 18. Paved outdoor storage area at Rockford HHW facility.



Figure 19. Outdoor storage at Rockford HHW facility.

Gurnee. The Solid Waste Agency of Lake County (SWALCO) Household Chemical Waste (HCW) Collection Program began operation at its current Gurnee facility in 2002 (Figure 20). The SWALCO Household Chemical Waste Collection Program is a “hybrid program” featuring public HHW drop-off events at the facility and mobile HHW collection events at various locations throughout Lake County.

The SWALCO facility is located at 1311 Estes Street, off Delaney Road and nearby Highway 21 in Gurnee. The facility accepts HHW every month on the second Saturday between 7:20 a.m. and 11 a.m., and on the fourth Monday between 11 a.m. and 1 p.m. Mobile collections are held at various Lake County locations on specific days between 8 a.m. and 2 p.m.

SWALCO recently established its first HCW Satellite Collection Program at the Lincolnshire-Riverwoods Fire Station #51 in Lincolnshire (Village of Lincolnshire, 2012). The HCW Satellite Collection Program is sponsored by the Lincolnshire-Riverwoods Fire Protection District, the Village of Lincolnshire, and SWALCO. The HCW Satellite Collection facility is staffed by HAZMAT-trained fire fighters, and is open by appointment only on every other Saturday. HHW collected at the HCW Satellite Collection facility is transferred to SWALCO’s Gurnee facility for IEPA-funded transport and disposition by the hazardous waste contractor selected by IEPA. The SWALCO Household Chemical Waste Collection facility does not accept latex paint, alkaline batteries, lead-acid batteries, business wastes, electronics, fire extinguishers, medical wastes, or sharps/needles.

SWALCO uses an online reservation system to schedule resident HHW drop-off appointments at the facility. The online reservation system is used to avoid long lines and long wait times.

SWALCO operates the HHW facility and has offices located in the facility. SWALCO provides operational costs of the facility and IEPA finances HHW off-site transportation and disposition.

The facility staff are HAZMAT-trained and OSHA-certified. Municipal public works employees conduct participant surveys and provide traffic management. Staff sizes are based on the participation anticipated for each event (Steven Nelson, personal communication, May 2, 2013).

The SWALCO Household Chemical Waste Collection facility consists of a brick building with office space (Figure 21), storage space for equipment and supplies used at HHW collection events (Figures 22 to 24), and a separate HHW container storage area (Figure 25). The facility was initially designed as a transfer facility to temporarily store household chemicals collected from mobile events held throughout Lake County, between April and November from 2002 to 2007. Since 2012, Veolia Environmental Services has served as hazardous waste contractor to conduct onsite collection and packaging, as well as transportation of mobile event collections.

In 2012, there were 24 public drop-off events held at the SWALCO facility in Gurnee, with a total of 935 55-gallon drums (i.e., 51,441.5 gallons) of HHW collected at the facility.



Figure 20. SWALCO facility in Gurnee.



Figure 21. SWALCO facility covered HHW drop-off area.



Figure 22. Interior storage area at SWALCO facility.



Figure 23. Drainage trench along interior perimeter of storage areas at SWALCO facility.



Figure 24. High-expansion foam fire suppression system over interior storage areas.



Figure 25. Interior storage bays at SWALCO facility.

Chicago. The Chicago Household Chemicals and Computer Recycling Facility (HCCR) is located at 1150 N. North Branch, on “Goose Island” (an artificial island in the North Branch of the Chicago River), on the north side of Chicago. The site of the Chicago HCCR Facility was formerly a City of Chicago animal incinerator, and then a storage facility for city vehicles. In 2005, the facility was repurposed into a new LEED-silver certified facility for collecting HHW and electronics, and started functioning in 2006 (Figure 26 and Figure 27). Currently, half of the 24,000 square foot facility is dedicated to the collection of electronics for recycling and refurbishing (Figure 28), and the other half is devoted to HHW (Figure 29). The facility is operated by the Chicago Department of Streets and Sanitation.³ Collection events are held on Tuesdays between 7 a.m. and 12 p.m., on Thursdays between 2 p.m. and 7 p.m., and on the first Saturday of every month between 8 a.m. and 3 p.m., excluding holidays.

Items not accepted at the Chicago HCCR Facility include alkaline batteries, business wastes, explosives, ammunition, fireworks, medical waste, and radioactive materials. The HHW facility features a free latex paint exchange program for participants.

According to Terry Sheahan (personal communication, May 13, 2013), HAZMAT Program Coordinator, operation costs are paid for by the City and the IEPA finances HHW off-site transportation and disposition. SET Environmental, Inc. and a city employee collect and pack HHW that is collected, and Heritage Environmental Services is contracted by IEPA to pick up, treat, and dispose of the waste materials. The staff is trained in HAZWOPER (Hazardous Waste Operations and Emergency Response), and safety equipment is provided by SET Environmental and the city.

The facility has collected approximately 1.5 million pounds of HHW since it opened. In 2012 alone, the facility collected about 155,000 pounds.



Figure 26. Exterior views of Chicago HCCR facility.

³ Information for the HCCR facility obtained from the Illinois EPA Bureau of Land Inventory Database, at <http://epadata.epa.state.il.us/land/inventory/>



Figure 27. Interior work area at Chicago HCCR facility.



Figure 28. Interior electronics collection storage area at Chicago HCCR facility.



Figure 29. Exterior HHW storage units at Chicago HCCR facility.

One-Day HHW Collections in Illinois

IEPA-Subsidized Events

IEPA has coordinated one-day collection events for HHW since November 1989, after the moderate success of three pilot events in September and October, 1988, in Quincy, Mount Carmel, and Homewood (David Saladino, personal communication, March 13, 2013). The IEPA website (2015) indicates that since the IEPA one-day HHW collections began in 1989, an estimated 401,350 households have participated in 449 events, with more than 78,100 drums of HHW materials collected.

Figure 30 shows the proportion of HHW categories collected based on IEPA HHW collection data available for the time period September 1988 through September 2012. Oil-based paints; flammable solvents; adhesives, sealers, and flammables not bulked; poisons and pesticides; and oils represent 75% of all the HHW collected.

Based on IEPA one-day collection data for the 24-year period (1988-2012), the average cost of hiring a hazardous waste contractor to collect, transport, and process HHW for each IEPA one-day HHW collection event is \$62,739, with costs ranging from \$9,829 to \$210,001. Not included in this average cost are related IEPA administrative or incurred costs by the local cosponsors for publicity, traffic control, etc. (IEPA, 2003b). The wide range of cost variability can be explained

by several factors including economy of scale, cost-efficiency, competitive pricing from contractors, scale of event, varying participation, etc.

According to collection records provided by the IEPA, contractors to one-day collection events use several disposal methods for the different wastes collected. These methods are highlighted in Table 7.

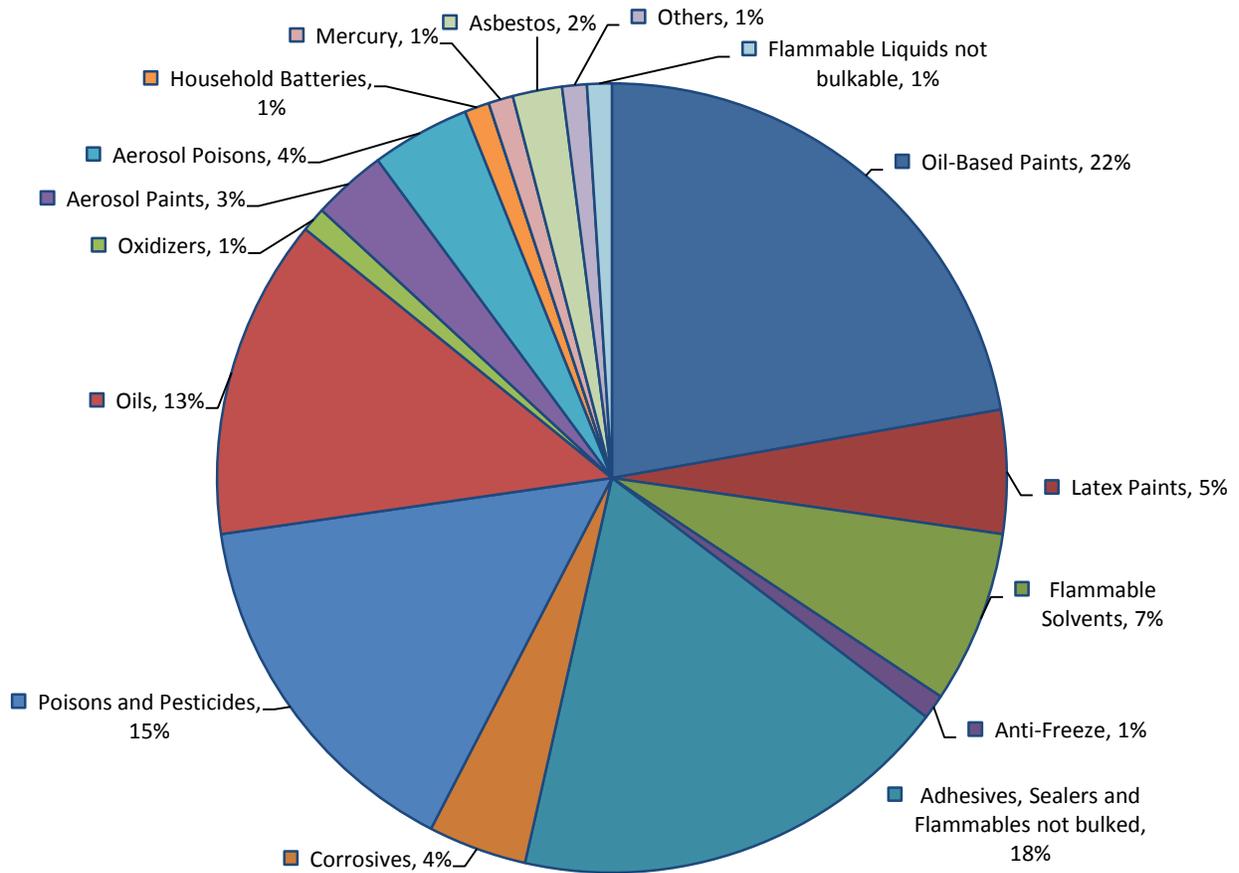


Figure 30. HHW collected at IEPA one-day collections (1988-2012).

Table 7. Different disposal methods for HHW categories.

HHW Collected	Disposal Method(s)
Oil-Based Paints	Fuel blended
Latex Paints	Recycled/Fuel blended
Flammable Solvents	Fuel blended/Incinerated
Anti-Freeze	Recycled/Fuel blended
Adhesives, Sealers/Flammables not Bulked	Fuel blended/Incinerated
Corrosives	Treated
Poisons and Pesticides	Treated/Incinerated
Oils	Recycled/Fuel blended
Oxidizers	Treated/Incinerated
Aerosol Paints	Recycled/Incinerated
Aerosol Poisons	Incinerated
Household Batteries	Recycled/Landfilled
Fluorescent Lamps	Recycled
Mercury	Treated/Recycled
Asbestos	Landfilled
Others ⁴	Treated/Incinerated

In fuel blending processes, materials with high energy density (BTU value) such as oil-based paints, solvents, and gasoline are used as an alternative energy source in cement kilns.

Materials that are commonly recycled include latex paints, antifreeze, motor oil, rechargeable batteries, fluorescent lamps, and mercury. Typically, they are cleaned or refined such that they can be reused (e.g., latex paint and motor oil) or they can be reduced to their component parts, which, in turn, can be used to make new products (e.g., fluorescent light tubes).

Incineration involves the exposure of materials such as pesticides and organic peroxides to high temperatures. This converts the solid and liquid components into gases, which are further treated to meet regulatory standards before being introduced to the atmosphere. Inorganic materials such as metals drop out as ash, which is also treated to regulatory specifications and disposed of in landfills.

Treatment refers to several methods such as chemical redox processes, metal precipitation, flocculation, filtration, neutralization, and carbon adsorption. They are typically used for corrosives and oxidizers, such as cleaners and pool chemicals.

⁴ “Others” refers to HHW items that may not fit into any of the above categories, such as pharmaceuticals, glue, lighter fluid, moth balls, etc.

Landfilling is the least expensive disposition method for HHW. However, landfills are highly regulated, and some items that cannot be recycled, fuel blended, or treated are not allowed into municipal solid waste landfills. Certain materials like asbestos and alkaline batteries need to be sent to hazardous waste landfills because of the lack of more viable opportunities (Bruning and O'Donnell, 2008).

According to Sheila Morris of Heritage Environmental Services (personal communication, July 19, 2013), all categories of HHW are sent to their single respective waste stream, with no splitting within the same category. An exception to this rule is corrosive substances, the majority of which are treated by a water-based neutralization system, while the remainder is incinerated. Table 8 reviews HHW disposal by Heritage Environmental Services for HHW collected in Illinois.

Table 8. Heritage Environmental Services disposal methods for HHW categories.

HHW Collected	Percentage	Disposal Method
Oil-Based Paints	100%	Fuel blended
Latex Paints	100%	Fuel blended
Flammable Solvents	100%	Bulked and fuel blended
Anti-Freeze	100%	Fuel blended
Adhesives, Sealers and Flammables not Bulked	100%	Fuel blended
Corrosives	60%	Treated
	40%	Incinerated
Poisons and Pesticides	100%	Incinerated
Oils	100%	Recycled
Oxidizers	100%	Incinerated
Aerosol Paints	100%	Fuel blended
Aerosol Poisons	100%	Incinerated
Household Batteries	100%	Metal reclamation
Fluorescent Lamps	100%	Recycled
Mercury	100%	Treated and recycled
Asbestos	100%	Landfilled

Non-IEPA-Subsidized Events

Due to limited availability of IEPA One-Day HHW Collections and the suspension of IEPA One-Day HHW Collections for three years between 2009 and 2012, a few Illinois counties have found an alternate means of funding one or more HHW collections to serve their residents. Examples of Illinois counties which have found alternate means of funding one-day HHW collections to serve their residents are reviewed further in the following sections.

Jackson County. From 2001 to 2006, HHW collection events in Jackson County were held every other year. These events were the result of a collaboration of Jackson County and the IEPA. When the IEPA could no longer co-sponsor these events due to funding shortages, the Jackson County Health Department started hosting their own collection programs. Two events were held each year from 2007 to 2009, and due to loss of funds, the number of events have been reduced to one per year, beginning in 2010.⁵

Funding for the non-IEPA subsidized events is a result of a host agreement between Jackson County and the Southern Illinois Regional Landfill. In addition to landfill tipping fees and other host agreement benefits, the landfill has dedicated \$50,000 to HHW collections in Jackson County.

According to Kerri Gale (personal communication, May 24, 2013), Recycling Coordinator at the Jackson County Health Department, an average of 3,970 gallons of HHW have been collected in the eight events hosted since funds from the IEPA were withdrawn, at an average total cost of \$48,743, and an average cost per household of \$71.29.

Figure 31 summarizes the relative amounts of major HHW categories collected at non-IEPA funded one-day HHW collections held in Jackson County.

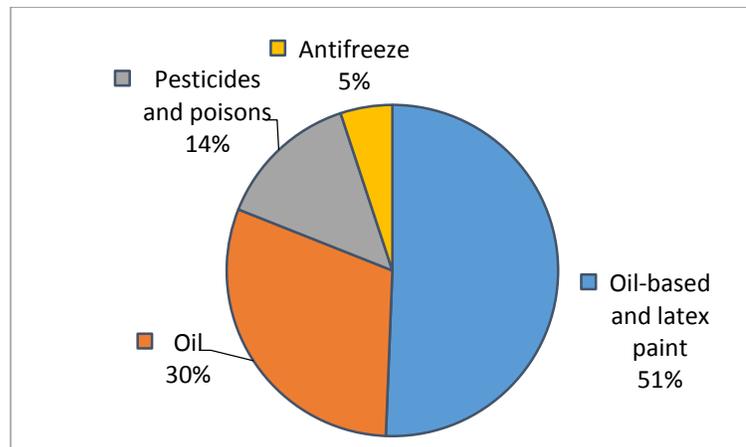


Figure 31. HHW collected at Jackson County one-day HHW collections (2007-2011).

⁵ Presentation by Bart Hagston and Kerri Gale of the Jackson County Health Department, at the ILCSWMA Conference on October 5, 2012. From personal communication on May 24, 2013.

McLean County. The Ecology Action Center (2015) is a non-profit organization which serves as a “central resource for environmental education, information, outreach, and technical assistance in McLean County.” Traditionally, HHW collection events within McLean County were those subsidized and co-sponsored by IEPA. A few IEPA one-day HHW collections were held in McLean County from 2002 to 2007, after which funds from the IEPA ran dry. This resulted in an absence of HHW collections for McLean County for a few years.

In 2011, the Ecology Action Center led a private/public funding partnership to hold a locally funded HHW collection event for McLean County in September, 2012. A total of \$143,079 was raised for the event, with sponsorship coming from individual or family contributions, the City of Bloomington, the Town of Normal, McLean County, sponsorships, We Care Twin Cities Half Marathon proceeds, the Ecology Action Center, business contributions, McLean County municipalities, church contributions, and community organization donations (Ecology Action Center, 2015). A total of 161,896 pounds of HHW was collected (Figure 32). The collection was conducted by Home Sweet Home Ministries for electronics; Springfield Electric Tools for batteries, mercury, lamps and some e-waste; Bloomington Police for pharmaceuticals; and Ecology Action Center and Tradebe Treatment and Recycling, LLC for all other HHW.⁶

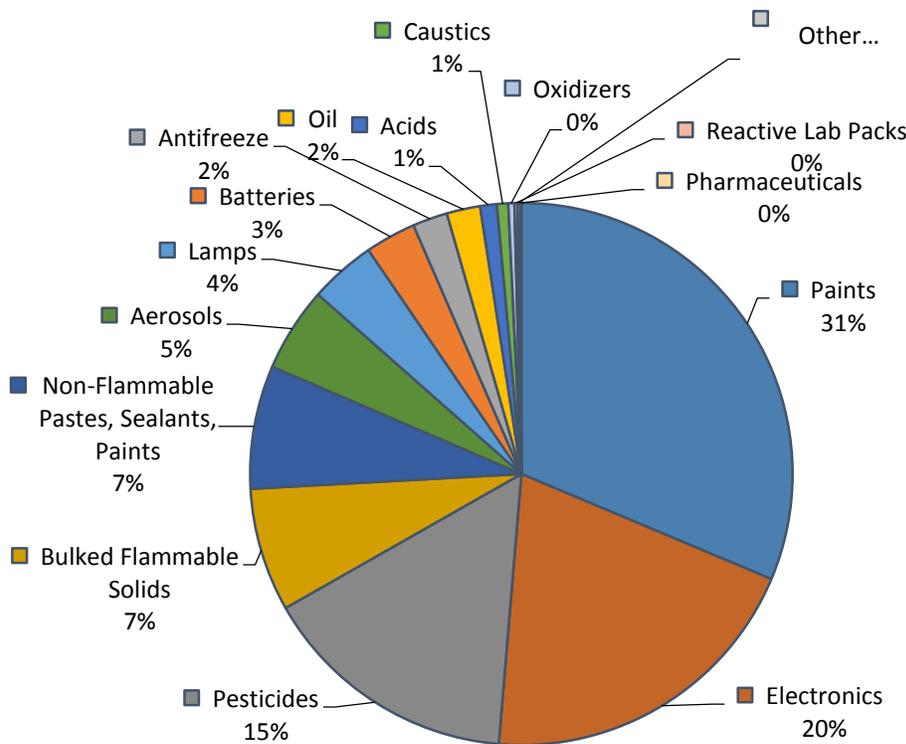


Figure 32. HHW collected at Ecology Action Center one-day HHW collection in 2012.

⁶ McLean County Archives. Retrieved from <http://www.mcleancountyil.gov/Archive/ViewFile/Item/3166>

Will County. Will County coordinates, on average, a total of five HHW collection events every year in different locations (Dave Hartke, personal communication, June 6, 2013), of which three non-IEPA-sponsored events are funded by host agreements between Will County and Waste Management, Inc.'s Laraway Recycling and Disposal Facility, and between Will County and Waste Management, Inc.'s Prairieview Landfill. At least two events are held in the spring and at least one in the fall. Will County also helps fund Naperville's permanent HHW collection facility (Will County Green, 2010).

In addition, Will County has partnered with libraries and retailers to provide battery disposal options; with the Will County Forest Preserve District to provide compact fluorescent light (CFL) recycling options; with retailers to promote a paint recycling program; and with pharmacies, police departments, and the IEPA to offer medication disposal opportunities to residents (Will County Green, 2010).

“ShareFest” is a free public event hosted annually in the Village of New Lenox in Will County since 2007, bringing together local government, schools, churches, businesses, organizations and residents to collect HHW, electronics, Styrofoam, scrap metal, wood and other items. The 2012 ShareFest was recognized with an “Outstanding Community Recycling Program” award at the Illinois Recycling and Resource Management Conference and Trade Show (2013) for collecting 46,429 pounds of HHW. The 2011 event won the Governor's Home Town Award, in which 33,952 pounds of HHW was collected. Since 2010, 122,232 pounds of HHW have been collected at ShareFest events (Illinois Recycling and Resource Management Conference and Trade Show, 2013).

Paint Collection Programs

Typically paint is the single most voluminous and expensive HHW material that many local governments collect and manage. According to a report based on data collected from California, Iowa, Oregon, Washington, and Wisconsin between 1998 and 2003 and projected to the national level (U.S. EPA, 2007), an estimated 10% of annual sales of post-consumer architectural paint is disposed of each year. This estimate is based on post-consumer paint disposed at MSW landfills and incinerators brought to HHW collection centers in each of the five states, and does not include paint that is stockpiled in homes or otherwise disposed of (e.g., dried out by consumers outside of the original container, or spilled down drains). In Illinois, based on one-day collection data (IEPA, 2003b), approximately 27% of HHW collected is paint.

IEPA Subsidized Paint Collection Program. IEPA launched the “Partners for Waste Paint Solutions” program in 1995. The “Partners for Waste Paint Solutions” program required that each ‘partner’ fund start-up and operation of a paint collection site. IEPA funds and is responsible for the pick-up, transport, and disposition of waste paint collected by each participating ‘partner.’ As of 2013, all paints collected by IEPA contractors have been incinerated.

Previously Illinois Department of Commerce and Economic Development grant funds were available to assist in procurement of paint collection equipment and supplies, however, these grant opportunities no longer are available.

Over time, the number of participating ‘partners’ in IEPA’s Waste Paint Partners Solutions program has dwindled considerably, from approximately 12 to five remaining participating paint collection sites statewide. Table 9 contains paint collection details of the five remaining participating outlets. Of the five participating paint-collection outlets, two do not accept oil-based paints.

Table 9. Partners for Waste Paint Solutions Paint Collection and Disposition.

Partners for Waste Paint Solutions	Frequency of Paint Collection	Total Volume Received	Volume of Oil-Based Paint	Volume of Latex-Based Paint	Disposition of Waste Paints
Lloyd’s Paint ‘N Paper	Year-round collection	228.5 gal in 2012	not accepted	228.5 gal	~95% sorted into 55 gal drums, ~5% donated to Habitat for Humanity
		15-20 gal per month	not accepted	15-20 gal per month	Earth paints collects paints sorted into 55 gal drums for recycling
Macon County Environmental Management Department	Year-round collection	40,000 gal from 2012 to present (Feb 2013)	17,850 gal	22,200 gal	Sorted into 55 gal drums
Village of Oak Park	Biannual collection	1,220 gal in 2012	not accepted	1220 gal	Paints sorted by color and ~17% given away, ~83% sorted into 55gal drums
Western Illinois Regional Council	Year-round collection	1,530 gal in 2012	460 gal	1070 gal	Sorted into 55 gal drums
Algonquin Township Road District	Every month from March to October	10,000 gal in 2012	3,000 gal	7,000 gal	~29% of reusable latex paint returned to residents, remaining latex paint and all oil paint sorted into 55 gal drums

Non-IEPA-Subsidized Programs. There are few options for recycling of latex paint in Illinois. One known option is to engage the services of the private firm Earth Paints Collections Systems (2008), which specializes in recycling of latex paint. Earth Paints Collection Systems coordinates with several retailers in the Chicago area to accept unwanted latex paint for recycling, and charges a per-container fee to persons dropping off containers of unwanted latex paint, as follows:

- one quart – \$1.50 each
- one gallon – \$2.50 each
- two gallon – \$3.50 each
- five gallon – \$8.00 each

Additionally, upon request, Earth Paint Collection Systems sponsors one-day paint collections, accepting latex paint only and charging a per-container fee as described above.

Controlled Substance Collections

Controlled substances are prescription drugs or illegal drugs whose use is regulated by the government. According to the Controlled Substances Act (U.S. Department of Justice, 2012), end users of prescription medications are required to return unused medications to the Drug Enforcement Administration (DEA) to be disposed, through take-back events, mail-back programs, and collection box locations. These disposal options would require the legal transfer of drugs to individuals for disposal. Since 2010, the DEA has held six nationally promoted take-back events which occur locally and are coordinated through local, state, and tribal law enforcement agencies. In total, since 2010, these collections have removed more than 2.8 million pounds of prescription drugs from circulation (U.S. Department of Justice, 2013d).

Pharmaceutical Collections

IEPA accepts unwanted pharmaceuticals at one-day HHW collection events held (2013b). In addition, unwanted or expired medications can be taken to long-term household hazardous waste facilities in Naperville, Rockford, Chicago and Lake County.

In addition, the Illinois-Indiana Sea Grant (2012) regularly provides safe options for disposal and recycling of pharmaceuticals to communities around Lake Michigan.

The Prescription Pill and Drug Disposal (P2D2) Program (n.d.) was initiated as a collaboration between communities, pharmacies, police departments, hospitals, city officials, and students to present options for disposing not only over-the-counter medications and personal care products, but also prescription medications. Illinois HB2056 was passed in 2011 as Public Act 097-0545. The legislation created the “Prescription Pill and Drug Disposal Fund” to be used for grants by the Illinois Criminal Justice Information Authority to local law enforcement agencies to assist in costs of a law enforcement agency to collect and transport unwanted pharmaceutical to be incinerated. The legislation is noteworthy as it provides a funding source in Illinois for pharmaceutical disposal other than tipping fees from operational landfills. The P2D2 program in

Illinois helps local pharmacies, police and fire departments, officials and students collaborate to collect unwanted medications and educate the public about the dangers of not properly disposing of medication and drugs.

Illinois Department of Agriculture Pesticide Clean Sweep Program

The Illinois Department of Agriculture (IDOA) in association with the Illinois Department of Public Health (IDPH) organized and started the Illinois Pesticide Clean Sweep Program in 1990 as a pilot program. With funding coming from the U.S. EPA, this program has continued on a larger scale since 1994. The program is geared specifically to serve only farmers and pest control contractors, and not residents. According to David Saladino (personal communication, April 23, 2013), Manager of the IEPA One-Day HHW Collection Program, chemical products used in agricultural operations are considered agricultural wastes, and therefore cannot be accepted at HHW events.

Waste pesticides are collected between 8 a.m. and 2 p.m., and need to be pre-registered with IDOA in order to be accepted at the events. To date, the program has collected a total of 487,287 pounds of pesticides from 16,103 participants at 43 collection events (Scott Frank, personal communication, April 19, 2013).

Hazardous Waste Disposal in Illinois

According to David Walters (personal communication, July 25, 2013), Division Manager at the IEPA Land Bureau, there are no hazardous waste landfills located in Illinois; the only operating hazardous waste incinerator in Illinois is Veolia Environmental Services' hazardous waste incinerator in the Village of Sauget. The Village of Sauget is located in St. Clair County, and is situated east of the City of East St. Louis along the Mississippi River. As reported by J. Tomich (2013) of the St. Louis Post-Dispatch, local environmental groups have recently called for more stringent monitoring of emissions from the incinerator (See Appendix R).

HHW Collection in Study Area

IEPA-Subsidized One-Day Events. A total of 25 IEPA-subsidized one-day collection events have been held in the seven-county study area since 1990. Champaign and Vermilion Counties, being the most populated in this area, hosted the most events. In total, 3,500 55-gallon drums, or, 192,500 gallons of HHW have been collected in these events (Figure 33) (David Saladino, personal communication, March 13, 2013).

Appendix S contains IEPA One-Day HHW Collection results for each county in the study area. It is evident from the charts that different counties experience different contributions of HHW. These differences are due, in part, to the different number of events in each county; the sizes of and awareness in the locations; and number of households participating in the different towns

and cities. However, the types of HHW collected in all seven counties were quite uniform: paints, adhesives, sealers and flammables, poisons and pesticides, oils, and flammable solvents.

To get a better understanding of HHW collection trends based on county and specific location, see Figures 34 and 35. Champaign County collects larger amounts of HHW, likely due to its population, allocated resources, and outreach activities.

Adhesives, sealers, and flammables; poisons and pesticides; and oils are the most predominantly collected items at IEPA one-day HHW collection events. The study area receives a greater percentage of oil-based paints than the state average, probably because of the lack of paint take-back programs in the study area.

Non-IEPA-Subsidized Paint Collection Programs. The Earth Paints Collection Systems website (2008) provides a list of stores that accept latex paints for a recycling fee. Presently, there are no such stores located in the study area.

Pharmaceutical Collections. Known options available to citizens in the study area are limited to those listed on the IEPA Medication Disposal Locations Map (2013b). Convenient 24-hour collection of unwanted pharmaceutical products is possible only at three police station locations in central portion of Champaign County. Pharmaceutical collection options are limited in Clark, Cumberland, and Coles Counties, and no pharmaceutical collection options are known to exist in Douglas, Edgar, or Vermilion Counties.

IDOA Pesticide Clean Sweep Program. IDOA coordinated regional one-day Clean Sweep pesticide collections catering specifically to farmers and pest control contractors in the study area. Within the study area, two one-day IDOA Clean Sweep events held were in Hindsboro, in Douglas County (in 2001), and Royal in Champaign County (in 2006) (Scott Frank, personal communication, April 19, 2013).

Collection Options for Specific Types of HHW in the Study Area. Existing collection options for specific types of HHW in the study area are listed by study area county in Appendix T.

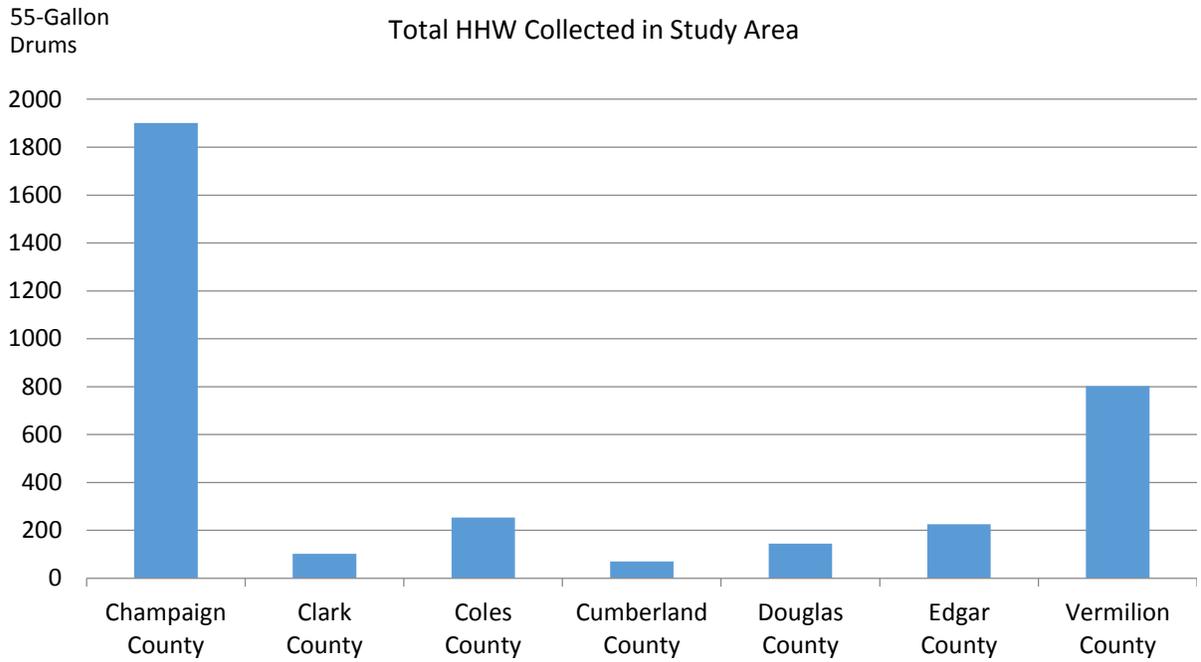


Figure 33. Total HHW collected in study area counties at IEPA one-day HHW collections held to date.

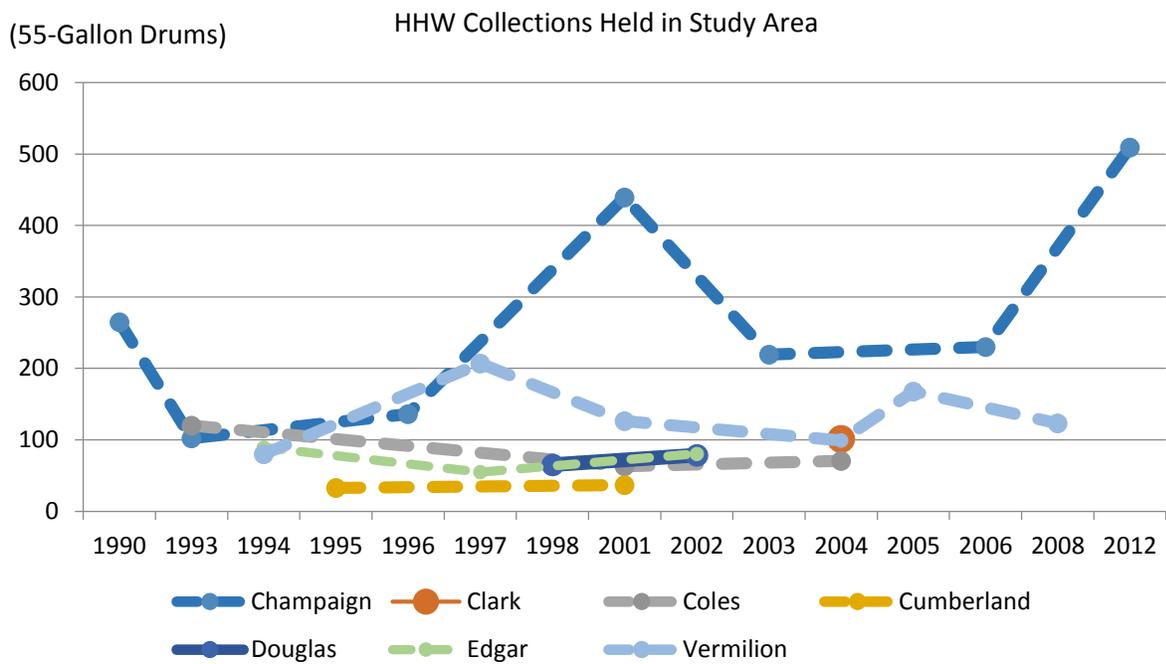


Figure 34. Estimated amount of HHW collected in the study area, in the years that a one-day HHW collection event was held.

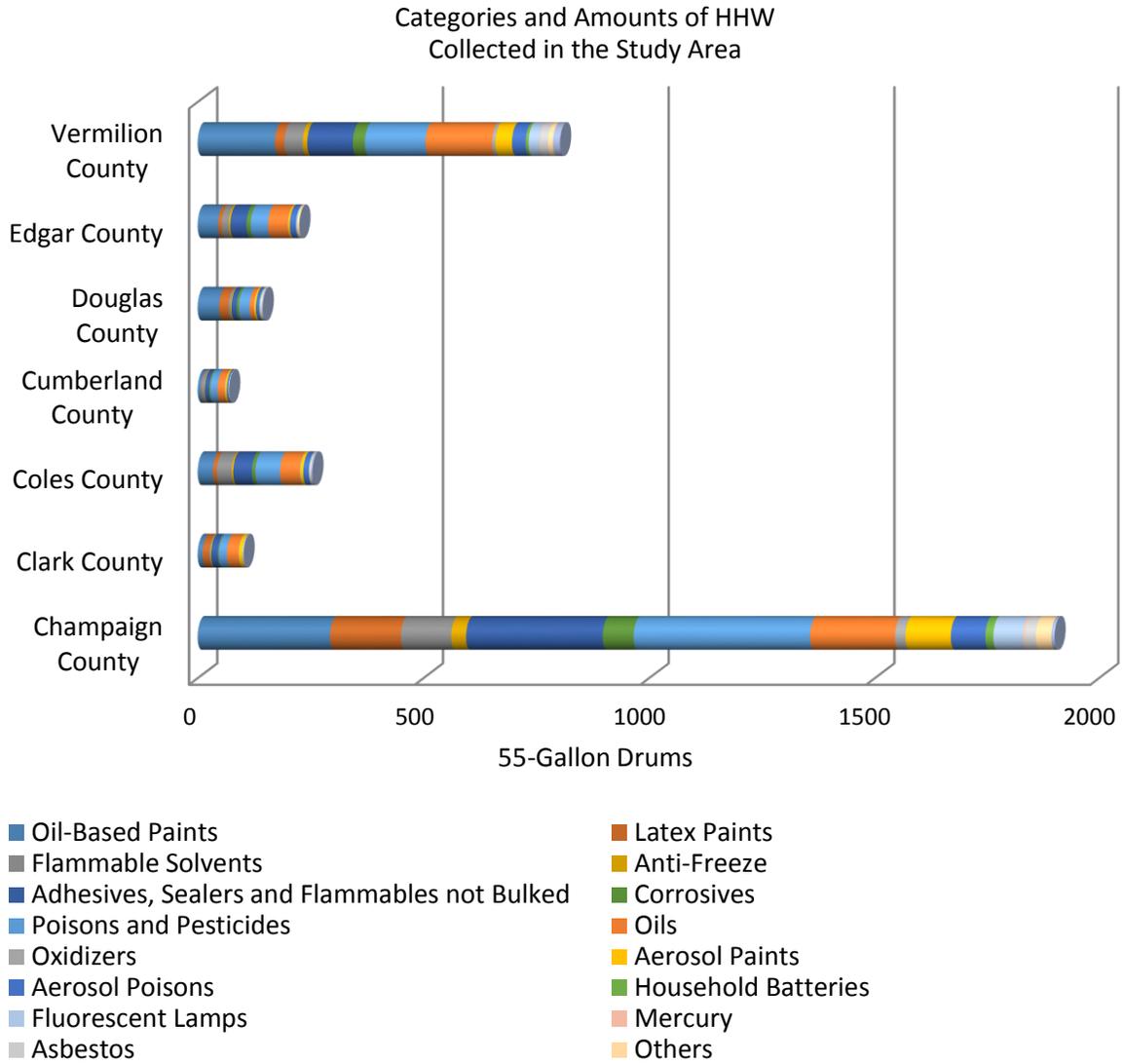


Figure 35. Comparison of categories of HHW collected in the study area at one-day HHW collections held to date.

5. HHW Best Management Practices

Early HHW Awareness and Collection

Rachel Carson's *Silent Spring* (1962) was a seminal treatise that first brought the deleterious health effects of hazardous chemicals to people's attention. Galvin and Dickey (2008) observed that the use of hazardous chemicals in household products in America dramatically increased following World War II, but that it was not until the early 1980s that environmental health and safety advocates began to question the cumulative impact of using and disposing of these hazardous products. Galvin (2008) describes early efforts in the U.S. to collect and responsibly manage HHW:

- In 1980, Ron West of Chemical Processors, Inc. opened up his industrial transfer-storage-disposal facility to the public on an as-needed basis.
- In 1981, Lebanon, Marion County in Kentucky held its first week-long pesticide "and other chemicals" collection program.
- In 1982, a pilot collection facility at a fire station was opened in Seattle, Washington for three weeks; a door-to-door HHW collection project in conjunction with the local fire department was started in Gresham, Oregon; and the first one-day HHW collection event in the country was held in Lexington, Massachusetts.

Galvin (2008) notes, in conjunction with the first one-day HHW collection event in Lexington, MA, that the League of Women Voters was instrumental in providing comprehensive how-to-organize-a-HHW-collection kits to distribute to other communities in New England to organize similar collections. The number of HHW collection programs in the U.S. increased rapidly from 1980 to 1997 (Duxbury, 1998), as illustrated in Figure 36.

HHW Collection
Events in US

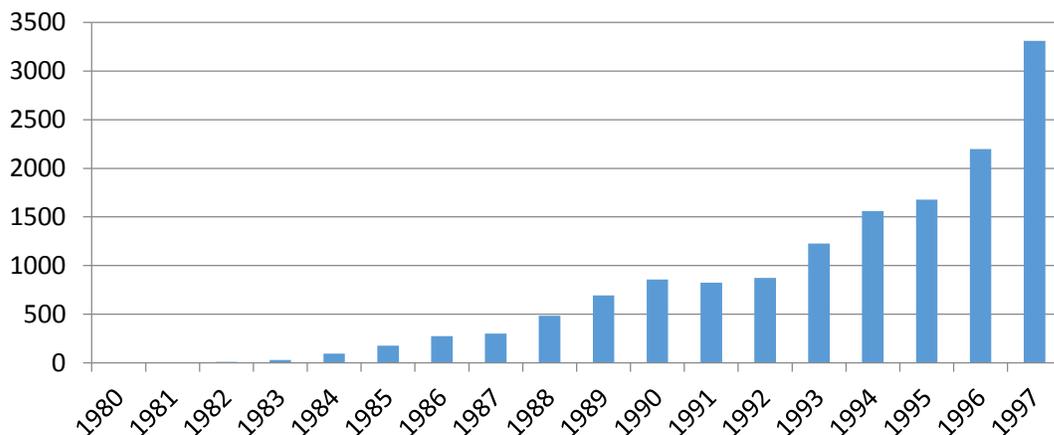


Figure 36. Number of HHW collection events in U.S. from 1980 to 1997.

Examples

A variety of best management practices associated with HHW collection have been implemented in some areas of the U.S, in Canada, or in other countries as described below.

Denmark, one of the first countries to implement HHW collection programs, has continued to be the frontrunner in terms of best practices (Meadows, 1989). In Denmark, all HHW is sent to one of 21 transfer facilities, none of which are more than 30 miles away. From there, they are transferred to one treatment facility which handles about 100,000 tons of hazardous materials per year and treats or disposes of HHW responsibly.

Denmark, Germany, and other countries in the European Union have embraced “take-back programs,” where HHW is collected at the point-of-sale. Germany, in fact, does not separate HHW collection from other non-hazardous recyclables. All HHW is collected at local recycling centers (Earth911, 2009). According to the European Environment Agency (2011), Sweden has banned the construction of new incinerators and buries its *concentrated* hazardous wastes in underground concrete vaults. Hazardous materials in the EU are increasingly being transported to other member countries, depending on their ability to handle such wastes.

Sheehan and Spiegelman (2005) state that Canada is one of the first non-European countries to establish HHW collection programs. As of 2005, it had nearly 50 “extended producer responsibility” programs to take back items such as rechargeable batteries, pesticides, pharmaceuticals, motor oil, and paints (Cassel, 2008).

Innovation Approaches for HHW Collection

Bruning (2008) identifies certain innovative approaches for HHW collection, including: “extended producer responsibility” (EPR) and take-back programs; multi-jurisdictional programs; partnerships between private industry and community; purchasing cooperatives; targeted waste streams; curbside collections; mail-back programs; product exchange programs; and multiple-site one-day collection events. These approaches can increase participation in HHW collection programs and reduce waste diversion. Additionally, Bruning (2008) recommends certain sustainable methods for improving the management and reducing the cost of collecting HHW, for example, maximum waste consolidation; on-site management of wastes; and generating revenue from waste streams.

Extended Producer Responsibility and Product Stewardship. Arguably, the best case scenario for dealing with HHW does not involve treating the materials after disposal; instead, take-back programs at point-of-sale centers and by manufacturers of the materials can ensure their diversion from the waste stream. Manufacturers can then send the products to be recycled or treated accordingly. This ensures that the wastes are treated almost like hazardous wastes under the purview of RCRA, i.e., the manufacturers are responsible for their products from cradle to grave, and any environmental costs are included in the cost of the goods (OECD, 2001).

Extended producer responsibility (EPR) is a strategy that aims to integrate the environmental cost of a product into its price. Cassel (2008) describes extended producer responsibility as encouraging producers to “improve the environmental performance of their products and to involve them in the collection and recycling of products at the end of their life” to ensure that their products and packaging are less wasteful and toxic, and more recyclable and reusable. EPR aims to shift financial and management responsibility away from the public sector (PSI, 2011). While the responsibility of ensuring a better product and its packaging, collection, and recycling lies with the producers, the cost of such end-of-life management falls on the consumers. Consumers are expected to pay for the improved packaging, and collection and recycling costs, all of which are usually included within the price of the product.

Green Dot identifies products whose packaging materials are collected and recovered by a qualified national organization (PRO Europe, 2011), and it is the more popular name for the packaging ordinance of 1991, which was first introduced in Germany. The Green Dot model is an example of an extremely successful European industry-funded EPR system recognized in over 30 countries, including non-European countries such as Canada, Japan, and Israel. The different member countries fall under the umbrella of PRO Europe, an organization that monitors the individual countries’ packaging directives and allows the streamlining of best practices between member countries. The success of this model can be demonstrated by the fact that the benefits of EPR are well-established, especially in Europe and parts of Asia, and the Green Dot is the most widely used trademark in the world (PRO Europe, 2011).

Product stewardship is a strategy similar to EPR, and it aims to reduce health, safety, and social impacts of a product in addition to its environmental impacts, while maximizing its economic benefits (PSI, 2011). Product stewardship is also similar to EPR in that the cost of product management falls on the consumers and is included within the price of the product. Furthermore, to discourage the burial, storage, or illegal dumping of hazardous end-of-life products, consumers are not charged separately for their recycling or disposal (Cassel, 2008).

While EPR requires producers to track and be responsible for the product through its life cycle, product stewardship ensures that *any* participant in the product supply chain such as the manufacturer, transporter, retailer, government, etc., has a role to play. The following are examples of potential EPR actions:

- The manufacturer takes action to design the product in a way that consumes less energy during manufacturing or use, and includes recycled and less-toxic materials.
- The retailer takes back products sold and pays for recycling.
- The government passes laws directed at manufacturers to use fewer or no hazardous materials in products or the production process and to create systems by which manufacturers can collect and recycle their products.

Since 1998, several organizations encouraging or dedicated to EPR and product stewardship have been established. The Northwest Product Stewardship Council (NWSPSC, n.d.) is a coalition of government and other organizations that focuses on EPR for chemicals, paint, batteries, mercury, electronics, pharmaceuticals, and other HHW in the Pacific Northwest. The North American Hazardous Materials Management Association (NAHMMA, 2012) is a professional organization “dedicated to pollution prevention and reducing the hazardous constituents entering

municipal waste streams from households, small businesses, and other entities that may be exempt from local, regional or national regulations.” In its effort to highlight novel approaches to hazardous waste management, NAHMMA conferences often include product stewardship ideas. The Product Policy Institute (PPI, n.d.) is an advocacy-based organization which focuses on EPR for hazardous materials such as paint, electronics, CFLs, and mercury thermostats, and aims to institute policy changes primarily in the realm of product manufacturer and producer responsibility. PSI is a membership-based organization which fosters dialogue between governmental agencies, manufacturers, retailers, environmental groups and other stakeholders. Besides focusing on EPR, PSI also emphasizes product stewardship of batteries, CFLs, electronics, paint, pesticides and pharmaceuticals (2013b) in order to reduce the economic, environmental, and health and safety costs of those and similar items.

Permanent HHW Collection Facilities. Permanent facilities, as the name suggests, are permanent structures in which the unloading, processing, storing, and loading of HHW disposed of by different households is carried out on a year-round basis. Residents carry their HHW to the facility when it is in operation, and specially trained staff collect and separate it into different categories of wastes that are transported to different disposal locations, such as incinerators and recycling facilities.

The ideal permanent HHW collection facility would be constructed at a secure location, situated outside of a floodplain, and sufficiently distant from dense populations, in case of an emergency. The Patrick Engineering (2009) report for Peoria County states that permanent facilities need to be “large enough to perform processing tasks and hold semi-truck quantities of HHW.” Typically, such facilities are commercial metal structures with spill-containment devices and safety features put in place.

According to Llewellyn (2009), regularly held HHW collection events at one location can result in improved results in terms of cost per participant as well as volume of collections, due to economies of scale in packaging and disposal of waste. With HHW collections held on a regular basis, streamlined operations are a more likely outcome.

A permanent HHW collection facility can include space for “reuse” or “swap” opportunities (Patrick Engineering, 2009). Llewellyn (2009) notes that high capital and operating costs can be a part of establishing and operating a permanent HHW collection facility, and this obstacle is significant to many communities.

Permanent HHW collection facilities recognized by NAHMMA for program excellence in 2007 include the City of Chicago Goose Island facility in Illinois, the San Luis Obispo County facility in California, and the Sarasota County HHW Collection Facility in Florida.

Multiple-Site One-Day HHW Collection Events. One-day HHW collections are usually held once or twice a year in certain locations that do not have access to a permanent facility. These tend to be temporary arrangements made and funded by the local government agencies that procure bids from service providers to contract the events.

Multiple-site one-day HHW collection events (also called “mobile collection events”) are convenient when many residents cannot travel to a particular one-day collection site due to distance, and when the households are too numerous to be effectively served by a single-site one-day HHW collection event. Multi-site collections occur in different locations on the same day, so as to reduce advertising costs; provide a consistent message; and allow residents to travel to the locations closest to them, ensuring full county coverage (Bruning, 2008).

Typically, the collected HHW is taken back to a permanent facility or contractor’s facility for proper storage and disposal. Depending on state requirements, a special permit may not be required for a one-day HHW collection if the HHW is transported to the main facility on the same day. However, transporting hazardous materials on the road leads to higher liability (Patrick Engineering, 2009).

An example of multiple-site one-day collections is the collaboration between the City of Fresno and Fresno County (CA), which hosts its main collection in the Fresno/Clovis metropolitan area while other collections are held on the same day in several locations within the county. The locations alternate between the east and west of the county every fall and spring (Bruning, 2008).

Satellite HHW Collections. Satellite HHW collections are similar to mobile or multiple-site one-day HHW collection events in that they are held in different locations, but these occur on a regular basis at each location (Patrick Engineering, 2009). A satellite HHW collection may be held in a location that enables convenient access by residents. As one example, if many communities are located outside the jurisdiction of a permanent HHW collection facility, satellite HHW collections can be held in each community in a fixed location and on a fixed day every month (or quarterly or semiannually). The satellite HHW collection center itself would travel from one community to the next, and the collected HHW would be transported to the permanent HHW collection facility after every satellite HHW collection.

In those cases where a permanent HHW collection facility is sponsored by IEPA, disposal costs would be covered. Satellite HHW facilities require lower initial capital investment than permanent HHW collection facilities and allow equipment sharing among different participating locations. In Illinois, a special permit would not be required for satellite HHW collection, provided the HHW is transported to a permanent HHW collection facility on the same day. One potential problem associated with a satellite HHW collection is that a very high participation rate could necessitate turning people away, due to the limited capacity of transportation vehicles (Patrick Engineering, 2009).

In Connecticut, the Department of Energy and Environmental Protection (2015) conducts several different satellite collections for HHW in towns and cities throughout the year. Clark County in Washington, Jackson County in Florida, and Montgomery County in Maryland each conduct satellite HHW collections on a regular schedule in towns and cities throughout the year.

Curbside HHW Collection. HHW that is collected curbside usually poses low environmental risks, and can also include universal wastes and e-wastes. A curbside HHW collection would require that HHW be placed in a special container for pick up in conjunction with regular garbage collection, with an additional fee for the HHW pickup. Curbside HHW collections could

be extremely useful for residents who are either incapable of or inconvenienced by transporting their HHW to a HHW collection center. For instance, aged and immobile residents, or residents who cannot go to collection events due to scheduling conflicts.

Curbside collections also effectively disseminate the idea of correct HHW disposal. According to Bruning (2008), recent curbside collection services dedicated to collecting motor oil and oil filters have drastically reduced the improper disposal of hazardous materials. Curbside collections allow for the rejection of unacceptable materials without the need for their transportation. On the other hand, curbside pick-ups are very expensive; require shipment of even small quantities of HHW; and need high levels of staff training (Patrick Engineering, 2009).

One example of a curbside collection program is the program run by Colorado's Southeast Metro Stormwater Authority (SEMSWA) (n.d.), with Curbside, Inc. to collect HHW from the residents of the City of Centennial and unincorporated Arapahoe County. Another example is San Mateo County (CA)'s curbside program, which serves residents of Belmont, East Palo Alto, Foster City, City of San Mateo and other locations at no additional charge to their regular door-to-door collection costs (RethinkWaste, n.d.).

Product Exchange Programs. Product exchange programs can encourage households to exchange for free their HHW items with less hazardous substitutes, such as single use batteries for rechargeable batteries, mercury thermometers for non-mercury thermometers, old propane tanks for tanks equipped with overfill protection devices, or used motor oil for items such as reusable drain pans or funnels. Most exchanges are funded by grants or by state environmental departments (Bruning, 2008). Exchange programs can also provide other related items to encourage recycling of HHW.

Examples of local governments holding product exchange programs for exchange of all HHW products are Waukesha County in Wisconsin and Orange County in California. Monroe County in New York (2015) exchanges mercury thermometers for mercury-free thermometers.

Multiple Program Components. To serve households that cannot participate in one-day HHW collections or HHW collections at a permanent collection facility, several communities have resorted to hosting "multiple components of HHW" collections. For example, a curbside collection may be organized for residents who are remotely located, homebound, or immobile, to collect HHW for a fee. Bruning (2008) says that, "Regional programs that service both rural and urban areas have found it beneficial to maintain mobile HHW collection events in addition to the permanent HHW collection facility." In a survey organized by the Cascadia Consulting Group in 2005 (American Public Works Association, 2007), 80% of the respondents comprising 25 jurisdictions had implemented a combination of different collection options, including mobile collections, curbside pickups, and permanent facility collections.

Many counties in Pennsylvania and California have both permanent HHW collection facilities and one-day HHW collections. Hood River, Sherman, and Wasco Counties in Oregon hold regular satellite HHW collections in addition to quarterly HHW collections or one-day HHW collections (Oregon Department of Environmental Quality, n.d.).

Multi-Jurisdictional Programs. Inter-agency cooperation is a powerful tool to disseminate information on appropriate environmental behavior. According to Bruning (2008), multi-jurisdictional programs can more effectively hold successful educational campaigns, with different agencies focusing on their own causes to circulate a more compelling message. As an example, a wastewater treatment agency may focus on keeping HHW and pharmaceuticals from getting flushed or drained into the sewer system, a storm water agency may try to prevent the entry of motor oil or other HHW into storm water drains, a pollution prevention agency may promote the use of less hazardous substitutes for different items, and a solid waste agency could focus on diverting HHW from landfills so as to save valuable space and prevent groundwater contamination. The combined effort of all agencies enables a stronger message to the public to drive community-wide behavioral changes with regard to proper disposal of HHW.

Multiple agencies focusing on the same region can more easily support permanent HHW collection facilities due to economies of scale (Edmonds and Anderson, 2008), whereas several communities would not be able to hold such collections on their own. Santa Clara County in California and Salt Lake County in Utah are two examples of counties whose HHW collections are supported by multi-jurisdictional programs.

Purchasing Cooperatives. For a HHW collection, a government entity usually puts out a request for proposals for which several different agencies, or service providers, can bid. In order to combine demands and get lower price quotes from the service providers, different government entities combine to form a purchasing cooperative. Purchasing cooperatives select the service providers who not only ensure competitive market rates, but also provide services agreeable to the members of the cooperative. A number of regional and statewide co-ops allow neighboring jurisdictions to “assume the terms, pricing and conditions” of their contract. This practice is known as piggybacking, and it allows the neighboring jurisdictions to utilize the services of the providers with the same advantages that are given to the purchasing cooperatives themselves.

Purchasing cooperatives also help smaller government agencies with their available resources, such as legal and risk management for drafting and reviewing the contract language, insurance requirements, and procurement documents (Bruning, 2008).

Private Industry and Community Partnerships. Private entities have a stake in providing HHW services for their communities, to improve recognition and relations within the community (Bruning, 2008). Many private entities partner with communities to hold HHW collection events in different capabilities. They can provide full funding for activities such as advertising, outreach, staffing, waste collection, transportation, and disposal in HHW collection events. This strategy makes sense if they already have the abilities to conduct such an event, and if they need to gain traction within the community. Typically, private companies hold HHW collection events on Earth Day or the anniversary of the city or town’s incorporation.

Private entities that do not have HHW capabilities can either provide the location for HHW collection events or make monetary donations to fund certain aspects of an HHW collection event, such as advertising and outreach services, payment for the staff, partial funding of the total event, or a flat amount per participant. They can also provide specific in-kind services such as

printing of outreach material, staffing, and make in-kind donations such as waste packaging materials, PPE kits, and administrative supplies.

Universal Wastes. “Universal wastes” are a type of hazardous waste subject to specific regulations intended to streamline their management and disposal (EPA, 2012a). In Illinois, universal wastes are batteries, pesticides that are recalled or cancelled, mercury-containing equipment, and mercury-containing lamps. Table 10 is an EPA (2013e) list of “State Additions” of one or more specific items which a state has added to their state universal waste law.

The states listed in Table 10, in accordance with EPA guidelines, have each added particular hazardous waste items or products to their existing state list of “universal waste” items, and have modified their state regulations to include those added items as “universal waste.” This allows the “universal waste” item to be collected and disposed of more easily and efficiently.

Targeted Waste Streams. Collection events that focus on a single type (e.g., motor oil, pharmaceuticals) or group (e.g., universal waste) of hazardous waste tend to be quite expensive, according to the report by the Bay Area Pollution Prevention Group (BAPPG) (BAPPG, 2006), but they can also successfully get across the message of proper disposal of hazardous wastes. For instance, since the success of the pilot program organized by the BAPPG for pharmaceutical wastes in 2006, many local agencies in the San Francisco Bay Area have effectively adopted regular single waste stream collection programs.

Table 10. Additions to the State’s Universal Waste Rule. A summary of EPA webpage information (2013e).

Universal Waste	States
Antifreeze	Louisiana, Michigan, New Hampshire
Ballasts	Maine, Maryland, Vermont
Barometers	Michigan, New Hampshire, Rhode Island
Cathode Ray Tubes (CRTs)	Arkansas, Maine, New Hampshire, Rhode Island, Vermont
Electronics	Arkansas, California, Colorado, Connecticut, Louisiana, Michigan, Nebraska, New Jersey
Oil-Based Finishes	New Jersey, Pennsylvania
Paint and Paint-Related Wastes	Texas
Pharmaceuticals	Florida, Michigan
Aerosol Cans	California, Colorado
Thermostats	California, Connecticut, Hawaii, Indiana, Maine, New York, Rhode Island, Texas, Utah, Vermont, Wisconsin
Mercury Auto Switches	Maine, Michigan

Optimizing HHW Collection Based on Location. Bruning (2008) points out the importance of a convenient and accessible HHW collection event location; specifically, the collection site must be easily accessible to emergency service vehicles (e.g., an ambulance or fire truck). A certain HHW collection location could be more suitable based on its proximity to a solid waste transfer station, fire station, or recycling center. It is preferable for a HHW collection center to be located within these types of facilities, at the expense of obtaining extra permits, so that participation rates increase; drop-off procedures are simplified; and new training can be minimized for personnel. In some cases, it is beneficial to host drop-offs of specific hazardous wastes such as motor oils and universal wastes in concurrence with existing transfer stations or recycling centers, if it is not possible to place a collection center catering to all types of HHW (Bruning, 2008).

Funding of HHW Collection Programs. HHW collection programs in New Hampshire are funded through what is known as the HW Clean-Up Fund, provided by the NH Department of Environmental Services. Funds are distributed to different programs based on the frequency and type of collections organized, up to half the collection cost (New Hampshire Department of Environmental Services, 2008). For example, programs with permanent facilities would receive \$0.22 per capita served, those with yearly one-day collection events would receive \$0.06 per capita, while programs conducting more than one single-day collection event per year would receive \$0.12 per capita (Albanese, 2012).

In Florida, all counties have access to a HHW collection program, thanks to the \$100,000 Hazardous Waste Collection Center Grant, which allows each county to build one or more collection centers. For those counties that assist smaller, neighboring counties to organize collections, \$10,000 is provided through the Cooperative Collection Center Arrangement Grant, while the smaller counties get up to \$25,000 to cover 75% of their event costs. Additionally, counties with permanent facilities can receive \$50,000 for holding unique collections and providing innovative services, like using post-consumer paint in alternative roofing systems or for concrete production (Florida Department of Environmental Protection, 2013).

New York reimburses up to 50% of the cost of HHW collections in the state through the Department of Environmental Conservation's Household Hazardous Waste State Assistance Program (HHWSAP). Collection programs can be permanent facilities, one-day collections, or mobile collections. To date, HHWSAP has awarded 338 grants amounting to \$23.81 million (New York Department of Environmental Conservation, 2015).

Pennsylvania offers grants to one-day or permanent collection programs through the Household Hazardous Waste Funding Act. Individuals, municipalities, businesses, and corporations from each county are eligible for 50% funding of their programs, up to a total cost of \$100,000 per year. These funds come from the \$3 million Recycling Fund, taken on a one-time basis from the Resource Recovery Development Fund (Pennsylvania Department of Environmental Protection, 2015). The programs must be registered with the Pennsylvania Department of Environmental Protection, and the operators assume generator status for the hazardous wastes (Pennsylvania General Assembly, 1994).

In California, grants are available to cities, counties, Indian tribes, and joint powers authorities such as the California Sanitation Risk Management Authority (CAJPA, 2013), to expand or implement HHW collection programs. The funds are administered on a yearly basis by the Department of Resources Recycling and Recovery, or CalRecycle (2013). A total of \$1.5 million was available for 2012/2013, with a cap of \$50,000 for individual applicants and \$75,000 for rural counties and/or multi-jurisdictional applicants. For 2013/2014, \$1.5 million is available, with a maximum award of \$350,000 per applicant.

The Kentucky Pride Fund is generated by a fee of \$1.75 per ton of municipal solid waste disposed of into Kentucky landfills. Grants are awarded with a 25% local match in the form of cash or “in kind” services such as personnel, advertising, and educational activities. For 2013/2014, a total of \$1.5 million from the Fund was awarded to recycling and HHW collection programs by the Kentucky State Division of Waste Management (2013). Of the 70 programs, 22 were for HHW collections, totaling \$362,555 in grant money (Commonwealth of Kentucky Energy and Environment Cabinet, 2013).

Design and Operation of HHW Collection Facilities. The American Planning Association (2006), advises local governments to sign a host agreement with the developers of an HHW collection facility “to guarantee environmental assurances and good-neighbor compliance, as well as financial assistance to the host community.” Among other things, the host agreement must create an environmental contingency fund, create a property value protection program, and establish a fee to be paid to the local government.

The Management Guidelines for Indiana Household Hazardous Waste Programs report prepared by the Indiana HHW Program Guidelines Committee (2003) offers several best management practices with regard to safety, training, proper waste disposal, ensuring easy access, and writing requests for proposals, and is an excellent resource for identifying the basic requirements of program operation and management. Such best management practices include the following:

- safety – performing job hazard analyses, limiting public access to materials, creating emergency action plans, etc.
- training – providing first aid, cardiopulmonary resuscitation, “unknowns” identification training to the staff, etc.
- proper disposal – ensuring good insurance, auditing, documentation, etc.

Any permanent or temporary HHW collection facility stands the risk of damage to workers or the building (Nightingale, 2012). Common dangers at HHW facilities include chemical health hazards from toxic vapors and other chemical exposure; physical health risks from moving vehicles; slips, trips, and falls; repetitive motions; and heavy loads. Additionally, flammable liquids pose a risk of creating potentially explosive atmospheres. Therefore, the design of collection facilities should account for these common threats.

Many HHW collection facilities often receive materials that they are not prepared to collect or process for transportation; however, the following strategies can be useful (Johnson, 2008). Flares are highly reactive and can either be given to local law enforcement or soaked in water and then broken in half under water. The best way to deal with ammunition, which threatens health and safety and is explosive, is to give it to local law enforcement. Smoke detectors cannot

be transported and landfilled because they can be radioactive (ionization-type detectors) or contain batteries and constitute electronic wastes (photoelectric-type detectors), and manufacturers need to be contacted for their best management. To ensure that radiation levels remain safe in the case of smoke detectors and other radioactive materials, facilities need to install scintillation meters or area monitors (Logan, 2012).

Other best management practices for items commonly collected at HHW centers include:

- ensuring that oil-based paint is not bulked, and is instead left in its original packaging, which results in reduced cost of drums, disposal, labor and personal protective equipment, according to Quinn (2011)
- reducing costs by using a moderate-risk waste-tracking database that includes an administrative system and data upload tool (Mitchell, 2012)
- limiting the risk of mercury exposure from bulb handling (Winnie, 2008) by ensuring a large area for ventilation, using PPE, employing the least agitating clean up practices, and placing any debris in a plastic bag while storing brooms and dust pans outside
- providing incentives to households to recycle used oil by giving free oil-collection containers (Mayo, 2012)

The Three R's: Reducing, Reusing, and Recycling HHW. EPA (2013f) recommends that households practice the principle of the three R's: reducing usage, reusing whatever possible, and recycling the rest. EPA (2013f) also advocates using safer cleaning products carrying the DfE (Design for the Environment) label. Labels that say "non-toxic," "biodegradable," and "contains no hazardous ingredients" indicate that the product is safe to use (City of Santa Monica Office of Sustainability and the Environment, 2013). According to the Ohio EPA's Public Interest Center (2000), households should buy only as much as is needed, buy and use less hazardous substitutes of common items, try to use only non-aerosol products, read and retain labels on items, follow direction of use, wear protective gear, and, instead of discarding waste items, give them away. Additionally, households should refrain from mixing materials or wastes together, disposing of items in a septic system or storm sewer, and burning or burying them.

Some less-hazardous substitutes of common hazardous household items are plumber's snakes instead of drain cleaners, rat traps instead of rat bait, and baking soda instead of toilet bowl cleaners (Miscolta, 2011).

Reuse, Reduction, or Recycling of Common Household Items and HHW. Latex paints are not considered hazardous, unless they contain mercury-based fungicides. Hazardous latex paints were either manufactured before 1990 or are used for exterior coatings (Rethink Recycling, 2013). Non-hazardous latex paints can be stored upside-down to prevent drying, given away, or dried using cat litter and newspaper scraps before disposal in the trash (IEPA, 2011a).

Acids and bases can be used even when they are old, but can produce toxic fumes if mixed (Ohio EPA, 2010). Acids used for cleaning purposes must be highly diluted by adding the acids into water, and not the other way around (Walters, 2010). Bleach can be used as a cleaning agent or disinfectant even when it is very old; however, bleach should never be mixed with ammonia or acidic products (Ohio EPA, 2010).

Excess pesticides and herbicides are best disposed of by applying them or by giving them away, and not by pouring down the drain; empty pesticide containers must not be reused (EPA, 2013g). Additionally, aerosol containers must be completely emptied before disposing of them in regular trash (Ohio EPA, 2010). Fluorescent lamps should be given to recyclers who can safely extract the mercury contained in them (IEPA, 2011b).

Motor oil must not be poured down the drain because it negatively impacts sewage treatment plant operations and can easily render fresh water undrinkable. Used motor oil must be saved in leak-proof containers and should be changed or recycled only at a service station that properly disposes of it (IEPA, 2011b). Antifreeze can also be recycled at auto repair shops. It is preferable to buy recycled antifreeze or antifreeze made from propylene glycol (Trask, 2006).

Most state laws state that lead-acid batteries need to be recycled, and can therefore be returned to retailers. Other lead-based batteries are accepted at automotive stores or local waste agencies. Several companies accept alkaline, zinc-ion, button and rechargeable batteries for heavy metal recovery through recycling (EPA, 2012c). Buying rechargeable batteries is more sustainable than buying alkaline batteries, since about 90% of the environmental damage associated with batteries is in the stages of raw material extraction and production (Neely, 2012).

Solvents such as turpentine, varnish, paint thinner and stripper must not be dumped into the soil, down sewers, or the drain; instead, large amounts can be taken to a recycler. Solvents can be cleaned by allowing dirt particles to settle out and then discarding the sludge in the trash products (Ohio EPA, 2010).

Programmable thermostats are preferable to regular thermostats because not only are most of them mercury-free, but they also lead to savings in energy costs (Rogers and Kostigen, 2007). Electronics can be donated for reuse or recycling to certified recyclers (EPA, 2013h).

Medical wastes must not be poured down the drain, even if the label allows one to do so. Instead, they should be mixed with coffee grounds or sawdust before disposal into regular trash (Walters, 2010). Certain hospitals and pharmacies collect unused medications.

Product Stewardship Initiatives

According to the Product Policy Institute (2011), as of 2010, 32 states have introduced 62 producer responsibility laws for products ranging from rechargeable batteries to automobile switches.

Batteries. The Call2Recycle (2015) program managed by the Rechargeable Battery Recycling Corporation allows individuals, institutions, and businesses to collect rechargeable batteries in collection boxes and mail them to the recycling facility for free. PSI (n.d.) is seeking to support the Corporation for Battery Recycling in introducing the recycling of single-use batteries, and aims to streamline legislation for rechargeable as well as single-use batteries.

Electronics. According to PSI (n.d.), there are over twenty existing electronics collection options in the country and can be free or at a nominal cost. Manufacturers such as Dell, HP, Apple, Sony, and LG have drop-off, exchange, mail back, and donation options, while retail chains such as Best Buy and Staples serve as drop-off locations.

Fluorescent Lamps. These lamps contain mercury, which can be released into the environment during disposal. There are no manufacturer-managed stewardship programs for fluorescent lamps and bulbs; however, large retailers such as Lowe's Home Improvement, Home Depot, and IKEA collect CFLs in stores nationwide (PSI, n.d.).

Mercury Auto Switches. All mercury auto switches contain 0.8 grams of mercury (Alliance of Automobile Manufacturers, 2002), which can have significant consequences due to improper disposal. End-of-Life Vehicle Solutions (ELVS) is a stewardship organization comprising several automobile manufacturing companies that manages the collection of mercury auto switches from salvage yards and auto dismantlers in several states such as Arizona, Illinois, Iowa, Massachusetts, Maine, and Maryland at an incentive of \$4 per switch (ELVS, 2012).

Mercury Thermostats. Most mercury thermostats contain 4 grams of mercury (PSI, 2004), which is extremely toxic to wildlife if discarded improperly. Currently, the Thermostat Recycling Corporation (2015) provides volunteer agencies with empty containers for collecting and mailing mercury-containing thermostats for a one-time fee of \$25.

Pharmaceuticals. While there are no nationwide programs for pharmaceutical collections (PSI, n.d.), there are several local efforts for collecting and disposing unused medications from consumers. PSI (n.d.) supports a workgroup that aims to find solutions to facilitate the convenient collection of waste pharmaceuticals. The EPA Great Lakes Restoration Initiative (2013) consists of a taskforce of 11 federal agencies which focuses on protecting watersheds from pollution by introducing policy, voluntary drug take-back programs, and outreach.

Motor Oil. According to PSI (n.d.), no programs for motor oil collection exist, but different maintenance shops and auto parts stores such as Advance Auto Parts and AutoZone collect used motor oil from customers at no charge.

Pesticides. There are no existing stewardship programs for consumer pesticide containers, however, the Ag Container Recycling Coalition (ACRC, n.d.), which consists of 57 pesticide manufacturing companies, collects and recycles used containers from 42 states at no cost.

Paint. PSI (n.d.) is currently collaborating with the paint industry and other stakeholders to introduce statewide legislations on paint stewardship.

6. Next Steps

This section contains a summary of known problems and challenges associated with availability of HHW collection options to citizens, both statewide and specific to the study area. Next steps are identified as the following topics are addressed:

- costs associated with HHW collection
- comments and recommendations to the Illinois Task Force on the Advancement of Materials Recycling regarding improving HHW collection options statewide
- reviewing feedback received from local government stakeholders within the study area, and identifying preferred HHW collection options
- conducting a preliminary ‘strength, weaknesses, opportunities, and threats’ (SWOT) assessment of HHW collection options considered
- developing a strategy and next steps toward improving local HHW collection options available to residents in the study area
- creating a local government toolkit for improving HHW collection options in Illinois, based on a proposed strategy for improving HHW collection options available to residents

Costs Associated with HHW Collection

Operational Costs: One-Day HHW Collection vs. HHW Collection Facility. Nightingale and Lewry (2008) consider the operational costs of a HHW collection facility to be less expensive than the operational costs of a one-day HHW collection event, based on the cost basis per pound or per customer. Reasons for lower permanent HHW collection operational costs include the following:

- no added mobilization costs, set-up costs, and breakdown costs for each collection event
- time and ability to more precisely characterize and package waste
- ability to temporarily store waste on site for up to 90 days, reducing shipping costs
- ability to maximize local reuse of good products to avoid shipping and disposal costs
- ability to store truckload size shipments for most or all shipments.

Processing Costs: One-Day HHW Collection vs. HHW Collection Facility. Total processing costs associated with a HHW collection center include the expenses of loading, transporting, and proper disposal of collected HHW. IEPA presently incurs all processing costs for the four existing HHW collection centers in northern Illinois, and may consider incurring processing costs for additional HHW collection centers yet to be proposed. Annual processing costs for a HHW collection facility may be based on an average cost of \$75 per vehicle, an amount based on processing costs that average between \$70 and \$80 per vehicle.⁷ A general estimate of annual processing costs for a HHW collection center serving 3,000 households per year is \$225,000.

⁷ This average processing cost per vehicle is used by S. Nelson at the SWALCO HCW Collection Facility in Gurnee, Illinois, based on phone conversations with S. Nelson in March, 2014.

Regarding processing costs of one-day HHW collections, past IEPA One-Day HHW Collection events within the study area have an average processing costs per participating household that ranges from \$59 to \$222, or between \$22,000 and \$135,445 per HHW collection event (see Table 11).

Other Costs Associated with One-Day HHW Collections. Other costs associated with promotion of the one-day collection and cost for holding a one-day HHW collection at a selected venue are covered by local co-sponsor entities (typically local governments and local agencies). Such costs to local co-sponsors can range from \$2,000 to \$7,000 and above per one-day collection.

Liability and Insurance Costs. Concerns about potential liability (e.g., property damage or injuries occurring at the collection site) were raised at meetings with interested persons and stakeholders in the study area. Regarding operation of a HHW collection facility, liability for collection and storage of HHW remains the responsibility of the HHW collection facility operator. Consulting firm Patrick Engineering, Inc. (2009) advised the following actions to address potential liability: a HHW collection facility operator should obtain and maintain insurance, should request that contractors providing services to the facility (e.g., such as environmental services contractor loading and transporting HHW from the facility to be processed) list the facility as “additionally insured,” and should request “occurrences” versus “claims made” coverage.

Table 11. Study Area County One-Day HHW Collection Cost Data.

County	Latest Available Collection Data	Number of 55 Gallon Drums	Cost of Processing Only	Processing Cost Per Participating Household
Champaign	9/29/2012	508.97	\$135,445	\$59.07
Clark	5/22/2004	101.57	\$33,113	\$137.97
Coles ^a	5/1/2004	70.85	\$34,976	\$103.48
Cumberland	6/16/2001	36.92	\$22,208	\$222.19
Douglas	9/21/2002	78.74	\$22,830	\$89.25
Edgar	4/13/2002	80.70	\$36,636	\$82.95
Vermilion	11/8/2008	123.11	\$45,248	\$108.25

(Source: compiled from data collected for this report)

Note: An additional IEPA sponsored one-day HHW collection took place on 10/19/2013, but data was not yet available.

Regarding potential liability associated with one-day HHW collections, the approach used by IEPA (2003) is to assume the role of hazardous waste ‘generator’ to address liability concerns, as follows:

“... IEPA transfers as much of the liability as possible to the collection contractors, who are required to add local cosponsors and IEPA staff to liability insurance policies. They must carry liability insurance for any damage or injury that might occur at collection sites or during transportation of the waste. This reduces the risk to cosponsoring agencies to an acceptable level.

The Agency has addressed the long-term liability concerns by accepting the role of "generator" of all wastes collected. As part of the responsibility, the Agency retains sole authority to direct waste to particular facilities. The IEPA project manager signs the transportation and tracking document (manifest) that lists the Agency as waste generator.”

Cost for Public Outreach. Indiana HHW Program and Guidelines Committee (2003) recommends that educating residents will result in less waste being disposed of through the HHW program and less cost for the program. Publications and online information regarding HHW source reduction, safety, and management of HHW should be available.

Input provided to the Illinois Task Force on the Advancement of Materials Recycling

The Illinois Task Force on the Advancement of Materials Recycling was created by Public Act 97-853, effective January 1, 2013. The Task Force mission was to review the status of recycling and solid waste management planning in Illinois, including the proper management of HHW. The Task Force submitted recommendations to the Governor and the Illinois General Assembly in its ‘State of Illinois Final Report’ dated January 1, 2015 (Task Force, 2015).

The following observations and recommendations regarding improving HHW collection options available to residents in Illinois were shared with Task Force members:

- Since 1989, depending on availability of state program funding, IEPA has selected four to six communities statewide (including northern Illinois) each spring and each fall in which to provide a one-day HHW collection (IEPA, 2003b; IEPA, 2011b). The program has gone unfunded at least twice in recent years. Requesting communities have no way of knowing how long the wait will be to be selected for an opportunity to organize and promote an IEPA one-day HHW collection.
- One-day HHW collection programs are more costly per household served, reach fewer households, and are generally considered a less convenient option for residents than HHW collection centers (Nightingale and Lewry, 2008).

We encourage the Illinois Task Force on the Advancement of Materials Recycling to take the following steps:

- 1) Recommend and support the establishment of take-back programs in Illinois based on principles of extended producer responsibility and product stewardship programs as the preferred long-term means of promoting HHW volume reduction

- at the source; requiring responsible recycling or reuse; and responsible disposal of paints, pharmaceuticals, and other potential HHW items throughout the state, consistent with the Illinois Solid Waste Management Act (415 ILCS 20/).
- 2) Recommend and support a more equitable system of distributing Solid Waste Management Funds (415 ILCS 15/7(c)) to counties in Illinois based on: (A) per capita population, and (B) existence of an operational landfill within the county which could represent a key potential source of revenue from negotiable landfill operator host agreement(s) toward recycling and HHW collection efforts within a county. Figure 37 illustrates that 32 of 102 counties in Illinois have an operational landfill as of January 2013. Table 12 indicates that 70 Illinois counties are at a disadvantage with regard to the potential to negotiate a landfill operator host agreement to obtain revenue for recycling or HHW collection efforts.
 - 3) Recommend that further review take place regarding any feasible options to add certain selected household products which could qualify under criteria established by RCRA Subtitle C for regulation and management under the state’s “universal waste laws” (Title 35 of the Illinois Administrative Code, Part 733). Examples of household products or items used by households which were added by other states to their universal waste laws include: ballasts, barometers, cathode ray tubes, oil-based finishes, paint and paint-related wastes, pharmaceuticals, and aerosol cans.

Table 12. Illinois counties with and without an operating landfill. Based on 2010 U.S. Census data, and IEPA (2012) data.

	Number of Counties	Total Population of Counties in this Category	Percent of Population Statewide
Counties with an Operating Landfill	32 (31%)	9,287,756	72%
Counties with no Operating Landfill	70 (69%)	3,542,876	28%

Stakeholder Meetings

Project staff met with groups of potential stakeholders in the study area to provide an update regarding general options to be reviewed for improved HHW collection and to encourage discussion about the options. City and village officials, fire chiefs, recycling coordinators, sanitary district representatives, county board members, and health department directors were among those invited to each meeting. The meetings provided a wide range of perspectives, some of which had not been previously considered, and provided insights regarding HHW collection models that might receive the greatest community support. Common concerns included how reduced budgets could financially support a new program, and costs of constructing and operating a secure and safe HHW collection facility. Appendix U summarizes discussions and feedback received.

Comments and feedback received at these meetings were in support of the following action items:

- 1) Launch a public campaign to promote reduction of HHW to include online regional information available to residents and stakeholders in the study area. This action would directly assist the public seeking information regarding HHW disposal options and alternatives, and assist staff of local county and municipal governments and area public health agencies who regularly receive inquiries from residents about HHW disposal.
- 2) Identify a broad base of support (public, corporate, non-profit, commercial/industrial) to establish conveniently located regional HHW collection facilities within the study area, based on a “satellite collection” model and effective service areas of an approximate 15 mile radius. One effective potential to explore is locating three regional HHW collection facilities within 15 miles of the most densely populated areas and providing convenient satellite collections to outlying areas within the study area (Figure 38).
- 3) Monitor and review potential funding options for improved HHW collection options within the study area.
- 4) Obtain input from local Emergency Management Agencies, Fire Departments and/or Fire Prevention Districts within the study area with regard to capability and interest as stakeholders.
- 5) Identify recommended HHW facility siting and HHW facility operation requirements.
- 6) Conduct a cost/benefit assessment and a SWOT (strengths, weaknesses, opportunities, threats) assessment of top HHW facility recommendations.

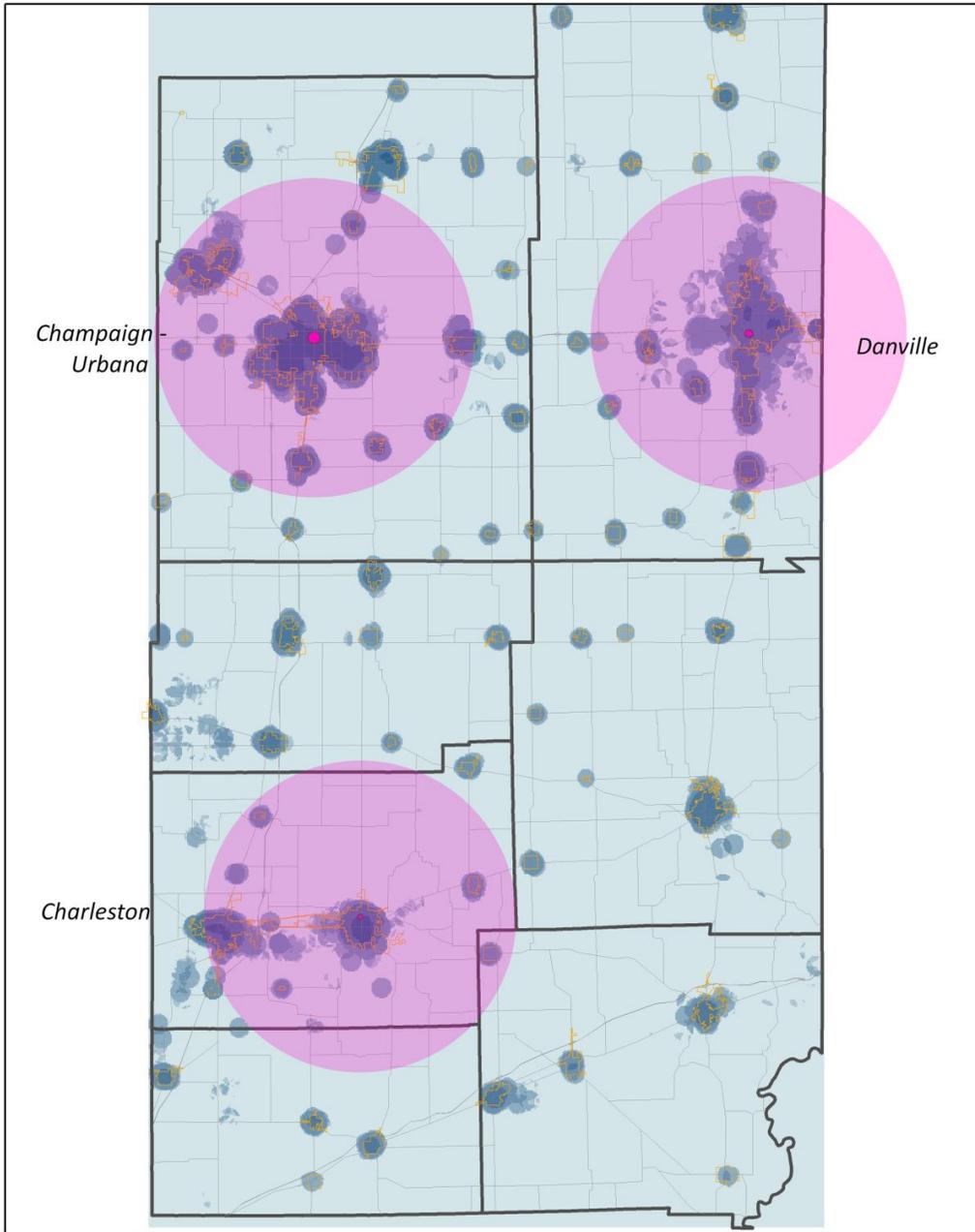


Figure 38. Fifteen-mile radii around three largest population centers in study area.

Review of Three HHW Collection Options

Based on meetings held in each of the study areas with interested parties and stakeholders as basic questions regarding improving HHW collection options in the study area were discussed (e.g., “where do we want to be?” and “how do we get there?”), and based on information regarding start-up, operational, and processing costs received about the four existing HHW collection facilities in Illinois, we selected three types of HHW collection options to review in more detail:

- Option A HHW Collection Facility
- Option B HHW Collection Facility with Satellite HHW Collections
- Option C Expanded HHW Collection Facility to include Electronics Collection and Paint Exchange

A preliminary “Strength, Weakness, Opportunities, Threats” (SWOT) assessment was completed for each option, based on certain cost assumptions described below in Tables 13, 14 and 15. Each of the three options, if implemented, would represent an improvement to the status quo with regard to HHW collection in the seven-county study area. More detail on all three options is available in the Local Government Toolkit, following this report.

Option A. Option A is a HHW collection facility located within the study area, sponsored by one or more local governments, possibly in partnership with public or private entities, and operating as a non-profit 501c3 organization. Option A is based on the following assumptions: a suitable site will be donated, with minimal site acquisition costs will be incurred, that the HHW collection facility will be in full compliance with public safety, building safety, and operational standards, and that the significant cost of processing is provided for in an intergovernmental agreement in place with IEPA to cover transportation and processing costs for collected HHW.

Table 13. Preliminary SWOT Assessment of Option A.

<p>STRENGTHS</p> <ul style="list-style-type: none"> Consistently scheduled collection dates Can accept tax deductible donations Can control the hours of operation More convenient to population served Latex paint becomes a revenue source Lower cost per household than mobile events Regional consensus on need for HHW collection facility No set-up or breakdown costs like one-day events Potentially improved ability to characterize waste Ability to store items to bulk and reduce shipping costs Reservation system limits reduce operations and processing costs Economies of scale in packaging No transportation liability Public support and widespread interest in participating Convenience over one-day collections 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> Large initial investment Employees may need additional training Charges for items that were free historically Possibility of illegal drop-offs Potential for injury Intergovernmental agreement could be broken at anytime Limited capacity and volume 501c3 may not be controlled by local government(s) Potential site not yet identified Lack of site creates uncertainty set-up costs and infrastructure needs By limiting participation, HHW collected is also limited Liability of processing and storage
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> Collaboration with surrounding communities/counties Public/private partnerships Decreased water and soil contamination Competition would be welcomed Could sell waste oil for added revenue Satellite collections in surrounding counties Experiential learning opportunities for students (research, promotions, marketing) Possible decrease in poisoning incidents Expand to include e-waste Expand to include waste from small generators Can introduce reuse programs (e.g., Paint SWAP) Could repurpose an existing building 	<p>THREATS</p> <ul style="list-style-type: none"> IEPA inability to fund additional HHW processing Cuts to IEPA funding Compliance issues Storms or floods Neighborhood resistance (NIMBY) Inability to get consensus on an acceptable intergovernmental agreement Inability to find a suitable site Getting siting approved by local municipality Potential cuts to local funding Building code or life safety code requirements could increase facility costs

Option B. Option B consists of one HHW collection facility (exactly as described in Option A), plus an additional storage locker and two annually held satellite HHW collections. In Option B, one HHW collection facility would be located in one of these three population centers (as noted in Figure 38) with the other two population centers proposed to be served by a consistently scheduled annual satellite HHW collection.

Table 14. Preliminary SWOT Assessment of Option B.

<p>STRENGTHS</p> <ul style="list-style-type: none"> Consistently scheduled collection dates Can accept tax deductible donations Can control the hours of operation Control traffic for minimum staffing More convenient to population served Can cover a broader area with satellite pick-ups Latex paint becomes a revenue source Facility enables lower cost per pound than mobile events Widespread interest in participating Regional consensus on the need for the service Potentially improved ability to characterize waste Ability to store items for bulking and to reduce shipping costs Limiting participation reduces the operations and processing costs 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> Additional costs to the host municipality Additional costs to the satellite host Employees may need additional training Charges for items that have historically been free Illegal drop-offs are possible Potential for injury to staff Intergovernmental agreement could be broken at anytime Limited capacity and volume 501c3 might not be controlled by the municipality Potential sites not yet identified Lack of site creates uncertainty set-up costs and infrastructure needs Adding satellite collections will take some staff time away from the permanent facility By limiting participation, the materials collected are also limited Using a contractor may triple the labor costs
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> Can turn used oil into revenue source Expanded collaboration with surrounding counties Public/private partnerships Decreased water and soil contamination Competition would be welcomed Experiential learning opportunities for students (research, promotions, marketing) Possible decrease in number of poisoning incidents Expand to include e-waste Expand to include waste from small generators Can introduce reuse program (e.g., Paint SWAP) Could repurpose an existing building 	<p>THREATS</p> <ul style="list-style-type: none"> IEPA inability to fund additional HHW processing Cuts to IEPA funding Compliance issues Storms or floods Neighborhood resistance (NIMBY) Inability to get consensus on an acceptable intergovernmental agreement Inability to find an acceptable site Getting siting approved by local municipality Potential cuts to local funding Building code or life safety code requirements could increase facility costs

Option C. Option C expands on the basic operation and features of Option A to a larger HHW collection facility footprint with the added capabilities to accommodate electronic recycling collection and latex paint collection. The paint collection and electronics items collection portions of the HHW collection facility would eventually ideally be wholly financed by revenue received from private vendors specifically seeking to recycle these items.

Table 15. Preliminary SWOT Assessment of Option C.

<p>STRENGTHS</p> <ul style="list-style-type: none"> Consistently scheduled collection dates Can accept tax deductible donations Can control the hours of operation Control traffic for minimum staffing More convenient to population served Latex paint becomes a revenue source Lower cost per pound than mobile events Widespread interest in participating Regional consensus on the need for the service No set-up or breakdown costs like one-day events Potentially improved ability to characterize waste Ability to store items to bulk and reduce shipping costs Limiting participation reduces the operations and processing costs By collecting three different waste streams, become a recycling hub for one stop recycling Increase donations with increased efforts boxes Moves the community toward zero waste 	<p>WEAKNESSES</p> <ul style="list-style-type: none"> Additional costs paid by host municipality Employees may need additional training Charges for items that have historically been free Illegal drop-offs are possible Potential for injury Intergovernmental agreement (IGA) could be broken at anytime Limited capacity and volume 501c3 might not be controlled by the municipality Potential sites not yet identified Lack of site creates uncertainty set-up costs and infrastructure needs By limiting participation the materials collected are also limited Requires coordination of the three entities Additional risk taken on by facilitators
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> Can turn used oil into revenue source Collaboration with surrounding counties Public/private partnerships Decreased water and soil contamination Competition would be welcomed Satellite collections in surrounding counties Experiential learning opportunities for students Possible decrease in number of poisoning incidents Expand to include waste from small generators Model reduces costs to the state and is expanded to other regions Can introduce reuse program (e.g., Paint SWAP) The facility could add other recycling streams (carpeting, mattresses, etc.) Vendor could provide staff for e-waste collection thereby reducing labor costs 	<p>THREATS</p> <ul style="list-style-type: none"> IEPA inability to fund additional HHW processing Cuts to IEPA funding Compliance issues Storms or floods Neighborhood resistance (NIMBY) Inability to get consensus on an acceptable IGA Inability to find an acceptable site Getting siting approved by local municipality Potential cuts to local funding Building code or life safety code requirements could increase facility costs Public unwillingness to use the facility

Difficult-to-Monetize Costs and Benefits

The project included estimated costs to implement a project to improve HHW collection options in the study area. At the same time, project staff acknowledged that there could be costs associated with not taking an action (similar to deferred maintenance). Tables 16 and 17 describe a number of other potential benefits and costs that could be associated with each HHW collection option under review, but that are difficult to place a monetary value on. As one example, EPA (2014) lists the following benefits of proper HHW collection but does not provide monetary values to the items listed:

- Reduction and recycling of HHW conserves resources and energy that would be expended in the production of more products.
- Reuse of hazardous household products can save money and reduce the need for generating hazardous substances.
- Proper disposal prevents pollution that could endanger human health and the environment.

Table 16. Additional Potential Costs that May Impact Each Option, but Prove Difficult to Monetize.

Potential Cost	Potential Impact
Property value	A HHW collection facility could have a negative impact on nearby property values
Traffic congestion	Satellite HHW collections could create traffic delays and additional fuel consumption
Legal	Real estate transaction would require legal council
Training	Employees need HAZWOPER, OSHA, and/or first aid training
Support groups	May occasionally need help with traffic coordination or promotion
Depreciation	Long-term facility upkeep of premises
Insurance Rider	Intergovernmental agreements have shared the additional risk to avoid additional insurance expense but depending on the organizational structure and insurance company perspective, there could be additional cost
Liability	Potential for an incident to occur that is not covered by insurance

Table 17. Additional Potential Benefits that May Impact Each Option, but Prove Difficult to Monetize.

Potential Benefit	Potential Impact
Reduced rural waste water treatment expenses	Pills and medicines that are flushed down the toilet can kill helpful bacteria, leading to septic tank failure
Improved water quality of effluent discharge	Drugs that are flushed down the toilet can pass through sewage treatment facilities without any chemical change and show up in the water supply
Generation of energy from medication incineration	Incinerated medications can create energy to power homes
Reduced environmental impact from illegal dumping	Impact on plants, wildlife, land, and water from illegal dumping of HHW chemicals
Reduction in pet poisonings from anti-freeze spills	Pets are frequently poisoned by licking the sweet taste of anti-freeze
Job creation	The financial impact of the jobs created will be a positive although the part-time nature will lessen the effect
Reduced numbers of deaths caused by unintentional overdoses	Deaths in the study area from unintentional poisoning in 2010. It is possible a HHW program would reduce the number of deaths in the study area.
Energy production from used oil and combustibles	Used oil and oil based paint is used to power kilns
Fewer emergency room visits due to unintentional home poisonings	In 2012 the study area had 623 people visit emergency rooms because of unintentional poisonings, with a median charge of \$1,279.85 for each outpatient visit and \$16,245.73 for each inpatient. Avoidance of an unintentional poisoning can be a benefit to future potential victims.
Reduced risk of groundwater contamination	Hazardous substances that end up in the landfill can destroy the synthetic liner, allowing substances to enter the soil and groundwater.
Sale of electronics items for recycling or reuse	While Option C assumes that electronics collected for recycling will be revenue neutral, the possibility exists that it could provide income
Waste oil sales	By purchasing a bulking machine the facility could profit from the sale of waste oil

Development of a Local Government Toolkit

To continue to share relevant information collected over the course of the project with interested groups and stakeholders and to encourage efforts to implement an improved HHW collection option in the study area, project staff developed a separate stand-alone Local Government Toolkit. The Toolkit includes a proposed strategy to improve HHW collection options within the study area, and builds upon information collected in this background report to assist interested parties as they seek answers to the question “how do we get there?” The Toolkit contains practical information of potential interest and utility to other counties or regions within Illinois seeking to improve HHW collection options available to their residents.

7. References

- Ag Container Recycling Coalition. (n.d.). Where to Recycle. Retrieved from http://acrecycle.org/Where_and_How_to_Recycle/Where.
- Albanese, J. (2012). Northeast Resource Recovery Association: Household Hazardous Waste Feasibility Study. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- Alleva E., Brock J., Brouwer A., Colborn T., Fossi, M.C., Gray, E., Guillette, L., Hauser, P., Leatherland, J., MacLusky, N., Mutti, A., Palanza, P., Parmigiani, S., Porterfield, S., Santti, R., Stein, S., vom Saal, F., and Weiss, B. (1998). Statement from the Work Session on Environmental Endocrine-Disrupting Chemicals: Neural, Endocrine, and Behavioral Effects. *Toxicology and Industrial Health*, 14(1–2), 1–8.
- Alliance of Automobile Manufacturers. (2002). Michigan Mercury Switch Study. Retrieved from http://www.michigan.gov/documents/deq/deq-ess-p2-mercury-michiganswitchstudy_306175_7.pdf
- American Planning Association. (2006). *Planning and Urban Design Standards*. Hoboken, NJ: John Wiley and Sons.
- American Public Works Association. (2007). Comparison of Household Hazardous Waste Collection Programs. Retrieved from <http://www.apwa.net/Resources/Reporter/Articles/2007/3/Comparison-of-household-hazardous-waste-collection-programs>
- Austin, D. (1997). Chlorine Fumes From Garbage Strike Again. *The Oregonian*, Portland, OR, p. D5.
- Bay Area Pollution Prevention Group. (2006). Report on the San Francisco Bay Area’s Safe Medicine Disposal Days. Retrieved from http://www.productstewardship.us/associations/6596/files/SFBAYSafeMeds_Report_August2006.pdf
- Biello, D. (2008). Fertilizer Runoff Overwhelms Streams and Rivers – Creating Vast “Dead Zones”. *Scientific American*. Retrieved from <http://www.scientificamerican.com/article.cfm?id=fertilizer-runoff-overwhelms-streams>
- Bronstein, A. C., Spyker, D. A., Cantilena, L. R. Rumack, B. H., and Dart, R. C. (2012). 2011 Annual Report of the American Association of Poison Control Centers’ National Poison Data System (NPDS): 29th Annual Report. *Clinical Toxicology*, 50, 911-1164.
- Bruning, S. (2008). Creative Collection and Management Options. In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 121-131). Lanham, MD: Government Institutes.
- Bruning, S., and O’Donnell, M. (2008). The Mechanics of HHW Collection and Management. In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 103-105). Lanham, MD: Government Institutes.
- CAJPA. (2013). California Association of Joint Powers Authorities: Members. Retrieved from <http://www.cajpa.org/about/members>

- Call2Recycle. (2015). Interested in Becoming a Collection Site? Retrieved from <http://www.call2recycle.org/collect-batteries/>
- CalRecycle. (2013). Notice of Funds Available: Household Hazardous Waste Grant Program. Retrieved from <http://www.calrecycle.ca.gov/homehazwaste/Grants/20thCycle/default.htm>.
- Cancer Prevention Coalition. (n.d.). Cancer Prevention Alert – Hazardous Ingredients in Household Products. Retrieved from <http://www.preventcancer.com/press/pdfs/hazardous.pdf>.
- Carson, R. (1962). *Silent Spring*. Boston, MA: Houghton Mifflin.
- Cassel, S. (2008). Product Stewardship: Shared Responsibility for Managing HHW. In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 167-202). Lanham, MD: Government Institutes.
- City of Santa Monica Office of Sustainability and the Environment. (2013). Hazardous Materials – Shop “Less Toxic”. Retrieved from http://www.smgov.net/Departments/OSE/Categories/Hazardous_Materials/Shop_“Less_Toxic”.aspx.
- Coles County Regional Planning and Development. (2012). Solid Waste. Retrieved from http://www.co.coles.il.us/CCRPDC/dept_solidWaste.html.
- Commonwealth of Kentucky Energy and Environment Cabinet. (2013). 2013-2014 KY Pride Grant Summary. Retrieved from http://waste.ky.gov/RLA/grants/Documents/recycling_and_hhw/2013-14_grant_awards_table.pdf.
- Connecticut Department of Energy and Environmental Protection. (2015). Household Hazardous Waste Programs and Collections Schedule. Retrieved from <http://www.ct.gov/deep/cwp/view.asp?a=2718&q=325448>.
- D’Arcy, R. (2009). The Road to Product Stewardship: Local Government as Catalysts. Retrieved from <http://c.yimcdn.com/sites/www.productstewardship.us/resource/resmgr/imported/Santa%20Clara%20Co%20Oct%2009%20EPR%20Strategies%20Final%20RD.pdf>.
- Digital Media Law Project. (2008). Forming a Nonprofit Corporation in Illinois. Retrieved from <http://www.dmlp.org/legal-guide/forming-nonprofit-corporation-illinois>.
- DiNovo, F. (2013). *Denken Stück: Champaign County Water Plan*.
- Duxbury, D. (1998). A 97 Percent Increase 1995! Household Hazardous Waste Management News, No. 35 (August 1998).
- Earth Paints Collection Systems. (2008). Paint Collection Center Search. Retrieved from http://www.earthpaintscs.com/collection_center/search.php.
- Earth911. (2009). Trash Planet: Germany. Retrieved from <http://earth911.com/news/2009/07/13/trash-planet-germany/>.
- Ecology Action Center. (2015). Household Hazardous Waste Fund. Retrieved from <http://www.ecologyactioncenter.org/wp/hhw-fund/>.
- Edmonds, B. J., and Anderson, C. (2008). HHW Programs: From One-Day Events to Integrated Strategies. *MSW Management*, 17(3), 44-54.

- End-of-Life Vehicle Solutions. (2012). Mercury Switches. Retrieved from <http://elvsolutions.org/>.
- EPA Great Lakes Restoration Initiative. (2013). Great Lakes. Retrieved from <http://www.epa.gov/greatlakes/glri/>
- European Environment Agency. (2011). Chapter 4: Natural Resources and Waste. Retrieved from <http://www.eea.europa.eu/soer/synthesis/synthesis/chapter4.xhtml>
- Ferretti, P., Copp, A., Tickle, C., and Moore, G. (2010). Chapter 6. Chemical Teratogens: Hazards, Tools and Clues. In N.A. Brown (Ed.), *Embryos, Genes and Birth Defects*. Oxford, UK: John Wiley and Sons Ltd. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/9780470090121.ch6/summary>
- Florida Department of Environmental Protection. (2013). Household Hazardous Waste Grants. Retrieved from <http://www.dep.state.fl.us/waste/categories/hazardous/pages/grants.htm>
- Fritz, J. (2014) Elements of a Business Plan for a Nonprofit Organization: Give Your Nonprofit a Roadmap to Success with a Business Plan. Retrieved from <http://nonprofit.about.com/od/gettingstarted/tp/Elements-Of-A-Business-Plan-For-A-Nonprofit-Organization.htm>.
- Galvin, D. (2008). The History and Current Status of HHW. In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 103-105). Lanham, MD: Government Institutes.
- Galvin, D., and Dickey, P. (2008). What is Household Hazardous Waste? In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 2-3). Lanham, MD: Government Institutes.
- Hammet, W. (1996). Hazardous Household Products. Retrieved from http://www.bae.ncsu.edu/programs/extension/publicat/wqwm/he368_1.html
- Illinois Environmental Protection Agency. (n.d.). About the Bureau of Land. Retrieved from <http://www.epa.state.il.us/land/about-the-bureau.html>
- Illinois Environment Protection Agency. (2003a). Siting a Pollution Control Facility in Illinois. Retrieved from <http://www.epa.state.il.us/community-relations/pollution-control-facility-siting.pdf>.
- Illinois Environmental Protection Agency. (2003b). Household Hazardous Waste Collection Results (IEPA Publication No. BOL 98-023). Springfield, IL: Illinois Environmental Protection Agency's Office of Public Information. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-collection-results.pdf>.
- Illinois Environmental Protection Agency. (2011a). Used Paint Disposal Alternatives. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/used-paint-disposal-alternatives.html>
- Illinois Environmental Protection Agency. (2011b). Household Waste Disposal Solutions. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhw-disposal.html>

- Illinois Environmental Protection Agency. (2012). Twenty-Fifth Annual Landfill Capacity Report - 2012. Retrieved from <http://www.epa.state.il.us/land/landfill-capacity/2011/index.html>
- Illinois Environmental Protection Agency. (2013a). Household Hazardous Waste Collections: Acceptable and Unacceptable Wastes. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-acceptable.html>
- Illinois Environmental Protection Agency. (2013b). Medication Disposal. Retrieved from <http://www.epa.illinois.gov/topics/waste-management/waste-disposal/medication-disposal/options/index>.
- Illinois Environmental Protection Agency. (2015). Household Hazardous Waste. <http://www.epa.illinois.gov/topics/waste-management/waste-disposal/household-hazardous-waste/index>.
- Illinois-Indiana Sea Grant. (2012). How to Dispose of Unwanted Medicine and Personal Care Products. Retrieved from <http://web.extension.illinois.edu/unusedmeds/>
- Illinois Poison Center (2014). About the Illinois Poison Center. Retrieved from http://illinoispoisoncenter.org/Illinois_Poison_Center_Fact_Sheet.
- Illinois Pollution Control Board. (2005). Citizens Guide to the IPCB. Retrieved from <http://www.ipcb.state.il.us/AboutTheBoard/CitizensGuidetotheBoard.asp?Section=Facility>.
- Illinois Recycling and Resource Management Conference and Trade Show. (2013). Growing Green in '13. Proceedings from Illinois Recycling and Resource Management Conference and Trade Show, 2013, Bloomington-Normal, IL.
- Illinois Teratogen Information Service. (2014). Paint and Pregnancy. Retrieved from <http://www.mothertobaby.org/files/Paint.pdf>
- Indiana HHW Program Guidelines Committee. (2003). Management Guidelines for Indiana Household Hazardous Waste Programs. Retrieved from http://www.indianahhw.org/images/stories/PDF/hhw_guidelines.pdf
- Johnson, A. (2008). HHW Materials – Items to Watch Out for. Proceedings from NAHMMA National Conference 2008, Burlington, VT.
- Keep Vermilion County Beautiful. (2015). KVCB Hopes to Increase Membership in 2013. Retrieved from <http://www.keepvermilioncountybeautiful.org/members.html>
- Kentucky State Division of Waste Management. (2013). State Division of Waste Management Announces \$1.5 Million in Waste Grants. Commonwealth of Kentucky Energy and Environment Cabinet. Retrieved from [http://eec.ky.gov/Lists/NewsReleases2/State Division of Waste Management Announces \\$1.5 Million in Waste Grants.pdf](http://eec.ky.gov/Lists/NewsReleases2/State%20Division%20of%20Waste%20Management%20Announces%20$1.5%20Million%20in%20Waste%20Grants.pdf)
- Kraemer, M. H. (1994). "How to Establish a Household Hazwaste Collection Program." Waste 360. Retrieved from http://waste360.com/mag/waste_establish_household_hazwaste.
- Lavinsky, D. (2014). How to Write a Business Plan. Retrieved from <http://www.forbes.com/sites/davelavinsky/2014/01/30/how-to-write-a-business-plan/>.

- Llewellyn, R. (2009). Recycling Computer Electronics. Proceedings from NAHMMA National Conference 2009, Houston, TX.
- Logan, S. (2012). Radioactive Materials 101 for HHW and CESQG Programs. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- Mancuso, A. (2011). How to Form a Nonprofit Corporation, 10th Edition, (pp. 65-70). Berkeley, CA: NOLO.
- Mayo, H. (2012). Orange County Regional Used Oil Recycling Program: Certified Collection Centers. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- Miscolta, D. (2011). Motivating Teachers, Students, and Parents to Reduce their Use of Household Hazardous Products. Proceedings from NAHMMA National Conference 2011, Portland, OR.
- Mitchell, J. D. (2012). Building and Implementing a Moderate Risk Waste-Tracking Database. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- Monroe County. (2015). Household Hazardous Waste. Retrieved from <http://www.monroecounty.gov/des-hhw.php>
- National Research Council. (2000). Toxicological Effects of Methylmercury (ISBN 0-309-07140-2). Washington, DC: National Academy Press.
- National Safety Council. (n.d.) Estimating the Costs of Unintentional Injuries. Retrieved from http://www.nsc.org/news_resources/injury_and_death_statistics/Pages/EstimatingtheCostsofUnintentionalInjuries.aspx.
- Neely, J. (2012). Alkaline Battery Management Decisions. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- New Hampshire Department of Environmental Services. (2008). Household Hazardous Waste Grant Program Guidance. Retrieved from <http://des.nh.gov/organization/commissioner/p2au/pps/hhwp/categories/grants.htm>
- New York Department of Environmental Conservation. (2015). Household Hazardous Waste State Assistance Program. Retrieved from <http://www.dec.ny.gov/chemical/8778.html>
- Nightingale, D. (2012). Design For Safety - Considerations for Improving the Design and Operation of your HHW/CESQG Collection Facility. Proceedings from NAHMMA National Conference 2012, Universal City, CA.
- Nightingale, D., and Donnette, R. (2002). Household Hazardous Wastes. In G. Tchobanoglous and F. Kreith (Eds.), Handbook of Solid Waste Management (2nd Ed.) (pp. 327-342). New York, NY: McGraw-Hill.
- Nightingale, D. and Lewry, B. (2008). HHW Collection Facilities. In A.D. Cabaniss (Ed.), Handbook on Household Hazardous Waste (pp. 107-118). Lanham, MD: Government Institutes.
- North American Hazardous Materials Management Association. (2012). About NAHMMA – Overview. Retrieved from <http://www.nahmma.org/displaycommon.cfm?an=1>
- Northwest Product Stewardship Council. (n.d.). The NWPSC. Retrieved from <http://productstewardship.net/about/nwpsc>.

- OECD. (2001). *Extended Producer Responsibility: A Guidance Manual for Governments*. Paris, France: OECD Publishing.
- Ohio Environmental Protection Agency. (2000). *A Guide to Safe Management of Household Hazardous Waste*. (2nd ed.). Columbus, OH: Ohio EPA Public Interest Center.
- Ohio Environmental Protection Agency. (2010). *A Guide to Safe Management of Household Hazardous Waste*. Retrieved from http://epa.ohio.gov/portals/34/document/guidance/gd_623.pdf.
- Oregon Department of Environmental Quality. (n.d.). *Household Hazardous Waste: Oregon HHW Services (by County)*. Retrieved from <http://www.deq.state.or.us/lq/sw/hhw/collection.htm>.
- Patrick Engineering. (2009). *Household Hazardous Waste Facility Feasibility Study*. (p.6) Retrieved from <http://www.peoriacounty.org/download?path=/recycle%2FPeoriaCo+HHW+feasibility+study+2009.pdf>.
- Pennsylvania Department of Environmental Protection. (2015). *Establish Collection Program*. Retrieved from <http://www.portal.state.pa.us/portal/server.pt?open=514&objID=589593&mode=2>.
- Pennsylvania General Assembly. (1994). Act 1994-155. In *Pennsylvania Session Laws*, 1346-1348. Retrieved from <http://www.palrb.us/pamphletlaws/19001999/1994/0/act/0155.pdf>
- Pennsylvania State University. (1998). *Household Hazardous Products and Hazardous Waste: A Summary for Consumers*. Retrieved from <http://pubs.cas.psu.edu/freepubs/pdfs/xi0014.pdf>.
- Prescription Pill and Drug Disposal Program. (n.d.). *Water is Life P²D²*. Retrieved from <https://p2d2program.wordpress.com/>.
- PRO Europe. (2011). *Producer Responsibility in Action*. Brussels, Belgium: PRO EUROPE s.p.r.l. Retrieved from http://pro-e.org/files/PRO-EUROPE_Producer-Responsibility-in-Action_web-version_final_150811.pdf.
- Product Policy Institute. (n.d.). *Products*. Retrieved from <http://www.productpolicy.org/content/products>.
- Product Policy Institute. (2011). *EPR Laws*. Retrieved from <http://www.productpolicy.org/content/epr-laws>.
- Product Stewardship Institute. (n.d.). *A Guide to Maximizing the Use of Existing Product Stewardship Programs*. Retrieved from http://c.yimcdn.com/sites/www.productstewardship.us/resource/resmgr/imported/Maximizing_Guide_Final.pdf.
- Product Stewardship Institute. (2011). *Product Stewardship and Extended Producer Responsibility: Definitions and Principles*. Retrieved from <http://productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=231>
- Product Stewardship Institute. (2013a). *What is PSI Doing on Pharmaceuticals?* Retrieved from <http://productstewardship.us/displaycommon.cfm?an=1&subarticlenbr=182>

- Product Stewardship Institute. (2013b). Product-Related Projects. Retrieved from http://productstewardship.us/displaycommon.cfm?an=3quantity_report.pdf
- Quinn, J. (2011). Paint Product Stewardship: What's in it for local governments? Proceedings from NAHMMA National Conference 2011, Portland, OR.
- RethinkWaste. (n.d.) Household Hazardous Waste, San Mateo County HHW Program. Retrieved from <http://rethinkwaste.org/residents/beyond-the-cart/household-hazardous-waste>
- Rethink Recycling. (2013). Paint and Painting Supplies. Retrieved from <http://www.rethinkrecycling.com/businesses/waste-management-guide/materials-name/paint-painting-supplies>
- Rogers, E., and Kostigen, T. M. (2007). *The Green Book: The Everyday Guide to Saving the Planet One Single Step at a Time*. New York, NY: Three Rivers Press.
- Sheehan, B., and Spiegelman, H. (2005). Extended Producer Responsibility Policies in the United States and Canada: History and Status. In D. Scheer and F. Rubik (Eds.), *Governance of Integrated Product Policy* (pp. 202-212). Sheffield, U.K.: Greenleaf Publishing Ltd. Retrieved from http://www.productpolicy.org/ppi/History_of_EPR_in_USA_Canada.pdf
- Southeast Metro Storm water Authority. (n.d.). Curbside, Inc. Door-to-Door Household Hazardous Waste Program. Retrieved from <http://www.arapahogov.com/DocumentCenter/View/355>.
- Meadows, D. (1989). Denmark's Hazardous Waste Disposal System. Retrieved from <http://www.donellameadows.org/archives/denmarks-hazardous-waste-disposal-system/>
- Task Force on the Advancement of Materials Recycling (2015). *State of Illinois Final Report: Task Force on the Advancement of Materials Recycling reporting to Governor Pat Quinn and Illinois' 98th General Assembly* (pp. 26-27 and 57-58).
- Thermostat Recycling Corporation. (n.d.). Enrolling in the Program. Retrieved from <http://www.thermostat-recycle.org/signup/>.
- Tomich, J. (2013). Environmentalists Urge More Emissions Monitoring at Sauget Incinerator. *St. Louis Post-Dispatch*. Retrieved from http://www.stltoday.com/news/local/illinois/environmentalists-urge-more-emissions-monitoring-at-sauget-incinerator/article_d75a492c-c0a8-506f-9a53-f4c62bfcc3eb.html
- Trask, C. (2006). *It's Easy Being Green: A Handbook for Earth-Friendly Living*. Salt Lake City, UT: Gibbs Smith.
- U.S. Census Bureau. (2014). *State and County QuickFacts*. Retrieved from <http://quickfacts.census.gov/qfd/states/17000.html>.
- U.S. Department of Justice. (2012). *Disposal of Controlled Substances, Proposed Rule*. *Federal Register*, 77(246). Retrieved from <http://www.gpo.gov/fdsys/pkg/FR-2012-12-21/pdf/2012-30699.pdf>
- U.S. Department of Justice. (2013a). *Drug Enforcement Administration, Office of Diversion Control: Title 21 United States Code (USC) Controlled Substances Act*. Retrieved from <http://www.deadiversion.usdoj.gov/21cfr/21usc/801.htm>

- U.S. Department of Justice. (2013b). Drug Enforcement Administration, Office of Diversion Control: Title 21 CFR, Part 1300-1399. Retrieved from <http://www.dea.diversion.usdoj.gov/21cfr/cfr/>
- U.S. Department of Justice. (2013c). Drug Enforcement Administration, Office of Diversion Control: Controlled Substance Schedules. Retrieved from <http://www.dea.diversion.usdoj.gov/schedules/index.html#exempt>
- U.S. Department of Justice. (2013d). Drug Enforcement Administration, Public Response to DEA's National Prescription Drug Take-Back Days Keeps Growing. Retrieved from <http://www.justice.gov/dea/divisions/hq/2013/hq050213.shtml>
- U.S. Department of Labor, (2013a). Occupation Safety and Health Administration: OSHA Law and Regulations. Retrieved from <https://www.osha.gov/law-regs.html>
- U.S. Department of Labor. (2013b). Occupation Safety and Health Administration: Illinois Law. Retrieved from <https://www.osha.gov/desp/osp/stateprogs/illinois.html>
- U.S. Environmental Protection Agency. (1993). Household Hazardous Waste Management: A Manual for One-Day Community Collection Programs. EPA530-R-92-026. (pp. 21-24). Retrieved from <http://www.epa.gov/waste/conserves/materials/pubs/manual/sec04.pdf>.
- U.S. Environmental Protection Agency. (2007). Quantifying the Disposal of Post-Consumer Architectural Paint. Abt Associates for Sector Strategies Division, Office of Policy, Economics and Innovation. Retrieved from <http://purl.access.gpo.gov/GPO/LPS81197>.
- U.S. Environmental Protection Agency. (2009). Identification and Listing of Hazardous Waste 40 CFR §261.4(b): Exclusions: Solid Wastes which are Not Hazardous Wastes. Version 1. Retrieved from <http://www.epa.gov/osw/hazard/wastetypes/wasteid/pdfs/rcra2614b-ref.pdf>.
- U.S. Environmental Protection Agency. (2011). RCRA Orientation Manual 2011. Retrieved from <http://www.epa.gov/wastes/inforesources/pubs/orientat/>
- U.S. Environmental Protection Agency. (2012). Selecting, Designing and Operating the Collection Site. Household Hazardous Waste Management: A Manual for One-Day Community Collection Programs. Retrieved from <http://epa.gov/waste/conserves/materials/pubs/manual/index.htm>.
- U.S. Environmental Protection Agency. (2012a). Universal Wastes. Retrieved from <http://www.epa.gov/wastes/hazard/wastetypes/universal/index.htm>
- U.S. Environmental Protection Agency. (2012b). Mixed Wastes. Retrieved from <http://www.epa.gov/wastes/hazard/wastetypes/mixed.htm>
- U.S. Environmental Protection Agency. (2012c). Batteries. Retrieved from <http://www.epa.gov/epawaste/conserves/materials/battery.htm#batteryrecycle>
- U.S. Environmental Protection Agency. (2013a). Solid Waste: Household Hazardous Waste. Retrieved from <http://www.epa.gov/region9/waste/solid/house.html>
- U.S. Environmental Protection Agency. (2013b). Listed Wastes. Retrieved from <http://www.epa.gov/wastes/hazard/wastetypes/listed.htm>

- U.S. Environmental Protection Agency. (2013c). Characteristic Wastes. Retrieved from <http://www.epa.gov/wastes/hazard/wastetypes/characteristic.htm>
- U.S. Environmental Protection Agency. (2013d). Municipal Solid Waste. Retrieved from <http://www.epa.gov/epawaste/nonhaz/municipal/index.htm>
- U.S. Environmental Protection Agency. (2013e). State-Specific Universal Waste Regulations. Retrieved from <http://www.epa.gov/osw/hazard/wastetypes/universal/statespf.htm>
- U.S. Environmental Protection Agency. (2013f). Resources: Protecting the Environment. Retrieved from <http://www.epa.gov/epahome/home.htm>
- U.S. Environmental Protection Agency. (2013g). Safe Disposal of Pesticides. Retrieved from <http://www.epa.gov/pesticides/regulating/disposal.htm>
- U.S. Environmental Protection Agency. (2013h). eCycling. Retrieved from <http://www.epa.gov/epawaste/consERVE/materials/ecycling/index.htm>
- U.S. Environmental Protection Agency. (2014, March 10). Household Hazardous Waste. Retrieved from <http://www.epa.gov/waste/consERVE/materials/hhw.htm>.
- Village of Lincolnshire. (2012). SWALCO Household Chemical Waste Collections. Retrieved from <http://www.village.lincolnshire.il.us/departments-services/fire-department/swalco-household-chemical-waste-collections>
- Wallace, L. (1987). The TEAM Study: Personal Exposure to Toxic Substances in Air. *Environmental Research*, 43, pp. 290-307.
- Walters, D. (2010). How to Dispose of Household Hazardous Waste. Proceedings from ILCSWMA 18th Annual Conference, Utica, NY.
- Will County Green. (2010). Household Hazardous Waste Collections. Retrieved from <http://www.willcountygreen.com/greenguide/household.aspx>
- Winnie, G. (2008). Mercury Exposure During Routine Bulb Handling - Operational Procedures to Limit Risk. Proceedings from NAHMMA National Conference 2008, Burlington, VT.

Appendix A: Local Government Toolkit – Improving HHW

Collection Options in Illinois

Table of Contents for Local Government Toolkit

List of Tables	91
List of Figures	91
List of Abbreviations	92
Abstract	93
1. Introduction.....	94
2. Proposed Strategy	95
3. Talking Points: The Need for HHW Collection	97
4. Types of HHW Collection Options Available	99
5. Establish a Household Hazardous Waste Collection Facility	103
6. A Leadership Team.....	105
7. Formulate a Business Plan	106
8. Form a 501(c) (3) Nonprofit Corporation	108
9. Manage Liability.....	110
10. Facility Design and Size	113
11. Site Suitability and Permitting	118
12. Estimated Costs: HHW Collection Facility Scenarios	122
13. Raise Funds.....	135
14. Education and Outreach.....	136
15. References.....	137

List of Tables

Table A-1. Types of HHW Accepted for Collection	97
Table A-2. IEPA One-Day HHW Collections Held in a Seven-County Area of East Central Illinois since 1989	101
Table A-3. Summary of Joanne Fritz’s Common Elements of a Nonprofit Business Plan.....	107
Table A-4. Digital Media Law Project’s Guide to Forming a 501(c) (3) in Illinois.....	108
Table A-5. Excerpt of 35 Illinois Administrative Code, Part 724	114
Table A-6. Pre-Design Guidelines for a HHW Collection Facility	115
Table A-7. HHW Collection Facility Size to Serve Population of Champaign County	116
Table A-8. Excerpts from Section 39.2 Siting Criteria.....	119
Table A-9. Site Characteristics to Consider for a Proposed HHW Collection Facility	120
Table A-10. Option A Estimated Capital Costs.....	123
Table A-11. Option A Estimate of Annual Operational Costs	123
Table A-12. Option A Estimated Annual Revenue	124
Table A-13. Option A Summary of Estimated Annual Costs and Revenue	124
Table A-14. Option A Estimate of Costs and Revenue Description.....	124
Table A-15. Option B Estimated Capital Costs	126
Table A-16. Option B Estimate of Annual Operational Costs	127
Table A-17. Option B Estimated Annual Revenue.....	128
Table A-18. Option B Summary of Estimated Annual Costs and Revenue	128
Table A-19. Option B Estimate of Costs and Revenue Description.....	128
Table A-20. Option C Estimated Capital Costs	131
Table A-21. Option C Estimate of Annual Operational Costs	132
Table A-22. Option C Estimated Annual Revenue.....	132
Table A-23. Option C Summary of Estimated Annual Costs and Revenue	132
Table A-24. Option C Estimate of Costs and Revenue Description.....	133

List of Figures

Figure A-1. Location of HHW Collection Facilities in Illinois	99
Figure A-2. Secured Prefabricated Hazardous Material Storage Units at Naperville Facility ...	117

List of Abbreviations

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibility
FEMA	Federal Emergency Management Agency
HAZWOPER	Hazardous Waste Operations and Emergency Response
HHW	Household Hazardous Waste
IEPA	Illinois Environmental Protection Agency
ILCS	Illinois State Compiled Statutes
IPCB	Illinois Pollution Control Board
NFPA	National Fire Protection Association
PSI	Product Stewardship Institute
RCRA	Resource Conservation and Recovery Act
TSDf	Treatment, Storage, and Disposal Facility

Abstract

The Local Government Toolkit contains a recommended strategy for initiating efforts to implement improved HHW collection options within the seven-county east central Illinois region. The Toolkit includes information of potential interest and utility to other counties or regions within Illinois seeking to improve HHW collection options available to their residents.

1. Introduction

The Local Government Toolkit is a compilation of basic information useful to a local government or community group interested in developing a HHW collection facility to improve HHW collection options for the households in a jurisdiction or region in Illinois.⁸ The Toolkit includes a proposed strategy to improve local or regional HHW collection options, plus practical information regarding developing a HHW collection facility:

- Talking Points: The Need for HHW Collection
- Types of HHW Collection Options
- Establish a HHW Collection Facility
- A Leadership Team
- Formulate a Business Plan
- Become a 501(c)(3) Nonprofit Corporation
- Manage Liability
- Facility Design and Size
- Site Suitability and Permitting
- Estimated Costs: HHW Collection Facility Scenarios
- Raise Funds
- Education and Outreach

⁸ For additional information about HHW collection in Illinois, see the HHW Collection Options in Illinois Background Report (Monte et al., 2015) which contains relevant information regarding HHW collection in Illinois, including: federal and state regulations relevant to HHW collection; best management practices associated with HHW collection; comprehensive review of existing HHW collection options in a seven-county east central Illinois project area; and description of known problems and challenges associated with HHW collection in the project area.

2. Proposed Strategy

A goal of the HHW Collection Options in Illinois Background Report (Monte et al., 2015) was to propose a strategy to fund and ultimately develop a convenient and reliable interim HHW collection option in central Illinois, namely a dedicated HHW collection facility. The desired HHW collection facility would be one intended to operate on a regular schedule of limited part-time hours throughout the year, and sufficient in size to serve routine HHW collection needs of households within a county or region.

The proposed strategy includes eight objectives, with subsidiary priority items:

- Objective 1 – Recruit a leadership team.
- Objective 2 – Organize.
 - Priority Item 2.1: Create a business plan.
 - Priority Item 2.2: Obtain 501(c) (3) non-profit status.
 - Priority Item 2.3: Form a governing body.
- Objective 3 – Manage risk.
 - Priority Item 3.1: Evaluate environmental liability.
 - Priority Item 3.2: Establish a shared liability intergovernmental agreement.
- Objective 4 – Obtain funding sources for capital, operational and processing costs associated with a HHW collection facility.
 - Priority Item 4.1: Seek the support or sponsorship of potential stakeholder organizations.
 - Priority Item 4.2: Consider opportunities to form potential partnership(s).
 - Priority Item 4.3: Seek and apply for potential grant funding.
- Objective 5 – Locate a potential site for a permanent HHW collection facility.
 - Priority Item 5.1: Identify a well-suited site capable of meeting preferred minimum site standards for a HHW collection facility.
 - Priority Item 5.2: Identify the government authority which will be making the siting decision, and clarify which local codes and land use requirements must be met for a pollution control facility.⁹
 - Priority Item 5.3: Develop a HHW collection facility operations plan, including a facility start-up plan.
- Objective 6 – Obtain site approval, IEPA permits, and local permits for the HHW collection facility.
 - Priority Item 6.1: Identify the sequence of approvals needed for the site approval application, IEPA permit applications, and local approvals and permit applications.
 - Priority Item 6.2: Procure a site plan, architectural drawings, and engineering plan for the HHW collection facility as required.
 - Priority Item 6.3: Develop a safety plan for employees and participants.

⁹ A HHW collection facility is considered a “pollution control facility.” The Environmental Protection Act (415 ILCS 5/1 et seq.) provides for a unique process in which municipalities and counties have an important say over whether a pollution control facility can locate or expand within their borders. Regulations can be found in the IL Admin. Code tit. 35, subpt. A, chpt. I.

- Priority Item 6.4: Develop policy and procedures (e.g., regarding illegal HHW and other material drop-offs.)
 - Priority Item 6.5: Apply for and obtain siting approval, IEPA permits, and local permits as required.
- Objective 7 – Construct or remodel the HHW collection facility.
 - Priority Item 7.1: Choose construction oversight method and contractor selection process.
 - Priority Item 7.2: Select contractor(s) and enter into contract(s).
- Objective 8 – Implement the HHW collection facility start-up plan and operations plan.
 - Priority Item 8.1: Hire staff and arrange for training.
 - Priority Item 8.2: Purchase insurance, supplies and equipment.
 - Priority Item 8.3: Implement preferred option to procure services of qualified hazardous waste contractor to process HHW.
 - Priority Item 8.4: Upgrade webpage to feature HHW collection facility appointment system and information.
 - Priority Item 8.5: Encourage stakeholder promotion and outreach regarding HHW collection facility.

3. Talking Points: The Need for HHW Collection

The following talking points (in bold font) address various reasons the collection and safe disposal of HHW is needed.

HHWs are products or items intended for use by a household and disposed of by a household that are hazardous. The U.S. Environmental Protection Agency (EPA) broadly defines HHW as: “leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients ... [that] require special care when you dispose of them” (EPA, 2013a). The *Illinois Household Hazardous Waste Collection Program Act* defines HHW as follows:

“A consumer-disposed waste product intended for household use generally containing constituents that make its disposal in municipal waste landfills or incinerators undesirable.... HHW includes, but is not limited to, the following: ... waste oil, ... petroleum distillate-based solvents, ... oil based liquid paint, paint strippers, and paint thinners, ... herbicides and pesticides except, for purposes of the Act, antimicrobial and disinfectant products are excluded (415 ILCS 90/3).”

Hundreds of household products qualify as HHW. Table A-1 describes types of HHW accepted for collection (IEPA, 2013a).

The benefits of proper HHW management are difficult to measure. The potential benefits of proper collection and management of HHW are regarded as diverse, widespread, and difficult to quantify specifically. According to the EPA (2014), reduction and recycling of HHW conserves resources and energy that would be expended in the production of more products. Reuse of hazardous household products can save money and reduce the need for generating hazardous substances. And proper HHW disposal prevents pollution that could endanger human health and the environment.

Hazardous materials thrown directly on the ground enter soil and contaminate groundwater. Overall, between 40 and 50 percent of the U.S. population depends on groundwater as its primary drinking water source (Bowen, 1998), but that percentage is much higher in rural areas. Without access to proper disposal methods, these groundwater sources could potentially become contaminated by HHW if poured on the ground or dumped into a roadside ditch.

Table A-1. Types of HHW Accepted for Collection.

Oil-based paint & aerosol paint	Household batteries	Solvents
Paint thinners	Used motor oil	Antifreeze
Herbicides	Drain cleaners & cleaning products	Hobby chemicals
Insecticides	Lawn chemicals & pool chemicals	Fluorescent lamp bulbs
Pesticides	Double-bagged & wetted asbestos	Old, outdated medicines & pharmaceuticals
Old gasoline	Mercury-containing devices	

Storing HHW at home and improper disposal of HHW can result in health hazards and pose risks for damage to the environment. Providing a safe and convenient means of HHW collection can lessen the frequency of poisoning accidents associated with having HHW around the home. Removing HHW from the waste stream reduces the toxicity of the waste stream disposed at landfills and will reduce the toxicity of the landfill's leachate.

A nationwide study in 1995 (Nightingale and Donnette, 2002) determined that 13% of households had disposed of one unused hazardous cleaning product into the trash in the preceding three months, while 70% disposed of either partially full or empty containers.

The EPA (2013a) reports each person in the United States produces an average of 4 pounds of HHW each year for a total of about 530,000 tons/year, and that, on average, a U.S. household generates more than 20 pounds of HHW annually. It is feasible that a hundred or more pounds of HHW could accumulate in a home, garage, or basement, often remaining there until the residents move out or do an extensive cleanup.

In comparison, EPA (2013d) reports the annual average amount of municipal solid waste (i.e., trash apart from and excluding HHW) disposed of collected in the U.S. averaged 250 million tons per year in a recent 25-year period. Though a tiny percentage in relative proportionality (0.21% of the total volume of municipal solid waste disposed of annually), the improper disposal of HHW into the trash, directly on the ground, or down the drain can lead to damaging environmental and health impacts.

There have been several reported instances where hazardous waste has had dangerous consequences in landfills, recycling facilities and transfer stations. There have been multiple cases of pool chlorine mixing with liquids to form toxic chlorine gas in a transfer station (Austin, 1997). In 1998, landfill workers were exposed to lethal fumes from pesticides and other chemicals (Brown, 1998). Many hazardous substances are known to be explosive or flammable, and therefore HHW present in a recycling facility or transfer station could aggravate fires or explosions caused by non-hazardous materials.

Hazardous chemicals that are poured down the drain during use or disposal enter either septic systems or wastewater treatment facilities. Hazardous components can affect natural biological ecosystems in septic tanks and render them useless, hence allowing pathogens to enter the groundwater without being neutralized in the tanks (Bowen, 1998). Municipal wastewater treatment systems are not designed to treat hazardous wastes, and hence such wastes can affect the effluent and sludge characteristics, lead to groundwater contamination, and compromise worker safety. Volatile solvents can evaporate from aeration tanks and pollute the air (Breiteneicher, 1997).

Hazardous substances that are disposed of with the trash can enter landfills, where they can destroy the synthetic liner and allow toxic substances to enter the soil and groundwater. Additionally, precipitation can wash away or dissolve hazardous wastes and expose the soil and groundwater to toxic materials (Bowen, 1998).

In discussions with local community stakeholder groups across the seven-county east central Illinois study area, study authors learned that in rural areas especially, sightings or reports of improper dumping of HHW along roadside ditches have occurred. Alternately, community representatives speculated that HHW materials are typically included in the household trash destined for a solid waste landfill.

4. Types of HHW Collection Options Available

HHW Collection Facilities Located in Illinois. As of June, 2015, there are four HHW collection facilities in Illinois – each situated in northern Illinois (Figure A-1). IEPA funds HHW processing costs for each of the four existing HHW collection facilities, and each facility will accept HHW brought to the facility from citizens residing in any Illinois location.

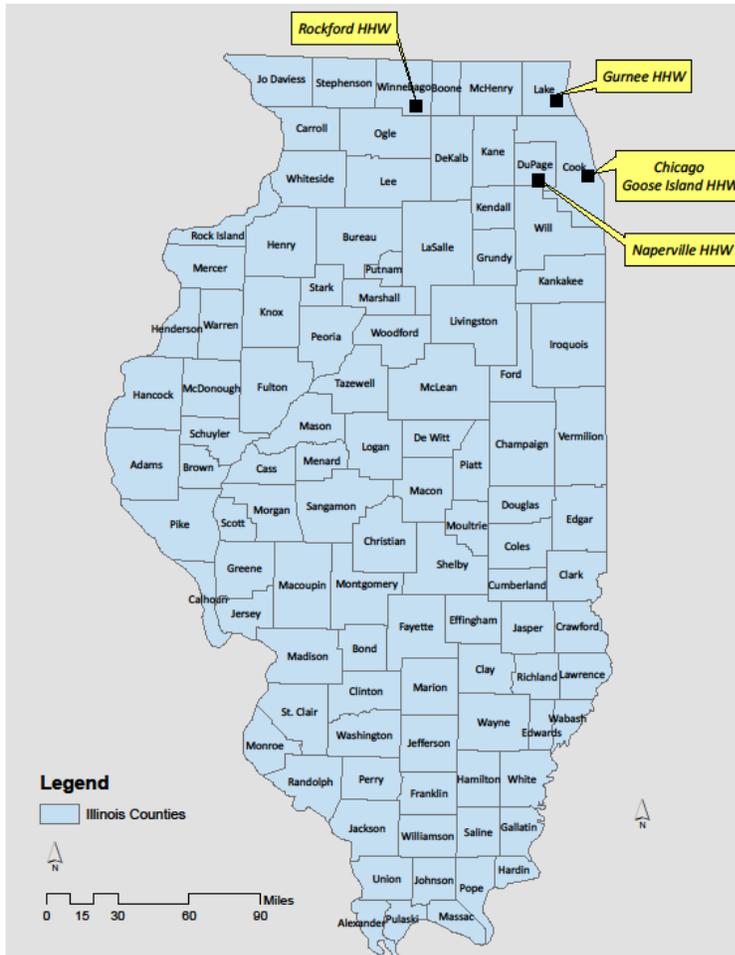


Figure A-1. Location of HHW Collection Facilities in Illinois.

Mobile One-Day HHW Collection Event. Areas outside of the nearby areas served by the four HHW collection facilities in northern Illinois are dependent on occasional IEPA mobile one-day HHW collection events, or as resources may allow, on one-day HHW collections not subsidized by IEPA.

IEPA One-Day HHW Collection Event. IEPA has accepted applications from local government entities in Illinois requesting a one-day HHW collection since 1989. Depending on availability of state program funding, IEPA staff selects four to six communities statewide each spring and each fall in which to provide a one-day HHW collection. Funding of the IEPA one-day HHW collection program is irregular. The program has gone unfunded at least twice in recent years. Requesting communities have no way of knowing how long the wait will be to be selected for an opportunity to organize and promote an IEPA one-day HHW collection. For example, Table A-2 contains a summary of IEPA one-day HHW collections held in a seven-county area in east central Illinois. This table shows, for each county, the number of years between IEPA one-day HHW collections held and the number of years since the last IEPA one-day HHW collection for communities in each county requesting a collection.

IEPA-coordinated one-day mobile HHW collections are costly. Based on IEPA data for the 23-year period, 1989-2012, the average cost per event of HHW processing which IEPA paid to a hazardous waste contractor was \$62,739, with costs ranging from \$9,829 to \$210,001. The wide variability of costs relates to factors including economy of scale, size of event, varying participation, competitive pricing from contractors, etc. Not included in this average cost are related IEPA administrative costs and significant costs incurred by local government or community sponsors for all publicity, traffic control, and site costs which need to be accommodated for each collection.

Non-IEPA One-Day HHW Collection Event. As of January, 2015, two Illinois counties (Will County in northern Illinois and Jackson County in southern Illinois) use a special fund established by their respective local governments based on a negotiated landfill operator host-fee agreement to finance one-day HHW collections within their county on an annual basis.

In McLean County, the Ecology Action Center, a non-profit organization, is financed by donations and by funds from a negotiated landfill operator host-fee agreement with the municipalities of Bloomington, Normal, and McLean County. The Ecology Action Center recently obtained approval to continue fund raising efforts and to hold one-day HHW collection events for households in the county on a consistent schedule at least every other year.

Door-to-Door Collection. Though not known to be available downstate, a specialized home collection service for HHW may potentially be purchased by a local government from one of the larger waste and environmental service companies willing to offer this option. Currently this service is provided to Kane County in northern Illinois. Appendix B contains a description of the “At Your Door Special Collection” program purchased by Kane County from Waste Management. The annual cost of the program selected by Kane County in 2011 was negotiated to be \$36,000. Rates per at-home pickup range upwards from \$105 to \$131 per stop. During a one year period, 2011-2012, a total of 245 Kane County residents requesting a HHW pickup were served by the Waste Management home pick up program. Once the annual contract

amount is spent, no other residents are eligible to receive a HHW pickup under the contract as agreed for that year. Typically only a small portion of total households in a local government jurisdiction would be served by this type of annual subscription HHW collection service.

Table A-2. IEPA One-Day HHW Collections Held in a Seven-County Area of East Central Illinois since 1989.

County	2010 Population	IEPA One-Day HHW Collection Location & Date	Interval between Collection Dates	Years since last Collection
Champaign	201,081	City of Champaign 4/7/1990 Village of Rantoul 3/27/1993 City of Urbana 4/13/1996 Village of Rantoul 9/15/2001 City of Champaign 11/3/2001 City of Champaign 11/1/2003 City of Urbana 4/9/2006 City of Champaign 9/29/2012	-- 3 years 3 years 5 years < 1 year 2 years 3 years 6 years	3
Clark	16,335	Village of Martinsville 5/22/2004	--	11
Coles	53,873	City of Charleston 9/18/1993 City of Charleston 10/27/2001 City of Mattoon 5/1/2004 City of Mattoon 9/2013	7 years 3 years 9 years	2
Cumberland	11,048	Village of Greenup 10/21/1995 Village of Toledo 6/16/2001	-- 6 years	14
Douglas	19,980	City of Tuscola 4/4/1998 City of Tuscola 9/21/2002	-- 4 years	13
Edgar	18,576	City of Paris 11/5/1994 City of Paris 4/5/1997 City of Paris 4/13/2002	-- 3 years 5 years	13
Vermilion	81,625	City of Danville 4/9/1994 City of Danville 4/12/1997 City of Hoopston 10/6/2001 Village of Westville 6/5/2004 City of Danville 4/30/2005 City of Hoopston 11/8/2008	-- 3 years 4 years 3 years 1 year 3 years	7

Piecemeal Collection of Certain Types of HHW. Some piecemeal collection options exist for certain types of HHW in some more populated areas of Illinois. For example, some larger retail chains such as Home Depot, Best Buy, and Lowes, feature in-store containers for residential drop off of rechargeable batteries, or compact fluorescent lamps during business hours only. Some auto service companies such as AutoZone and Advance Auto Parts accept lead acid batteries, transmission fluids, and used motor oil. Some larger cities may have established a drop off box system at local law enforcement offices for collection of pharmaceuticals. The IEPA-subsidized “Partner for Waste Paint Solutions” program begun in 1995 continues on a limited basis at six locations, with two locations in central Illinois (Macon County and McDonough County) and four locations in the outlying suburban Chicago area.

5. Establish a Household Hazardous Waste Collection Facility

The proposed strategy to establish and operate a HHW collection facility is an interim measure to provide an improved HHW collection option for households in the region. Developing a HHW collection facility to serve the region is a potentially feasible option in the near-term or mid-term, provided funding sources can be identified. To develop a HHW collection facility will include a serious commitment of funds and other resources.

The strategy is considered as an interim solution based on the understanding that a desirable long-term solution to the HHW collection crisis will be wide scale implementation of an “extended producer responsibility” (EPR) system of product management. EPR is widely recognized as a cradle-to-grave system of shared responsibility that requires the environmentally safe design, manufacture, use, and disposal of products with specific roles for manufacturers, retailers, consumers, and government.¹⁰ The eventual implementation of an EPR system could be expected to greatly ease local governmental costs associated with provision of HHW collection options to citizens.¹¹

Implementing an EPR system will necessitate a paradigm shift and require concerted efforts, and therefore EPR is seen as a long-term solution worth promoting and pursuing concurrently with the interim option of a HHW collection facility in place.

Cost Effective and Convenient Option. The infrequency of IEPA coordinated one-day HHW collections held in the study area has been historically considered as problematic. A permanent HHW collection facility operating on a regular schedule of limited part-time hours throughout the year would allow for greater participation because of the increased number of hours that HHW collection options are available. Based on data collected regarding HHW collection in Illinois, an improved, more convenient, and cost-effective HHW collection option is to establish and operate a HHW collection facility to serve households in the region, provided funding sources for capital, operational, and processing costs can be identified.

According to Llewellyn (2009), regularly held HHW collection events at one location can result in improved results in terms of cost per participant as well as volume of collections, due to economies of scale in packaging and disposal of waste. With HHW collections held on a regular part-time basis, streamlined operations are a more likely outcome. A HHW collection facility is

¹⁰ A system of shared responsibility for managing HHW which is known as “product stewardship” is the long-term HHW collection option for which to strive. Product stewardship calls for shared responsibility of a “cradle-to-grave” design, manufacture and disposition of products based on the five product stewardship principles: (1) shared responsibility; (2) internalizing a product’s lifecycle cost into the purchase price; (3) providing incentives for manufacturers to make cleaner products and follow sustainable management practices; (4) flexibility to achieve goal-oriented results; and (5) specific roles for industry, government, and consumers (Cassel, 2008).

¹¹ Rob D’Arcy, Hazardous Materials Program Manager for the County of Santa Clara Department of Environmental Health, calls for local governments to be catalysts for change: “EPR puts industry in charge of their materials management and the free market will provide incentives for recycling and reuse of these materials. . . . Local government programs that handle hazardous and universal waste streams now should consider how to support EPR partnerships or programs and shift the responsibility for this waste from government to industry” (D’Arcy, 2009).

one means of providing for a known location and regular schedule of HHW collection opportunities. Residents would arrange to bring their HHW to the facility when it is in operation, and specially-trained staff would collect and separate it into different categories of wastes that would be stored temporarily onsite for later transport by a hazardous materials contractor to different disposal locations, such as incinerators and recycling facilities.

In its January 2015 report to the Governor and Illinois' 98th General Assembly, members of the Task Force on the Advancement of Materials Recycling addressed the proper management of HHW in Illinois. Task Force members agreed that most residents of Illinois still lack a convenient collection system for proper disposal of HHW. An excerpt of the Final Report follows:

“The one-day collection events are neither routine in their location or timing resulting in significant frustration for the residents of Illinois to dispose of unwanted HHW. These HHW materials continue to show up in waste audits conducted by the State.... Illinois' 2009 Statewide Commodity/Waste Generation and Characterization Study found that 64,000 tons of HHW are currently being disposed per year and the State's efforts to remove HHW needs to be enhanced to meet our obligations to future residents of the State” (Task Force on the Advancement of Materials Recycling, 2015).

The Task Force recommended that Section 22.25 of the Environmental Protection Act be amended to require establishment of a convenient statewide collection infrastructure for HHW, and that the infrastructure should “be developed by regions of the state and rely upon partnerships for the operation of the collection sites with the State's participation being the transportation, disposal and RCRA (Resource Conservation and Recovery Act) liability of the materials collected.” The Task Force further recommended that a total of 12 additional permanent HHW collection facilities be developed throughout the state: four additional in the northern part of the State, four in the central portion of the State, and four in the southern portion of the State. Appendix C contains the full content of the Task Force “Evaluation of the Proper Management of Household Hazardous Waste in Illinois.”

6. A Leadership Team

Implementing a strategy to improve HHW collection options for the region can be expected to encompass numerous challenges and tasks. The effort is likely to have the best chance for success if guided by a leadership team and if based on the formal resolve of an intergovernmental agreement.

The success of a process such as refining and implementing a strategy or a policy plan is likely to be dependent on continuous, focused commitment over an extended period through to the implementation stage. Important indicators of successful [strategic] plan implementation are likely to include: (1) ability to frame a decision to a sufficient number of key political stakeholders as avoiding a potential loss rather than as securing a potential gain; (2) focus on one or a small number of specific outputs; and (3) champions who push continuously for the desired outcome (DiNovo, 2013).

The guidance of an oversight body such as a leadership team will be crucial. A leadership team might be comprised of six to ten persons accountable and serving as liaisons to local governments of key population centers the HHW collection facility will serve. Ideally the leadership team would include one or more champions who are eager to promote development of the HHW collection facility. The leadership team chair position could be held on a rotating basis and determined by consensus; team members could elect to abide by a standard set of bylaws. Leadership team members might agree to meet semi-annually, quarterly, or on a flexible as-needed basis.

The intergovernmental agreement establishing the leadership team should include a mission statement for the leadership team and list of agreed-upon objectives to be achieved by the team. As may be appropriate and as feasible, a memorandum of understanding may be developed to clarify expectations with regard to leadership team support potentially available from a non-governmental service organization (e.g., such as a regional planning council) to provide limited staff support to facilitate leadership team meetings.

7. Formulate a Business Plan

Key tasks of the leadership team will include formulating a business plan for the nonprofit. The business plan for a nonprofit initially may be brief and evolve over the lifetime of a nonprofit as the organization changes (Fritz, 2014). Table A-3 is a summary of Fritz's common elements of a nonprofit business plan.

A business plan is a description of the nonprofit organization and its market niche, operations strategy, and future goals and objectives. The business plan will be useful in providing a prospective investor or lender with information about the nonprofit organization that is well prepared and persuasive in portraying the potential of the nonprofit organization. Several business plan elements will be referenced in the organization's application for a 501(c) (3) nonprofit organization.

The following online sources provide initial basic information regarding developing a business plan for a nonprofit organization in Illinois:

- <http://tax.illinois.gov/NonProfits/>
- <http://www.illinois.gov/dceo/BizDevelopment/Documents/bizplan.pdf>

Table A-3. Summary of Joanne Fritz's Common Elements of a Nonprofit Business Plan.

- Executive Summary
 - A concise overview of the entire business plan and includes the nonprofit's mission, its history, unique strengths and assets, and list of products, services, or programs, and a summary of the nonprofit's marketing plan and how the organization is financed both in the short and long term.
- Organizational Structure
 - A description of how the nonprofit is organized that includes current status, organizational objectives, expected growth, and known trends in the specific nonprofit area.
- Products, Programs or Services
 - A description of products to be produced or distributed, what programs will be offered, and/or services planned to be provided. Describe special features such as the benefits of what the nonprofit offers and what future development plans may be. Explain any new products and services to be eventually launched.
 - A description of constituencies the nonprofit intends to serve and how they will be reached. Explain market trends, the need for the nonprofit's services, and what other organizations are competitors or possible collaborators. Detail promotional efforts, market research, media outreach, and communication channels. Include examples of promotional material in the appendix.
- Operational Plan
 - A description of how the nonprofit plans to deliver its services, and where the facility will be located. A description of equipment and/or inventory. Explain how the nonprofit plans to maintain its operation and how the nonprofit will evaluate the efficacy of its programs and services.
- Management and Organizational Team
 - A description of the management team that includes information about key management staff and their expertise. List the members of the nonprofit board and of any advisory board. Detail their expertise. List financial sponsors. Include an organizational chart. Explain lines of responsibility. Provide an assessment of current and future staffing needs.
- Capitalization
 - A description of the non-profit's capital structure. Detail outstanding loans, debts, holdings, bonds and endowments.
- Financial Plan
 - A description of the nonprofit's current and projected financial status, including expected income sources, balance sheet, cash flow statement, and financial projections. Explain need for financing. List grant awards, major contributions, and in-kind support. Include a fundraising plan for the nonprofit.
- Appendix
 - Include board member lists, pertinent charts and graphs, promotional material, strategic plan, and annual report.

8. Form a 501(c) (3) Nonprofit Corporation

Forming a 501(c) (3) nonprofit corporation is a multi-step process at the state and federal levels. The primary reasons to become a 501(c) (3) tax-exempt nonprofit corporation include increasing the ability to attract and receive public and private grant funds and individual donations. Most funding options reviewed require the requesting entity be a registered 501(c) (3) non-profit. Both tax-exempt government foundations and private foundations and charities usually are required to donate funds to only 501(c) (3) tax-exempt organizations. Individual private donors can claim personal federal income tax deductions for contributions made to a 501(c) (3) tax-exempt organization (Mancuso, 2011). Table A-4 contains a summary from the Digital Media Law Project (2008) online article about the basic steps necessary to form a 501(c) (3) nonprofit corporation in Illinois.

Table A-4. Digital Media Law Project's Guide to Forming a 501(c) (3) in Illinois

1. Choose a business name and check for availability
2. Recruit and/or appoint directors
(In Illinois, a minimum of three directors is required: a president, secretary, and treasurer).
3. Incorporate the Nonprofit Organization
 - Prepare and file articles of incorporation with the Secretary of State
 - Create the bylaws
 - Hold an organizational meeting
 - Create a Records Book
4. Obtain an Employer Identification Number
 - Federal
 - State
5. Register with the state of Illinois
 - Office of the Attorney General
 - Department of Revenue
6. Apply for tax exemptions
 - Federal
 - State
 - Local

The following online sources provide basic information regarding steps necessary to form a nonprofit organization in Illinois:

- <http://www.irs.gov/Charities-&-Non-Profits/Frequently-Asked-Questions-about-Tax-Exempt-Organizations>
- http://www.cyberdriveillinois.com/departments/business_services/corp.html
- <http://www.dmlp.org/legal-guide/forming-nonprofit-corporation-illinois>

9. Manage Liability

By complying with the requirements set out in federal, state, and local laws, local governments can reduce their overall liability (EPA, 1993).

Regulatory Compliance and EPA Policy Directive. In 1976, the Resource Conservation and Recovery Act (RCRA) amended the Solid Waste Disposal Act to include “cradle-to-grave” requirements for active and future programs for management of “solid waste” and management of “hazardous waste” in the U.S. RCRA regulations are contained in Title 40 of the Code of Federal Regulations (CFR) Parts 239 through 299. The EPA (2011) “RCRA Orientation Manual 2011,” is a useful resource and general framework for understanding the RCRA program definitions, standards, and regulations.

At the federal level, RCRA Subtitle C provisions address “hazardous waste” regulatory programs and RCRA Subtitle D provisions address “solid waste” regulatory programs. RCRA Subtitle D provisions require that, at a minimum, HHW must be managed in accordance with all state and local requirements for the management of solid waste. RCRA Subtitle C provisions regarding regulation of hazardous wastes are primarily intended to address the management of commercial and industrial hazardous wastes, and include an exemption (40 CFR261.4(b)(1) for “household waste.”

EPA Policy Directive. Galvin and Dickey (2008) point out that EPA issued a policy directive in 1988 to recommend that state and local HHW collection programs manage collected HHW as hazardous waste and not as municipal solid waste. The EPA policy directive clarifies that managing HHW as hazardous waste provides a greater level of environmental protection and a greater level of protection for HHW collection programs to avoid potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, also known as “Superfund,” is the environmental program established to address abandoned hazardous waste sites in the U.S. (EPA, 2011). CERCLA provisions (42 USC § 9601 *et seq.*) do not exempt hazardous waste generated by households.

As noted in the 1988 EPA policy directive, under CERCLA, a HHW collection facility could be liable for any future hazardous waste related clean-up and remediation costs. Under CERCLA, a liability could arise if there is a release or threatened release of a hazardous substance from a facility and the defendant is a potentially responsible party.

To minimize risk from a CERCLA liability, the operator of a HHW collection facility will need to have general liability insurance. When hiring a qualified hazardous waste contractor to collect and/or transport HHW, the hazardous waste contractor should provide proof of adequate insurance for general liability, motor vehicle, in-transit, workers’ compensation, and Treatment, Storage, and Disposal Facility (TSDF) environmental impairment liability insurance (required coverage for liability under the RCRA for hazardous waste contractors). An agreement with a

qualified contractor should include indemnification, hold harmless, duty to defend, and insure provisions.

A feasibility study conducted by Patrick Engineering (2009) for a Peoria County, Illinois HHW facility advises that HHW facility owners and operators should “obtain and maintain insurance, request that service providers list the agency as ‘additionally insured’ and always ask for ‘occurrences’ versus ‘claims made’ coverage.”

IEPA Assumes “Generator” Status if Covering Cost of HHW Processing. IEPA covers the costs of processing for HHW collected by the four existing collection facilities and HHW collected in an IEPA one-day collection. IEPA assumes “generator” status under these circumstances. In a 2003 HHW collection results report, IEPA addressed potential liability concerns as follows:

“Liability issues are a primary concern to any municipality or organization contemplating a household hazardous waste collection program. Concerns may revolve around property damage at the collection site and/or injuries to program participants resulting from the release of wastes, spills, fire, or explosion. Also of concern are the long-term liabilities that hosting such an event may pose. In order to alleviate those concerns, the IEPA transfers as much of the liability as possible to the collection contractors, who are required to add local cosponsors and IEPA staff to liability insurance policies. They must carry liability insurance for any damage or injury that might occur at collection sites or during transportation of the waste. This reduces the risk to cosponsoring agencies to an acceptable level.

The Agency has addressed the long-term liability concerns by accepting the role of ‘generator’ of all wastes collected. As part of the responsibility, the Agency retains sole authority to direct waste to particular facilities. The IEPA project manager signs the transportation and tracking document (manifest) that lists the Agency as waste generator.” (IEPA, 2003b)

Intergovernmental Agreement of Local Government Stakeholders to Share Liability. Any counties and municipalities that intend to coordinate a one-day HHW collection without IEPA serving as “generator” are advised to share potential liability with a provision in an intergovernmental agreement specific to the concern regarding potential liability.¹²

Additional measures to manage potential liability for a HHW collection facility. Ensure that employees operate in compliance with worker laws and regulations. Safety precautions must be adhered to by employees and participants at a HHW collection facility. The Minnesota Pollution Control Agency provides the following template of an Employee Safety Plan at a HHW Collection Facility:

<http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/waste-management/household-hazardous-waste/operational-resources.html#health-and-safety>.

¹² Based on phone conversations occurring in 2014 with Marta Keane, Recycling Specialist with Will County Resource Recovery and Energy Division.

The Minnesota Pollution Control Agency Standard Operating Procedures 4.1 for Receiving Wastes from Participants can be viewed at the following website:

<http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/waste-management/household-hazardous-waste/operational-resources.html#facility-operations,-including-mobile-events>.

Create Policy regarding Illegal Drop-Offs. A HHW collection facility occasionally may encounter problems related to illegal HHW drop-off or other waste drop-off at their sites outside normal working hours. Some facilities have added cameras to capture the license plates of the offending vehicles. A policy is needed to guide the HHW facility operator and to provide guidelines regarding enforcement for violators.

10. Facility Design and Size

HHW Collection Facility – Design Standards. A HHW collection facility will be designed to be used as a place 1) to safely accept HHW brought to the facility by residents by appointment; 2) to safely sort, pack, bulk, and temporarily store collected HHW; and 3) to safely load HHW onto qualified transport vehicles for off-site processing.

Consistent with exemptions granted by EPA regarding the collection of “household waste” in the Resource Conservation and Recovery Act (RCRA), a HHW collection facility in Illinois is specifically exempted from most hazardous waste management requirements of Title 35 of the Illinois Administrative Code, Subtitle G (Waste Disposal), Chapter I (Pollution Control Board), Subchapter C: Hazardous Waste Operating Requirements.

Even with such exemptions, the expectations of stakeholders (e.g., local governments and the public) will be that a HHW collection facility is designed to meet the same types of building design standards for a hazardous waste storage and treatment facility and to meet certain similar aspects of a waste transfer station. Designing a HHW collection facility to meet these types of standards will serve to ensure the safety of employees and users of a HHW collection facility, and to protect the environment. As an example of applicable types of standards, Table A-5 contains an excerpt of 35 IAC, Part 724 “Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.”

Table A-5. Excerpt of 35 Illinois Administrative Code, Part 724.

Section 724.131 Design and Operation of Facility

Facilities must be designed, constructed, maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment.

(Source: Amended at 27 Ill. Reg. 3725, effective February 14, 2003)

Section 724.132 Required Equipment

All facilities must be equipped with the following, unless the owner or operator demonstrates to the Agency that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

- a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
- b) A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;
- c) Portable fire extinguishers, fire control equipment (including special extinguishing equipment, such as that using foam, inert gas, or dry chemicals), spill control equipment and decontamination equipment; and
- d) Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers or water spray systems.

(Source: Amended at 27 Ill. Reg. 3725, effective February 14, 2003)

Section 724.135 Required Aisle Space

The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless the owner or operator demonstrates to the Agency that aisle space is not needed for any of these purposes.

(Source: Amended at 27 Ill. Reg. 3725, effective February 14, 2003)

Building Code Requirements. Illinois Public Act 096-0704 requires all new commercial construction¹³ after July 1, 2011 to comply with the 2006 or later editions of the International Building Code; International Existing Building Code; International Property Maintenance Code and the 2008 or later edition of the National Electrical Code (NFPA 70). It is of interest to note that the Act does not require Life Safety Code compliance:

“(g) This Section does not regulate any other statutorily authorized code or regulation administered by State agencies. These include without limitation the Illinois Plumbing Code, the Illinois Environmental Barriers Act, the International Energy Conservation Code, and administrative rules adopted by the Office of the State Fire Marshal.”

¹³ “Commercial building” means any building other than a single-family home or a dwelling containing two or fewer apartments, condominiums, or townhomes or a farm building as exempted from Section 3 of the Illinois Architecture Practice Act.

The local fire chief is responsible for enforcing the NFPA Life Safety Code (2000 Edition) provisions for a public assembly, dependent population, or multi-family premises.

Inquiries were made to various municipal staff in the study area regarding building code requirements applicable to a HHW collection facility. Those notified were unfamiliar with code requirements specific to this type of building and found it difficult to provide definitive answers given the hypothetical example. It was pointed out that many factors will dictate the building requirements including size of the building, stacking, and storage. The City of Champaign Fire Marshal suggested that once a site is identified the next step should be a code analysis by the local building official. If located in a municipality with an adopted building code, a project review to assess code compliance will likely be part of the permit review application process.¹⁴

Pre-Design Considerations. Nightingale and Lewry (2008) share important pre-design guidelines to consider very early on regarding the building type, layout, and size of a potential HHW collection facility. These are summarized in Table A-6.

Table A-6. Pre-Design Guidelines for a HHW Collection Facility.

<ul style="list-style-type: none">• Ask a lot of “what ifs?”• Determine what products will be collected.• Design the operation around those processes.• Consider the staff needs for each material stream, e.g., safety recommendations regarding collection and packing of each product, and covered collection and storage areas.• Sketch what needs to go where and why, including material flow and location of material handling processes to accommodate: universal waste rule; oil-based paint and flammable liquids; lead-acid battery storage; combustible liquids; antifreeze; fluorescent lamps; acids; oxidizers; organic peroxides; reactives; explosives.• What are the security requirements?• Will the facility use electric or air power to operate equipment in the facility? (e.g., electrical will require explosion proof plugs and sockets.)• Will the facility or storage units require stand-by power?

¹⁴ Based on a phone conversation with City of Champaign Fire Marshal John Koller on December 12, 2013.

Size of HHW Collection Facility. Nightingale and Lewry (2008) suggest a formula to consider for sizing of a HHW collection facility be to allow for one square foot of operational area for every 200 pounds of anticipated annual throughput. They observe, on average, that a community may expect 5% of households participate in HHW collections each year, with average HHW volume collected to vary from 60 pounds to 150 pounds per household. Over time, HHW collection facility usage rates can be expected to increase by as much as 100%, while weights will likely decrease by approximately 30% as pent-up supply is reduced. Table A-7 is an example based on this formula as applied to one county in the study area, and assuming a reduced participation rate of 3% of the population.¹⁵

The sizing method described above is only an approximate guideline to consider. Many variables will influence actual square footage needs such as number of different HHW items accepted and the range of potential participation rates.¹⁶ There will need to be adequate space for all containers in the process, room for forklifts to transport, and, if the building is to accommodate a “paint exchange” or similar exchange option, a customer space separated from operational space.

Table A-7. HHW Collection Facility Size to Serve Population of Champaign County.

<p>87,120 households times a 3% participation rate = 2,614 2,614 times 100 pounds throughput per year = 261,400 pounds 261,400 divided by 200 = 1,307</p> <p>Based on the above formula, a 1,307 square foot facility would be needed to service 87,120 households.</p>

¹⁵ Input received from a representative of the Naperville HHW Collection Facility which uses a reservation system is that scheduled HHW drop-offs have reduced the participation levels from 5% to approximately 3%.

¹⁶ For example, in Illinois, existing HHW collection facilities whose processing costs are paid by IEPA are required to accept HHW from all Illinois residents.

HHW Storage/Containment. The storage containment lockers commonly used by HHW collection facilities throughout the country are prefabricated double-walled steel construction. The lockers can be built to the buyer's specifications, but most include chemical fire suppression, explosion proof lights, and a two-hour fire rating. Figure A-2 shows storage unit in use at the Naperville collection facility. Appendix D provides a sample of storage locker specifications of this type.

If the HHW collection facility is to host satellite HHW collections in the surrounding areas, more than one HHW storage locker may be required.



Figure A-2. Secured Prefabricated Hazardous Material Storage Units at Naperville Facility.
Source: CCRPC staff, 2014.

11. Site Suitability and Permitting

Site Suitability. In considering selection of a suitable site for a HHW collection facility, the siting criteria requirements for a regional pollution control facility¹⁷ in Illinois (415 ILCS 5/39.2) are useful as a guide. Table A-8 contains excerpts from Section 39.2 siting criteria most relevant to site selection of a potential HHW collection facility.¹⁸

In general, best planning practices call for avoiding siting of most buildings in areas such as the following:

- FEMA-designated 100-Year Floodplains based on FEMA digital Flood Insurance Rate Maps
- wetlands, designated by U.S. Army Corps of Engineers
- archeological or historic sites of interest, designated by Illinois State Historic Preservation
- Illinois Natural Areas Inventory sites;
- areas likely to contain Illinois endangered and threatened species
- regulated groundwater recharge areas

As part of the IEPA permitting process for a HHW collection facility in Illinois, the following site considerations will come under review:

- parcel boundaries
- topography
- 100-year floodplain boundaries
- nearest residences and the distances in feet from the proposed facility to the residential properties
- outline of the proposed facility and location of all process buildings
- loading and unloading areas, and access roads
- storm sanitary and process sewage systems
- fences, utilities, easements
- traffic patterns, estimated volume, number and types of transporting vehicles in relation to road surface and load bearing capacity, and traffic control signals on public roads
- on-site traffic pattern

Appendix E lists IEPA permit application forms to be completed as part of the IEPA permitting process for a HHW collection facility. IEPA forms and instructions for completing each form are available at the IEPA (n.d.) website.

¹⁷ The Environmental Protection Act (415 ILCS 5/) defines a “regional pollution control facility” as “any waste storage site, sanitary landfill, waste disposal site, waste transfer station, resource recovery facility, waste treatment facility or waste incinerator that accepts waste from or that serves an area that exceeds or extends over the boundaries of any local general purpose unit of government...”

¹⁸ Developers of a HHW collection facility may request and may be granted a waiver from local authority siting approval procedures (415 ILCS 5/22, Section 16.b.d).

Table A-8. Excerpts from Section 39.2 Siting Criteria.

<p>Sec. 39.2. Local siting review.</p> <p>(a) The county board of the county or the governing body of the municipality ... shall approve or disapprove the request for local siting approval for each pollution control facility which is subject to such review. local siting approval shall be granted only if the proposed facility meets the following criteria:</p> <ul style="list-style-type: none"> (i) the facility is necessary to accommodate the waste needs of the area it is intended to serve; (ii) the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected; (iii) the facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property; (iv) (A) for a facility other than a sanitary landfill or waste disposal site, the facility is located outside the boundary of the 100 year flood plain or the site is flood-proofed; (B) for a facility that is a sanitary landfill or waste disposal site, the facility is located outside the boundary of the 100-year floodplain, or if the facility is a facility described in subsection (b)(3) of Section 22.19a, the site is flood-proofed; (v) the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents; (vi) the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows; (vii) if the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility which includes notification, containment and evacuation procedures to be used in case of an accidental release; (viii) if the facility is to be located in a county where the county board has adopted a solid waste management plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan; for purposes of this criterion (viii), the "solid waste management plan" means the plan that is in effect as of the date the application for siting approval is filed; and (ix) if the facility will be located within a regulated recharge area, any applicable requirements specified by the Board for such areas have been met. <p>⋮</p> <p>(g) The siting approval procedures, criteria and appeal procedures provided for in this Act for new pollution control facilities shall be the exclusive siting procedures and rules and appeal procedures for facilities subject to such procedures. Local zoning or other local land use requirements shall not be applicable to such siting decisions.</p> <p>(h) Nothing in this Section shall apply to any existing or new pollution control facility located within the corporate limits of a municipality with a population of over 1,000,000.</p> <p>(i) ... The Board shall adopt regulations establishing the geologic and hydrologic siting criteria necessary to protect usable groundwater resources which are to be followed by the Agency in its review of permit applications for new pollution control facilities. Such regulations, insofar as they apply to new pollution control facilities authorized to store, treat or dispose of any hazardous waste, shall be at least as stringent as the requirements of the Resource Conservation and Recovery Act and any State or federal regulations adopted pursuant thereto.</p> <p>(j) Any new pollution control facility which has never obtained local siting approval under the provisions of this Section shall be required to obtain such approval after a final decision on an appeal of a permit denial.</p> <p>(k) A county board or governing body of a municipality may charge applicants for siting review under this Section a reasonable fee to cover the reasonable and necessary costs incurred by such county or municipality in the siting review process.</p> <p>(l) The governing Authority as determined by subsection (c) of Section 39 of this Act may request the Department of Transportation to perform traffic impact studies of proposed or potential locations for required pollution control facilities.</p> <p>⋮</p> <p>(o) Notwithstanding any other provision of this Section, a transfer station used exclusively for landscape waste, where landscape waste is held no longer than 24 hours from the time it was received, is not subject to the requirements of local siting approval under this Section, but is subject only to local zoning approval.</p>
--

Table A-9 is a list by Nightingale and Lewry (2008) of site characteristics to consider when siting a HHW collection facility. They observe that a HHW collection facility is often co-located with a solid waste facility, fire department, or waste water treatment plant.

Table A-9. Site Characteristics to Consider for a Proposed HHW Collection Facility.

<ul style="list-style-type: none">• Quality infrastructure (good customer access via paved road; adequate queuing space; adequate turning radii for supply and shipping trucks, separate from customer lanes)• Proximity to schools, day care facilities, and nursing homes (further is better)• Proximity to other customer destinations and similar businesses (closer is better)• Utilities already on site or very near building site to minimize construction costs• Possible re-use of existing building• Proximity to emergency services• Room to expand if needed in the future (allow for addition of other operations e.g., recycling buy-back center or paint swap program)
--

Local Zoning Code. An IEPA publication (2003a) indicates “local zoning and local land use requirements may not be applied to siting decisions for pollution control facilities, except when located within Chicago city limits.” Codes and local land use requirements are variable throughout the study area. Input from legal counsel is advised in the event questions arise as to whether a potential HHW collection facility is exempt from a local zoning code or other local land use requirements.

One-Day HHW Collection or Satellite HHW Collection. Kraemer (1994) summarizes the key attributes of “proper location and site design” for a one-day HHW collection program as follows:

- well-known to the public
- centrally located
- easily accessible (near a major artery or highway)
- spacious enough to accommodate traffic and materials overflow
- covered and securable
- equipped with on-site utilities
- paved and contained to prevent run-off
- removed from parks, residences, and environmentally sensitive areas

The following site attributes are considered favorable when identifying a location for the HHW facility site:

- paved surface, one acre minimum
- fenced with gated entrance
- publicly owned
- good ingress and egress for accessibility and traffic control
- hooked up to electric and water
- buildings and equipment

EPA (1993) provided a manual including information regarding selecting a site for one-day HHW collections. The suggestions are applicable to either a “stand-alone” one-day HHW collection or a satellite HHW collection. Appendix F is an excerpt of the EPA publication regarding these site considerations.

Permitting Requirements. Appendix E (regarding the IEPA permit applications forms for a HHW collection facility) includes IEPA Form LPC-PA3, “Application for a Solid Waste Management Permit to Develop Treatment and/or Storage Facilities.” IEPA Form LPC-PA3 calls for descriptions and individual plans, if specified, to be provided to address each feature of a proposed HHW collection facility, as follows:

- plan sheet of the site
- process flow diagram of the treatment or storage operation
- narrative description of the site’s operation
- waste characterization plan
- waste analysis plan
- residuals
- contingency plan
- containment system
- run-on/run-off
- description of inspection procedures
- operating record
- closure plan
- post closure use of site
- site suitability

12. Estimated Costs: HHW Collection Facility Scenarios

The following estimated costs and estimated potential revenue are associated with three hypothetical HHW collection facility scenarios in a seven-county study area in East Central Illinois. Estimated costs can be expected to be variable depending on specific site and building factors (e.g., whether a site is donated, whether an existing building will be re-purposed, or whether utilities are available to serve the site, etc.).

Option A	HHW Collection Facility
Option B	HHW Collection Facility with Satellite HHW Collections
Option C	Expanded HHW Collection Facility to include Electronics Collection and Paint Exchange

Each option, if implemented, would represent an improvement to the status quo with regard to HHW collection in the seven-county study area.

Option A. Option A is a HHW collection facility located within the study area, sponsored by one or more local governments and possibly in partnership with public or private entities, and operating as a non-profit 501(c) (3) organization. Option A is based on an assumption that a suitable site will be donated and a minimal annual lease cost incurred.

Budget constraints are expected to remain a significant challenge in establishing a HHW collection facility. The Option A cost estimates are based on a HHW collection facility in full compliance with public safety, building safety, and operational standards, and not exceeding standards. Option A includes a rough estimate of expected revenue from fees assessed and from donations to be received.

Option A is based on an ideal assumption that the significant cost of processing (estimated as \$225,000 annually) is provided for in an intergovernmental agreement in place with IEPA to cover transportation and processing costs for all collected HHW.¹⁹ Tables A-10 through A-14 summarize the estimated costs and revenues of Option A.

¹⁹ Currently IEPA provides the cost for qualified hazardous waste contractor to transport and process HHW collected at four of the existing HHW collection facilities located in northern Illinois. The estimated amount of \$225,000 is based on Task Force discussions regarding an average annual cost to IEPA for this expense per each HHW collection facility.

Table A-10. Option a Estimated Capital Costs.

Site Acquisition		n/a
Chemical Storage Locker		\$48,000
Installation Concrete Pad & Bollards (520 Square feet)	\$3,200	
Installation (unit/HVAC/electric/security)	\$8,800	
	Subtotal Contractor	\$12,000
HHW Collection Facility Building (24' x 48')		\$30,000
Building Assembly/Installation		
Concrete footings	\$3,900	
Assembly	\$5,000	
Lighting/Miscellaneous	\$3,500	
	Subtotal Contractor	\$12,400
Site Preparation and Fencing		\$15,000
Landscaping (topsoil, finish grading, low maintenance plantings)		\$8,000
Equipment (forklift, dollies, shelving, scale, can crusher, computer system)		\$30,000
Engineering Plan/Architectural Drawing		\$25,000
Plan Review and Permitting		\$25,000
	Subtotal	\$205,400
	20% Contingency	\$41,100
	Estimated Capital Costs	\$246,500

Table A-11. Option A Estimate of Annual Operational Costs.

Part-time Chemist 12 hours/week for 50 weeks	\$21,000	
Part-time HHW Collection Staff 1 10 hours/week for 50 weeks	\$5,000	
Part-time HHW Collection Staff 2 10 hours/week for 50 weeks	\$5,000	
Part-time Administrator 7 hours/week (350 hours/year)	\$8,750	
	Subtotal Estimated Labor:	\$39,750
Fringe Costs (23% of estimated labor costs)		\$9,145
Staff Safety Training		\$9,500
Utilities		\$2,000
Routine Site Maintenance		\$1,500
Building Fund		\$5,000
	Subtotal	\$66,895
	10% Contingency	\$6,700
	Estimated Annual Operational Costs	\$73,595

Table A-12. Option A Estimated Annual Revenue.

Fees (estimated to average \$10.78 per vehicle x 3,000 vehicles)	\$32,340	
Donations (estimated to average \$3 per vehicle x 3,000 vehicles)	\$9,000	
Estimated Annual Revenue		\$41,340

Table A-13. Option A Summary of Estimated Annual Costs and Revenue.

Estimated Annual HHW Processing Costs	n/a
Estimated Annual Operational Costs	< \$73,595 >
Estimated Annual Revenue	\$41,340
Estimated Annual Cash Flow	< \$32,255 >

Table A-14. Option A Estimate of Costs and Revenue Description.

Estimated Capital Costs	
Site	Option A does not include site acquisition costs, based on the assumption that suitable site may be donated. A large percentage of capital costs for a HHW collection facility could depend on site improvements required. Using an existing building, existing infrastructure, or fencing can reduce capital costs. Having to remove obstacles or make many changes to the site will significantly increase capital costs.
Building	The Option A building is similar to a pole barn in construction with open air flow on two sides and access for vehicle drop-offs via an interior building drive through or under an attached covered drive-up area. A 1,152 square foot building (24' x 48') allows sufficient area for onsite sorting, packing, and bulking of HHW. State and/or local building code and life safety code requirements have a bearing on building cost. It may be possible to avoid installation of an expensive catchment drainage system by not equipping the building with a drain. Some HHW collection facilities avoid installation of extensive HVAC systems by using an open air building.
Storage Locker	The amount of HHW estimated to be collected will determine the amount of needed storage, and whether additional storage units are needed. Option A includes a single, pre-fabricated storage locker (40'6" x 8' x 8'6"). The locker has a two-hour fire-rating and a dry chemical fire suppression system, and will hold a total of 42 55-gallon drums of collected HHW.
Estimated Operational Costs	
Staffing	Option A estimated operational costs are for part time staff: one chemist for 12 hours per week @ \$35 per hour; two HHW collection staff, each for 10 hours per week @ \$10 per hour; and one administrator for 350 hours per year @ \$25 per hour. The estimate is based on the following assumptions: <ul style="list-style-type: none"> the HHW collection facility will operate 10 hours per week for 50 weeks annually an online reservation system will be used to pace the traffic flow and minimize staffing requirements, to initially allow for a vehicle drop-off every ten minutes (a rate that can be altered based on participant demands or staff availability) a nonprofit organization will be established/identified to run the HHW collection facility^a
Utilities	Option A is based on the following assumptions: <ul style="list-style-type: none"> the HHW collection facility will be used 10 hours per week open-air building areas where sorting, pour-off, and bulking occur will have open-air ventilation, and no air conditioning utility costs for the facility will be relatively low

Table A-14. Option A Estimate of Costs and Revenue Description. (continued)

Routine Site Maintenance	Landscape maintenance will be minimized as much as possible. Snow removal is expected to be the primary site maintenance cost.
Estimated Processing Costs	
	Option A is based on an ideal assumption that the estimated cost of processing is provided for in an intergovernmental agreement in place with IEPA to cover transportation and processing costs for all collected HHW. (Without such agreement, processing costs could be as high as \$225,000 annually.)
Estimated Potential Revenue	
Fee	Option A allows that the HHW collection facility may charge residents a fee, as follows: "...The collection centers may charge fees for their services, not to exceed the costs incurred..." (415 ILCS 5/22.16b(d). It will be necessary to document that HHW
Fee (continued)	<p>collection facility costs incurred are more than the fees collected. Assuming the operating entity will need to confirm a non-profit status, little additional effort will be needed.</p> <p>Option A includes possible source of revenue based on a fee structure model used at the St. Louis County Health Department HHW Collection Facility (in Missouri).</p> <p>The fee will partially offset operating costs the HHW collection facility. The first 50 pounds of HHW from a vehicle would be accepted free of charge, and then users pay \$1 per pound for anything over that amount. There would be a separately calculated fee of \$0.20 per pound for any latex paint. To apply this fee structure to Option A, the assumptions are as follows:</p> <ul style="list-style-type: none"> • the HHW collection facility is open 10 hours per week • a vehicle reservation is made every 10 minutes (with six 10-minute increments per hour) • 60 households drop off HHW each week • the HHW collection facility is open 50 weeks per year <p>Based on these assumptions, an estimated 3,000 households will drop off HHW at the Option A facility each year. On average, St. Louis receives \$10.78 per vehicle based on this fee structure. Using the average estimated amount of \$10.78 per household, the annual revenue for the Option A facility is estimated at \$32,340.</p>
Donations	<p>Option A assumes the coordinating entity of the HHW collection facility will be a non-profit organization (e.g., a 501C3 organization) and able to accept donations.</p> <p>The suggestion to allow donations was used by the Ecology Action Center (EAC), a non-profit located in McLean County, Illinois which organized an independent HHW one-day collection in 2012. EAC collected HHW from an estimated 2,000 vehicles and received \$16,000 in donations. The average donation per vehicle of \$8 may have been influenced by a large fundraising campaign for the first-time event of its kind in the area. Option A assumes a more conservative estimate that \$3 per vehicle, on average, will be donated, with estimated annual donations totaling \$9,000.</p>

Table 14 Note.

a. The operating entity of the HHW collection facility may choose the option of hiring a private contractor to run the operations at the HHW collection facility. For example, the City of Rockford has such an agreement with a private environmental services contractor to operate the Rockford HHW collection facility, at an approximate cost of \$125,000 per year.

Option B. Option B consists of one HHW collection facility (exactly as described in Option A), plus an additional storage locker, and plus two annually held satellite HHW collections. In Option B, one HHW collection facility would be located in one of these three population centers, with the other two population centers proposed to be served by a consistently scheduled annual satellite HHW collection. Tables A-15 through A-19 summarize the estimated costs and revenues of Option B.

Table A-15. Option B Estimated Capital Costs.

Site Acquisition		n/a
Chemical Storage Lockers	(2) @ \$48,000	\$96,000
Installation Concrete Pad & Bollards (520 Square feet)	(2) @ \$3,000	
Installation (unit/HVAC/electric/security)	(2) @ \$8,000	
Subtotal Contractor		\$22,000
HHW Collection Facility Building (24' x 48')		\$30,000
Building Assembly/Installation		
Concrete footings	\$3,900	
Assembly	\$5,000	
Lighting/Miscellaneous	\$3,500	
Subtotal Contractor		\$12,400
Site Preparation and Fencing		\$15,000
Landscaping (topsoil, finish grading, low maintenance plantings)		\$8,000
Equipment (forklift, dollies, shelving, scale, can crusher, computer system)		\$30,000
Engineering Plan/Architectural Drawing		\$25,000
Plan Review and Permitting		\$25,000
Subtotal		\$263,400
20% Contingency		\$52,700
Estimated Capital Costs		\$316,100

Table A-16. Option B Estimate of Annual Operational Costs.

Satellite HHW Collections – Local Services			
Outreach/Promotion	\$1,000		
Truck Rental Transport Supplies	\$500		
Garbage Disposal/Roll off Rental	\$2,000		
Safety Gear/Traffic Cones/Patrol Officer/Tent Rental/Food	\$4,000		
Forklift Rental	\$500		
Estimated 10% Contingency	\$850		
Estimated Local Services for Satellite HHW Collection #1		\$9,350	
Estimated Local Services for Satellite HHW Collection #2		\$9,350	
Satellite HHW Collections - Contractor Services			
2 Field Chemists Labor 2 x 8 hours x \$45	\$720		
2 Field Chemists Mobilization 2 x \$275	\$550		
14 Field Technicians Labor 14 x 8 hours x \$35	\$3,920		
14 Field Technicians Mobilization 14 x \$175	\$2,450		
Transport HHW back to HHW Collection Facility (estimate)	\$3,000		
Estimated 10% Contingency	\$1,060		
Estimated Contractor Services for Satellite HHW Collection #1		\$11,700	
Estimated Contractor Services for Satellite HHW Collection #2		\$11,700	
Subtotal Estimated Costs for 2 Satellite HHW Collections			\$42,100
HHW Collection Facility			
Estimate of HHW Collection Facility Labor Costs	\$39,750		
Fringe Costs (23% of estimated labor costs)	\$9,145		
Personnel Safety Training	\$9,500		
Utilities	\$2,000		
Routine Site Maintenance	\$1,500		
Building Fund	\$5,000		
Estimated HHW Collection Facility Operational Costs		\$66,895	
10% Contingency	\$6,700		
Subtotal Estimated Annual Operational Costs HHW Collection Facility			\$73,595
Option B Total Estimated Operational Costs			\$115,695

Table A-17. Option B Estimated Annual Revenue.

HHW Collection Facility Fees (estimated to average \$10.78 per vehicle x 3,000 vehicles)	\$32,340	
HHW Collection Facility Donations (estimated to average \$3 per vehicle x 3,000 vehicles)	\$9,000	
Satellite HHW Collection #1 Donations (estimated to average \$3 per vehicle x 900 vehicles)	\$2,700	
Satellite HHW Collection #2 Donations (estimated to average \$3 per vehicle x 900 vehicles)	\$2,700	
Estimated Annual Revenue:		\$46,740

Table A-18. Option B Summary of Estimated Annual Costs and Revenue.

Estimated Annual HHW Processing Costs	n/a
Estimated Annual Operational Costs:	< \$115,695 >
Estimated Annual Revenue	\$46,740
Estimated Annual Cash Flow	< \$68,955 >

Table A-19. Option B Estimate of Costs and Revenue Description.

Estimated Capital Costs	
Site	<p>Option B does not include site acquisition costs, based on the assumption that a land parcel of sufficient area –both for a HHW collection facility site, and for two separate satellite HHW collection sites may be donated.</p> <p>As with all Options under consideration, a large percentage of the capital costs for a HHW collection facility may depend on improvements required to the site. Using an existing building, existing infrastructure, or fencing can reduce the capital costs. Having to remove obstacles or make many changes to the site will significantly increase capital costs.</p>
Building ^a	<p>The Option B building is similar to a pole barn in construction with open air flow on two sides and access for vehicle drop-offs via an interior building drive through or under an attached covered drive-up area. A 1,152 square foot building (24' x 48') allows sufficient area for sorting, bulking and packaging of HHW materials.</p> <p>State and/or local building code and life safety code requirements have a bearing on the building's cost. It may be possible to avoid installation of an expensive catchment drainage system by not equipping the building with a drain. Some HHW collection facilities avoid installation of extensive HVAC systems by using an open air building.</p>
Chemical Storage Locker	<p>Option B assumes additional HHW volume collected will require a second storage locker to be installed at the HHW collection facility. Option B includes two single, pre-fabricated storage locker (40'6" x 8' x 8'6") on site. The lockers have a two-hour fire-rating and a dry chemical fire suppression system, and will hold 42 55-gallon drums of HHW collected material.</p>

Table A-19. Option B Estimate of Costs and Revenue Description. (continued)

Estimated Operational Costs	
Staffing	<p>Staffing for HHW Collection Facility: Option B estimated operational costs include the following part time staff: one chemist for 12 hours per week @ \$35 per hour; two HHW collection technicians, each for 10 hours per week @ \$10 per hour; and one administrator for 350 hours per year @ \$25 per hour. The estimate is based on the following assumptions:</p> <ul style="list-style-type: none"> • the HHW collection facility will operate 10 hours per week for 50 weeks annually • an online reservation system will be used to pace the traffic flow and minimize staffing, to initially allow for a vehicle drop-off every ten minutes (a rate that can be altered based on participant demands or staff availability) • a nonprofit organization will be established to run the HHW collection facility^b <p>Staffing for two Satellite HHW Collections: Option B assumes the following:</p> <ul style="list-style-type: none"> • an environmental services contractor will be hired to provide staff at each satellite collection, including two field chemists and 14 field technicians • the environmental services contractor will accept HHW at the satellite collection, lab pack and bulk the HHW collected, and transport it back to the HHW collection facility in accordance with DOT requirements <p>Additional details regarding operational costs for each satellite HHW collection are provided in Table 49 above.</p>
Utilities ^a	<p>Option B is based on the following assumptions:</p> <ul style="list-style-type: none"> • the HHW collection facility will be used 10 hours per week • open-air building areas where sorting, pour-off, and bulking occur will have open-air ventilation, and no air conditioning • utility costs for the facility will be relatively low
Routine Site Maintenance ¹	<p>Option B assumes landscape maintenance will be minimized as much as possible. Snow removal is expected to be the primary site maintenance cost.</p>
Estimated Processing Costs ^a	
	<p>Option B is based on an ideal assumption that the estimated cost of processing is provided for in an intergovernmental agreement in place with IEPA to cover transportation and processing costs for all collected HHW. (Without such agreement, processing costs could be as high as \$225,000 annually.)</p>
Estimated Potential Revenue	
Fee	<p>Option B allows that the HHW collection facility may charge residents a fee, as follows: "...The collection centers may charge fees for their services, not to exceed the costs incurred..." (415 ILCS 5/22.16b(d). It will be necessary to document that the HHW collection facility costs incurred are more than the fees collected. Assuming the operating entity will need to confirm a non-profit status, little additional effort will be needed.</p> <p>Option B includes possible source of revenue based on a fee structure model used at the St. Louis County Health Department HHW Collection Facility (in Missouri).</p> <p>The fee will partially offset operating costs the HHW collection facility. The first 50 pounds of HHW from a vehicle would be accepted free of charge, and then users pay \$1 per pound for anything over that amount. There would be a separately calculated fee of \$0.20 per pound for any latex paint. To apply this fee structure to Option B, the assumptions are as follows:</p>

Table A-19. Option B Estimate of Costs and Revenue Description. (continued)

<p>Fee (continued)</p>	<ul style="list-style-type: none"> • the HHW collection facility is open 10 hours per week • a vehicle reservation is made every 10 minutes (with six 10-minute increments per hour) • 60 households drop off HHW each week • the HHW collection facility is open 50 weeks per year <p>Based on these assumptions, an estimated 3,000 households will drop off HHW at the HHW collection facility each year. On average, St. Louis receives \$10.78 per vehicle based on this fee structure. Using the average estimated amount of \$10.78 per household, the annual revenue for the Option B facility is estimated at \$32,340.</p> <p>The ability to collect a fee from participants at the two satellite HHW collections is less clear based on provisions of the existing statute (415 ILCS 5/22.16b(d)). The amount of time and staff required to weigh product and calculate fees would lead to exceedingly long traffic lines at the event, and would add to the event cost. For these reasons, Option B does not include fee collection based on product weight or type at the satellite HHW collections.</p>
<p>Donations</p>	<p>Option B assumes the coordinating entity of the HHW collection facility will be a non-profit organization (e.g., a 501C3 organization) and therefore able to accept donations.</p> <p>The suggestion to allow donations is inspired by the Ecology Action Center (EAC), a non-profit located in McLean County, Illinois which organized an independent HHW one-day collection in 2012.</p> <p>Option B assumes the conservative estimate that \$3 per vehicle, on average, will be donated, with estimated annual donations as follows: \$3 x 3,000 vehicles per year at the HHW collection facility for \$9,000 \$3 x 900 vehicles per year at Satellite HHW collection #1 for \$2,700 \$3 x 900 vehicles per year at Satellite HHW collection #2 for \$2,700 Total donations estimated for Option B are \$14,400.</p>

Table 19 notes.

- a. The Option B estimated costs provided for this item are identical to the Option A estimated costs.
- b. A more expensive option to operate the HHW collection facility is to hire a private contractor to run the operations at the HHW collection facility. As one example, the City of Rockford has an agreement with a private environmental services contractor to operate the Rockford HHW collection facility, at an approximate cost of \$125,000 per year.

Option C. Option C expands on the basic operation and features of Option A. Option C consists of a larger HHW collection facility footprint (3,456 square feet) and includes the added capabilities to accommodate electronic recycling collection and latex paint collection, as well as HHW, under the same roof. The potential combination of electronic recycling collection, latex paint collection, and HHW collection is complementary, in that latex paint can be over 50% of the volume dropped off at HHW collections, and electronics recycling collection opportunities continue to be sought by residents in the study area.

In Illinois, several separate types of electronic items (e.g., televisions, cathode ray tube monitors, printers, computers, etc.) have been banned from Illinois landfills since 2012. As of July, 2015,

few options exist for residents who wish to recycle televisions and cathode ray tube monitors, due in part to inability of electronics recyclers to absorb the high processing costs for these items. Efforts to improve state legislation continue. Once much needed improvements are made to the existing manufacturers' electronics take-back program in Illinois, electronics recyclers may be able to offer to purchase unwanted electronics thereby creating a potential revenue stream for a HHW collection facility.

Regarding the paint collection and electronics items collection portions of the HHW collection facility, the hope is that eventually public/private partnerships would be established whereby the operations and processing of paint and electronics will be wholly financed by revenue received from private vendors specifically seeking to recycle these items.

Option C allows that non-HHW collection staff would greet and initially provide instructions to residents who arrive at the facility to drop off HHW, latex paint, or electronics waste. The non-HHW collection staff could supervise unpaid community service workers to assist with non-HHW related tasks onsite (e.g., sorting and palletizing electronics, and sorting latex paint). Non-HHW collection staff would require safety training and less HAZWOPER training. Tables A-20 through A-24 summarize the estimated costs and revenues of Option C.

Table A-20. Option C Estimated Capital Costs.

Site Acquisition		n/a
Chemical Storage Locker		\$48,000
Installation Concrete Pad & Bollards (520 Square feet)	\$3,200	
Installation (unit/HVAC/electric/security)	\$8,800	
	Subtotal Contractor	\$12,000
HHW Collection Facility Building (48' x 60')		\$90,000
Building Assembly/Installation		
Concrete footings	\$9,100	
Assembly	\$10,000	
Lighting/Miscellaneous	\$10,500	
	Subtotal Contractor	\$29,600
Site Preparation and Fencing		\$15,000
Landscaping (topsoil, finish grading, low maintenance plantings)		\$12,000
Equipment (forklift, dollies, shelving, scale, can crusher, computer system)		\$30,000
Engineering Plan/Architectural Drawing		\$25,000
Plan Review and Permitting		\$25,000
	Subtotal	\$286,600
	20% Contingency	\$57,300
	Estimated Capital Costs	\$343,900

Table A-21. Option C Estimate of Annual Operational Costs.

Part-time Chemist 12 hours/week for 50 weeks	\$21,000	
Part-time HHW Collection Staff 1 10 hours/week for 50 weeks	\$5,000	
Part-time HHW Collection Staff 2 10 hours/week for 50 weeks	\$5,000	
Part-time non-HHW Collection Staff 1 10 hours/week for 50 weeks	\$5,000	
Part-time non-HHW Collection Staff 2 10 hours/week for 50 weeks	\$5,000	
Part-time Administrator 8 hours/week (400 hours/year)	\$10,000	
Subtotal Estimated Labor:		\$51,000
Fringe Costs (23% of estimated labor costs)		\$11,730
Staff Safety Training		\$9,500
Utilities		\$3,500
Routine Site Maintenance		\$1,500
Building Fund		\$5,000
Subtotal		\$82,230
10% Contingency		\$8,230
Estimated Annual Operational Costs		\$90,460

Table A-22. Option C Estimated Annual Revenue.

Fees (estimated to average \$10.78 per vehicle x 3,000 vehicles)	\$32,340	
Donations (estimated to average \$3 per vehicle x 3,000 vehicles)	\$9,000	
Estimated Annual Revenue		\$41,340

Table A-23. Option C Summary of Estimated Annual Costs and Revenue.

Estimated Annual HHW Processing Costs	n/a
Estimated Annual Operational Costs	< \$90,460 >
Estimated Annual Revenue	\$41,340
Estimated Annual Cash Flow	<\$49,120 >

Table A-24. Option C Estimate of Costs and Revenue Description.

Estimated Capital Costs	
Site	Option C does not include site acquisition costs, based on the assumption that a land parcel of sufficient area may be donated. A large percentage of capital costs for a HHW collection facility may depend on site improvements required. Using an existing building, existing infrastructure, or fencing can reduce capital costs. Having to remove obstacles or make many changes to the site will significantly increase capital costs.
Building	The Option C building is similar to a pole barn in construction with open air flow on two sides and access for vehicle drop-offs via an interior building drive through or under an attached covered drive-up area. A 3,456 square foot building (24' x 144')
Building (continued)	allows sufficient area for sorting, bulking and packaging of HHW materials, and the potential to sort and temporarily store electronics for recycling, and latex paint for recycling, and a potential paint exchange area. State and/or local building code and life safety code requirements have a bearing on the building's cost. It may be possible to avoid installation of an expensive catchment drainage system by not equipping the building with a drain. Some HHW collection facilities avoid installation of extensive HVAC systems by using an open air building.
Storage Locker	The amount of HHW estimated to be collected will determine the amount of needed storage, and whether additional storage units are needed. Option C includes a single, pre-fabricated storage locker (40'6" x 8' x 8'6") on site. The locker has a two-hour fire-rating and a dry chemical fire suppression system, and will hold a total of 42 55-gallon drums of collected HHW.
Estimated Operational Costs	
Staffing	Option C estimated operational costs are for part time staff: one chemist for 12 hours per week @ \$35 per hour; two HHW collection staff, each for 10 hours per week @ \$10 per hour; two non-HHW collection staff, each for 10 hours per week, and one administrator for 400 hours per year @ \$25 per hour. The estimate is based on the following assumptions: <ul style="list-style-type: none"> the HHW collection facility will operate 10 hours per week for 50 weeks annually an online reservation system will be used to pace the traffic flow and minimize
	staffing requirements, to initially allow for a vehicle drop-off every ten minutes (a rate that can be altered based on participant demands or staff availability) <ul style="list-style-type: none"> one non-HHW collection staff would supervise a number of unpaid community services workers to assist in electronics items sorting and packing, and latex-paint collecting and sorting, if that local option is available a nonprofit organization will be established to run the HHW collection facility
Utilities	Option C is based on the following assumptions: <ul style="list-style-type: none"> the HHW collection facility will be used 10 hours per week open-air building areas where sorting, pour-off, and bulking occur will have open-air ventilation, and no air conditioning utility costs for the facility will be relatively low
Routine Site Maintenance	Landscape maintenance will be minimized as much as possible. Snow removal is expected to be the primary site maintenance cost.

Table A-24. Option C Estimate of Costs and Revenue Description. (continued)

Estimated Processing Costs	
	<p>Option C is based on an ideal assumption that the estimated cost of HHW processing is provided for in an intergovernmental agreement in place with IEPA to cover transportation and processing costs for all collected HHW. Without such agreement, processing costs could be as high as \$225,000 annually.</p> <p>Until a cost-neutral system for accepting and recycling latex paint is established, Option C assesses a fee of 20 cents per pound for latex paint collected. The fee offsets the cost to ship latex paint to a paint recycler, and assumes the 20 cent per pound fee will be sufficient to cover the cost of shipping collected latex paint to a paint recycler.</p> <p>The status of electronic items recycling is changing in Illinois due to the challenge of expensive processing costs of cathode ray tube monitors and televisions. Establishing an electronics collection program at the facility will depend on legislative fixes to address this challenge.</p>
Estimated Potential Revenue	
Fee	<p>Option C allows that the HHW collection facility may charge residents a fee, as follows: "...The collection centers may charge fees for their services, not to exceed the costs incurred..." (415 ILCS 5/22.16b(d)). It will be necessary to document that HHW collection facility costs incurred are more than the fees collected. Assuming the operating entity will need to confirm a non-profit status, little additional effort will be needed.</p> <p>Option C includes possible source of revenue based on a fee structure model used at the St. Louis County Health Department HHW Collection Facility (in Missouri). The fee will partially offset operating costs the HHW collection facility. The first 50 pounds of HHW from a vehicle would be accepted free of charge, and then users pay \$1 per pound for anything over that amount. There would be a separately calculated fee of \$0.20 per pound for any latex paint. To apply this fee structure to Option C, the assumptions are as follows:</p> <ul style="list-style-type: none"> • the HHW collection facility is open 10 hours per week • a vehicle reservation is made every 10 minutes (with six 10-minute increments per hour) • 60 households drop off HHW each week
	<ul style="list-style-type: none"> • the HHW collection facility is open 50 weeks per year <p>Based on these assumptions, an estimated 3,000 households will drop off HHW at the Option A facility each year. On average, St. Louis receives \$10.78 per vehicle based on this fee structure. Using the average estimated amount of \$10.78 per household, the annual revenue for the Option A facility is estimated at \$32,340.</p>
Donations	<p>Option C assumes the coordinating entity of the HHW collection facility will be a non-profit organization (e.g., a 501C3 organization) and able to accept donations. Option C assumes a conservative estimate that \$3 per vehicle, on average, will be donated, with estimated annual donations totaling \$9,000.</p>

13. Raise Funds

Project staff reviewed potential funding or grants opportunities which could be further explored as funding sources for construction of a permanent HHW collection facility within the seven-county study area. Future funding sources may include:

- a special state fund which IEPA utilizes to fund construction and processing costs associated with the four existing HHW collections facilities (generated from the fee established in Section 22.15 of the Illinois Environmental Protection Act)
- donations, sponsors, local partnerships
- corporate community grant programs and private foundation grants

Qualified public support may include funds from private and public agencies as well as contributions from corporate and individual donors. The IRS limits the amount of qualified support the group can receive from one individual or corporation. However, limits are exempt with regard to funds received from a government unit or other publicly supported organization, or funds received from grants designated as unusual grants from either the public or private sector (Mancuso, 2011). An “unusual grant” typically meets following types of criteria:

- funds not regularly received or relied upon
- an unusually large grant amount
- grant attracted by publicly supported nature

Other fundraising ideas are detailed below.

Apply for Foundation Grants. Start a database to identify potential grantors to provide capital for the startup.

Ask Local Organizations for Support or Sponsorship. There are local organizations and companies that have a direct interest in protecting the areas’ water supply and therefore may provide funding to support this effort. Such entities may include agricultural firms and the local water providers.

Identify Revenue Streams for Ongoing Operations.

1. User fees – many HHW collection facilities charge by weight or for material over a specified weight (e.g., over 50 pounds or over 75 pounds).
2. Local government contributions – municipalities or a county may charge households a fee or a county may include a referendum to approve funding for a HHW collection facility as a particular public concern.
3. Donations – a HHW collection facility can display a donation box to help offset operational costs.

14. Education and Outreach

Raising awareness through traditional local government and public agency online sources and digital news and media outlets will be a constant need associated with implementing the strategy to improve HHW collection options available to households in the study area.

Ongoing efforts will need to occur to educate stakeholders regarding the need for safe HHW collection, the avoidance of continued health and environmental risks, the need for funding, and the option to participate in HHW collection once a HHW facility becomes available.

15. References

- Austin, D. (1997). Chlorine Fumes From Garbage Strike Again. *The Oregonian*, Portland, OR, p. D5.
- Bowen, C. (1998). Household Hazardous Products and Hazardous Waste: A Summary for Consumers. College of Agricultural Sciences, Agricultural Research and Cooperative Extension, Pennsylvania State University. Retrieved from <http://extension.psu.edu/DFA0DED8-BE66-4620-BD96-DE706E02C2A4>.
- Breiteneicher, D. (1997). HHW in Wastewater. *Household Hazardous Waste Management News*, The Waste Watch Center, Andover, MA.
- Brown, B. (1998). Unknown Source Sickens Fresh Kills Workers. *Waste News*, Volume 4, Issue 1, p. 2.
- Cassel, S. (2008). Product Stewardship: Shared Responsibility for Managing HHW. In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 167-202). Lanham, MD: Government Institutes.
- D'Arcy, R. (2009). The Road to Product Stewardship: Local Government as Catalysts. Retrieved from <http://c.ymcdn.com/sites/www.productstewardship.us/resource/resmgr/imported/Santa%20Clara%20Co%20Oct%2009%20EPR%20Strategies%20Final%20RD.pdf>.
- Digital Media Law Project. (2008). Forming a Nonprofit Corporation in Illinois. Retrieved from <http://www.dmlp.org/legal-guide/forming-nonprofit-corporation-illinois>.
- DiNovo, F. (2013). Denken Stück: Champaign County Water Plan.
- Fritz, J. (2014) Elements of a Business Plan for a Nonprofit Organization: Give Your Nonprofit a Roadmap to Success with a Business Plan. Retrieved from <http://nonprofit.about.com/od/gettingstarted/tp/Elements-Of-A-Business-Plan-For-A-Nonprofit-Organization.htm>.
- Galvin, D., & Dickey, P. (2008). What is Household Hazardous Waste? In A. D. Cabaniss (Ed.), *Handbook on Household Hazardous Waste* (pp. 2-3). Lanham, MD: Government Institutes.
- Illinois Environmental Protection Agency. (n.d.). About the Bureau of Land. Retrieved from <http://www.epa.state.il.us/land/about-the-bureau.html>.
- Illinois Environment Protection Agency. (2003a). Siting a Pollution Control Facility in Illinois. Retrieved from <http://www.epa.state.il.us/community-relations/pollution-control-facility-siting.pdf>.
- Illinois Environmental Protection Agency. (2003b). Household Hazardous Waste Collection Results (IEPA Publication No. BOL 98-023). Springfield, IL: Illinois Environmental Protection Agency's Office of Public Information. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-collection-results.pdf>.
- Illinois Environmental Protection Agency. (2013a). Household Hazardous Waste Collections: Acceptable and Unacceptable Wastes. Retrieved from <http://www.epa.state.il.us/land/hazardous-waste/household-haz-waste/hhwc-acceptable.html>.
- Kraemer, M. H. (1994). How to Establish a Household Hazwaste Collection Program. *Waste 360*. Retrieved from http://waste360.com/mag/waste_establish_household_hazwaste.

- Llewellyn, R. (2009). Recycling Computer Electronics. Proceedings from NAHMMA National Conference 2009, Houston, TX.
- Mancuso, A. (2011). How to Form a Nonprofit Corporation, 10th Edition, (pp. 65-70). Berkeley, CA: NOLO.
- Nightingale, D., & Donnette, R. (2002). Household Hazardous Wastes. In G. Tchobanoglous & F. Kreith (Eds.), Handbook of Solid Waste Management (2nd Ed.) (pp. 327-342). New York, NY: McGraw-Hill.
- Nightingale, D. and Lewry, B. (2008). HHW Collection Facilities. In A.D. Cabaniss (Ed.), Handbook on Household Hazardous Waste (pp. 107-118). Lanham, MD: Government Institutes.
- Patrick Engineering. (2009). Household Hazardous Waste Facility Feasibility Study. (p.6) Retrieved from <http://www.peoriacounty.org/download?path=/recycle%2FPeoriaCo+HHW+feasibility+study+2009.pdf>.
- Task Force on the Advancement of Materials Recycling (2015a). State of Illinois Final Report: Task Force on the Advancement of Materials Recycling reporting to Governor Pat Quinn and Illinois' 98th General Assembly.
- U.S. Environmental Protection Agency. (1993). Household Hazardous Waste Management: A Manual for One-Day Community Collection Programs. EPA530-R-92-026. (pp. 21-24). Retrieved from <http://www.epa.gov/waste/conserves/materials/pubs/manual/sec04.pdf>.
- U.S. Environmental Protection Agency. (2011). RCRA Orientation Manual 2011. Retrieved from <http://www.epa.gov/wastes/inforesources/pubs/orientat/>.
- U.S. Environmental Protection Agency. (2013a). Solid Waste: Household Hazardous Waste. Retrieved from <http://www.epa.gov/region9/waste/solid/house.html>
- U.S. Environmental Protection Agency. (2013d). Municipal Solid Waste. Retrieved from <http://www.epa.gov/epawaste/nonhaz/municipal/index.htm>
- U.S. Environmental Protection Agency. (2014). Household Hazardous Waste. Retrieved from <http://www.epa.gov/waste/conserves/materials/hhw.htm>.

Appendix B: At Your Door Special Collection Program



At Your Door Special Collection[®] a service of Waste Management

Extension of your recycling program
for Kane County, IL

RFP 41-012 Household Hazardous Waste Collection

Introduction

Waste Management is pleased to submit this proposal for At Your Door Special Collection service of difficult-to-recycle household items directly from the homes of residents within Anytown. This service makes it easy for the residents of your community to recycle home-generated special materials – including chemicals, automotive products, and electronics – safely, easily, and responsibly. This unique service has been helping municipalities, government agencies, and the public for sixteen (16) years.

The At Your Door Special Collection program is a Waste Management service. Waste Management is the leading provider of comprehensive waste and environmental services in North America, as well as North America's largest residential municipal waste recycler. The concept and responsible implementation of door-to-door collection of difficult-to-recycle household items is unique. **At Your Door Special Collection is a leader in providing home collection of special materials**

Statement of Work

The program begins when the public is informed about how to participate. Following are the elements of the At Your Door Special Collection program and how it works.

Resident Initiates Collection

To participate, residents call our toll free number or e-mail atyourdoor@wm.com and request a collection at their home. A customer service representative from our, trained, U.S. based call center answers the call or online request. The participant is asked for basic information: name, address, phone number, how they learned of the program, single or multi-family home and a short inventory of the material. The representative discusses the program with the participant, including the placement of the material on collection day. The call center is available from 5 AM through 5 PM Pacific Time, Monday through Friday. Both English and Spanish speaking representatives are available. There is an automated call system available after hours and on holidays. The website is also available 24-7 to request a collection; messages are responded to Monday through Friday between 5am and 5pm Pacific Time..

Collection Is Scheduled

The participant is provided with a date when they must place their material at the entrance door or in front of their garage or if multi-family, in a safe location. That location is noted by the customer service representative for use by the customer service technician.

The frequency of collection routes will vary depending upon demand. When programs first start and during seasonal peaks such as spring and fall cleaning times, there is usually a higher demand resulting in longer periods between the call and the collection. [PSS REPS, if this is for a MUD or small community with infrequent collections e.g. once each month, every other month etc. please indicate in this section. You will find comments about frequency in the scope of work]

Packaging

A kit will be sent via U.S. mail to the participant, who will package the material and place it out on the designated collection date. The kit consists of heavy bag, bag tie, survey card, labels (for material that is not labeled) and an instruction sheet. The instruction sheet reiterates the collection date and items discussed with the call center customer service representative. Residents collect their difficult-to-recycle items in the bag and place it on the front porch or near the garage. Multi-family participants can

designate a safe place at their building where the material can be collected (never at the curb or on public property).

The quantity of material that can be collected at any one time is limited to the items that can be placed into the kit bag along with designated items that may be placed outside the bag:

- **Up to 5 Vehicle Batteries, 8 fluorescent tubes and/or CFLs and up to 5 gallons of motor oil and antifreeze**

If the resident receives their kit and calls explaining that they have more material than can fit in the kit, they will be provided with a choice: either have the one kit and its contents collected as scheduled, or be rescheduled when we can collect all of the material at the same time. Participants will be discouraged from requesting a collection of very small quantities, e.g., a container of used motor oil. Residents with used motor oil only will be directed to local collection centers. Callers with very small quantities will be directed to combine their material with neighbors if possible.

All containers must be labeled and they cannot leak. If a container leaks, participants are instructed to transfer it to a non-leaking container and label it. If a container is not labeled, participants are told to place a label on the container or use one provided in the kit. Additional instructions may apply based on applicable rules and laws. Leaking containers or containers without labels will not be collected.

Collection

On the established pickup date, a customer service technician will arrive at the home during the day, inspect the material for eligible items, and package the material based upon hazard classification. All materials must be placed outside of the home. We will not enter the premises to gather or remove any material. In the event the materials are ineligible, e.g., unlabeled, leaking, commercial material, the resident will be contacted in person, by phone and/or a door hanger will be left with instructions. Residents do not have to be home for collections to occur.

Transport

Materials are transported to the facility and then shipped to various recycling, processing or disposal facilities. Once the material is collected, our customer service technicians work to responsibly manage and recycle as much of the collected material as possible. Most materials collected are recycled. Emphasis is placed on recycling, then treatment, followed by incineration, and when no other options are available, to secure landfills.

Safety

At Waste Management, safety is a core value, a cornerstone of operational excellence. It is a philosophy that is embedded in the way we work, the decisions we make, and the actions we take. With thousands of trucks on the road every day, we recognize the responsibility to hold ourselves to the highest standards to protect our customers, our employees and our communities. Waste Management's goal is to attain world-class safety and, more importantly, to be the safest company in our industry.

Eligible Items

In general, most ordinary household chemicals purchased at retail stores are eligible for collection. Only items originating from households are eligible, no business material is allowed. Most consumer electronic items can be collected, including microwave ovens (appliances such as washer, drier, refrigerator or other large appliance are not acceptable). Console TV's and similar consumer electronic items in limited amounts are eligible unless they originate from a business. Universal material is collected and typically includes fluorescent lamps, compact fluorescent bulbs and mercury devices. List is not all-inclusive.

Garden Chemicals

- Insect sprays
- Weed killers
- Other poisons, rat poison
- Roach poison
- Fertilizer
- Herbicides

Automotive Material

- Motor oil
- Antifreeze
- Waxes/Polishes
- Cleaners
- Brake fluid
- Gasoline
- Diesel Fuel
- Used oil filters
- Transmission fluid
- Windshield washer fluid
- Hydraulic fluid
- Automotive batteries

Paint Products

- Oil based paint
- Latex paint
- Stripper

- Stains
- Caulking
- Wood preservative
- Glue
- Thinner

Household Cleaners

- Bleach
- Ammonia
- Floor stripper
- Drain cleaner
- Tile remover
- Floor and tile cleaners
- Rust remover
- Naval jelly
- Driveway Cleaner

Misc. Household

- Household batteries
- Florescent tubes
- Compact fluorescent bulbs
- High intensity lamps

Ineligible Material

Commercial material, material from businesses, and unusually large quantities of the same material are not eligible for this program (the list below is not totally inclusive)

Biological waste	Gas cylinders
Radioactive materials, including smoke detectors	Materials improperly packaged for transportation
Ammunition	Unknown material (unlabeled)
Explosives	Tires
Commercial chemicals	Appliances
Containers over 5 gallons	Liquid mercury
Unlabeled material	Driveway sealer greater than 5 gallons
Fire Extinguishers	All medicines
Leaking containers	Sharps, needles
Electronics	

Recycling of Collected Materials

Thanks to our company's vast infrastructure and affiliated entities, we are able to recycle as much as 75% or more of the items, reclaiming valuable resources for the benefit of your community and the environment. The following are some methods used to recycle or treat some materials.

- Lamps/CFL's to WM LampTracker®
- Recyclables (bottles, empty containers) to WM MRF
- Used oil and Antifreeze -- recycling
- Household batteries -- recycling
- Mercury to WM Mercury Solutions, Inc.'s mercury retort facility
- Flammables to Fuel Blending (paints, solvents)

Public Education

At Your Door can provide a recommended public education strategy for your community. . The purpose of providing this program is to insure an effective communication effort to achieve our mutual goals, which are to insure that every resident understands that they can use the program when it is convenient to them. While not every household will utilize the program at the very least, residents will understand that it is available. Our public education program recommendations are designed to maintain a respectable level of participation and a high degree of participant satisfaction within the pricing provided for this program.

The At Your Door Special Collection program is committed to the successful implementation of the program proposed in this document. To this end, the participant surveys discussed below will help to verify the success of the program:

Participant Surveys

A postage-paid card addressed to the sponsoring agency program manager will be included in every kit sent to participants. The card lists multiple choice and fill-in-the-blanks questions. In the past, on average 15-35% of these cards have been completed and mailed to government agencies sponsoring At Your Door Special Collection managed programs.

The survey card is a "report card" mailed directly to you. Residents in the comfort of their homes fill in the cards because they care about the program. The responses allow us to continually improve the program.

Reports

Every item collected from every home is logged on the inventory form used by our customer service technicians on site. This data is entered into At Your Door Special Collection proprietary database and reports can be generated. You may request a report that provides a summary of the material collected

**Appendix C: Evaluation of the Proper Management of Household
Hazardous Waste in Illinois**

Section V. Evaluation of the Proper Management of Household Hazardous Waste in Illinois

Background

The Federal Resource Conservation and Recovery Act (RCRA) details very ridged management methods for hazardous wastes generated by commercial and industrial sources. The “cradle to grave” management of hazardous waste insures that it is properly and environmentally handled, transported, treated, and disposed. Those very comprehensive regulations provide guidelines for industrial and commercial hazardous waste, but exclude household hazardous waste (HHW). Household products often contain the same hazardous components as products used in industrial or commercial operations, but since the resulting waste is generated by households it is exempt from most environmental regulations. Potential public health and environmental problems resulting from inappropriate disposal of such wastes are evident. While the waste generated by one household may contain only small quantities of hazardous wastes, the accumulation of small quantities multiplied by millions of households has raised legitimate concern for their proper disposal.

Residential households also consume products that when not properly disposed of have the potential to impact human health and the environment, air, land and water, in a negative manner. Recognizing the need for environmentally sound management of HHW the IEPA has developed several household hazardous waste (HHW) programs to assist Illinois residents in managing these critical waste streams (see Attachment G which provides an overview of IEPA’s HHW programs). In addition to the HHW programs administered by IEPA the Illinois General Assembly has enacted laws to ban certain potentially hazardous products from disposal: mercury switches, used oil, lead acid batteries, refrigerant coolant containing appliances, and electronics. Although these bans have increased the public’s awareness they are not 100% effective in the removal of these products and there still exist a significant number of household hazardous products that are purchased and used that have not been included in the “ban” approach to managing these wastes at their end of life.

As previously stated, the IEPA has developed collection programs to assist residents of the State to safely and efficiently manage household generated hazardous waste. The Illinois Environmental Protection Act authorizes the IEPA to utilize funds from the Solid Waste Management Fund for the development of programs to collect and dispose of HHW. The IEPA’s programs have been comprised of both one day collection events where a partner, generally a local municipality or county, assists the IEPA in advertising, site management and traffic control for the event, to permanent drop-off locations (currently 4 in the State located in Naperville, Chicago, Rockford and Gurnee) that provide residents the ability to bring unwanted HHW where the local partner is responsible for operating the facility on a frequent basis and to provide collection, packaging, and storage of the material. Over the course of these programs IEPA has effectively removed 156,000 drums of household hazardous waste from nearly 1,000,000 Illinois residents over the past 25 years.

Today, IEPA continues to assist the four permanent HHW collection sites by providing resources to both remove and properly destroy the materials collected and retain the

generator status to the HHW material, as well as support numerous one day collection events for HHW throughout the State. Most residents of Illinois, however, still lack a convenient collection system for the proper disposal of HHW. The one day collection events are neither routine in their location or timing resulting in significant frustration for the residents of Illinois to disposal of unwanted HHW. These HHW materials continue to show up in waste audits conducted by the State. These HHW materials continue to show up in waste audits conducted by the State, (Illinois' 2009 Statewide Commodity/Waste Generation and Characterization Study found that 64,000 tons of HHW are currently being disposed per year) and the State's efforts to remove HHW needs to be enhanced to meet our obligations to future residents of the State.

The Task Force has spent a significant amount of time evaluating both the success of the State's existing product/material bans and the collection systems in place to assist residents in the disposal of HHW. Based on this evaluation the Task Force believes that there exists an inadequate HHW collection infrastructure to meet the desired convenience of most Illinois residents. Furthermore, the Task Force believes that the use of permanent collection drop-off sites provides for a more efficient and effective program for residents to dispose of HHW.

Based upon materials shared with the Task Force from the IEPA regarding disposal costs, permanent sites (average annual disposal costs are approximately \$250,000) as well as the total funds collected from the landfill fees, see appendix 3.2 "Solid Waste Management Fund 078" annual revenue and expense report, the Task Force is recommending that more permanent HHW collection sites be developed to enhance the disposal network for the residents of the State. Below is the specific recommendation agreed to by the Task Force.

The task force believes that all citizens of Illinois, regardless of geographic location, deserve a collection system to dispose of their unused and unwanted HHW that is safe for the environment and to human health. Any collection system must be convenient for the citizenry to use if it is to be successfully utilized. Several methods for funding the establishment of additional permanent HHW collection drop offs locations were considered by the Task Force, but no consensus was reached. Funding options that were discussed and that could be further explored to potentially assist in establishing a state wide HHW collection system are included later in this document under the heading "Potential Funding Options."

Recommendations

Amend section 22.25 of the Environmental Protection Act to require the establishment of a convenient State wide collection infrastructure for HHW. This infrastructure should be developed by regions of the State and rely upon partnerships for the operation of the collections sites with the State's participation being the transportation, disposal and RCRA liability of the materials collected. The infrastructure shall have as its base eight sites in the northern part and four each in the central and southern part of the State. See Attachment B(4), the HHW Task Force recommendation.

Attachment B(4)

Task Force on the Advancement of Recyclable Material in Illinois Formal Recommendation of Finding and/or Recommendation

Submitted By: David Van Vooren, Jennifer Walling, and Walter Willis **Date:** July 14, 2014

Legislative Citation: Amend Section 22.55 of the Illinois Environmental Protection Act to develop a convenient statewide collection infrastructure for residents to dispose of their unwanted household hazardous waste (HHW)

Brief Summary of Issue: The Illinois Environmental Protection Agency has been given the authority to reduce the environmental impact of improper disposal of household hazardous waste and has utilized its HHW program to provide collection opportunities throughout the State. IEPA currently provides one day and permanent collection sites through partnerships with local agencies for the proper management and disposal of household chemical waste. These one day and permanent collection sites are funded through the Section 22.15 of the Illinois Environmental Protection Act and administered by the IEPA (see attached handout on the IEPA's HHW program). Currently, the IEPA funds four permanent collections sites (Chicago, Naperville, Rockford and SWALCO) and several one day collection events in central and southern Illinois. Providing a means for the residents of the State of Illinois to dispose of their household hazardous waste in an effective, safe, cost effective and especially convenient manner ensures the State's environment, air and water, is preserved for future generations. The Task Force realizes, after receiving information from the IEPA and public comments provided to it that the existing HHW collection infrastructure is inadequate to meet the desired convenience standard for most of Illinois' residents. The Task Force suggests that the State develop, through local partnerships, an enhanced collection infrastructure that would include eight sites in the northern third of the State (four more in addition to the existing four sites) and four sites each in the central and southern portion of the State.

Any Current Legislative Language: No legislative language has been developed at this time, but amending Section 22.55 of the Illinois Environmental Protection Act to require the development of a more convenient HHW program may be an appropriate approach. The other element of this is the funding for 8 additional permanent collection sites in Illinois which are anticipated to cost the State approximately \$2 million more per year to manage the HHW material collected by the sites. This estimate is based on \$250,000 per site and could be lower if the Paint Stewardship bill is enacted in IL.

Suggested Finding: Currently the State collects funds through the fee established in Section 22.15 of the Illinois Environmental Protection Act. The State should first review the allocation of these funds and determine if the existing allocation can be increased by re-prioritizing the way the existing funds are spent. Secondly, the State should consider eliminating the exemptions allowed under Section 22.15, which will generate significant new funding.

Specific Recommendations:

1. Amend Section 22.55 of the Environmental Protection Act to require the establishment of a convenient State wide collection infrastructure for household hazardous waste. Said infrastructure should be developed by regions (north/central/south) and rely upon partnerships for the operation of the collections sites with the State's participation being the disposal of the materials collected. The infrastructure shall have as its base eight sites in the northern part and four each in the central and southern part of the State.
2. The IEPA should evaluate the existing allocation of Section 22.15 fee revenue to determine if additional funds can be allocated to the expansion of the HHW program.
3. If existing funds cannot be reallocated then amend Section 22.15 of the Act to eliminate the exemptions to the State and local fee and utilize of portion of this new revenue to fund an expanded HHW program..

Discussion in Support: The positive related to this recommendation is the development of a convenient, statewide HHW collection infrastructure that will promote clean air, land and water for the residents of the State.

Discussion in Dissent or Opposition: None provided.

RECORD KEEPING SECTION

Date of Vote: 09-04-2014

Votes in Favor: Walters, Smith, Braatz, Keane, Van Vooren, Disbrow, Walker, Fletcher, Magrisso, Willis, Bulthuis, Hoving, Maxwell, Peck, Laird, Walling

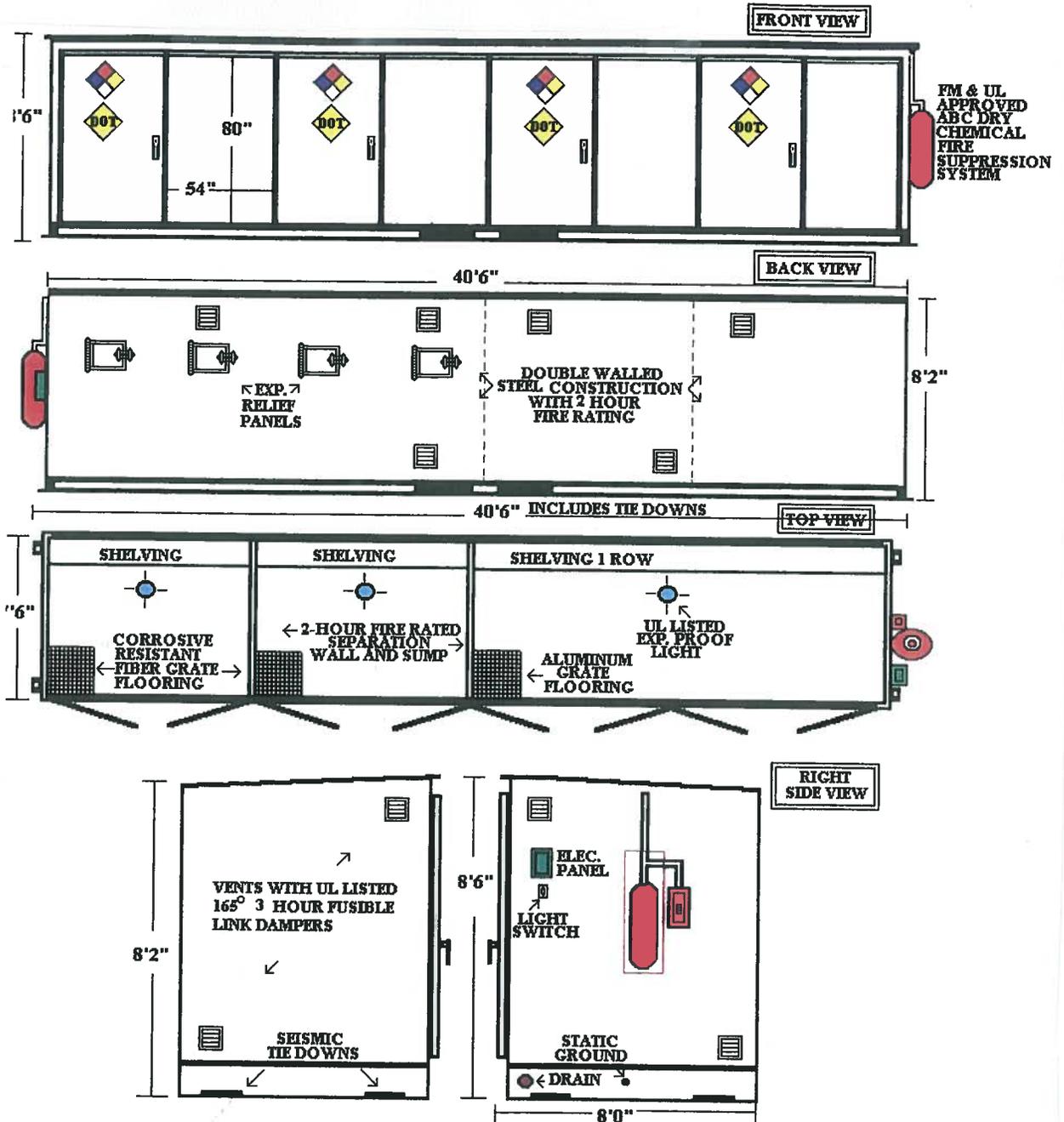
Votes in Opposition: None

This recommendation was approved with a vote of 16-0.

Appendix D: Sample HHW Storage Locker Specifications

Sample HHW Storage Locker Specifications
 Provided by Environmental Compliance Products, Inc.

ECP Model # S4008BXR DRAWING – NOT TO SCALE



CP MODEL# S4008BXR

DOUBLE WALLED STEEL CONSTRUCTION WITH 2-HOUR FIRE RATING
 FACTORY MUTUAL APPROVED
 35 LB. UL & FM ABC DRY CHEMICAL FIRE SUPPRESSION SYSTEM W/ STEEL ENCLOSURE

* FIBERGRATE & ALUMINUM GRATE FLOORING 300 LB. PSF
 * UNIT WEIGHT = 21,500 LBS.
 * SUMP CAPACITY 1,496 US GALLONS
 * 4-EXP. RELIEF PANELS
 * 3 - UL LISTED EXP. PROOF LIGHTS

DESCRIPTION: MODEL # S4008BXR

DRAWING DATE: 03/03/2014

ENVIRONMENTAL COMPLIANCE PRODUCTS, INC

8907 WARNER AVE # 122
 HUNTINGTON BEACH, CA 92647
 PH: (800) 643-7065 FAX: (714) 847-7854

ECP Model # S4008BXR SPECIFICATIONS

1. Factory Mutual Approved, to meet FMRC Class 6049 (NFPA 30).
2. Complies with IFC, IBC, EPA, NFPA AND OSHA codes and regulations for compliance in design.
3. Dimensions: 40'6" x 8' x 8'6" (W-D-H)
8 - Doors 54" x 80" (W-H) with 3 point locks
Approximate Weight: 21,500 lbs
4. All materials are new, unused, non-commercial grade ASTM A570 and commercial grades ASTM A500, ASTM A569 and ASTM A36 steel.
5. Double walled, 12 & 14 gauge welded steel construction with 2 hour Fire Rating. Sump built of 10 gauge steel.
6. Chemical resistive coating inside and outside with salt water primer. Cold tar epoxy Resin on the bottom 12".
7. Fusible link fire dampers.
8. Internal spill containment is 748 (20'), 374 (10'), 374 (10') gallon minimum.
9. Static ground connection on all units.
10. Spill containment drain on all units, are a minimum of 4" above ground to allow drainage.
11. 8 -Doors for pallet loading and accessibility; are 54" wide each with 3 point locks.
12. Non-Spark Aluminum Grate Flooring in the 20' compartment & Fibergrate Flooring in the 2 - 10' compartments.
13. Units are designed to be portable by forklift, with front to rear loading capability, with forklift pockets.
14. Seismic tie down holes are 1" diameter.
15. All units have 3/8" grounding lugs, set at 30" diameter.
16. 2 - 2 Hour Fire rated separation walls dividing the building into 3 compartments, (1-20' & 2-10') with segregated sumps.
17. UL & FM Approved ABC Dry Chemical Fire Suppression system with manual pull station in the 20' compartment and weatherproof steel enclosure.

18. 8 - Secondary Containment Steel Shelves, (one row along back wall).
19. 3 - Explosion proof lights (Class I, Div I) with switch
20. 3 - Steel Loading Ramps (36" x 60") W-L.
21. R-11 Insulation. (Optional)
22. 3 - Explosion Proof Air Conditioners (Class I, Div II) 19,500 btu. (Optional)
23. 4 - Explosion Relief Panels in the 20' compartment.
24. NFPA Signs & DOT Placards.

Appendix E: Permit Application Forms for a HHW Collection

Facility

IEPA Permit Application Forms for a HHW Collection Facility

The following IEPA application forms are required to be completed and submitted to IEPA for a proposal to construct a HHW collection facility in Illinois:

- Certificate of Authenticity
- 39(i) Certification (for a Legal Entity)
- LPC-PA1 General Application for Permit
- LPC-PA3 Application for a Permit to Develop Treatment and/or Storage Facilities
- LPC-PA8 Certification of Siting Approval
- LPC-PA 11 Closure Plans and Post-Closure Care Plans
- LPC-PA16 Notice of Application for Permit to Manage Waste

A copy of each IEPA form, and instructions for each form, are available online at:
<http://www.epa.state.il.us/land/regulatory-programs/permits-and-management/forms/>.

Appendix F: EPA Site Considerations for One-Day HHW

Collections

EPA Site Considerations for One-Day HHW Collections

An excerpt of Section 7 "Selecting, Designing, and Operating the Collection Site" from EPA 1993 publication: 'Household Hazardous Waste Management: A Manual for One-day Community Collection Programs' follows:

S I T E C O N S I D E R A T I O N S

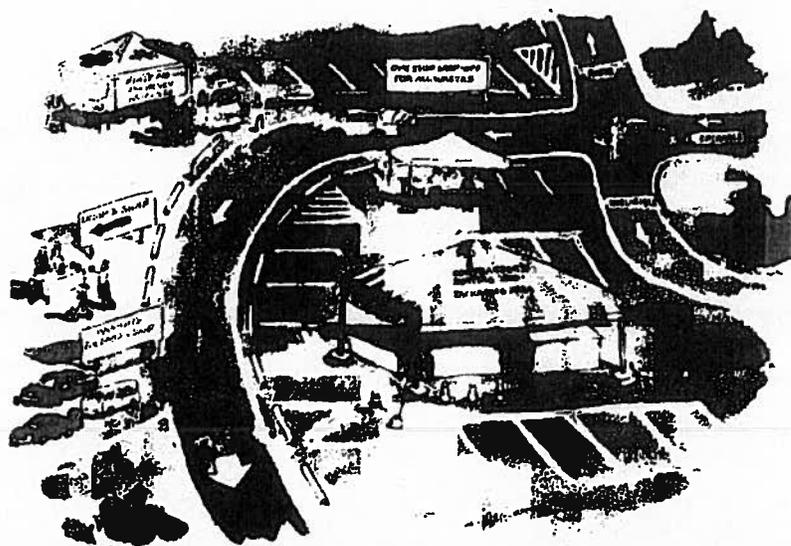
Proper site selection, design, and operation are crucial in promoting maximum participation in the HHW collection and subsequent collections. An easily accessible, efficiently run site will help ensure positive experiences on collection day, which can result in favorable publicity for the next event.

Site Selection

The site chosen for the collection should be well known, centrally located, and easily accessible. It also should be well removed from residences, parks where children play, and environmentally sensitive areas, such as open bodies of water, wells, faults, and wetlands. Local zoning regulations might specify required setbacks and buffer zones and might identify acceptable or restricted areas. Using sites with an impermeable surface (e.g., pavement or concrete) helps to minimize

environmental risks. Onsite utilities should include running water, fire hydrants, and electric hookups (or generators) in case lights are needed to pack and label the HHW after dark.

Collection sites typically are located on publicly owned land, such as stadium parking lots, solid waste landfills or transfer stations, schools, fire stations, and public works yards. A wastewater treatment plant is a good collection site because it also offers the opportunity to educate the public about water pollution problems caused by improperly managed HHW.



Simple site plan for a one-day drop-off HHW collection program.

SITE CONSIDERATIONS

Site Design and Operation

A well-designed and well-operated HHW collection site allows participants to move through the collection area quickly and efficiently. It includes areas for people who require special attention, and adequate space for waiting lines. It also has staff on hand to direct traffic, offer informational materials, and answer questions.

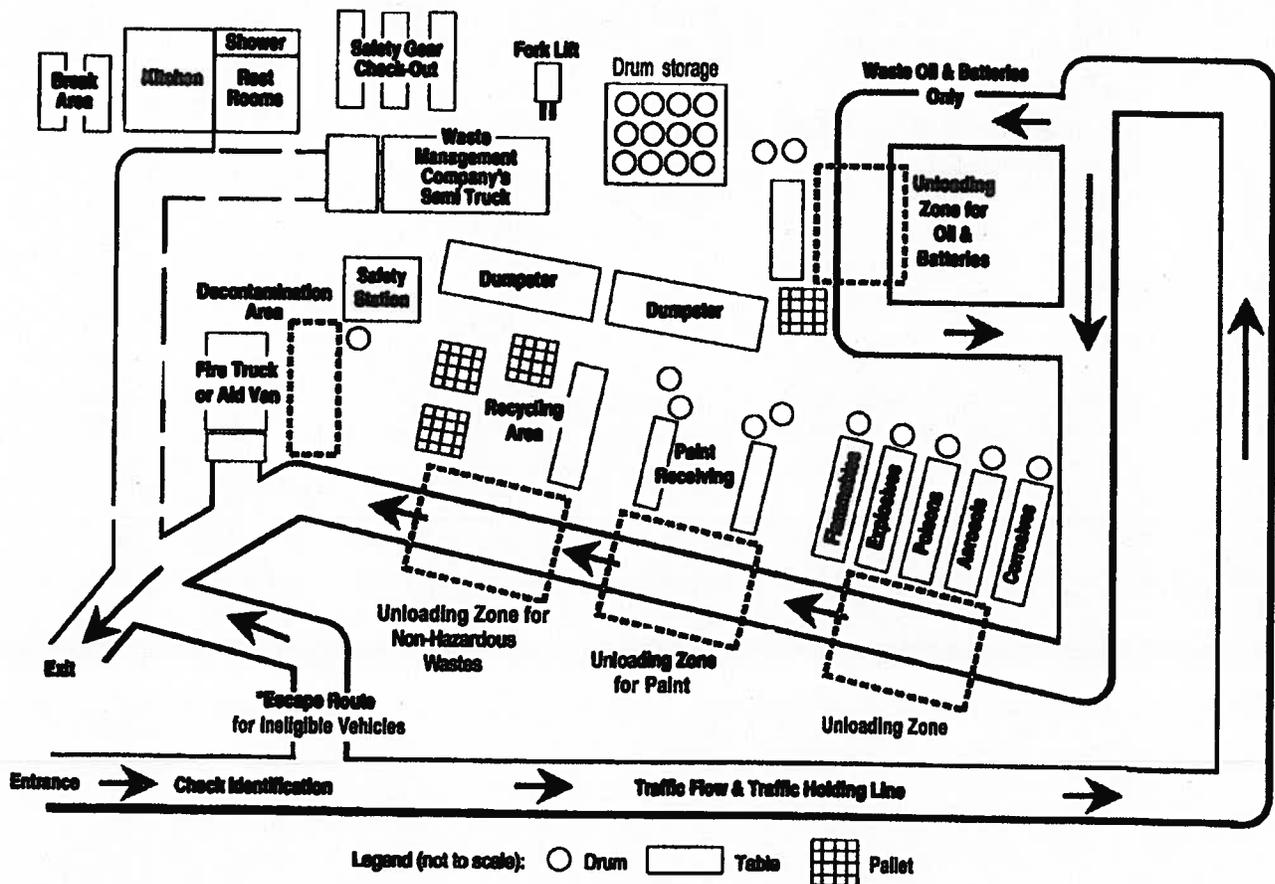
The size of the site is critical to the efficiency of the program; sponsors should plan for traffic overflow. The site should be at least 10,000 square feet.

Figure 1 shows one example of a site plan for a one-day drop-off collection program.

The simple plan shown in Figure 1 might not be adequate for all programs, however. Depending on the design and goals of the program, a more complex layout might be required, such as the layout shown in Figure 2. Described below is a commonly used system for designing the site layout. There are many other ways an efficient collection can be achieved.

Entrance

Collection staff or volunteers should stand at the entrance or check-in station to greet the participants and direct them to the receiving area. Police officers or volunteer personnel should be stationed just outside



More complex site plan for a one-day drop-off HHW collection program.

S I T E C O N S I D E R A T I O N S

the entrance to manage traffic flow that cannot be contained on the site.

Several unloading lanes with signs and traffic cones can help control the flow of traffic on and off the site. Separate express lanes for the wastes received in the highest volume (usually paint and used oil) can help speed up service to participants.

Before participants drop off their HHW, they can be asked to document their eligibility to participate in the collection (residency), complete questionnaires, and list the wastes they have brought to the site. (A sample questionnaire is provided in Appendix D.) The staff can offer informational materials, answer questions, and provide information about what to do with excluded wastes. To minimize traffic delays, these tasks can be completed while participants wait to enter the receiving area.

Receiving Area

At the receiving areas, trained personnel (usually the contractor's staff) screen each vehicle for unknown, unacceptable, recyclable, or nonhazardous waste. Participants should not be permitted to remove any wastes from their own cars and should be encouraged to remain in their cars. The staff members unload recyclable materials and take them to the recycling area. The recyclable should be handled and packaged according to any instructions from the recycling firm. They then take the rest of the acceptable wastes to a sorting table. After removing the HHW from the vehicle, the staff members direct the participant to the exit.

Sorting Area

In the sorting area, staff members or contractor personnel sort the wastes into hazard categories and deliver them to the packing area. They place empty containers and non-hazardous waste in dumpsters located in the

sorting area. Arrangements can be made for removing and replacing the dumpsters during the day if necessary. A volunteer can flatten boxes for recycling or to reduce the amount of room the boxes take up in the dumpster. Any unknown material needs to be sorted as a hazardous material.

Packing Area

In the packing area, trained personnel (usually contractor staff.) lab-pack the wastes or bulk them into drums. They then label all containers by hazard class and load them onto the appropriate truck(s). Consolidation of wastes (e.g., paint, motor oil, or antifreeze) can be performed in this area.

Temporary Storage Area

Empty drums are kept in the temporary storage area. Fully packed and sealed drums can be placed in the storage area until they are loaded onto a truck. To ensure that this area stays dry and uncontaminated, it should be covered, at least by an awning, and the floor should be covered with chemically resistant plastic.

Break Area

Staff and volunteers should have a break area, separate from the waste-receiving area, where they can eat, drink, rest, and use a bathroom.

Parking Area

A special parking area is recommended to accommodate people who need extra attention, such as those who bring in unidentified wastes or have spilled a container in their vehicle. Parking spaces also can be designated for volunteer and staff vehicles.

Appendix G: Selected Demographic Characteristics of Study Area

Counties

CHAMPAIGN		CLARK		COLES		CUMBERLAND		DOUGLAS		EDGAR		VERMILION	
incorporated:	168,223	incorporated:	8,470	incorporated:	42,781	incorporated:	4,610	incorporated:	15,230	incorporated:	12,256	incorporated:	58,898
unincorporated:	32,858	unincorporated:	7,865	unincorporated:	11,092	unincorporated:	6,438	unincorporated:	4,750	unincorporated:	6,320	unincorporated:	22,727
	Population												
Municipalities	(2010)												
Total	201,081	Total	16,335	Total	53,873	Total	11,048	Total	19,980	Total	18,576	Total	81,625
Bondville	443	Casey	2,769	Ashmore	785	Greenup	1,513	Arcola	2,916	Brocton	322	Allerton	291
Broadlands	349	Marshall**	3,933	Charleston**	21,838	Jewett	223	Arthur	2,288	Chrisman	1,343	Alvan	270
Champaign City	81,055	Martinsville	1,167	Humboldt	437	Neoga	1,636	Atwood	1,224	Hume	380	Belgium	404
Fisher	1,881	Westfield	601	Lerna	286	Toledo**	1,238	Camargo	445	Kansas	787	Bismarck	579
Foosland	101	TOTAL	8,470	Mattoon	18,555	TOTAL	4,610	Garrett	162	Metcalf	189	Catlin	2,040
Gifford	975			Oakland	880			Hindsboro	313	Paris**	8,837	Danville**	33,027
Homer	1,193			TOTAL	42,781			Newman	865	Redmon	173	Fairmount	642
Ivesdale	267							Tuscola**	4,480	Vermilion	225	Fithian	485
Long View	153							Villa Grove	2,537	TOTAL	12,256	Georgetown	3,474
Ludlow	371							TOTAL	15,230			Henning	251
Mahomet	7,258											Hoopeston	5,351
Ogden	810											Indianola	276
Pesotum	551											Muncie	146
Philo	1,466											Oakwood	1,595
Rantoul	12,338											Potomac	750
Royal	293											Rankin	561
Sadorus	416											Ridge Farm	882
St. Joseph	3,967											Rossville	1,331
Savoy	7,280											Sidell	617
Sidney	1,233											Tilton	2,724
Thomasboro	1,126											Westville	3,202
Tolono	3,447											TOTAL	58,898
Urbana**	41,250												
TOTAL	168,223												

Area (sq miles):	996	501	508	346	417	623	898	4,289
								total area

* NACO website accessed 5/1/2013 <http://www.naco.org/Counties/Pages/FindACounty.aspx>

** County Seat (also from NACO website)

Source: Champaign County 2012 Statistical Abstract
 Populations: Census 2010
 Illinois Counties & Incorporated Municipalities - July 2012

Appendix H: Excerpt of RCRA Exclusions from Hazardous Waste

Definition

■ Hazardous Waste Exclusions

EPA also excludes certain solid wastes from the definition of hazardous waste. If a material meets an exclusion from the definition of hazardous waste, it cannot be a hazardous waste, even if the material technically meets a listing or exhibits a characteristic. There are currently 15 exclusions from the definition of hazardous waste.

Household Hazardous Waste

Households often generate solid wastes that could technically be hazardous wastes (e.g., old solvents, paints, pesticides, fertilizers, or poisons). However, it would be impossible to regulate every house in the United States that occasionally threw away a can of paint thinner or a bottle of rat poison. Therefore, EPA developed the household waste exclusion. Under this exclusion, wastes generated by normal household activities (e.g., routine house and yard maintenance) are excluded from the definition of hazardous waste. EPA has expanded the exclusion to include household-like areas, such as bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas. While household hazardous waste is excluded from Subtitle C, it is regulated under Subtitle D as a solid waste (as discussed in Chapter II).

Agricultural Waste

To prevent overregulation of farms and promote waste recycling, solid wastes generated by crop or animal farming are excluded from the definition of hazardous waste provided that the wastes are returned to the ground as fertilizers or soil conditioners. Examples of such wastes are crop residues and manures.

Mining Overburden

After an area of a surface mine has been depleted, it is common practice to return to the mine the earth and rocks (overburden) that were removed to gain access to ore deposits. When the material is returned to the mine site, it is not a hazardous waste under RCRA.

Bevill and Bentsen Wastes

In the Solid Waste Disposal Act Amendments of 1980, Congress amended RCRA by exempting oil, gas, and geothermal exploration, development, and production wastes (**Bentsen wastes**); fossil fuel combustion wastes; mining and mineral processing wastes; and cement kiln dust wastes (**Bevill wastes**) from the definition of hazardous waste pending further study by EPA. These wastes were temporarily exempted because they were produced in very large volumes, were thought to pose less of a hazard than other wastes, and were generally not amenable to the management practices required under RCRA. The following paragraphs describe these exclusions in detail.

Fossil Fuel Combustion Waste

In order to accommodate effective study, fossil fuel combustion wastes were divided into two categories, large-volume coal-fired utility wastes and remaining wastes. After studying these wastes, in 1993, EPA decided to permanently exclude large-volume coal-fired utility wastes, including fly ash, bottom ash, boiler slag, and flue gas emission control waste from the definition of hazardous waste. Further study by EPA, in 2000, indicated that all remaining fossil fuel combustion wastes need not be regulated under RCRA Subtitle C. However, EPA determined that national non-hazardous waste regulations under RCRA Subtitle D are appropriate

for coal combustion wastes (CCW) disposed in surface impoundments and landfills and used as minefill.

In 2007, EPA published a Notice of Data Availability (NODA) regarding the management of CCW in landfills and surface impoundments. After the failure of the coal combustion residual (CCR) surface impoundment at the Tennessee Valley Authority's Kingston facility in December 2008, EPA undertook an effort to assess the structural integrity of other CCR surface impoundments. In 2010, EPA proposed two regulatory options under RCRA for the disposal of CCRs generated from electric utilities and independent power producers. Under the first proposal, EPA would revise its previous regulatory determination and would regulate these residuals as special wastes under Subtitle C when they are destined for disposal in landfills or surface impoundments. Under the second proposal, EPA would maintain the initial regulatory determination and regulate disposal of such materials under Subtitle D by issuing national minimum criteria. EPA also issued a subsequent NODA about additional information regarding CCR surface impoundments at electric utilities. EPA will use comments and information received in response to the proposed rule and NODA as the Agency follows up on the regulatory determination.

Oil, Gas, and Geothermal Wastes

Certain wastes from the exploration and production of oil, gas, and geothermal energy are excluded from the definition of hazardous waste. These wastes include those that have been brought to the surface during oil and gas exploration and production operations, and other wastes that have come into contact with the oil and gas production stream (e.g., during removal of waters injected into the drill well to cool the drill bit).

Mining and Mineral Processing Wastes

Certain wastes from the mining, refining, and processing of ores and minerals are excluded from the definition of hazardous waste.

Cement Kiln Dust

Cement kiln dust is a fine-grained solid by-product generated during the cement manufacturing process and captured in a facility's air pollution control system. After study, EPA decided to develop specific regulatory provisions for cement kiln dust. Until EPA promulgates these new regulatory controls, however, cement kiln dust will generally remain excluded from the definition of hazardous waste.

Trivalent Chromium Wastes

The element chromium exists in two forms, hexavalent and trivalent. EPA determined that while hexavalent chromium poses enough of a threat to merit regulation as a characteristic hazardous waste, trivalent chromium does not. Therefore, to prevent unnecessary regulation, EPA excluded, from the definition of hazardous waste, trivalent chromium-bearing hazardous wastes from certain leather tanning, shoe manufacturing, and leather manufacturing industries.

Arsenically Treated Wood

Discarded arsenically treated wood or wood products that are hazardous only because they exhibit certain toxic characteristics (e.g., contain certain concentrations of leachable metal, pesticide, or organic constituents) are excluded from the definition of hazardous waste. Once such treated wood is used, it may be disposed of by the user (commercial or residential) without being subject to hazardous waste regulation. This exclusion is based on the fact that the use of such wood products on the land is similar to the common disposal method, which is landfilling. This exclusion applies only to end-users and not to manufacturers.

Petroleum-Contaminated Media and Debris from Underground Storage Tanks (USTs)

USTs are used to store petroleum (e.g., gasoline, oil) and hazardous substances (e.g., ammonia). When these tanks leak, the UST program under RCRA Subtitle I provides requirements for cleaning up such spills. To facilitate the corrective action process under the UST regulations, contaminated media (soils and ground water) and debris (tanks and

equipment) at sites undergoing UST cleanup that are hazardous only because they exhibit certain toxic characteristics (e.g., contain specific concentrations of leachable organic constituents) are excluded from the definition of hazardous waste.

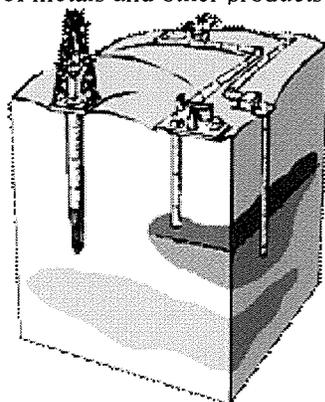
CWA. The exclusion will remain effective while EPA studies how the landfill leachate and landfill gas condensate are currently managed, and the effect of future CWA effluent limitation guidelines for landfill wastewaters.

Spent Chlorofluorocarbon Refrigerants

Chlorofluorocarbons (CFCs) released to the atmosphere damage the stratospheric ozone layer. To promote recycling and discourage the practice of venting used CFCs to the atmosphere as a means of avoiding Subtitle C regulation, EPA excluded recycled CFCs from the definition of hazardous waste since the refrigerants are generally reclaimed for reuse.

Used Oil Filters

In order to promote the recycling and recovery of metals and other products from used oil filters,



EPA exempted used oil filters that have been properly drained to remove the used oil.

Used Oil Distillation Bottoms

When used oil is recycled, residues (called **distillation bottoms**) form at the

bottom of the recycling unit. To promote used oil recycling and the beneficial reuse of waste materials, EPA excluded these residues from the definition of hazardous waste when the bottoms are used as ingredients in asphalt paving and roofing materials.

Landfill Leachate or Gas Condensate Derived from Certain Listed Wastes

Landfill leachate and landfill gas condensate derived from previously disposed wastes, where such wastes now meet the listing description of one or more of the following listed wastes: K169, K170, K171, K172, K176, K177, K178, and K181, would be regulated as a listed hazardous waste. However, EPA temporarily deferred such landfill leachate and gas condensate from the definition of hazardous waste provided their discharge is regulated under

Appendix I: Household Hazardous Waste Collection Program Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY (415 ILCS 90/) Household Hazardous Waste Collection Program Act.

(415 ILCS 90/1) (from Ch. 111 1/2, par. 991-1)

Sec. 1. Short title. This Act may be cited as the Household Hazardous Waste Collection Program Act.
(Source: P.A. 87-735; 87-1159.)

(415 ILCS 90/2) (from Ch. 111 1/2, par. 991-2)

Sec. 2. Findings and purpose. The General Assembly finds that there is a need for household hazardous waste collection centers throughout the State that can be operated to augment existing and future hazardous waste storage facilities. The collection centers shall be operated to provide a service to households that generate small quantities of hazardous waste and to encourage proper hazardous waste disposal. Local collection centers will allow local governments the opportunity to provide a location for collection and temporary storage of small quantities of household waste.
(Source: P.A. 87-735; 87-1159.)

(415 ILCS 90/3) (from Ch. 111 1/2, par. 991-3)

Sec. 3. Definitions. As used in this Act the following terms have the following meanings:

"Agency" means the Illinois Environmental Protection Agency.

"Collection center" means a secured site approved by the Agency to be used as a base for a hazardous waste collection facility.

"Household hazardous waste" means a consumer disposed waste product intended for household use generally containing constituents that make its disposal in municipal waste landfills or incinerators undesirable. Household hazardous waste includes, but is not limited to, the following:

- (1) Waste oil.
- (2) Petroleum Distillate-Based Solvents.
- (3) Oil based liquid paint, paint strippers, and paint thinners.
- (4) Herbicides and pesticides except, for purposes of this Act, antimicrobial and disinfectant products are excluded.

"Regional collection center" means a facility permitted by the Agency for the storage of household hazardous wastes.
(Source: P.A. 87-735; 87-1159; 88-163.)

(415 ILCS 90/4) (from Ch. 111 1/2, par. 991-4)

Sec. 4. Pilot project plan.

(a) The Agency shall formulate and update a plan for collecting small quantities of household hazardous waste from households in the State. The plan shall include:

- (1) An assessment of private industry interest or involvement in hazardous waste collection in the State and recommendations to the General Assembly for private industry collection incentives.
- (2) A survey of businesses available to serve this function or alternative recycling or disposal functions with recommendations of approved firms to be used for the collection program.
- (3) A method for encouraging private industry household waste collection pilot projects in local and regional communities.
- (4) A method of encouraging county and municipal

household hazardous waste collection pilot projects.

(b) The agency shall develop and distribute public information regarding, but not limited to, the following:

(1) Nontoxic alternatives to household hazardous materials.

(2) Safe use and storage procedures for household hazardous materials, including toxic effect warnings.

(3) Proper disposal procedures for household hazardous waste.

(4) Recycling options available for various types of household hazardous waste.

(c) Agency sponsored household hazardous waste collections shall continue until March 1, 1995.
(Source: P.A. 87-735; 87-1159.)

(415 ILCS 90/5) (from Ch. 111 1/2, par. 991-5)

Sec. 5. Statewide plan. By March 1, 1995, the Agency shall develop a statewide household hazardous waste management plan that will ensure comprehensive collection and proper management of household hazardous waste from households in Illinois and shall submit the plan to the General Assembly for approval. The plan shall address, at a minimum, a network of local collection centers, transfer stations, and expanded household hazardous waste collection route services. The plan shall assess the need for additional compliance verification inspections, enforcement, and penalties. The plan shall include a strategy, timetable, and budget for implementation.
(Source: P.A. 87-735; 87-1159.)

(415 ILCS 90/6) (from Ch. 111 1/2, par. 991-6)

Sec. 6. Grant program. The Agency shall establish a grant program for local governments that desire to provide a local or regional household hazardous waste collection center. Grants shall be authorized to cover collection center costs associated with capital outlay for preparing a facility or site to safely serve as a collection center and to cover costs of administration, public awareness, and local amnesty day programs. The total cost for administration and public awareness shall not exceed 10% of the grant award. Grants shall be available on a competitive basis to local governments that:

- (1) design a collection center which is approved by the agency; and
- (2) provide up to 33% of the capital outlay money needed for the facility as matching money.

(Source: P.A. 87-735; 87-1159.)

(415 ILCS 90/7) (from Ch. 111 1/2, par. 991-7)

Sec. 7. Evaluation and report. The Agency shall submit to the Governor and the General Assembly on or before January 1, 1995, a report evaluating the effectiveness of the programs provided under this Act including all of the following:

- (1) An assessment of the need for a continuation of existing programs.
- (2) The need for the development and implementation of new programs, including appropriate funding mechanisms.
- (3) Any legislative and administrative action necessary to fully implement a comprehensive household hazardous waste management program in Illinois.

(Source: P.A. 87-1159.)

(415 ILCS 90/150) (from Ch. 111 1/2, par. 991-150)

Sec. 150. This Act shall take effect upon becoming law.
(Source: P.A. 87-735.)

Appendix J: Public Act 96-0121 EPA Household Waste Drop-Off

AN ACT concerning safety.

**Be it enacted by the People of the State of Illinois,
represented in the General Assembly:**

Section 5. The Environmental Protection Act is amended by adding Section 22.55 as follows:

(415 ILCS 5/22.55 new)

Sec. 22.55. Household Waste Drop-off Points.

(a) Findings; Purpose and Intent.

(1) The General Assembly finds that protection of human health and the environment can be enhanced if certain commonly generated household wastes are managed separately from the general household waste stream.

(2) The purpose of this Section is to provide, to the extent allowed under federal law, a method for managing certain types of household waste separately from the general household waste stream.

(b) Definitions. For the purposes of this Section:

"Controlled substance" means a controlled substance as defined in the Illinois Controlled Substances Act.

"Household waste" means waste generated from a single residence or multiple residences.

"Household waste drop-off point" means the portion of a site or facility used solely for the receipt and temporary storage of household waste.

"One-day household waste collection event" means a household waste drop-off point approved by the Agency under subsection (d) of this Section.

"Personal care product" means an item other than a pharmaceutical product that is consumed or applied by an individual for personal health, hygiene, or cosmetic reasons. Personal care products include, but are not limited to, items used in bathing, dressing, or grooming.

"Pharmaceutical product" means medicine or a product containing medicine. A pharmaceutical product may be sold by prescription or over the counter. "Pharmaceutical product" does not include (i) medicine that contains a radioactive component or a product that contains a radioactive component or (ii) a controlled substance.

(c) Except as otherwise provided in Agency rules, the following requirements apply to each household waste drop-off point other than a one-day household waste collection event:

(1) A household waste drop-off point must not accept waste other than the following types of household waste: pharmaceutical products, personal care products, batteries other than lead-acid batteries, paints, automotive fluids, compact fluorescent lightbulbs, mercury thermometers, and mercury thermostats.

(2) Except as provided in subdivision (c)(2) of this Section, household waste drop-off points must be located at a site or facility where the types of products accepted at the household waste drop-off point are lawfully sold, distributed, or dispensed. For example, household waste drop-off points that accept prescription pharmaceutical products must be located at a site or facility where prescription pharmaceutical products are sold, distributed, or dispensed.

(A) Subdivision (c)(2) of this Section does not apply to household waste drop-off points operated by a government or school entity, or by an association or other organization of government or school entities.

(B) Household waste drop-off points that accept mercury thermometers can be located at any site or facility where non-mercury thermometers are sold, distributed, or dispensed.

(C) Household waste drop-off points that accept mercury thermostats can be located at any site or facility where non-mercury thermostats are sold, distributed, or dispensed.

(3) The location of acceptance for each type of waste accepted at the household waste drop-off point must be clearly identified. Locations where pharmaceutical products are accepted must also include a copy of the sign required under subsection (j) of this Section.

(4) Household waste must be accepted only from private individuals. Waste must not be accepted from other persons, including, but not limited to, owners and operators of rented or leased residences where the household waste was generated, commercial haulers, and other commercial, industrial, agricultural, and government operations or entities.

(5) If more than one type of household waste is accepted, each type of household waste must be managed separately prior to its packaging for off-site transfer.

(6) Household waste must not be stored for longer than 90 days after its receipt, except as otherwise approved by the Agency in writing.

(7) Household waste must be managed in a manner that protects against releases of the waste, prevents nuisances, and otherwise protects human health and the environment. Household waste must also be properly secured to prevent unauthorized public access to the waste, including, but not limited to, preventing access to the waste during the non-business hours of the site or facility on which the household waste drop-off point is located. Containers in which pharmaceutical products are collected must be clearly marked "No Controlled Substances".

(8) Management of the household waste must be limited to the following: (i) acceptance of the waste, (ii) temporary storage of the waste prior to transfer, and (iii) off-site transfer of the waste and packaging for off-site transfer.

(9) Off-site transfer of the household waste must comply with federal and State laws and regulations.

(d) One-day household waste collection events. To further aid in the collection of certain household wastes, the Agency may approve the operation of one-day household waste collection events. The Agency shall not approve a one-day household waste collection event at the same site or facility for more than one day each calendar quarter. Requests for approval must be submitted on forms prescribed by the Agency. The Agency must issue its approval in writing, and it may impose conditions as necessary to protect human health and the environment and to otherwise accomplish the purposes of this Act. One-day household waste collection events must be operated in accordance with the Agency's approval, including all conditions contained in the approval. The following requirements apply to all one-day household waste collection events, in addition to the conditions contained in the Agency's approval:

(1) Waste accepted at the event must be limited to household waste and must not include garbage, landscape waste, controlled substances, or other waste excluded by the Agency in the Agency's approval or any conditions contained in the approval.

(2) Household waste must be accepted only from private individuals. Waste must not be accepted from other persons, including, but not limited to, owners and operators of rented or leased residences where the household waste was generated, commercial haulers, and other commercial, industrial, agricultural, and government operations or entities.

(3) Household waste must be managed in a manner that protects against releases of the waste, prevents nuisances, and otherwise protects human health and the environment. Household waste must also be properly secured to prevent public access to the waste, including, but not limited to, preventing access to the waste during the event's non-business hours.

(4) Management of the household waste must be limited to the following: (i) acceptance of the waste, (ii) temporary storage of the waste before transfer, and (iii) off-site transfer of the waste or packaging for off-site transfer.

(5) Except as otherwise approved by the Agency, all household waste received at the collection event must be transferred off-site by the end of the day following the collection event.

(6) The transfer and ultimate disposition of household

waste received at the collection event must comply with the Agency's approval, including all conditions contained in the approval.

(e) The Agency may adopt rules governing the operation of household waste drop-off points other than one-day household waste collection events. Those rules must be designed to protect against releases of waste to the environment, prevent nuisances, and otherwise protect human health and the environment. As necessary to address different circumstances, the regulations may contain different requirements for different types of household waste and different types of household waste drop-off points, and the regulations may modify the requirements set forth in subsection (c) of this Section. The regulations may include, but are not limited to, the following: (i) identification of additional types of household waste that can be collected at household waste drop-off points, (ii) identification of the different types of household wastes that can be received at different household waste drop-off points, (iii) the maximum amounts of each type of household waste that can be stored at household waste drop-off points at any one time, and (iv) the maximum time periods each type of household waste can be stored at household waste drop-off points.

(f) Prohibitions.

(1) Except as authorized in a permit issued by the Agency, no person shall cause or allow the operation of a household waste drop-off point other than a one-day household waste collection event in violation of this Section or any regulations adopted under this Section.

(2) No person shall cause or allow the operation of a one-day household waste collection event in violation of this Section or the Agency's approval issued under subsection (d) of this Section, including all conditions contained in the approval.

(g) Permit exemptions.

(1) No permit is required under subdivision (d)(1) of Section 21 of this Act for the operation of a household waste drop-off point other than a one-day household waste collection event if the household waste drop-off point is operated in accordance with this Section and all regulations adopted under this Section.

(2) No permit is required under subdivision (d)(1) of Section 21 of this Act for the operation of a one-day household waste collection event if the event is operated in accordance with this Section and the Agency's approval issued under subsection (d) of this Section, including all conditions contained in the approval, or for the operation of a household waste collection event by the Agency.

(h) This Section does not apply to the following:

(1) Persons accepting household waste that they are authorized to accept under a permit issued by the Agency.

(2) Sites or facilities operated pursuant to an intergovernmental agreement entered into with the Agency under Section 22.16b(d) of this Act.

(i) The Agency, in consultation with the Department of Public Health, must develop and implement a public information program regarding household waste drop-off points that accept pharmaceutical products.

(j) The Agency must develop a sign that provides information on the proper disposal of unused pharmaceutical products. The Agency shall make a copy of the sign available for downloading from its website.

(k) If an entity chooses to participate as a household waste drop-off point, then it must follow the provisions of this Section and any rules the Agency may adopt governing household waste drop-off points.

Section 99. Effective date. This Act takes effect upon becoming law.

Effective Date: 8/4/2009

Appendix K: Illinois Solid Waste Management Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY (415 ILCS 20/) Illinois Solid Waste Management Act.

(415 ILCS 20/1) (from Ch. 111 1/2, par. 7051)

Sec. 1. Short title. This Act shall be known as the Illinois Solid Waste Management Act.

(Source: P.A. 84-1319.)

(415 ILCS 20/2) (from Ch. 111 1/2, par. 7052)

Sec. 2. Public Policy. (a) The General Assembly finds:

(1) that current solid waste disposal practices are not adequate to address the needs of many metropolitan areas in Illinois;

(2) that the generation of solid waste is increasing while landfill capacity is decreasing;

(3) that siting of new landfills, transfer stations, incinerators, recycling facilities, or other solid waste management facilities and the expansion of existing facilities is very difficult due to the public concern and competition with other land uses for suitable sites;

(4) that more effective and efficient management of solid waste is needed in a manner that promotes economic development, protects the environment and public health and safety, and allows the most practical and beneficial use of the material and energy values of solid waste;

(5) that state government policy and programs should be developed to assist local governments and private industry in seeking solutions to solid waste management problems;

(6) that the purchase of products or supplies made from recycled materials by public agencies in the State will divert significant quantities of waste from landfills, reduce disposal costs and stimulate recycling markets, thereby encouraging the further use of recycled materials and educating the public about the utility and availability of such materials;

(7) that there are wastes for which combustion would not provide practical energy recovery or practical volume reduction, which cannot be reasonably recycled or reused and which have reduced environmental threat because they are non-putrescible, homogeneous and do not contain free liquids. Such wastes bear a real and substantial difference under the purposes of the Illinois Solid Waste Management Act from solid wastes for which combustion would provide practical energy recovery or practical volume reduction, which can be reasonably recycled or reused, or which are putrescible, non-homogeneous or contain free liquids;

(8) since it is the policy of the State as set forth in the Environmental Protection Act to assure that contaminants

discharged into the atmosphere or waters of the State are given the degree of treatment or control necessary to prevent pollution, that wastes generated as a result of removing contaminants from the air, water or land bear a real and substantial difference from other wastes in that the generation of wastes containing pollution treatment residuals can improve the environment in Illinois and should be encouraged;

(9) since it is the policy of the State as set forth in the Environmental Protection Act to promote conservation of natural resources and minimize environmental damage by encouraging and effecting recycling and reuse of waste materials, that wastes from recycling, reclamation or reuse processes designed to remove contaminants so as to render such wastes reusable or wastes received at a landfill and recycled through an Agency permitted process bear a real and substantial difference from wastes not resulting from or subject to such recycling, reclamation, or reuse and that encouraging such recycling, reclamation or reuse furthers the purposes of the Illinois Solid Waste Management Act;

(10) that there are over 300 landfills in Illinois which are permitted to accept only demolition or construction debris or landscape waste, the vast majority of which accept less than 10,000 cubic yards per year. By themselves these wastes pose only a minimal hazard to the environment when landfilled in compliance with regulatory requirements in an Agency-permitted site without commingling with other wastes and, as such, landfills receiving only such wastes bear a real and substantial difference from landfills receiving wastes which are commingled. Disposal of these wastes in landfills permitted for municipal wastes uses up increasingly scarce capacity for garbage, general household and commercial waste. It is the policy of the State to encourage disposal of these wastes in separate landfills.

(b) It is the purpose of this Act to reduce reliance on land disposal of solid waste, to encourage and promote alternative means of managing solid waste, and to assist local governments with solid waste planning and management. In furtherance of those aims, while recognizing that landfills will continue to be necessary, this Act establishes the following waste management hierarchy, in descending order of preference, as State policy:

- (1) volume reduction at the source;
- (2) recycling and reuse;
- (3) combustion with energy recovery;
- (4) combustion for volume reduction;
- (5) disposal in landfill facilities.

(Source: P.A. 85-1440.)

(415 ILCS 20/2.1) (from Ch. 111 1/2, par. 7052.1)

Sec. 2.1. Definitions. When used in this Act, unless the context otherwise requires, the following terms have the meanings ascribed to them in this Section:

"Department", when a particular entity is not specified, means (i) in the case of a function to be performed on or after July 1, 1995 (the effective date of the Department of Natural Resources Act), the Department of Commerce and Community Affairs (now Department of Commerce and Economic Opportunity), as successor to the former Department of Energy and Natural Resources under the Department of Natural

Resources Act; or (ii) in the case of a function required to be performed before July 1, 1995, the former Illinois Department of Energy and Natural Resources.

"Deinked stock" means paper that has been processed to remove inks, clays, coatings, binders and other contaminants.

"End product" means only those items that are designed to be used until disposal; items designed to be used in production of a subsequent item are excluded.

"High grade printing and writing papers" includes offset printing paper, duplicator paper, writing paper (stationery), office paper, note pads, xerographic paper, envelopes, form bond including computer paper and carbonless forms, book papers, bond papers, ledger paper, book stock and cotton fiber papers.

"Paper and paper products" means high grade printing and writing papers, tissue products, newsprint, unbleached packaging and recycled paperboard.

"Postconsumer material" means only those products generated by a business or consumer which have served their intended end uses, and which have been separated or diverted from solid waste; wastes generated during production of an end product are excluded.

"Recovered paper material" means paper waste generated after the completion of the papermaking process, such as postconsumer materials, envelope cuttings, bindery trimmings, printing waste, cutting and other converting waste, butt rolls, and mill wrappers, obsolete inventories, and rejected unused stock. "Recovered paper material", however, does not include fibrous waste generated during the manufacturing process such as fibers recovered from waste water or trimmings of paper machine rolls (mill broke), or fibrous byproducts of harvesting, extraction or woodcutting processes, or forest residues such as bark.

"Recycled paperboard" includes recycled paperboard products, folding cartons and pad backing.

"Recycling" means the process by which solid waste is collected, separated and processed for reuse as either a raw material or a product which itself is subject to recycling, but does not include the combustion of waste for energy recovery or volume reduction.

"Tissue products" includes toilet tissue, paper towels, paper napkins, facial tissue, paper doilies, industrial wipers, paper bags and brown papers.

"Unbleached packaging" includes corrugated and fiber boxes.

"USEPA Guidelines for federal procurement" means all minimum recycled content standards recommended by the U.S. Environmental Protection Agency.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 20/3) (from Ch. 111 1/2, par. 7053)

Sec. 3. State agency materials recycling program.

(a) All State agencies responsible for the maintenance of public lands in the State shall, to the maximum extent feasible, use compost materials in all land maintenance activities which are to be paid with public funds.

(b) The Department of Central Management Services, in coordination with the Department of Commerce and Economic Opportunity, shall implement waste reduction programs, including source separation and collection, for office

wastepaper, corrugated containers, newsprint and mixed paper, in all State buildings as appropriate and feasible. Such waste reduction programs shall be designed to achieve waste reductions of at least 25% of all such waste by December 31, 1995, and at least 50% of all such waste by December 31, 2000. Any source separation and collection program shall include, at a minimum, procedures for collecting and storing recyclable materials, bins or containers for storing materials, and contractual or other arrangements with buyers of recyclable materials. If market conditions so warrant, the Department of Central Management Services, in coordination with the Department of Commerce and Economic Opportunity, may modify programs developed pursuant to this Section.

The Department of Commerce and Community Affairs (now Department of Commerce and Economic Opportunity) shall conduct waste categorization studies of all State facilities for calendar years 1991, 1995 and 2000. Such studies shall be designed to assist the Department of Central Management Services to achieve the waste reduction goals established in this subsection.

(c) Each State agency shall, upon consultation with the Department of Commerce and Economic Opportunity, periodically review its procurement procedures and specifications related to the purchase of products or supplies. Such procedures and specifications shall be modified as necessary to require the procuring agency to seek out products and supplies that contain recycled materials, and to ensure that purchased products or supplies are reusable, durable or made from recycled materials whenever economically and practically feasible. In choosing among products or supplies that contain recycled material, consideration shall be given to products and supplies with the highest recycled material content that is consistent with the effective and efficient use of the product or supply.

(d) Wherever economically and practically feasible, the Department of Central Management Services shall procure recycled paper and paper products as follows:

(1) Beginning July 1, 1989, at least 10% of the total dollar value of paper and paper products purchased by the Department of Central Management Services shall be recycled paper and paper products.

(2) Beginning July 1, 1992, at least 25% of the total dollar value of paper and paper products purchased by the Department of Central Management Services shall be recycled paper and paper products.

(3) Beginning July 1, 1996, at least 40% of the total dollar value of paper and paper products purchased by the Department of Central Management Services shall be recycled paper and paper products.

(4) Beginning July 1, 2000, at least 50% of the total dollar value of paper and paper products purchased by the Department of Central Management Services shall be recycled paper and paper products.

(e) Paper and paper products purchased from private vendors pursuant to printing contracts are not considered paper products for the purposes of subsection (d). However, the Department of Central Management Services shall report to the General Assembly on an annual basis the total dollar value of printing contracts awarded to private sector vendors that included the use of recycled paper.

(f)(1) Wherever economically and practically feasible, the recycled paper and paper products referred to in subsection (d) shall contain postconsumer or recovered paper materials as specified by paper category in this subsection:

(i) Recycled high grade printing and writing paper shall contain at least 50% recovered paper material. Such recovered paper material, until July 1, 1994, shall consist of at least 20% deinked stock or postconsumer material; and beginning July 1, 1994, shall consist of at least 25% deinked stock or postconsumer material; and beginning July 1, 1996, shall consist of at least 30% deinked stock or postconsumer material; and beginning July 1, 1998, shall consist of at least 40% deinked stock or postconsumer material; and beginning July 1, 2000, shall consist of at least 50% deinked stock or postconsumer material.

(ii) Recycled tissue products, until July 1, 1994, shall contain at least 25% postconsumer material; and beginning July 1, 1994, shall contain at least 30% postconsumer material; and beginning July 1, 1996, shall contain at least 35% postconsumer material; and beginning July 1, 1998, shall contain at least 40% postconsumer material; and beginning July 1, 2000, shall contain at least 45% postconsumer material.

(iii) Recycled newsprint, until July 1, 1994, shall contain at least 40% postconsumer material; and beginning July 1, 1994, shall contain at least 50% postconsumer material; and beginning July 1, 1996, shall contain at least 60% postconsumer material; and beginning July 1, 1998, shall contain at least 70% postconsumer material; and beginning July 1, 2000, shall contain at least 80% postconsumer material.

(iv) Recycled unbleached packaging, until July 1, 1994, shall contain at least 35% postconsumer material; and beginning July 1, 1994, shall contain at least 40% postconsumer material; and beginning July 1, 1996, shall contain at least 45% postconsumer material; and beginning July 1, 1998, shall contain at least 50% postconsumer material; and beginning July 1, 2000, shall contain at least 55% postconsumer material.

(v) Recycled paperboard, until July 1, 1994, shall contain at least 80% postconsumer material; and beginning July 1, 1994, shall contain at least 85% postconsumer material; and beginning July 1, 1996, shall contain at least 90% postconsumer material; and beginning July 1, 1998, shall contain at least 95% postconsumer material.

(2) For the purposes of this Section, "postconsumer material" includes:

(i) paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after the waste has passed through its end usage as a consumer item, including used corrugated boxes, old newspapers, mixed waste paper, tabulating cards, and used cordage; and

(ii) all paper, paperboard, and fibrous wastes

that are diverted or separated from the municipal solid waste stream.

(3) For the purposes of this Section, "recovered paper material" includes:

(i) postconsumer material;

(ii) dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets), including envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations, or from bag, box and carton manufacturing, and butt rolls, mill wrappers, and rejected unused stock; and

(iii) finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(g) The Department of Central Management Services may adopt regulations to carry out the provisions and purposes of this Section.

(h) Every State agency shall, in its procurement documents, specify that, whenever economically and practically feasible, a product to be procured must consist, wholly or in part, of recycled materials, or be recyclable or reusable in whole or in part. When applicable, if state guidelines are not already prescribed, State agencies shall follow USEPA guidelines for federal procurement.

(i) All State agencies shall cooperate with the Department of Central Management Services in carrying out this Section. The Department of Central Management Services may enter into cooperative purchasing agreements with other governmental units in order to obtain volume discounts, or for other reasons in accordance with the Governmental Joint Purchasing Act, or in accordance with the Intergovernmental Cooperation Act if governmental units of other states or the federal government are involved.

(j) The Department of Central Management Services shall submit an annual report to the General Assembly concerning its implementation of the State's collection and recycled paper procurement programs. This report shall include a description of the actions that the Department of Central Management Services has taken in the previous fiscal year to implement this Section. This report shall be submitted on or before November 1 of each year.

(k) The Department of Central Management Services, in cooperation with all other appropriate departments and agencies of the State, shall institute whenever economically and practically feasible the use of re-refined motor oil in all State-owned motor vehicles and the use of remanufactured and retread tires whenever such use is practical, beginning no later than July 1, 1992.

(l) (Blank).

(m) The Department of Central Management Services, in coordination with the Department of Commerce and Community Affairs (now Department of Commerce and Economic Opportunity), shall implement an aluminum can recycling program in all State buildings within 270 days of the effective date of this amendatory Act of 1997. The program shall provide for (1) the

collection and storage of used aluminum cans in bins or other appropriate containers made reasonably available to occupants and visitors of State buildings and (2) the sale of used aluminum cans to buyers of recyclable materials.

Proceeds from the sale of used aluminum cans shall be deposited into I-CYCLE accounts maintained in the State Surplus Property Revolving Fund and, subject to appropriation, shall be used by the Department of Central Management Services and any other State agency to offset the costs of implementing the aluminum can recycling program under this Section.

All State agencies having an aluminum can recycling program in place shall continue with their current plan. If a State agency has an existing recycling program in place, proceeds from the aluminum can recycling program may be retained and distributed pursuant to that program, otherwise all revenue resulting from these programs shall be forwarded to Central Management Services, I-CYCLE for placement into the appropriate account within the State Surplus Property Revolving Fund, minus any operating costs associated with the program.

(Source: P.A. 96-77, eff. 7-24-09.)

(415 ILCS 20/3.1) (from Ch. 111 1/2, par. 7053.1)

Sec. 3.1. Institutions of higher learning.

(a) For purposes of this Section "State-supported institutions of higher learning" or "institutions" means the University of Illinois, Southern Illinois University, the colleges and universities under the jurisdiction of the Board of Governors of State Colleges and Universities, the colleges and universities under the jurisdiction of the Board of Regents of Regency Universities, and the public community colleges subject to the Public Community College Act.

(b) Each State-supported institution of higher learning shall develop a comprehensive waste reduction plan covering a period of 10 years which addresses the management of solid waste generated by academic, administrative, student housing and other institutional functions. The waste reduction plan shall be developed by January 1, 1995. The initial plan required under this Section shall be updated by the institution every 5 years, and any proposed amendments to the plan shall be submitted for review in accordance with subsection (f).

(c) Each waste reduction plan shall address, at a minimum, the following topics: existing waste generation by volume, waste composition, existing waste reduction and recycling activities, waste collection and disposal costs, future waste management methods, and specific goals to reduce the amount of waste generated that is subject to landfill disposal.

(d) Each waste reduction plan shall provide for recycling of marketable materials currently present in the institution's waste stream, including but not limited to landscape waste, corrugated cardboard, computer paper, and white office paper, and shall provide for the investigation of potential markets for other recyclable materials present in the institution's waste stream. The recycling provisions of the waste reduction plan shall be designed to achieve, by January 1, 2000, at least a 40% reduction (referenced to a base year of 1987) in the amount of solid waste that is generated by the institution and identified in the waste reduction plan as being subject to landfill disposal.

(e) Each waste reduction plan shall evaluate the institution's procurement policies and practices to eliminate procedures which discriminate against items with recycled content, and to identify products or items which are procured by the institution on a frequent or repetitive basis for which products with recycled content may be substituted. Each waste reduction plan shall prescribe that it will be the policy of the institution to purchase products with recycled content whenever such products have met specifications and standards of equivalent products which do not contain recycled content.

(f) Each waste reduction plan developed in accordance with this Section shall be submitted to the Department of Commerce and Economic Opportunity for review and approval. The Department's review shall be conducted in cooperation with the Board of Higher Education and the Illinois Community College Board.

(g) The Department of Commerce and Economic Opportunity shall provide technical assistance, technical materials, workshops and other information necessary to assist in the development and implementation of the waste reduction plans. The Department shall develop guidelines and funding criteria for providing grant assistance to institutions for the implementation of approved waste reduction plans.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 20/4) (from Ch. 111 1/2, par. 7054)

Sec. 4. Projections of Disposal Capacity. On or before July 1, 1987, and annually thereafter, the Environmental Protection Agency shall publish a report regarding the projected disposal capacity available for solid waste in sanitary landfills subject to the fee requirements in Section 22.15 of the Environmental Protection Act. Such reports shall present the data on an appropriate regional basis. With respect to such sanitary landfill facilities, the report shall include an assessment of the life expectancy of each site.

(Source: P.A. 87-895.)

(415 ILCS 20/5) (from Ch. 111 1/2, par. 7055)

Sec. 5. Informational Clearinghouse. The Department of Commerce and Economic Opportunity, in cooperation with the Environmental Protection Agency, shall maintain a central clearinghouse of information regarding the implementation of this Act. In particular, this clearinghouse shall include data regarding solid waste research and planning, solid waste management practices, markets for recyclable materials and intergovernmental cooperation.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 20/6) (from Ch. 111 1/2, par. 7056)

Sec. 6. The Department of Commerce and Economic Opportunity shall be the lead agency for implementation of this Act and shall have the following powers:

(a) To provide technical and educational assistance for applications of technologies and practices which will minimize the land disposal of non-hazardous solid waste; economic feasibility of implementation of solid waste management alternatives; analysis of markets for recyclable materials and energy products; application of the Geographic Information System to provide analysis of natural resource, land use, and environmental impacts; evaluation of financing and ownership

options; and evaluation of plans prepared by units of local government pursuant to Section 22.15 of the Environmental Protection Act.

(b) To provide technical assistance in siting pollution control facilities, defined as any waste storage site, sanitary landfill, waste disposal site, waste transfer station or waste incinerator.

(c) To provide loans or recycling and composting grants to businesses and not-for-profit and governmental organizations for the purposes of increasing the quantity of materials recycled or composted in Illinois; developing and implementing innovative recycling methods and technologies; developing and expanding markets for recyclable materials; and increasing the self-sufficiency of the recycling industry in Illinois. The Department shall work with and coordinate its activities with existing for-profit and not-for-profit collection and recycling systems to encourage orderly growth in the supply of and markets for recycled materials and to assist existing collection and recycling efforts.

The Department shall develop a public education program concerning the importance of both composting and recycling in order to preserve landfill space in Illinois.

(d) To establish guidelines and funding criteria for the solicitation of projects under this Act, and to receive and evaluate applications for loans or grants for solid waste management projects based upon such guidelines and criteria. Funds may be loaned with or without interest.

(e) To support and coordinate solid waste research in Illinois, and to approve the annual solid waste research agenda prepared by the University of Illinois.

(f) To provide loans or grants for research, development and demonstration of innovative technologies and practices, including but not limited to pilot programs for collection and disposal of household wastes.

(g) To promulgate such rules and regulations as are necessary to carry out the purposes of subsections (c), (d) and (f) of this Section.

(h) To cooperate with the Environmental Protection Agency for the purposes specified herein.

The Department is authorized to accept any and all grants, repayments of interest and principal on loans, matching funds, reimbursements, appropriations, income derived from investments, or other things of value from the federal or state governments or from any institution, person, partnership, joint venture, corporation, public or private.

The Department is authorized to use moneys available for that purpose, subject to appropriation, expressly for the purpose of implementing a loan program according to procedures established pursuant to this Act. Those moneys shall be used by the Department for the purpose of financing additional projects and for the Department's administrative expenses related thereto.

(Source: P.A. 94-91, eff. 7-1-05.)

(415 ILCS 20/6a) (from Ch. 111 1/2, par. 7056a)

Sec. 6a. The Department of Commerce and Economic Opportunity shall:

(1) Work with nationally based consumer groups and trade associations to develop nationally recognized logos which may be used to indicate whether a container is recyclable, made of

recycled materials, or both.

(2) Work with nationally based consumer groups and trade associations to develop nationally recognized criteria for determining under what conditions the logos may be used.

(3) Develop and conduct a public education and awareness campaign to encourage the public to look for and buy products in containers which are recyclable or made of recycled materials.

(4) Develop and prepare educational materials describing the benefits and methods of recycling for distribution to elementary schools in Illinois.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 20/6.1) (from Ch. 111 1/2, par. 7056.1)

Sec. 6.1. (Repealed).

(Source: P.A. 86-776. Repealed by P.A. 89-445, eff. 2-7-96.)

(415 ILCS 20/6.2) (from Ch. 111 1/2, par. 7056.2)

Sec. 6.2. (Repealed).

(Source: P.A. 90-372, eff. 7-1-98. Repealed internally, eff. 7-1-98.)

(415 ILCS 20/6.3) (from Ch. 111 1/2, par. 7056.3)

Sec. 6.3. (Repealed).

(Source: P.A. 87-1250. Repealed by P.A. 91-798, eff. 7-9-00.)

(415 ILCS 20/7) (from Ch. 111 1/2, par. 7057)

Sec. 7. It is the intent of this Act to provide the framework for a comprehensive solid waste management program in Illinois.

The Department shall prepare and submit to the Governor and the General Assembly on or before January 1, 1992, a report evaluating the effectiveness of the programs provided under this Act and Section 22.14 of the Environmental Protection Act; assessing the need for a continuation of existing programs, development and implementation of new programs and appropriate funding mechanisms; and recommending legislative and administrative action to fully implement a comprehensive solid waste management program in Illinois.

The Department shall investigate the suitability and advisability of providing tax incentives for Illinois businesses to use recycled products and purchase or lease recycling equipment, and shall report to the Governor and the General Assembly by January 1, 1987, on the results of this investigation.

By July 1, 1989, the Department shall submit to the Governor and members of the General Assembly a waste reduction report:

(a) that describes various mechanisms that could be utilized to stimulate and enhance the reduction of industrial and post-consumer waste in the State, including their advantages and disadvantages. The mechanisms to be analyzed shall include, but not be limited to, incentives for prolonging product life, methods for ensuring product recyclability, taxes for excessive packaging, tax incentives, prohibitions on the use of certain products, and performance standards for products; and

(b) that includes specific recommendations to stimulate and enhance waste reduction in the industrial

and consumer sector, including, but not limited to, legislation, financial incentives and disincentives, and public education.

The Department of Commerce and Economic Opportunity, with the cooperation of the State Board of Education, the Illinois Environmental Protection Agency, and others as needed, shall develop, coordinate and conduct an education program for solid waste management and recycling. The program shall include, but not be limited to, education for the general public, businesses, government, educators and students.

The education program shall address, at a minimum, the following topics: the solid waste management alternatives of recycling, composting, and source reduction; resource allocation and depletion; solid waste planning; reuse of materials; pollution prevention; and household hazardous waste.

The Department of Commerce and Economic Opportunity shall cooperate with municipal and county governments, regional school superintendents, education service centers, local school districts, and planning agencies and committees to coordinate local and regional education programs and workshops and to expedite the exchange of technical information.

By March 1, 1989, the Department shall prepare a report on strategies for distributing and marketing landscape waste compost from centralized composting sites operated by units of local government. The report shall, at a minimum, evaluate the effects of product quality, assured supply, cost and public education on the availability of compost, free delivery, and public sales composting program. The evaluation of public sales programs shall focus on direct retail sale of bagged compost at the site or special distribution centers and bulk sale of finished compost to wholesalers for resale.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 20/7.1) (from Ch. 111 1/2, par. 7057.1)

Sec. 7.1. Waste paint.

(a) The Department shall conduct a study to develop cost effective, environmentally sound, and technically feasible waste paint disposal options for small businesses, including at least painting contractors, auto body shops and households. The study shall include on site investigations of manufacturing processes, including demonstration projects on reprocessing, and on pigment and solvent extraction.

(b) The Department shall develop an effective public education program to inform small businesses and households about the best available waste paint reduction and management options.

(c) By November 1, 1991, the Department shall report to the Governor and the General Assembly on its activities pursuant to this Section, with recommendations for legislation or regulations necessary to address the reduction and management of waste paint.

(Source: P.A. 89-445, eff. 2-7-96.)

(415 ILCS 20/7.2) (from Ch. 111 1/2, par. 7057.2)

Sec. 7.2. Pesticide containers. (a) The Department of Agriculture, in consultation and cooperation with the Environmental Protection Agency, shall design and implement a pilot pesticide container collection project, to be completed by June 30, 1991, to:

(1) collect and recycle empty, triple-rinsed pesticide containers;

(2) develop, demonstrate, and promote proper pesticide container management; and

(3) evaluate current pesticide container management methods and the cause and extent of problems associated with pesticide containers.

By November 30, 1991, the Department of Agriculture shall report to the Governor and the General Assembly its conclusions from the project, and its recommendations for additional legislation or regulations governing management of pesticide containers.

(b) The Environmental Protection Agency shall develop informational and educational materials to promote proper methods of pesticide container management.

(c) The Department of Agriculture shall provide for the establishment and operation of temporary collection sites for pesticide containers. The Environmental Protection Agency may limit the type and quantity of pesticide containers acceptable for collection.

During the pilot project, the Department of Agriculture shall conduct surveys and collect information on proper and improper pesticide container storage and disposal.

The Department of Agriculture and any other entity collecting pesticide containers shall manage and dispose of the containers in compliance with applicable federal and State requirements.

(d) For the purposes of this Section, the term "pesticide" means a substance or mixture of substances intended to prevent, destroy, repel, or mitigate a pest, and a substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

(Source: P.A. 86-1026.)

(415 ILCS 20/7.3)

Sec. 7.3. Waste collection pilot project. On or before March 1, 1994, the Department shall issue a Request for Proposals to establish a pilot wet/dry collection pilot project, serving at least 600 households, to evaluate the feasibility of wet/dry collection systems that divert source separated recyclables and compostable nontoxic organic materials from the residential and commercial waste streams.

The study shall evaluate both two-stream and three-stream systems using, at a minimum, the following criteria: convenience and effectiveness of different sorting systems, waste diversion potential, compost quality, marketability of end-products, contamination levels, efficiency and cost of various collection systems, and participation levels.

The pilot project shall include, but need not be limited to, the following materials: newspapers, mixed paper, glass containers, plastic containers, food waste, paper towels, facial tissue, cardboard, and metals. The pilot program shall include promotional materials to discourage residents from collecting their grass clippings.

(Source: P.A. 91-357, eff. 7-29-99.)

(415 ILCS 20/8)

Sec. 8. Recycling Economic Development Program. On or before March 1, 1994, the Department shall issue a Request for Proposals that invites individuals, not-for-profit

corporations, and small businesses to submit proposals to develop enterprises that use secondary materials that are collected in municipal and business recycling programs for the manufacture of recycled-content products. Grants to qualified applicants shall not exceed \$50,000 for any one proposal. The Department shall provide grants in an amount not to exceed \$150,000 during any one fiscal year. The terms of the grants shall be determined by the Department. This program shall operate for a period not to exceed 2 years.

The Department shall give priority to proposals that will create small scale businesses in economically depressed areas. In determining the most viable proposals, the Department may consider, in addition to its regular market development program guidelines, the nature of the business, its capital needs, benefits to the community, program budget constraints, local financing opportunities, and the type of secondary material that will be used as feedstock in the reuse or remanufacturing process.

The Department shall hold at least 2 informational meetings in the State to publicize the existence of this recycling economic redevelopment Request for Proposals and shall provide technical assistance to any potential respondent desiring such assistance. Grant recipients shall prepare and submit to the Department a one year progress report which the Department shall summarize and submit to the General Assembly along with recommendations on measures that the State can undertake to stimulate small-scale market development ventures, particularly in economically-depressed areas.

None of the provisions of this Section shall limit or affect other programs administered by the Department pursuant to this Act.

(Source: P.A. 91-357, eff. 7-29-99.)

(415 ILCS 20/10)

(This Section will be renumbered as Section 7.4 in a revisory bill.)

Sec. 10. The Task Force on the Advancement of Materials Recycling.

(a) The Task Force on the Advancement of Materials Recycling is hereby created to review the status of recycling and solid waste management planning in Illinois. The goal of the Task Force is to investigate and provide recommendations for expanding waste reduction, recycling, reuse, and composting in Illinois in a manner that protects the environment, as well as public health and safety, and promotes economic development.

The Task Force's review shall include, but not be limited to, the following topics: county recycling and waste management planning; current and potential policies and initiatives in Illinois for waste reduction, recycling, composting, and reuse; funding for State and local oversight and regulation of solid waste activities; funding for State and local support of projects that advance solid waste reduction, recycling, reuse, and composting efforts; and the proper management of household hazardous waste. The review shall also evaluate the extent to which materials with economic value are lost to landfilling, and it shall also recommend ways to maximize the productive use of waste materials through efforts such as materials recycling and composting.

(b) The Task Force on the Advancement of Materials Recycling shall consist of the following 21 members appointed as follows:

(1) four legislators, appointed one each by the President of the Senate, the Minority Leader of the Senate, the Speaker of the House of Representatives, and the Minority Leader of the House of Representatives;

(2) the Director of the Illinois Environmental Protection Agency, or his or her representative;

(3) the Director of Commerce and Economic Opportunity, or his or her representative;

(4) two persons appointed by the Director of Commerce and Economic Opportunity to represent local governments;

(5) two persons appointed by the Director of the Illinois Environmental Protection Agency to represent a local solid waste management agency;

(6) two persons appointed by the Director of the Illinois Environmental Protection Agency to represent the solid waste management industry;

(7) one person appointed by the Director of Commerce and Economic Opportunity to represent non-profit organizations that provide recycling services;

(8) one person appointed by the Director of Commerce and Economic Opportunity to represent recycling collection and processing services;

(9) one person appointed by the Director of Commerce and Economic Opportunity to represent construction and demolition debris recycling services;

(10) one person appointed by the Director of Commerce and Economic Opportunity to represent organic composting services;

(11) one person appointed by the Director of Commerce and Economic Opportunity to represent general recycling interests;

(12) one person appointed by the Director of the Illinois Environmental Protection Agency to represent environmental interest groups;

(13) one person appointed by the Director of Commerce and Economic Opportunity to represent environmental interest groups;

(14) one person appointed by the Director of the Illinois Environmental Protection Agency to represent a statewide manufacturing trade association; and

(15) one person appointed by the Director of the Illinois Environmental Protection Agency to represent a statewide business association.

(c) The Directors of Commerce and Economic Opportunity and the Illinois Environmental Protection Agency, or their representatives, shall co-chair and facilitate the Task Force.

(d) The members of the Task Force shall be appointed no later than 90 days after the effective date of this amendatory Act of the 97th General Assembly. The members of the Task Force shall not receive compensation for serving as members of the Task Force.

(e) The Task Force shall seek assistance from the Illinois Department of Central Management Services, the Illinois Green Economy Network, and the Illinois Green Governments Coordinating Council to help facilitate the Task Force, using technology, such as video conferencing and meeting space, with the goal of reducing costs and greenhouse gas emissions

associated with travel.

(f) The Task Force shall prepare a report that summarizes its work and makes recommendations resulting from its study, and it shall submit a report of its findings and recommendations to the Governor and the General Assembly no later than 2 years after the effective date of this amendatory Act of the 97th General Assembly.

(g) The Task Force, upon issuing the report described in subsection (f) of this Section, is dissolved and this Section is repealed.

(Source: P.A. 97-853, eff. 1-1-13.)

Appendix L: Local Solid Waste Disposal Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY (415 ILCS 10/) Local Solid Waste Disposal Act.

(415 ILCS 10/1) (from Ch. 85, par. 5901)

Sec. 1. This Act shall be known and may be cited as the "Local Solid Waste Disposal Act".
(Source: P.A. 84-963.)

(415 ILCS 10/1.1) (from Ch. 85, par. 5901.1)

Sec. 1.1. It is the purpose of this Act and the policy of this State to protect the public health and welfare and the quality of the environment by providing local governments with the ability to properly dispose of solid waste within their jurisdictions by preparing and implementing, either individually or jointly, solid waste management plans for the disposal of solid waste and, to the extent technically and economically feasible, to efficiently use products or by-products generated during the disposal process.
(Source: P.A. 85-882.)

(415 ILCS 10/2) (from Ch. 85, par. 5902)

Sec. 2. As used in this Act, unless the context clearly indicates otherwise:

(1) "Solid waste" means "waste", as defined in the Illinois Environmental Protection Act, but for the purposes of this Act does not include "hazardous waste" as defined in that Act.

(2) "Unit of local government" means a municipality, county, or a Municipal Joint Action Agency created under Section 3.2 of the Intergovernmental Cooperation Act or, if the context requires, the member municipalities of such an agency or their territory.

(3) "Pollution control facility" has the meaning ascribed to the term in the Illinois Environmental Protection Act, except that the term shall not include sewers and sewage treatment facilities owned or operated by sanitary districts.

(4) "Jurisdiction" means: (1) in the case of a municipality, the territory within the corporate limits of the municipality; (2) in the case of a county, the territory within the corporate limits of the county which does not lie within the corporate limits of any municipality which has adopted and is implementing a plan under this Act either independently or through a Municipal Joint Action Agency; and (3) in the case of a Municipal Joint Action Agency, the territory within the corporate limits of each member municipality.

(5) "Qualified solid waste energy facility" means either (i) a solid waste pollution control facility or a portion

thereof owned or operated by or for the benefit of a unit of local government and developed under this Act, which meets the requirements set forth in Section 3.1 of this Act, or (ii) a facility which uses methane gas generated from landfills.

(6) "Municipal waste" means garbage, general household, institutional and commercial waste, industrial lunchroom or office waste, landscape waste, and construction and demolition debris.

(Source: P.A. 87-650; 88-681, eff. 12-22-94.)

(415 ILCS 10/3) (from Ch. 85, par. 5903)

Sec. 3. Units of local government may, on their own behalf or pursuant to an intergovernmental agreement under Section 4, prepare solid waste management plans for disposal of solid waste generated within their jurisdictions. No such plans, however, shall be implemented prior to July 1, 1986. Such plans, if prepared, shall include provisions for, but need not be limited to, the following:

(1) a description of the origin, content and weight or volume of municipal waste currently generated within the unit of local government's boundaries, and an estimate of the origin, content, and weight or volume of municipal waste that will be generated within the unit of local government's boundaries during the next 20 years, including an assessment of the primary variables affecting this estimate and the extent to which they can reasonably be expected to occur;

(2) a description of the facilities where municipal waste is currently being processed or disposed of and the remaining capacity of such facilities;

(3) a description of the facilities and programs that are proposed for the management of municipal waste generated within the unit of local government's boundaries during the next 20 years including, but not limited to, their size, expected cost and financing method;

(4) an evaluation of the environmental, energy, life cycle cost and economic advantages and disadvantages of the proposed waste management facilities and financing method;

(5) a description of the time schedule for the development and operation of each proposed facility or program;

(6) the identity of potential sites within the unit of local government where each proposed waste processing, disposal and recycling program will be located, or an explanation of how the sites will be chosen. For any facility outside the unit of local government that the unit of local government proposes to utilize, the plan shall explain the reasons for selecting that facility;

(7) if the plan concludes that waste stream control measures are necessary to implement the plan, the identification of those measures;

(8) identification of any governmental entity that will be responsible for implementing the plan on behalf of the unit of local government, and an explanation of the legal basis for the entity's authority to do so; and

(9) adequate provision for the present and reasonably anticipated future needs of the recycling and resource recovery interests within the area.

(Source: P.A. 87-650.)

(415 ILCS 10/3.1) (from Ch. 85, par. 5903.1)

Sec. 3.1. If a solid waste management plan prepared and implemented under Section 3 of this Act, Section 2 of the Illinois Solid Waste Management Act, Section 22.15 of the Environmental Protection Act, or Section 4 of the Solid Waste Planning and Recycling Act, or the Energy Facility Plan, specifies that incineration shall be a means used by a facility to meet waste disposal needs within a jurisdiction, that facility shall be deemed a qualified solid waste energy facility if it meets the following requirements:

(1) The operator annually certifies to the Illinois Commerce Commission that solid waste is the primary fuel and comprises no less than 95% of the annual fuel loading.

(2) The operator guarantees that the solid waste throughput volume shall be equal to at least 66% of the design capacity of the facility.

(3) (A) A solid waste management plan has been developed by the unit or units of local government included in the area that is intended to be served by the facility and has been filed with and approved by the Illinois Environmental Protection Agency pursuant to subsection (g) of Section 22.15 of the Illinois Environmental Protection Act or pursuant to Section 5 of the Solid Waste Planning and Recycling Act. Any such plan shall establish a recycling goal of a minimum of 25% by weight of the solid waste stream generated within the planning area; or

(B) For any facility that receives local site approval before May 1, 1989, a Solid Waste Energy Facility Plan has been developed with respect to the facility by the owner or operator of the facility and has been filed with and approved by the Illinois Environmental Protection Agency. Any such Solid Waste Energy Facility Plan shall establish a recycling goal of at least 25% of the solid waste stream received by the Solid Waste Energy Facility, and shall include a description of the processes and systems to be utilized by the facility for materials and energy recovery.

(4) A good faith effort has been made by the unit or units of local government served by the facility or the owner or operator of the facility to achieve the 25% recycling goal at the time the facility commences commercial operation and thereafter.

(Source: P.A. 91-357, eff. 7-29-99.)

(415 ILCS 10/4) (from Ch. 85, par. 5904)

Sec. 4. A unit of local government may enter into intergovernmental agreements to prepare and implement solid waste management plans, and may adopt those procedures for the preparation and implementation of plans the contracting parties deem appropriate. A unit of local government may delegate any power to another unit of local government for the specific purpose of preparing and implementing a solid waste management plan. However, no plan prepared pursuant to an intergovernmental agreement under the authority of this Section shall provide for the siting of a new pollution control facility within the incorporated area of any municipality or the unincorporated area of any county which is not a signatory to the agreement without the consent of the municipality or county.

It is the intent of the General Assembly that any action taken pursuant to this Act by one or more units of local government, acting individually or jointly, shall be deemed to be State action for purposes of the application of federal antitrust law, and no such action shall be prohibited by virtue of any anticompetitive effect it may produce.
(Source: P.A. 88-681, eff. 12-22-94.)

(415 ILCS 10/5) (from Ch. 85, par. 5905)

Sec. 5. An annual report shall be prepared on the implementation, review and updating of the solid waste management plan. The report shall include the following:

(a) An accounting of the quantity of waste received by those pollution control facilities included in the plan;

(b) If revenue bonds have been issued to finance a new pollution control facility, an accounting of the adequacy of the quantity of waste flow, and the effectiveness of those measures taken to guarantee a waste flow to the facility to ensure that all bond obligations will be satisfied;

(c) If the new pollution control facility called for by the plan has not gone into operation, a report on the progress made towards bringing the facility into operation, including those additional measures not previously identified in the plan which are intended to be implemented, which would guarantee a constant flow of a given amount of solid waste to a given facility or facilities;

(d) A review of the 5 year solid waste forecast and the adequacy of the policies provided for in the certified plan to meet that projected solid waste disposal need; and

(e) Every fifth year after the certification of the plan, a review of the 20 year solid waste forecast and the adequacy of the policies provided for in the certified plan to meet that projected solid waste disposal need.

(Source: P.A. 88-681, eff. 12-22-94.)

(415 ILCS 10/6) (from Ch. 85, par. 5906)

Sec. 6. In accordance with the provisions set forth in Section 11-19-7 of the Illinois Municipal Code and Section 5-1047 of the Counties Code, units of local government may provide by ordinance, license, contract or other means that the methods of disposal of solid waste shall be the exclusive methods of disposal to be allowed within their respective jurisdictions, notwithstanding the fact that competition may be displaced or that such ordinance, license, contract or other measure may have an anti-competitive effect.

(Source: P.A. 86-1475.)

Appendix M: Solid Waste Planning and Recycling Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY **(415 ILCS 15/) Solid Waste Planning and Recycling Act.**

(415 ILCS 15/1) (from Ch. 85, par. 5951)

Sec. 1. This Act shall be known and may be cited as the Solid Waste Planning and Recycling Act.
(Source: P.A. 85-1198.)

(415 ILCS 15/2) (from Ch. 85, par. 5952)

Sec. 2. (a) The General Assembly finds:

(1) that parts of this State have inadequate and rapidly diminishing disposal capacity for municipal waste;

(2) that counties should have the primary responsibility to plan for the management of municipal waste within their boundaries to insure the timely development of needed waste management facilities and programs;

(3) that waste reduction and recycling are preferable to the disposal of municipal waste;

(4) that removing certain materials from the municipal waste stream will decrease the flow of waste to sanitary landfills, aid in the conservation and recovery of valuable resources, conserve energy in the manufacturing process, increase the supply of reusable materials for the State's industries, and reduce substantially the need for municipal waste incineration facilities and contribute to their overall combustion efficiency, thereby resulting in a significant cost savings in the planning, construction and operation of these facilities; and

(5) that solid waste planning should be encouraged to take place on a multi-county, regional basis and through inter-governmental cooperation agreements whereby various units of local government within a region determine the best methods and locations for disposal of solid waste. This amendatory Act of 1992 shall not be construed to impact the authority of units of local government in the siting of solid waste disposal facilities.

(b) It is the purpose of this Act to provide incentives for decreased generation of municipal waste, to require certain counties to develop comprehensive waste management plans that place substantial emphasis on recycling and other alternatives to landfills, to encourage municipal recycling and source reduction, and to promote composting of yard waste.
(Source: P.A. 87-330; 87-906.)

(415 ILCS 15/3) (from Ch. 85, par. 5953)

Sec. 3. As used in this Act, unless the context clearly indicates otherwise:

"Agency" means the Illinois Environmental Protection Agency.

"Composting" means the biological process by which microorganisms decompose the organic fraction of waste, producing a humus-like material that may be used as a soil conditioner.

"County" means any county of the State and includes the City of Chicago.

"Department" means the Department of Commerce and Economic Opportunity.

"Municipal waste" means garbage, general household, institutional and commercial waste, industrial lunchroom or office waste, landscape waste, and construction and demolition debris.

"Person" means any individual, partnership, cooperative enterprise, unit of local government, institution, corporation or agency, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

"Recycling, reclamation or reuse" means a method, technique or process designed to remove any contaminant from waste so as to render the waste reusable, or any process by which materials that would otherwise be disposed of or discarded are collected, separated or processed and returned to the economic mainstream in the form of raw materials or products.

"Recycling center" means a facility that accepts only segregated, nonhazardous, nonspecial, homogeneous, nonputrescible materials, such as dry paper, glass, cans or plastics, for subsequent use in the secondary materials market.

(Source: P.A. 94-793, eff. 5-19-06.)

(415 ILCS 15/4) (from Ch. 85, par. 5954)

Sec. 4. (a) By March 1, 1991, each county with a population of 100,000 or more and each municipality with a population of 1,000,000 or more, and by March 1, 1995, each county with a population of less than 100,000, shall submit to the Agency an officially adopted plan for the management of municipal waste generated within its boundaries. Such plan shall conform with the waste management hierarchy established as State policy in subsection (b) of Section 2 of the Illinois Solid Waste Management Act.

(b) The Agency shall review each county waste management plan to ensure consistency with the requirements of this Act and, if warranted, return it to the county with specific recommendations for improving the plan within 90 days after the plan is submitted. If the plan is returned, the county shall consider the Agency recommendations, make any appropriate revisions, and adopt a revised plan by September 1, 1991, or by September 1, 1995 in the case of a county with a population of less than 100,000.

(c) Each waste management plan shall contain, at a minimum, the following provisions:

(1) A description of the origin, content and weight or volume of municipal waste currently generated within the county's boundaries, and the origin, content, and weight or volume of municipal waste that will be generated within the county's boundaries during the next 20 years, including an assessment of the primary variables affecting this estimate and the extent to which they can reasonably be expected to occur.

(2) A description of the facilities where municipal waste is currently being processed or disposed of and the remaining available permitted capacity of such facilities.

(3) A description of the facilities and programs that are proposed for the management of municipal waste generated within the county's boundaries during the next 20 years, including, but not limited to their size, expected cost and financing method.

(4) An evaluation of the environmental, energy, life cycle cost and economic advantages and disadvantages of the proposed waste management facilities and programs.

(5) A description of the time schedule for the development and operation of each proposed facility or program.

(6) The identity of potential sites within the county where each proposed waste processing, disposal and recycling program will be located or an explanation of how the sites will be chosen. For any facility outside the county that the county proposes to utilize, the plan shall explain the reasons for selecting such facility.

(7) The identity of the governmental entity that will be responsible for implementing the plan on behalf of the county and explanation of the legal basis for the entity's authority to do so.

(8) Any other information that the Agency may require.

(d) Any county may delegate power to a municipality within the county or Municipal Joint Action Agency for the specific purpose of preparing the waste management plan or any portion thereof under this Act.

(e) Counties may, by intergovernmental agreement, jointly create and administer their solid waste management plans, provided that such joint plans fulfill all the requirements of this Act.

(Source: P.A. 86-228.)

(415 ILCS 15/5) (from Ch. 85, par. 5955)

Sec. 5. (a) Prior to adopting a waste management plan for submission to the Agency, the county shall form an advisory committee, which shall include representatives from municipalities within the county, citizen organizations, industry, the private solid waste management industry operating within the county, local recyclers and any other persons deemed appropriate by the county. The advisory committee shall review the plan during its preparation, make suggestions and propose any changes it believes appropriate.

(b) The county shall provide written notice to all municipalities and interested members of the public when plan development begins and shall provide periodic written progress reports to such entities concerning the preparation of the plan.

(c) Prior to adoption by the governing body of the county, the county shall submit copies of the proposed plan for review and comment to the Agency, all municipalities within the county, all areawide planning agencies and the county health department. The county shall also make the proposed plan available for public review and comment. The period for review and comment shall be 90 days. The county shall hold at least one public hearing on the proposed plan during this period. The plan subsequently submitted to the governing body of the county for adoption shall be accompanied by a document containing written responses to substantive comments made during the comment period.

(d) The governing body of the county shall adopt a plan within 60 days from the end of the public comment period. Within 10 days of adoption, the plan shall be submitted to the Agency for review.

(e) Each county waste management plan shall be updated and reviewed every 5 years, and any necessary or appropriate revisions shall be submitted to the Agency for review and comment.

(Source: P.A. 89-443, eff. 7-1-96.)

(415 ILCS 15/6) (from Ch. 85, par. 5956)

Sec. 6. Each county waste management plan adopted under Section 4 shall include a recycling program. Such recycling program:

(1) shall be implemented throughout the county and include a time schedule for implementation of the program.

(2) shall provide for the designation of a recycling coordinator to administer the program.

(3) shall be designed to recycle, by the end of the third and fifth years of the program, respectively 15% and 25% of the municipal waste generated in the county, subject to the existence of a viable market for the recycled material, based on measurements of recycling and waste generated in terms of weight. The determination of recycling rate shall not include: discarded motor vehicles, wastes used for clean fill or erosion control, or commercial, institutional or industrial machinery or equipment.

(4) may provide for the construction and operation of one or more recycling centers by a unit of local government, or for contracting with other public or private entities for the operation of recycling centers.

(5) may require residents of the county to separate recyclable materials at the time of disposal or trash pick-up.

(6) may make special provision for commercial and institutional establishments that implement their own specialized recycling programs, provided that such establishments annually provide written documentation to the county of the total number of tons of material recycled.

(7) shall provide for separate collection and composting of leaves.

(8) shall include public education and notification programs to foster understanding of and encourage compliance with the recycling program.

(9) shall include provisions for compliance, including incentives and penalties.

(10) shall include provisions for (i) recycling the collected materials, (ii) identifying potential markets for at least 3 recyclable materials, and (iii) promoting the use of products made from recovered or recycled materials among businesses, newspapers and local governments in the county.

(11) may provide for the payment of recycling diversion credits to public and private parties engaged in recycling

activities.
(Source: P.A. 86-777; 87-650.)

(415 ILCS 15/7) (from Ch. 85, par. 5957)

Sec. 7. (a) Each county shall begin implementation of its waste management plan, including the recycling program, within one year of adoption of the plan. The county may enter into written agreements with other persons, including a municipality or persons transporting municipal waste on the effective date of this Act, pursuant to which the persons undertake to fulfill some or all of the county's responsibilities under this Act. A person who enters into an agreement shall be responsible with the county for the implementation of such programs.

(b) In implementing the recycling program, consideration for the collection, marketing and disposition of recyclable materials shall be given to persons engaged in the business of recycling within the county on the effective date of this Act, whether or not the persons were operating for profit.

If a township within the county is operating a recycling program on the effective date of the plan which substantially conforms with or exceeds the requirements of the recycling program included in the plan, the township may continue to operate its recycling program, and such operation shall constitute, within the township, implementation of the recycling program included in the plan. A township may at any time adopt and implement a recycling program that is more stringent than that required by the county waste management plan.

(c) The Department shall assist counties in implementing recycling programs under this Act, and may, pursuant to appropriation, make grants and loans from the Solid Waste Management Fund to counties or other units of local government for that purpose, to be used for capital assistance or for the payment of recycling diversion credits or for other recycling program purposes, in accordance with such guidelines as may be adopted by the Department.

(Source: P.A. 97-333, eff. 8-12-11.)

(415 ILCS 15/8) (from Ch. 85, par. 5958)

Sec. 8. (a) Any municipality or combination of municipalities that has a total population of 20,000 or more may apply to the Department for assistance grants to operate a pilot recycling project that demonstrates the economic feasibility and environmental benefits of a recycling method. Population shall be determined by the most recent federal decennial census.

The pilot recycling project shall include, at a minimum, the following elements:

(1) A curbside program requiring the occupants of at least 3,000 single family residences to separate at least 3 materials deemed appropriate by the municipality from other solid waste generated at their residences, and to store such material until collection; the 3 materials shall be chosen from the following: glass, aluminum, steel and bimetallic cans, newsprint, corrugated paper, used motor oil, plastics.

(2) A scheduled day, at least twice per month, during which separated materials are to be placed at the curbside or a similar location for collection.

(3) A system including trucks and related equipment for collecting recyclable materials from the curbside or similar locations at least twice per month from each participating residence.

(4) A drop-off or buy-back center for the collection and sale or reuse of recyclable materials, including but not limited to glass, aluminum cans and newsprint.

(5) Provisions for recycling of collected materials.

(6) Provisions for public education and compliance.

(b) The Department shall establish guidelines for solicitation of grants under this Section. Applications for assistance shall be filed with the Department on forms provided by the Department and shall set forth such information as may be required by the Department. The Department shall evaluate the application and notify the applicant of the qualification or non-qualification of the application within 45 days of the deadline established by the Department for receipt of applications.

(c) In implementing this Section, the Department shall, pursuant to appropriation, make grants from the Solid Waste Management Fund to municipalities with approved pilot recycling

projects. Such grants shall be limited to 50% of the project costs, not to exceed a total of \$50,000 per project.

(d) No more than 25 pilot recycling project grants may be made pursuant to this Section.
(Source: P.A. 86-256.)

(415 ILCS 15/8.5)

Sec. 8.5. High-rise recycling. The Department shall conduct a workshop regarding the feasibility and methods of recycling in high-rise residential and office buildings, including an explanation of financial assistance available. The Department shall provide a report to the General Assembly on high-rise residential and office recycling projects on or before July 1, 1994. The report shall include, but is not limited to, a review of the volume of materials collected and costs associated with such projects compared to other collection methods.
(Source: P.A. 88-60.)

(415 ILCS 15/9) (from Ch. 85, par. 5959)

Sec. 9. Any county or municipality may, by ordinance, provide that no sanitary landfill facility located within the unincorporated area, if a county, or the incorporated area, if a municipality, may accept for final disposal at any time truckloads composed primarily of leaves generated within the county in which the facility is located, except that leaves separated at the source from other municipal waste may be accepted by a sanitary landfill facility in those instances where the facility has provided and maintains for that purpose separate composting facilities, and the composted leaves are utilized either as part of the final vegetative cover for the landfill, or for other uses as a soil conditioning material.
(Source: P.A. 86-456.)

(415 ILCS 15/10) (from Ch. 85, par. 5960)

Sec. 10. Beginning January 1, 1992, no person shall offer for sale any single use plastic bottle with a capacity of 16 fluid ounces or more, nor any other single use rigid plastic container with a capacity of 8 fluid ounces or more, that is not coded in a manner that assists recyclers in sorting such containers by resin composition. The code shall consist of a 3-sided triangular arrow with a number in the center and letters underneath. The number and letters shall indicate the resin from which the container is made as follows: 1 and PETE for polyethylene terephthalate, 2 and HDPE for high density polyethylene, 3 and V for vinyl, 4 and LDPE for low density polyethylene, 5 and PP for polypropylene, 6 and PS for polystyrene, and 7 and Other for other materials, including multi-layer materials. Containers with labels or base cups of different material shall be coded by their primary, basic material. However, this Section does not apply to the plastic casings on lead-acid storage batteries.
(Source: P.A. 86-177; 87-650.)

(415 ILCS 15/10.1) (from Ch. 85, par. 5960.1)

Sec. 10.1. (a) No person may sell or offer for sale at retail to consumers in this State any beverage packaged in a plastic can unless such person has first demonstrated to the satisfaction of the Agency that:

(1) plastic cans can be collected and recycled in a manner that will not interfere with the processing of scrap aluminum cans; and

(2) plastic cans can be collected, processed and transported to secondary materials markets at a cost that provides a reasonable profit to recycling operations in the State.

(b) For the purpose of this Section, "plastic can" means a beverage container having a capacity of 16 fluid ounces or less, composed of clear polyethylene terephthalate thermoplastic, and where the basic structure of the container, exclusive of the closure, also includes aluminum or steel.

(c) Any person adversely affected or threatened by a final determination of the Agency under this Section may obtain review by filing a petition for review with the Pollution Control Board in the manner provided for permit appeals in the Environmental Protection Act.

(d) Any person that knowingly violates this Section shall be liable for a civil penalty not to exceed \$5,000 for each violation; such penalty may, upon order of a court of competent

jurisdiction, be made payable to the Solid Waste Management Fund, to be used in accordance with the provisions of the Illinois Solid Waste Management Act.

The State's Attorney or any person of the county in which the violation occurred, or the Attorney General, at the request of the Agency or on his own motion, may institute a civil action against any violator of this Section. The court may award costs and reasonable attorney fees to the State's Attorney, Attorney General, or other person who has prevailed against a person who has committed a willful, knowing or repeated violation of this Section.

Any funds collected in a proceeding under this subsection (d) in which the Attorney General has prevailed shall be deposited in the Solid Waste Management Fund.
(Source: P.A. 86-774.)

(415 ILCS 15/11) (from Ch. 85, par. 5961)

Sec. 11. (a) It shall be a violation of this Act for any person:

(1) To cause or assist in the violation of Section 9 or 10 of this Act or any regulation promulgated hereunder.

(2) To fail to adhere to the schedule set forth in, or pursuant to, this Act for adopting and reviewing a waste management plan.

(3) To fail to implement the recycling component of an adopted waste management plan.
(Source: P.A. 85-1198.)

(415 ILCS 15/12) (from Ch. 85, par. 5962)

Sec. 12. (a) Any person that violates any provision of this Act shall be liable for a civil penalty not to exceed \$5,000 for such violation; such penalty may, upon order of a court of competent jurisdiction, be made payable to the Solid Waste Management Fund, to be used in accordance with the provisions of the Illinois Solid Waste Management Act.

(b) The State's Attorney or any person of the county in which the violation occurred, or the Attorney General, at the request of the Agency or on his own motion, may institute a civil action against any violator of this Act. The court may award costs and reasonable attorney fees to the State's Attorney, Attorney General, or any person who has prevailed against a person who has committed a willful, knowing or repeated violation of this Act.

(c) Any funds collected under subsection (b) in which the Attorney General has prevailed shall be deposited in the Solid Waste Management Fund.
(Source: P.A. 85-1198.)

(415 ILCS 15/13)

Sec. 13. Solid Waste Hauling and Recycling Program Act. This Act is subject to the provisions of the Solid Waste Hauling and Recycling Program Act.
(Source: P.A. 98-1079, eff. 8-26-14.)

Appendix N: Waste Oil Recovery Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

BUSINESS TRANSACTIONS (815 ILCS 440/) Waste Oil Recovery Act.

(815 ILCS 440/1) (from Ch. 96 1/2, par. 7701)

Sec. 1. Short title. This Act shall be known and may be cited as the "Waste Oil Recovery Act".
(Source: P.A. 81-379.)

(815 ILCS 440/2) (from Ch. 96 1/2, par. 7702)

Sec. 2. Definitions. As used in this Act, unless the context otherwise requires, words and phrases shall have the meanings ascribed to them in the Sections following this Section and preceding Section 3.
(Source: P.A. 98-756, eff. 7-16-14.)

(815 ILCS 440/2.1) (from Ch. 96 1/2, par. 7702.1)

Sec. 2.1. "Waste oil" or "used oil" means any oil which has been refined from crude oil, has been used, and as a result of such use has been contaminated by physical or chemical impurities.
(Source: P.A. 81-379.)

(815 ILCS 440/2.2) (from Ch. 96 1/2, par. 7702.2)

Sec. 2.2. "New oil" means any oil which has been refined from crude oil and has not been used, and which may or may not contain additives. Such term does not include used oil or recycled oil.
(Source: P.A. 81-379.)

(815 ILCS 440/2.3) (from Ch. 96 1/2, par. 7702.3)

Sec. 2.3. "Recycled oil" means:
(a) used oil from which physical and chemical contaminants acquired through use have been removed by re-refining or other processing, or
(b) any blend of oil, consisting of such re-refined or otherwise processed used oil and new oil or additives with respect to which the manufacturer has determined, pursuant to the rule prescribed under Title V, Section 383 of the Federal "Energy Policy and Conservation Act" (P.L. 94-163) and promulgated by the Federal Trade Commission, is substantially equivalent to new oil for a particular end use.
(Source: P.A. 81-379.)

(815 ILCS 440/2.4) (from Ch. 96 1/2, par. 7702.4)

Sec. 2.4. "Lubricating oil" means all oil regardless of origin which:
(a) is suitable for use as a lubricant or
(b) is sold for use as a lubricant.
(Source: P.A. 81-379.)

(815 ILCS 440/2.5) (from Ch. 96 1/2, par. 7702.5)

Sec. 2.5. "Automotive oil" means all oil including lubricating and hydraulic oil, which is used in automobiles, trucks, buses, motorcycles and all other motorized vehicles which travel on or off roads and highways.
(Source: P.A. 81-379.)

(815 ILCS 440/2.6) (from Ch. 96 1/2, par. 7702.6)

Sec. 2.6. "Fuel oil" means all oil which has been refined,

re-refined or reclaimed for the purpose of being burned to reproduce heat.
(Source: P.A. 81-379.)

(815 ILCS 440/2.7) (from Ch. 96 1/2, par. 7702.7)

Sec. 2.7. "Person" means any individual, partnership, firm, company, corporation, association, political subdivision, State agency or any other legal entity and any officer or agent thereof.
(Source: P.A. 81-379.)

(815 ILCS 440/2.8) (from Ch. 96 1/2, par. 7702.8)

Sec. 2.8. "Department" means the Department of Commerce and Economic Opportunity.
(Source: P.A. 94-793, eff. 5-19-06.)

(815 ILCS 440/3) (from Ch. 96 1/2, par. 7703)

Sec. 3. Legislative finding. The General Assembly finds:

(a) that a great volume of waste oil is being disposed of in ways that pollute the waters, air and lands of the State of Illinois.

(b) that this oil is a valuable natural resource, the conservation of which can benefit the people of Illinois.

(c) that the absence of legislative direction has historically acted to inhibit the reuse of this resource.
(Source: P.A. 81-379.)

(815 ILCS 440/4) (from Ch. 96 1/2, par. 7704)

Sec. 4. Purpose. The General Assembly declares that to the maximum extent possible, consistent with this Act and other State and federal laws, all forms of used petroleum based oils shall be recycled.

The purpose of this Act shall be to enhance, promote and facilitate the highest beneficial uses of all forms of used petroleum based oils in order to:

(a) encourage the recycling of used oil;

(b) promote the use of recycled oil;

(c) reduce consumption of new oil by promoting increased utilization of recycled oil;

(d) reduce environmental hazards and wasteful practices associated with the disposal of used oil; and

(e) protect the health and welfare of the people of Illinois.

(Source: P.A. 81-379.)

(815 ILCS 440/5) (from Ch. 96 1/2, par. 7705)

Sec. 5. The Department shall be responsible for administering the provisions of this Act.

The Department shall encourage the voluntary collection and recycling of used oil by retail sellers of more than 500 gallons per year of lubricating oil. The Department shall also provide technical assistance to persons or businesses interested in such collecting and recycling.

(Source: P.A. 82-592.)

(815 ILCS 440/6) (from Ch. 96 1/2, par. 7706)

Sec. 6. Any establishment engaged in retail sales of automotive lubricating oils is urged to post a sign clearly visible to the public in every area where automotive lubricating oils are sold, indicating the closest used oil storage facility. The sign shall be a minimum size of 8 1/2 inches by 11 inches and shall be available from the Department of Commerce and Economic Opportunity upon request by a retail seller of 500 or more gallons per year of automotive lubricating oil.

(Source: P.A. 94-793, eff. 5-19-06.)

(815 ILCS 440/7) (from Ch. 96 1/2, par. 7707)

Sec. 7. No lubricating oil, regardless of its origin, or any product that is a blend of recycled oil and new oil shall be sold, offered for sale or delivered for use in an internal combustion engine unless such product is substantially equivalent to new oil for the particular end use for which it is labeled as determined by test procedures promulgated by the

Federal Trade Commission as prescribed under Title V, Section 383 of the federal "Energy Policy and Conservation Act" (P.L. 94-163). This Section shall take effect six months after the promulgation of federal standards concerning the use of recycled oil as a lubricating oil and the use of recycled oil as a fuel oil, or six months from the effective date of this Act, whichever is later.
(Source: P.A. 81-379.)

(815 ILCS 440/8) (from Ch. 96 1/2, par. 7708)

Sec. 8. The Department shall, in conjunction with appropriate government departments and agencies, institutions, and industry groups conduct public information and educational programs designed to inform the public of the efforts of the State of Illinois in regard to the recycling of oil in order to conserve a vital natural resource.
(Source: P.A. 82-592.)

(815 ILCS 440/9) (from Ch. 96 1/2, par. 7709)

Sec. 9. All State officials shall act within their authority to encourage the use of recycled oil and prohibit any discriminatory action which would be discouragement to the use of recycled oils.
(Source: P.A. 81-379.)

Appendix O: Title 35 Illinois Administrative Code Part 733:

Universal Waste Rule, Subparts A and B

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 733
STANDARDS FOR UNIVERSAL WASTE MANAGEMENT

SUBPART A: GENERAL

Section	
733.101	Scope
733.102	Applicability: Batteries
733.103	Applicability: Pesticides
733.104	Applicability: Mercury-Containing Equipment
733.105	Applicability: Lamps
733.106	Applicability: Mercury-Containing Equipment (Repealed)
733.107	Applicability: Mercury-Containing Lamps (Repealed)
733.108	Applicability: Household and Conditionally Exempt Small Quantity Generator Waste
733.109	Definitions

SUBPART B: STANDARDS FOR SMALL QUANTITY HANDLERS

Section	
733.110	Applicability
733.111	Prohibitions
733.112	Notification
733.113	Waste Management
733.114	Labeling and Marking
733.115	Accumulation Time Limits
733.116	Employee Training
733.117	Response to Releases
733.118	Off-Site Shipments
733.119	Tracking Universal Waste Shipments
733.120	Exports

- 733.139 Tracking Universal Waste Shipments
- 733.140 Exports

SUBPART D: STANDARDS FOR UNIVERSAL WASTE TRANSPORTERS

- Section
- 733.150 Applicability
- 733.151 Prohibitions
- 733.152 Waste Management
- 733.153 Accumulation Time Limits
- 733.154 Response to Releases
- 733.155 Off-site Shipments
- 733.156 Exports

SUBPART E: STANDARDS FOR DESTINATION FACILITIES

- Section
- 733.160 Applicability
- 733.161 Off-Site Shipments
- 733.162 Tracking Universal Waste Shipments

SUBPART F: IMPORT REQUIREMENTS

- Section
- 733.170 Imports

SUBPART G: PETITIONS TO INCLUDE OTHER WASTES

- Section
- 733.180 General
- 733.181 Factors for Petitions to Include Other Wastes

AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R95-20 at 20 Ill. Reg. 11291, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 944, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7650, effective April 15, 1998; amended in R99-15 at 23 Ill. Reg. 9502, effective July 26, 1999; amended in R00-13 at 24 Ill. Reg. 9874, effective June 20, 2000; amended in R05-8 at 29 Ill. Reg. 6058, effective April 13, 2005; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 1352, effective December 20, 2006.

SUBPART A: GENERAL

- Section 733.101 Scope

- a) This Part establishes requirements for managing the following:
 - 1) Batteries, as described in Section 733.102;

- 2) Pesticides, as described in Section 733.103;
 - 3) Mercury-containing equipment, as described in Section 733.104; and
 - 4) Lamps, as described in Section 733.105.
- b) This Part provides an alternative set of management standards in lieu of regulation pursuant to 35 Ill. Adm. Code 702 through 705 and 720 through 728.
 - c) Electronic reporting. The filing of any document pursuant to any provision of this Part as an electronic document is subject to 35 Ill. Adm. Code 720.104.

BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 3, as added, and 40 CFR 271.10(b), 271.11(b), and 271.12(h) (2005), as amended at 70 Fed. Reg. 59848 (Oct. 13, 2005).

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.102 Applicability: Batteries

- a) Batteries covered under this Part.
 - 1) The requirements of this Part apply to persons managing batteries, as described in Section 733.109, except those listed in subsection (b) of this Section.
 - 2) Spent lead-acid batteries that are not managed under Subpart G of 35 Ill. Adm. Code 726, are subject to management under this Part.
- b) Batteries not covered under this Part. The requirements of this Part do not apply to persons managing the following batteries:
 - 1) Spent lead-acid batteries that are managed under Subpart G of 35 Ill. Adm. Code 726;
 - 2) Batteries, as described in Section 733.109, that are not yet wastes under 35 Ill. Adm. Code 721, including those that do not meet the criteria for waste generation in subsection (c) of this Section; or
 - 3) Batteries, as described in Section 733.109, that are not hazardous waste. A battery is a hazardous waste if it exhibits one or more of the characteristics identified in Subpart C of 35 Ill. Adm. Code 721.
- c) Generation of waste batteries.

- 1) A used battery becomes a waste on the date it is discarded (e.g., when sent for reclamation).
- 2) An unused battery becomes a waste on the date the handler decides to discard it.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.103 Applicability: Pesticides

- a) Pesticides covered under this Part. The requirements of this Part apply to persons managing pesticides, as described in Section 733.109, that meet the following conditions, except those listed in subsection (b) of this Section:
 - 1) Recalled pesticides, as follows:
 - A) Stocks of a suspended and canceled pesticide that are part of a voluntary or mandatory recall under Section 19(b) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA; 7 USC 136q(b)), including, but not limited to those owned by the registrant responsible for conducting the recall; or
 - B) Stocks of a suspended or cancelled pesticide, or a pesticide that is not in compliance with FIFRA, that are part of a voluntary recall by the registrant; or
 - 2) Stocks of other unused pesticide products that are collected and managed as part of a waste pesticide collection program.
- b) Pesticides not covered under this Part. The requirements of this Part do not apply to persons managing the following pesticides:
 - 1) Recalled pesticides described in subsection (a)(1) of this Section and unused pesticide products described in subsection (a)(2) of this Section that are managed by farmers in compliance with 35 Ill. Adm. Code 722.170. (35 Ill. Adm. Code 722.170 addresses pesticides disposed of on the farmer's own farm in a manner consistent with the disposal instructions on the pesticide label, providing the container is triple rinsed in accordance with 35 Ill. Adm. Code 721.107(b)(3).);
 - 2) Pesticides not meeting the conditions set forth in subsection (a) of this Section must be managed in compliance with the hazardous waste regulations in 35 Ill. Adm. Code 702 through 705 and 720 through 728;

- 3) Pesticides that are not wastes under 35 Ill. Adm. Code 721, including those that do not meet the criteria for waste generation in subsection (c) of this Section or those that are not wastes as described in subsection (d) of this Section; and
 - 4) Pesticides that are not hazardous waste. A pesticide is a hazardous waste if it is a waste (see subsection (b)(3) of this Section) and either it is listed in Subpart D of 35 Ill. Adm. Code 721 or it exhibits one or more of the characteristics identified in Subpart C of 35 Ill. Adm. Code 721.
- c) When a pesticide becomes a waste.
- 1) A recalled pesticide described in subsection (a)(1) of this Section becomes a waste on the first date on which both of the following conditions apply:
 - A) The generator of the recalled pesticide agrees to participate in the recall; and
 - B) The person conducting the recall decides to discard (e.g., burn the pesticide for energy recovery).
 - 2) An unused pesticide product described in subsection (a)(2) of this Section becomes a waste on the date the generator decides to discard it.
- d) Pesticides that are not wastes. The following pesticides are not wastes:
- 1) Recalled pesticides described in subsection (a)(1) of this Section, provided that either of the following conditions exist:
 - A) The person conducting the recall has not made a decision to discard the pesticide (e.g., burn it for energy recovery). Until such a decision is made, the pesticide does not meet the definition of “solid waste” under 35 Ill. Adm. Code 721.102; thus the pesticide is not a hazardous waste and is not subject to hazardous waste requirements, including those of this Part. This pesticide remains subject to the requirements of FIFRA; or
 - B) The person conducting the recall has made a decision to use a management option that, under 35 Ill. Adm. Code 721.102, does not cause the pesticide to be a solid waste (i.e., the selected option is use (other than use constituting disposal) or reuse (other than burning for energy recovery) or reclamation). Such a pesticide is not a solid waste and therefore is not a hazardous waste, and is not subject to the hazardous waste requirements including this Part. This pesticide, including a recalled pesticide that is exported to a foreign destination for use or reuse, remains subject to the requirements of FIFRA; and

- 2) Unused pesticide products described in subsection (a)(2) of this Section, if the generator of the unused pesticide product has not decided to discard them (e.g., burn for energy recovery). These pesticides remain subject to the requirements of FIFRA.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.104 Applicability: Mercury Thermostats

- a) Mercury-containing equipment covered under this Part. The requirements of this Part apply to persons managing mercury-containing equipment, as described in Section 733.109, except those listed in subsection (b) of this Section.
- b) Mercury-containing equipment not covered under this Part. The requirements of this Part do not apply to persons managing the following mercury-containing equipment:
 - 1) Mercury-containing equipment that is not yet waste pursuant to 35 Ill. Adm. Code 721. Subsection (c) of this Section describes when mercury-containing equipment becomes waste;
 - 2) Mercury-containing equipment that is not hazardous waste. Mercury-containing equipment is a hazardous waste if it is a waste (see subsection (b)(1) of this Section) and it exhibits one or more of the characteristics identified in Subpart C of 35 Ill. Adm. Code 721 or is listed in Subpart D of 35 Ill. Adm. Code 721; and
 - 3) Equipment and devices from which the mercury-containing components have been removed.
- c) Generation of waste mercury-containing equipment.
 - 1) A used mercury-containing equipment becomes a waste on the date it is discarded.
 - 2) Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.105 Applicability: Lamps

- a) Lamps covered under this Part. The requirements of this Part apply to persons that manage lamps, as described in Section 733.109, except those listed in subsection (b) of this Section.
- b) Lamps not covered under this Part. The requirements of this Part do not apply to persons that manage the following lamps:
 - 1) Lamps that are not yet wastes under 35 Ill. Adm. Code 721, as provided in subsection (c) of this Section; and
 - 2) Lamps that are not hazardous waste. A lamp is a hazardous waste if it exhibits one or more of the characteristics identified in Subpart C of 35 Ill. Adm. Code 721.
- c) Generation of waste lamps.
 - 1) A used lamp becomes a waste on the date it is discarded.
 - 2) An unused lamp becomes a waste on the date the handler decides to discard it.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.106 Applicability: Mercury-Containing Equipment (Repealed)

(Source: Repealed at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.107 Applicability--Mercury-Containing Lamps (Repealed)

(Source: Repealed at 22 Ill. Reg. 9874, effective June 20, 2000)

Section 733.108 Applicability: Household and Conditionally Exempt Small Quantity Generator Waste

- a) A person that manages any of the wastes listed below may, at its option, manage the waste under the requirements of this Part.
 - 1) Household wastes that are exempt under 35 Ill. Adm. Code 721.104(b)(1) and which are also of the same type as the universal wastes defined at Section 733.109; or

- 2) Conditionally exempt small quantity generator wastes that are exempt under 35 Ill. Adm. Code 721.105 and are also of the same type as the universal wastes defined at Section 733.109.
- b) A person that commingles the wastes described in subsections (a)(1) and (a)(2) of this Section together with universal waste regulated under this Part must manage the commingled waste under the requirements of this Part.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.109 Definitions

“Ampule” means an airtight vial made of glass, plastic, metal, or any combination of these materials.

“Battery” means a device consisting of one or more electrically connected electrochemical cells that is designed to receive, store, and deliver electric energy. An electrochemical cell is a system consisting of an anode, cathode, and an electrolyte, plus such connections (electrical and mechanical) as may be needed to allow the cell to deliver or receive electrical energy. The term battery also includes an intact, unbroken battery from which the electrolyte has been removed.

“Destination facility” means a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in Sections 733.113 (a) and (c) and 733.133 (a) and (c). A facility at which a particular category of universal waste is only accumulated is not a destination facility for purposes of managing that category of universal waste.

“FIFRA” means the Federal Insecticide, Fungicide, and Rodenticide Act (7 USC 136 through 136y).

“Generator” means any person, by site, whose act or process produces hazardous waste identified or listed in 35 Ill. Adm. Code 721 or whose act first causes a hazardous waste to become subject to regulation.

“Lamp” or “universal waste lamp” is defined as the bulb or tube portion of an electric lighting device. A lamp is specifically designed to produce radiant energy, most often in the ultraviolet, visible, or infra-red regions of the electromagnetic spectrum. Common examples of universal waste electric lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

“Large quantity handler of universal waste” means a universal waste handler (as defined in this Section) that accumulates 5,000 kilograms or more total of

universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time. This designation as a large quantity handler of universal waste is retained through the end of the calendar year in which the 5,000-kilogram limit is met or exceeded.

“Mercury-containing equipment” means a device or part of a device (including thermostats, but excluding batteries and lamps) that contains elemental mercury integral to its function.

“On-site” means the same or geographically contiguous property that may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing as opposed to going along the right of way. Non-contiguous properties, owned by the same person but connected by a right-of-way that that person controls and to which the public does not have access, are also considered on-site property.

“Pesticide” means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or intended for use as a plant regulator, defoliant, or desiccant, other than any article that fulfills one of the following descriptions:

It is a new animal drug under section 201(v) of the Federal Food, Drug and Cosmetic Act (FFDCA) (21 USC 321(v)), incorporated by reference in 35 Ill. Adm. Code 720.111;

It is an animal drug that has been determined by regulation of the federal Secretary of Health and Human Services pursuant to FFDCA section 512(j) (21 USC 360b(j)), incorporated by reference in 35 Ill. Adm. Code 720.111(c), to be an exempted new animal drug; or

It is an animal feed under FFDCA section 201(w) (21 USC 321(w)), incorporated by reference in 35 Ill. Adm. Code 720.111(c), that bears or contains any substances described in either of the two preceding paragraphs of this definition.

BOARD NOTE: The second exception of corresponding 40 CFR 273.6 reads as follows: “Is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug.” This is very similar to the language of section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 USC 136(u)). The three exceptions, taken together, appear intended not to include as “pesticide” any material within the scope of federal Food and Drug Administration regulation. The Board codified this provision with the intent of retaining the same meaning as its federal counterpart while adding the definiteness required under Illinois law.

“Small quantity handler of universal waste” means a universal waste handler (as defined in this Section) that does not accumulate 5,000 kilograms or more total of

universal waste (batteries, pesticides, mercury-containing equipment, or lamps, calculated collectively) at any time.

“Thermostat” means a temperature control device that contains metallic mercury in an ampule attached to a bimetal sensing element and mercury-containing ampules that have been removed from such a temperature control device in compliance with the requirements of Section 733.113(c)(2) or 733.133(c)(2).

“Universal waste” means any of the following hazardous wastes that are subject to the universal waste requirements of this Part:

Batteries, as described in Section 733.102;

Pesticides, as described in Section 733.103;

Mercury-containing equipment, as described in Section 733.104; and

Lamps, as described in Section 733.105.

“Universal waste handler” means either of the following:

A generator (as defined in this Section) of universal waste; or

The owner or operator of a facility, including all contiguous property, that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination.

Universal waste handler does not mean:

A person that treats (except pursuant to the provisions of Section 733.113(a) or (c) or 733.133(a) or (c)), disposes of, or recycles universal waste; or

A person engaged in the off-site transportation of universal waste by air, rail, highway, or water, including a universal waste transfer facility.

“Universal waste transfer facility” means any transportation-related facility including loading docks, parking areas, storage areas, and other similar areas where shipments of universal waste are held during the normal course of transportation for ten days or less.

“Universal waste transporter” means a person engaged in the off-site transportation of universal waste by air, rail, highway, or water.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

SUBPART B: STANDARDS FOR SMALL QUANTITY HANDLERS

Section 733.110 Applicability

This Subpart B applies to small quantity handlers of universal waste (as defined in Section 733.109).

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.111 Prohibitions

A small quantity handler of universal waste is prohibited from the following acts:

- a) Disposing of universal waste; and
- b) Diluting or treating universal waste, except by responding to releases as provided in Section 733.117 or by managing specific wastes as provided in Section 733.113.

Section 733.112 Notification

A small quantity handler of universal waste is not required to notify the Agency of its universal waste handling activities.

Section 733.113 Waste Management

- a) Universal waste batteries. A small quantity handler of universal waste must manage universal waste batteries in a manner that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
 - 1) A small quantity handler of universal waste must contain any universal waste battery that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container must be closed, structurally sound, compatible with the contents of the battery, and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;
 - 2) A small quantity handler of universal waste may conduct the following activities, as long as the casing of each individual battery cell is not breached and remains intact and closed (except that cells may be opened to remove electrolyte but must be immediately closed after removal):

- A) Sorting batteries by type;
 - B) Mixing battery types in one container;
 - C) Discharging batteries so as to remove the electric charge;
 - D) Regenerating used batteries;
 - E) Disassembling batteries or battery packs into individual batteries or cells;
 - F) Removing batteries from consumer products; or
 - G) Removing electrolyte from batteries; and
- 3) A small quantity handler of universal waste that removes electrolyte from batteries, or that generates other solid waste (e.g., battery pack materials, discarded consumer products) as a result of the activities listed in subsection (a)(2) of this Section, must determine whether the electrolyte or other solid waste exhibits a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721.
- A) If the electrolyte or other solid waste exhibits a characteristic of hazardous waste, it is subject to all applicable requirements of 35 Ill. Adm. Code 702 through 705 and 720 through 728. The handler is considered the generator of the hazardous electrolyte or other waste and is subject to 35 Ill. Adm. Code 722.
 - B) If the electrolyte or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, State, or local solid (non-hazardous) waste regulations.

BOARD NOTE: See generally the Act [415 ILCS 5] and 35 Ill. Adm. Code 807 through 817 to determine whether additional facility siting, special waste, or non-hazardous waste regulations apply to the waste. Consult the ordinances of relevant units of local government to determine whether local requirements apply.

- b) Universal waste pesticides. A small quantity handler of universal waste must manage universal waste pesticides in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste pesticides must be contained in one or more of the following:

- 1) A container that remains closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;
 - 2) A container that does not meet the requirements of subsection (b)(1) of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of subsection (b)(1) of this Section;
 - 3) A tank that meets the requirements of Subpart J of 35 Ill. Adm. Code 725, except for 35 Ill. Adm. Code 725.297(c), 265.300, and 265.301; or
 - 4) A transport vehicle or vessel that is closed, structurally sound, compatible with the pesticide, and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.
- c) Universal waste mercury-containing equipment. A small quantity handler of universal waste must manage universal waste mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- 1) A small quantity handler of universal waste must place in a container any universal waste mercury-containing equipment with non-contained elemental mercury or that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions. The container must be closed; must be structurally sound; must be compatible with the contents of the device; must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions; and must be reasonably designed to prevent the escape of mercury into the environment by volatilization or any other means.
 - 2) A small quantity handler of universal waste may remove mercury-containing ampules from universal waste mercury-containing equipment provided the handler follows each of the following procedures:
 - A) It removes and manages the ampules in a manner designed to prevent breakage of the ampules;
 - B) It removes ampules only over or in a containment device (e.g., tray or pan sufficient to collect and contain any mercury released from an ampule in case of breakage);
 - C) It ensures that a mercury clean-up system is readily available to immediately transfer any mercury resulting from spills or leaks

from broken ampules from that containment device to a container that meets the requirements of 35 Ill. Adm. Code 722.134;

- D) It immediately transfers any mercury resulting from spills or leaks from broken ampules from the containment device to a container that meets the requirements of 35 Ill. Adm. Code 722.134;
 - E) It ensures that the area in which ampules are removed is well ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
 - F) It ensures that employees removing ampules are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers;
 - G) It stores removed ampules in closed, non-leaking containers that are in good condition; and
 - H) It packs removed ampules in the container with packing materials adequate to prevent breakage during storage, handling, and transportation.
- 3) A small quantity handler of universal waste mercury-containing equipment that does not contain an ampule may remove the open original housing holding the mercury from universal waste mercury-containing equipment provided the handler does as follows:
- A) It immediately seals the original housing holding the mercury with an air-tight seal to prevent the release of any mercury to the environment; and
 - B) It follows all requirements for removing ampules and managing removed ampules pursuant to subsection (c)(2) of this Section.
- 4) Required hazardous waste determination and further waste management.
- A) A small quantity handler of universal waste that removes mercury-containing ampules from mercury-containing equipment or seals mercury from mercury-containing equipment in its original housing must determine whether the following exhibit a characteristic of hazardous waste identified in Subpart C of 35 Ill. Adm. Code 721:

- i) Mercury or clean-up residues resulting from spills or leaks; or
 - ii) Other solid waste generated as a result of the removal of mercury-containing ampules (e.g., the remaining mercury-containing equipment).
- B) If the mercury, residues, or other solid waste exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of 35 Ill. Adm. Code 702 through 705 and 720 through 728. The handler is considered the generator of the mercury, residues, or other waste and must manage it in compliance with 35 Ill. Adm. Code 722.
- C) If the mercury, residues, or other solid waste is not hazardous, the handler may manage the waste in any way that is in compliance with applicable federal, State, or local solid (non-hazardous) waste regulations.

BOARD NOTE: See generally the Act [415 ILCS 5] and 35 Ill. Adm. Code 807 through 817 to determine whether additional facility siting, special waste, or non-hazardous waste regulations apply to the waste. Consult the ordinances of relevant units of local government to determine whether local requirements apply.

- d) Lamps. A small quantity handler of universal waste must manage lamps in a manner that prevents releases of any universal waste or component of a universal waste to the environment, as follows:
- 1) A small quantity handler of universal waste lamps must contain all lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;
 - 2) A small quantity handler of universal waste lamps must immediately clean up and place in a container any lamp that is broken, and the small quantity handler must place in a container any lamp that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment. Any container used must be closed, structurally sound, compatible with the contents of the lamps, and must lack evidence of leakage, spillage, or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment under reasonably foreseeable conditions; and

- 3) Small quantity handlers of universal waste lamps may treat those lamps for volume reduction at the site where they were generated under the following conditions:
- A) The lamps must be crushed in a closed system designed and operated in such a manner that any emission of mercury from the crushing system must not exceed 0.1 mg/m^3 when measured on the basis of time weighted average over an eight-hour period;
 - B) The handler must provide notification of crushing activity to the Agency quarterly, in a form as provided by the Agency. Such notification must include the following information:
 - i) Name and address of the handler;
 - ii) Estimated monthly amount of lamps crushed; and
 - iii) The technology employed for crushing, including any certification or testing data provided by the manufacturer of the crushing unit verifying that the crushing device achieves the emission controls required in subsection (d)(5)(A) of this Section;
 - C) The handler immediately transfers any material recovered from a spill or leak to a container that meets the requirements of 35 Ill. Adm. Code 722.134, and has available equipment necessary to comply with this requirement;
 - D) The handler ensures that the area in which the lamps are crushed is well-ventilated and monitored to ensure compliance with applicable OSHA exposure levels for mercury;
 - E) The handler ensures that employees crushing lamps are thoroughly familiar with proper waste mercury handling and emergency procedures, including transfer of mercury from containment devices to appropriate containers; and
 - F) The crushed lamps are stored in closed, non-leaking containers that are in good condition (e.g., no severe rusting, apparent structural defects or deterioration), suitable to prevent releases during storage, handling, and transportation.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.114 Labeling and Marking

A small quantity handler of universal waste must label or mark the universal waste to identify the type of universal waste, as follows:

- a) Universal waste batteries (i.e., each battery) or a container in which the batteries are contained must be labeled or marked clearly with any one of the following phrases: “Universal Waste-Batteries,” “Waste Batteries,” or “Used Batteries”.
- b) A container (or multiple container package unit), tank, transport vehicle, or vessel in which recalled universal waste pesticides, as described in Section 733.103(a)(1), are contained must be labeled or marked clearly, as follows:
 - 1) The label that was on or accompanied the product as sold or distributed; and
 - 2) The words “Universal Waste-Pesticides” or “Waste-Pesticides.”
- c) A container, tank, or transport vehicle, or vessel in which unused pesticide products, as described in Section 733.103(a)(2), are contained must be labeled or marked clearly, as follows:
 - 1) Pesticide labeling:
 - A) The label that was on the product when purchased, if still legible;
 - B) If using the labels described in subsection (c)(1)(A) of this Section is not feasible, the appropriate label as required under USDOT regulation 49 CFR 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), incorporated by reference in 35 Ill. Adm. Code 720.111(b); or
 - C) If using the labels described in subsections (c)(1)(A) and (c)(1)(B) of this Section is not feasible, another label prescribed or designated by the waste pesticide collection program administered or recognized by a state; and
 - 2) The words “Universal Waste-Pesticides” or “Waste-Pesticides.”
- d) Universal waste mercury-containing equipment and universal waste thermostat labeling:

- 1) Universal waste mercury-containing equipment (i.e., each device) or a container in which the equipment is contained must be labeled or marked clearly with any one of the following phrases: “Universal Waste-MercuryMercury-Containing Equipment,” or “Waste Mercury-Containing Equipment,” or “Used Mercury-Containing Equipment.”
 - 2) Universal waste thermostats (i.e., each thermostat) or a container in which the thermostats are contained must be labeled or marked clearly with any one of the following phrases: “Universal Waste-Mercury Thermostats,” or “Waste Mercury Thermostats,” or “Used Mercury Thermostats”.
- e) Each lamp or a container or package in which such lamps are contained must be labeled or clearly marked with one of the following phrases: “Universal Waste--Lamps,” “Waste Lamps,” or “Used Lamps.”

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.115 Accumulation Time Limits

- a) A small quantity handler of universal waste may accumulate universal waste for no longer than one year from the date the universal waste is generated or received from another handler, unless the requirements of subsection (b) of this Section are met.
- b) A small quantity handler of universal waste may accumulate universal waste for longer than one year from the date the universal waste is generated or received from another handler if such activity is solely for the purpose of accumulation of such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal. However, the handler bears the burden of proving that such activity is solely for the purpose of accumulation of such quantities of universal waste as are necessary to facilitate proper recovery, treatment, or disposal.
- c) A small quantity handler of universal waste that accumulates universal waste must be able to demonstrate the length of time that the universal waste has been accumulated from the date it becomes a waste or is received. The handler may make this demonstration in any of the following ways:
 - 1) Placing the universal waste in a container and marking or labeling the container with the earliest date that any universal waste in the container became a waste or was received;
 - 2) Marking or labeling each individual item of universal waste (e.g., each battery or thermostat) with the date it became a waste or was received;

- 3) Maintaining an on-site inventory system that identifies the date each universal waste became a waste or was received;
- 4) Maintaining an on-site inventory system that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers of universal waste became a waste or was received;
- 5) Placing the universal waste in a specific accumulation area and identifying the earliest date that any universal waste in the area became a waste or was received; or
- 6) Any other method that clearly demonstrates the length of time that the universal waste has been accumulated from the date it became a waste or was received.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.116 Employee Training

A small quantity handler of universal waste must inform all employees who handle or have responsibility for managing universal waste. The information must describe proper handling and emergency procedures appropriate to the types of universal waste handled at the facility.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.117 Response to Releases

- a) A small quantity handler of universal waste must immediately contain all releases of universal waste and other residues from universal waste.
- b) A small quantity handler of universal waste must determine whether any material resulting from the release is hazardous waste, and if so, must manage the hazardous waste in compliance with all applicable requirements of 35 Ill. Adm. Code 702 through 705 and 720 through 728. The handler is considered the generator of the material resulting from the release and must manage it in compliance with 35 Ill. Adm. Code 722.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.118 Off-Site Shipments

- a) A small quantity handler of universal waste is prohibited from sending or taking universal waste to a place other than another universal waste handler, a destination facility, or a foreign destination.

- b) If a small quantity handler of universal waste self-transport universal waste off-site, the handler becomes a universal waste transporter for those self-transportation activities and must comply with the transporter requirements of Subpart D of this Part while transporting the universal waste.
- c) If a universal waste being offered for off-site transportation meets the definition of hazardous material under USDOT regulation 49 CFR 171.8 (Definitions and Abbreviations), incorporated by reference in 35 Ill. Adm. Code 720.111(b), a small quantity handler of universal waste must package, label, mark, and placard the shipment and prepare the proper shipping papers in accordance with the applicable USDOT regulations under 49 CFR 171 (General Information, Regulations, and Definitions), 172 (Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements), 173 (Shippers--General Requirements for Shipments and Packages), 174 (Carriage by Rail), 175 (Carriage by Aircraft), 176 (Carriage by Vessel), 177 (Carriage by Public Highway), 178 (Specifications for Packagings), 179 (Specifications for Tank Cars), and 180 (Continuing Qualification and Maintenance of Packagings), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- d) Prior to sending a shipment of universal waste to another universal waste handler, the originating handler must ensure that the receiving handler agrees to receive the shipment.
- e) If a small quantity handler of universal waste sends a shipment of universal waste to another handler or to a destination facility and the shipment is rejected by the receiving handler or destination facility, the originating handler must do either of the following:
 - 1) Receive the waste back when notified that the shipment has been rejected; or
 - 2) Agree with the receiving handler on a destination facility to which the shipment will be sent.
- f) A small quantity handler of universal waste may reject a shipment containing universal waste or a portion of a shipment containing universal waste that it has received from another handler. If a handler rejects a shipment or a portion of a shipment, it must contact the originating handler to notify the originating handler of the rejection and to discuss reshipment of the load. The handler must perform either of the following actions:
 - 1) Send the shipment back to the originating handler; or

- 2) If agreed to by both the originating and receiving handler, send the shipment to a destination facility.
- g) If a small quantity handler of universal waste receives a shipment containing hazardous waste that is not a universal waste, the handler must immediately notify the Agency (Bureau of Land, Illinois EPA, 1021 North Grand Avenue East, Springfield, Illinois 62794-9276 (telephone: 217-782-6761)) of the illegal shipment, and provide the name, address, and phone number of the originating shipper. The Agency will provide instructions for managing the hazardous waste.
- h) If a small quantity handler of universal waste receives a shipment of non-hazardous, non-universal waste, the handler may manage the waste in any way that is in compliance with applicable federal, State, or local solid (non-hazardous) waste regulations.

BOARD NOTE: See generally the Act [415 ILCS 5] and 35 Ill. Adm. Code 807 through 817 to determine whether additional facility siting, special waste, or non-hazardous waste regulations apply to the waste. Consult the ordinances of relevant units of local government to determine whether local requirements apply.

(Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Section 733.119 Tracking Universal Waste Shipments

A small quantity handler of universal waste is not required to keep records of shipments of universal waste.

Section 733.120 Exports

A small quantity handler of universal waste that sends universal waste to a foreign destination other than to those OECD countries specified in 35 Ill. Adm. Code 722.158(a)(1) (in which case the handler is subject to the requirements of Subpart H of 35 Ill. Adm. Code 722) shall do the following:

- a) Comply with the requirements applicable to a primary exporter in 35 Ill. Adm. Code 722.153; 722.156(a)(1) through (a)(4), (a)(6), and (b); and 722.157;
- b) Export such universal waste only upon consent of the receiving country and in conformance with the USEPA Acknowledgement of Consent, as defined in Subpart E of 35 Ill. Adm. Code 722; and
- c) Provide a copy of the USEPA Acknowledgment of Consent for the shipment to the transporter transporting the shipment for export.

Source: Amended at 31 Ill. Reg. 1352, effective December 20, 2006)

Appendix P: Mercury Switch Removal Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY (415 ILCS 97/) Mercury Switch Removal Act.

(415 ILCS 97/1)

(Section scheduled to be repealed on January 1, 2017)

Sec. 1. Short title. This Act may be cited as the Mercury Switch Removal Act.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/3)

(Section scheduled to be repealed on January 1, 2017)

Sec. 3. Legislative findings. The General Assembly finds:

(a) That switches containing mercury have been used for convenience lighting and anti-lock braking systems in vehicles sold in the State of Illinois.

(b) That mercury from the switches may be released into the environment when end-of-life vehicles are flattened, crushed, baled, shredded, melted, or otherwise processed for recycling.

(c) That removing mercury switches from end-of-life vehicles is an effective way to prevent mercury from being released into the environment.

(d) That it is in the public interest of the residents of the State of Illinois to reduce the quantity of mercury entering the environment by removing mercury switches from end-of-life vehicles.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/5)

(Section scheduled to be repealed on January 1, 2017)

Sec. 5. Definitions. For the purposes of this Act:

"Agency" means the Environmental Protection Agency.

"Capture rate" means the number of convenience light mercury switches removed from end-of-life vehicles prior to the vehicle being flattened, crushed, baled, shredded, or otherwise processed for recycling as a percentage of the total number of convenience light mercury switches available for removal from end-of-life vehicles that are flattened, crushed, shredded, or otherwise processed for recycling.

"End-of-life vehicle" means any vehicle that is sold, given, or otherwise conveyed to a vehicle recycler or scrap metal recycler for the purpose of resale of its parts or recycling.

"Manufacturer" means a person who is the last person in the production or assembly process of a new motor vehicle that uses one or more mercury switches or, in the case of an imported vehicle, the importer or domestic distributor of the vehicle. "Manufacturer" does not include any person engaged in

the business of selling new motor vehicles at retail or converting or modifying new motor vehicles after the production or assembly process.

"Mercury switch" means each mercury-containing capsule or mercury-containing switch assembly that is part of a convenience light switch assembly or part of an anti-lock braking system assembly installed in a vehicle. An anti-lock braking system assembly may contain more than one mercury switch.

"Person" means any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, State agency, or any other legal entity, or their legal representative, agent, or assigns.

"Scrap metal recycler" means a person who engages in the business of shredding or otherwise processing end-of-life vehicles or other scrap metal into prepared grades and whose principal product is scrap iron, scrap steel, or nonferrous metallic scrap for sale for remelting purposes.

"Vehicle" means "motor vehicle" as that term is defined in the Illinois Vehicle Code, but excluding second division vehicles weighing more than 8,000 pounds.

"Vehicle crusher" means a person, other than a vehicle recycler or a scrap metal recycler, who engages in the business of flattening, crushing, or otherwise processing end-of-life vehicles for recycling. Vehicle crushers include, but are not limited to, persons who use fixed or mobile equipment to flatten or crush end-of-life vehicles for a vehicle recycler or a scrap recycler.

"Vehicle recycler" means a person who engages in the business of acquiring, dismantling, removing parts from, or destroying 6 or more end-of-life vehicles in a calendar year for the primary purpose of reselling the vehicle parts.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/10)

(Section scheduled to be repealed on January 1, 2017)

Sec. 10. Removal requirements.

(a) Mercury switches removed from end-of-life vehicles must be managed in accordance with the Environmental Protection Act and regulations adopted thereunder.

(b) No person shall represent that all mercury switches have been removed from a vehicle if all mercury switches have not been removed from the vehicle, except where a mercury switch cannot be removed from the vehicle because the switch is inaccessible due to significant damage to the vehicle in the area surrounding the switch.

(c) Consistent with the protection of confidential business information, vehicle recyclers, vehicle crushers, and scrap metal recyclers that remove mercury switches from end-of-life vehicles must maintain records documenting the following for each calendar quarter:

(1) the number of mercury switches the vehicle recycler, vehicle crusher, or scrap metal recycler removed from end-of-life vehicles;

(2) the number of end-of-life vehicles received by the vehicle recycler, vehicle crusher, or scrap metal recycler that contain one or more mercury switches;

(3) the number of end-of-life vehicles the vehicle recycler, vehicle crusher, or scrap metal recycler

flattened, crushed, shredded, or otherwise processed for recycling; and

(4) the make and model of each car from which one or more mercury switches was removed by the vehicle recycler, vehicle crusher, or scrap metal recycler.

The records required under this subsection (c) must be retained at the vehicle recycler's or scrap metal recycler's place of business for a minimum of 3 years and made available for inspection and copying by the Agency during normal business hours.

(d) For the period of July 1, 2006 through June 30, 2007 and for each period of July 1 through June 30 thereafter, no later than 45 days after the close of the period vehicle recyclers, vehicle crushers, and scrap metal recyclers that remove mercury switches from end-of-life vehicles must submit to the Agency an annual report containing the following information for the period: (i) the number of mercury switches the vehicle recycler, vehicle crusher, or scrap metal recycler removed from end-of-life vehicles; (ii) the number of end-of-life vehicles received by the vehicle recycler, vehicle crusher, or scrap metal recycler that contain one or more mercury switches, and (iii) the number of end-of-life vehicles the vehicle recycler, vehicle crusher, or scrap metal recycler flattened, crushed, shredded, or otherwise processed for recycling. Data required to be reported to the United States Environmental Protection Agency under federal law or regulation may be used in meeting requirements of this subsection (d), if the data contains the information required under items (i), (ii), and (iii) of this subsection. (Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/15)

(Section scheduled to be repealed on January 1, 2017)
Sec. 15. Mercury switch collection programs.

(a) Within 60 days of the effective date of this Act, manufacturers of vehicles in Illinois that contain mercury switches must begin to implement a mercury switch collection program that facilitates the removal of mercury switches from end-of-life vehicles before the vehicles are flattened, crushed, shredded, or otherwise processed for recycling and to collect and properly manage mercury switches in accordance with the Environmental Protection Act and regulations adopted thereunder. In order to ensure that the mercury switches are removed and collected in a safe and consistent manner, manufacturers must, to the extent practicable, use the currently available end-of-life vehicle recycling infrastructure. The collection program must be designed to achieve capture rates of not less than (i) 35% for the period of July 1, 2006, through June 30, 2007; (ii) 50% for the period of July 1, 2007, through June 30, 2008; and (iii) 70% for the period of July 1, 2008, through June 30, 2009 and for each subsequent period of July 1 through June 30. At a minimum, the collection program must:

(1) Develop and provide educational materials that include guidance as to which vehicles may contain mercury switches and procedures for locating and removing mercury switches. The materials may include, but are not limited to, brochures, fact sheets, and videos.

(2) Conduct outreach activities to encourage vehicle recyclers and vehicle crushers to participate in

the mercury switch collection program. The activities may include, but are not limited to, direct mailings, workshops, and site visits.

(3) Provide storage containers to participating vehicle recyclers and vehicle crushers for mercury switches removed under the program.

(4) Provide a collection and transportation system to periodically collect and replace filled storage containers from vehicle recyclers, vehicle crushers, and scrap metal recyclers, either upon notification that a storage container is full or on a schedule predetermined by the manufacturers.

(5) Establish an entity that will serve as a point of contact for the collection program and that will establish, implement, and oversee the collection program on behalf of the manufacturers.

(6) Track participation in the collection program and the progress of mercury switch removals and collections.

(b) Within 90 days of the effective date of this Act, manufacturers of vehicles in Illinois that contain mercury switches must submit to the Agency an implementation plan that describes how the collection program under subsection (a) of this Section will be carried out for the duration of the program and how the program will achieve the capture rates set forth in subsection (a) of this Section. At a minimum, the implementation plan must:

(A) Identify the educational materials that will assist vehicle recyclers, vehicle crushers, and scrap metal processors in identifying, removing, and properly managing mercury switches removed from end-of-life vehicles.

(B) Describe the outreach program that will be undertaken to encourage vehicle recyclers and vehicle crushers to participate in the mercury switch collection program.

(C) Describe how the manufacturers will ensure that mercury switches removed from end-of-life vehicles are managed in accordance with the Illinois Environmental Protection Act and regulations adopted thereunder.

(D) Describe how the manufacturers will collect and document the information required in the quarterly reports submitted pursuant to subsection (e) of this Section.

(E) Describe how the collection program will be financed and implemented.

(F) Identify the manufacturer's address to which the Agency should send the notice required under subsection (f) of this Section.

The Agency shall review the collection program plans it receives for completeness and shall notify the manufacturer in writing if a plan is incomplete. Within 30 days after receiving a notification of incompleteness from the Agency the manufacturer shall submit to the Agency a plan that contains all of the required information.

(c) The Agency must provide assistance to manufacturers in their implementation of the collection program required under this Section. The assistance shall include providing manufacturers with information about businesses likely to be engaged in vehicle recycling or vehicle crushing, conducting

site visits to promote participation in the collection program, and assisting with the scheduling, locating, and staffing of workshops conducted to encourage vehicle recyclers and vehicle crushers to participate in the collection program.

(d) Manufacturers subject to the collection program requirements of this Section shall provide, to the extent practicable, the opportunity for trade associations of vehicle recyclers, vehicle crushers, and scrap metal recyclers to be involved in the delivery and dissemination of educational materials regarding the identification, removal, collection, and proper management of mercury switches in end-of-life vehicles.

(e) (Blank).

(f) If the reports required under this Act indicate that the capture rates set forth in subsection (a) of this Section for the period of July 1, 2007, through June 30, 2008, or for any subsequent period have not been met the Agency shall provide notice that the capture rate was not met; provided, however, that the Agency is not required to provide notice if it determines that the capture rate was not met due to a force majeure. The Agency shall provide the notice by posting a statement on its website and by sending a written notice via certified mail to the manufacturers subject to the collection program requirement of this Section at the addresses provided in the manufacturers' collection plans. Once the Agency provides notice pursuant to this subsection (f) it is not required to provide notice in subsequent periods in which the capture rate is not met.

(g) Beginning 30 days after the Agency first provides notice pursuant to subsection (f) of this Section, the following shall apply:

(1) Vehicle recyclers must remove all mercury switches from each end-of-life vehicle before delivering the vehicle to an on-site or off-site vehicle crusher or to a scrap metal recycler, provided that a vehicle recycler is not required to remove a mercury switch that is inaccessible due to significant damage to the vehicle in the area surrounding the mercury switch that occurred before the vehicle recycler's receipt of the vehicle in which case the damage must be noted in the records the vehicle recycler is required to maintain under subsection (c) of Section 10 of this Act.

(2) No vehicle recycler, vehicle crusher, or scrap metal recycler shall flatten, crush, or otherwise process an end-of-life vehicle for recycling unless all mercury switches have been removed from the vehicle, provided that a mercury switch that is inaccessible due to significant damage to the vehicle in the area surrounding the mercury switch that occurred before the vehicle recycler's, vehicle crusher's, or scrap metal recycler's receipt of the vehicle is not required to be removed. The damage must be noted in the records the vehicle recycler or vehicle crusher is required to maintain under subsection (c) of Section 10 of this Act.

(3) Notwithstanding paragraphs (1) through (2) of this subsection (g), a scrap metal recycler may agree to accept an end-of-life vehicle that contains one or more mercury switches and that has not been flattened, crushed, shredded, or otherwise processed for recycling provided the scrap metal recycler removes all mercury switches from

the vehicle before the vehicle is flattened, crushed, shredded, or otherwise processed for recycling. Scrap metal recyclers are not required to remove a mercury switch that is inaccessible due to significant damage to the vehicle in the area surrounding the mercury switch that occurred before the scrap metal recycler's receipt of the vehicle. The damage must be noted in the records the scrap metal recycler is required to maintain under subsection (c) of Section 10 of this Act.

(4) Manufacturers subject to the collection program requirements of this Section must provide to vehicle recyclers, vehicle crushers, and scrap metal recyclers the following compensation for all mercury switches removed from end-of-life vehicles on or after the date of the notice: \$2.00 for each mercury switch removed by the vehicle recycler, vehicle crusher, or the scrap metal recycler, the costs of the containers in which the mercury switches are collected, and the costs of packaging and transporting the mercury switches off-site. Payment of this compensation must be provided in a prompt manner.

(h) In meeting the requirements of this Section manufacturers may work individually or as part of a group of 2 or more manufacturers.

(Source: P.A. 97-459, eff. 7-1-12.)

(415 ILCS 97/20)

(Section scheduled to be repealed on January 1, 2017)

Sec. 20. Evaluation. At the end of calendar year 2007, and at the end of each year thereafter through calendar year 2016, the Agency shall meet with manufacturers subject to the collection program requirements of Section 15 of this Act to review the performance of the manufacturers' mercury switch collection program, provided that the manufacturers must request such a meeting. If the program is not accomplishing the objectives set forth in the implementation plan the Agency may recommend modifications to the program or recommend the investigation of additional methods to promote the removal, collection, and proper management of mercury switches from end-of-life vehicles.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/25)

(Section scheduled to be repealed on January 1, 2017)

Sec. 25. Agency recommendations. Every 3 years the Agency shall make a recommendation to the General Assembly as to whether the \$2 fee required under Section 15 of this Act should be modified to ensure adequate compensation for the removal of mercury switches from end-of-life vehicles. In developing its recommendations, the Agency shall seek comments or information from interested persons, including, but not limited to, representatives of vehicle recyclers, scrap metal recyclers, vehicle manufacturers, steel and iron manufacturers, and environmental groups.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/30)

(Section scheduled to be repealed on January 1, 2017)

Sec. 30. All information required to be submitted to the Agency under this Act must be submitted on forms prescribed by the Agency.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/35)

(Section scheduled to be repealed on January 1, 2017)

Sec. 35. The Agency shall have the duty to investigate violations of this Act.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/40)

(Section scheduled to be repealed on January 1, 2017)

Sec. 40. Penalties.

(a) Any manufacturer that willfully or knowingly violates any provision of this Act or willfully or knowingly fails to perform any duty imposed by this Act shall be liable for a civil penalty not to exceed \$1,000 for the violation and an additional civil penalty not to exceed \$1,000 for each day the violation continues, and shall be liable for a civil penalty not to exceed \$5,000 for a second or subsequent violation and an additional civil penalty not to exceed \$1,000 for each day the second or subsequent violation continues.

(b) Any vehicle recycler, vehicle crusher, or scrap metal recycler that willfully or knowingly violates any provision of this Act or fails to perform any duty imposed by this Act shall be liable for a civil penalty not to exceed \$250 for the first violation and not to exceed \$500 for a second or subsequent violation.

(c) The penalties provided for in this Section may be recovered in a civil action brought in the name of the people of the State of Illinois by the State's Attorney of the county in which the violation occurred or by the Attorney General. Without limiting any other authority that may exist for the awarding of attorney's fees and costs, a court of competent jurisdiction may award costs and reasonable attorney's fees, including the reasonable costs of expert witnesses and consultants, to the State's Attorney or the Attorney General in a case where he or she has prevailed against a person who has committed a willful, knowing, or repeated violation of this Act. Any funds collected under this Section in an action in which the Attorney General has prevailed shall be deposited in the Hazardous Waste Fund established under the Environmental Protection Act. Any funds collected under this Section in an action in which a State's Attorney has prevailed shall be retained by the county in which he or she serves.

(d) The State's Attorney of the county in which the violation occurred or the Attorney General may, at the request of the Agency or on his or her own motion, institute a civil action for an injunction, prohibitory or mandatory, to restrain violations of this Act or to require such other actions as may be necessary to address violations of this Act.

(e) The penalties and injunctions provided in this Act are in addition to any penalties, injunctions, or other relief provided under any other law. Nothing in this Act shall bar a cause of action by the State for any other penalty, injunction, or relief provided by any other law.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/45)

(Section scheduled to be repealed on January 1, 2017)

Sec. 45. Manufacturers subject to the collection program requirement of Section 15 of this Act shall indemnify, defend,

and hold harmless vehicle recyclers, vehicle crushers, and scrap metal recyclers for any liabilities arising from releases from a mercury switch after the switch is transferred under the manufacturer's collection program to the manufacturer or its agent, provided that the switch has been managed in accordance with the Environmental Protection Act and regulations adopted thereunder prior to the transfer.
(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/50)

(Section scheduled to be repealed on January 1, 2017)

Sec. 50. If the Agency determines that the requirements of this Act are no longer necessary because a federal program provides equal or greater protection of human health and safety and the environment in this State, the Agency shall submit a report of its determination to the General Assembly. In making its determination the Agency shall seek comments or information from interested persons, including, but not limited to, representatives of vehicle recyclers, vehicle crushers, scrap metal recyclers, vehicle manufacturers, steel and iron manufacturers, and environmental groups.

(Source: P.A. 94-732, eff. 4-24-06.)

(415 ILCS 97/55)

(Section scheduled to be repealed on January 1, 2017)

Sec. 55. Repealer. This Act is repealed on January 1, 2017.

(Source: P.A. 96-1281, eff. 7-26-10.)

(415 ILCS 97/99)

(Section scheduled to be repealed on January 1, 2017)

Sec. 99. Effective date. This Act takes effect upon becoming law.

(Source: P.A. 94-732, eff. 4-24-06.)

Appendix Q: Mercury Thermostat Collection Act

Information maintained by the Legislative Reference Bureau

Updating the database of the Illinois Compiled Statutes (ILCS) is an ongoing process. Recent laws may not yet be included in the ILCS database, but they are found on this site as [Public Acts](#) soon after they become law. For information concerning the relationship between statutes and Public Acts, refer to the [Guide](#).

Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

ENVIRONMENTAL SAFETY (415 ILCS 98/) Mercury Thermostat Collection Act.

(415 ILCS 98/1)

(Section scheduled to be repealed on January 1, 2021)

Sec. 1. Short title. This Act may be cited as the Mercury Thermostat Collection Act.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/5)

(Section scheduled to be repealed on January 1, 2021)

Sec. 5. Legislative findings. The General Assembly finds that:

(1) many older thermostats used to activate heating and cooling equipment contain mercury as part of a tilt switch component in the thermostat;

(2) the total amount of mercury used in each of those thermostats averages about 4 grams;

(3) millions of mercury-containing thermostats are still in use in homes and businesses in the United States;

(4) mercury in those thermostats poses a risk to human health and the environment if those thermostats are not properly managed at the end of their useful life;

(5) the major thermostat manufacturers have established a voluntary program to facilitate the collection and proper management of mercury thermostats taken out of service;

(6) the annual average of mercury-containing thermostats collected for recycling in Illinois under the existing voluntary collection program from 2006 to 2008 was 4,433;

(7) thousands of mercury-containing thermostats are taken out of service annually in the State;

(8) it is in the public interest to achieve a significant increase in the collection and proper management of mercury thermostats taken out of service in the State.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/10)

(Section scheduled to be repealed on January 1, 2021)

Sec. 10. Definitions.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Collection program" means a system for the collection, transportation, recycling, and disposal of out-of-service mercury thermostats that is financed and managed or provided by a thermostat manufacturer individually or collectively with other thermostat manufacturers in accordance with this Act.

"Contractor" means a person engaged in the business of

installation, service, or removal of heating, ventilation, and air-conditioning components.

"Mercury thermostat" means a thermostat that meets the definition of a "mercury thermostat" under subsection (f) of Section 22.23b of the Environmental Protection Act.

"Out-of-service mercury thermostat" means a mercury thermostat that is removed, replaced, or otherwise taken out of service.

"Person" means any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, State agency, or any other legal entity, or its legal representatives, agents, or assigns.

"Qualified contractor" means a person engaged in the business of installation, service, or removal of heating, ventilation, and air-conditioning components who employs 7 or more service technicians or installers or who is located in an area outside of an urban area, as defined by the United States Bureau of the Census.

"Qualified local government authorities" means household hazardous waste facilities, solid waste management agencies, environmental management agencies, or departments of public health.

"Thermostat manufacturer" means a person who owns or owned a name brand of one or more mercury thermostats sold in the State.

"Thermostat retailer" means a person who sells thermostats of any kind primarily to homeowners or other nonprofessionals through any sale or distribution mechanism, including, but not limited to, sales using the Internet or catalogs. A thermostat retailer that meets the definition of thermostat wholesaler shall be considered a thermostat wholesaler.

"Thermostat wholesaler" means a person who is engaged in the distribution and wholesale selling of heating, ventilation, and air-conditioning components, including, but not limited to, thermostats, to contractors, and whose total wholesale sales account for 80% or more of its total sales. A thermostat manufacturer, as defined in this Section, is not a thermostat wholesaler.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/15)

(Section scheduled to be repealed on January 1, 2021)

Sec. 15. Mercury thermostat collection programs.

(a) Each thermostat manufacturer shall, individually or collectively with other thermostat manufacturers, establish and maintain a collection program for the collection, transportation, and proper management of out-of-service mercury thermostats in accordance with the provisions of this Act.

(b) Each thermostat manufacturer shall, individually or collectively with other thermostat manufacturers through a collection program, do the following:

(1) On and after January 1, 2011, compile a list of thermostat wholesalers in the State and offer each thermostat wholesaler containers for the collection of out-of-service mercury thermostats.

(2) On and after January 1, 2011, make collection containers available to all qualified contractors, thermostat wholesalers, thermostat retailers, and

qualified local government authorities in this State that request a container. Each thermostat manufacturer shall with each container include information regarding the proper management of out-of-service mercury thermostats as universal waste in accordance with the collection program and Board's rules.

(3) Establish a system to collect, transport, and properly manage out-of-service mercury thermostats from all collection sites established under this Section.

(4) Not include any fees or other charges to persons participating in the program, except that each thermostat wholesaler, qualified contractor, qualified local government authority, or thermostat retailer that is provided with one or more collection containers may be charged a one-time program administration fee not to exceed \$75 per collection container.

(5) From January 1, 2011, through December 31, 2013, conduct education and outreach efforts, including, but not limited to the following:

(A) create a public service announcement promoting collection and proper management of out-of-service mercury thermostats, copies of which shall be provided to the Agency;

(B) establish and maintain a publicly accessible website for the dissemination of educational materials to promote the collection of out-of-service mercury thermostats. This website shall include templates of the educational materials on the Internet website in a form and format that can be easily downloaded and printed. The link to this website shall be provided to the Agency;

(C) contact thermostat wholesalers at least once a year to encourage their support and participation in educating their customers on the importance of and statutory requirements for the collection and proper management of out-of-service mercury thermostats;

(D) develop and implement strategies to encourage participating thermostat retailers to educate their customers on the importance of and opportunities for collecting and recycling out-of-service mercury thermostats;

(E) create and maintain a web-based program that allows contractors and consumers to identify collection sites for out-of-service mercury thermostats by zip code in the State;

(F) prepare and mail to contractor associations a postcard or other notice that provides information on the collection program for out-of-service mercury thermostats; and

(G) develop informational articles, press releases, and news stories pertaining to the importance of and opportunities for collecting and recycling out-of-service mercury thermostats and distribute those materials to trade publications, local media, and stakeholder groups.

(6) On or before January 1, 2011, develop and update as necessary educational and other outreach materials for distribution to contractors, contractor associations, and consumers. Those materials shall be made available for use by participating thermostat wholesalers, thermostat

retailers, contractors, and qualified local government authorities. The materials shall include, but not be limited to, the following:

(A) signage, such as posters and cling signage, that can be prominently displayed to promote the collection of out-of-service mercury thermostats to contractors and consumers; and

(B) written materials or templates of materials for reproduction by thermostat wholesalers and thermostat retailers to be provided to customers at the time of purchase or delivery of a thermostat. The materials shall include, but not be limited to, information on the importance of properly managing out-of-service mercury thermostats and opportunities for the collection of those thermostats.

(7) Provide an opportunity for the Agency and other interested stakeholders to offer feedback and suggestions on the collection program.

(c) If the collection programs do not collectively achieve the collection goals provided for in Section 25 of this Act for calendar year 2013, 2015 or 2017, thermostat manufacturers shall, individually or collectively, submit to the Agency for review and approval proposed revisions to the collection programs that are designed to achieve the goals in subsequent calendar years. The proposed revisions shall be submitted to the Agency with the annual report required in Section 20 of this Act.

(d) Within 90 days after receipt of the proposed collection program revisions required under subsection (c) of this Section, the Agency shall review and (i) approve, (ii) disapprove, or (iii) approve with modifications the proposed collection program revisions.

(1) The Agency shall approve proposed revisions if the Agency determines that the revised collection programs will collectively achieve the collection goals set forth in Section 25 of this Act.

(2) If the Agency determines the revised collection programs will not collectively achieve the collection goals set forth in Section 25 of this Act, the Agency may require modifications to one or more collection programs that the Agency determines are necessary to achieve the collection goals. Modifications required by the Agency may include improvements to outreach and education conducted under the collection program, expansion of the number and location of collection sites established under the program, modification of the roles of participants, and a \$5 financial incentive in the form of either cash or a coupon offered by the manufacturer to contractors and consumers for each out-of-service mercury thermostat returned to a collection site.

(3) Prior to issuing any decision under this subsection (d) the Agency shall consult with thermostat manufacturers and other interested groups.

(4) Thermostat manufacturers shall begin the process to implement collection program revisions approved by the Agency, with or without modifications, within 90 days after approval.

(5) If the program revisions are disapproved, the Agency shall notify the thermostat manufacturers in writing as to the reasons for the disapproval. The

thermostat manufacturers shall have 35 days to submit a new collection program revision.

(6) Any action by the Agency to disapprove or modify proposed collection program revisions under this subsection (d) shall be subject to appeal to the Board in the same manner as provided for a permit decision under Section 40 of the Environmental Protection Act.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/20)

(Section scheduled to be repealed on January 1, 2021)

Sec. 20. Reporting on collection efforts.

(a) No later than September 1, 2011, and no later than September 1 of each year thereafter, each thermostat manufacturer shall, individually or collectively with other thermostat manufacturers, submit a mid-term report on its collection program to the Agency covering the six-month period beginning on January 1st of the year in which the report is due. The mid-term report shall identify the number of out-of-service mercury thermostats collected under the program and a listing of all collection sites in the State.

(b) No later than April 1, 2012, and no later than April 1 of each year thereafter, each thermostat manufacturer shall, individually or collectively with other thermostat manufacturers, submit an annual report on its collection program to the Agency covering the one-year period ending December 31st of the previous year. Each report shall be posted on the manufacturer's or program operator's respective internet website. The annual report shall include, but not be limited to, the following:

(1) the number of out-of-service mercury thermostats collected and managed under this Act during the previous calendar year;

(2) the estimated total amount of mercury contained in the out-of-service mercury thermostats collected under this Act during the previous calendar year;

(3) an evaluation of the effectiveness of the collection program;

(4) a list of all thermostat wholesalers, contractors, qualified local government authorities, and thermostat retailers participating in the program as mercury thermostat collection sites and the number of out-of-service mercury thermostats returned by each;

(5) an accounting of the program's administrative costs;

(6) a description of outreach strategies employed under item (5) of subsection (b) of Section 15 of this Act;

(7) examples of outreach and educational materials used under item (6) of subsection (b) of Section 15 of this Act;

(8) the Internet website address or addresses where the annual report may be viewed online;

(9) a description of how the out-of-service mercury thermostats were managed;

(10) any modifications that the thermostat manufacturer has made or is planning to make in its collection program; and

(11) the identification of a collection program contact and the business phone number, mailing address,

and e-mail address for the contact.
(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/25)

(Section scheduled to be repealed on January 1, 2021)

Sec. 25. Collection goals. The collection programs established by thermostat manufacturers under this Act shall be designed to collectively achieve the following statewide goals:

(a) For calendar year 2011, the collection of least 5,000 mercury thermostats taken out of service in the State during the calendar year.

(b) For calendar years 2012, 2013, and 2014, the collection of at least 15,000 mercury thermostats taken out of service in the State during each calendar year.

(c) For calendar years 2015 through 2020, the collection goals shall be established by the Agency. The Agency shall establish collection goals no later than November 1, 2014. The collection goals established by the Agency shall maximize the annual collection of out-of-service mercury thermostats in the State. In developing the collection goals, the Agency shall take into account, at a minimum, (i) the effectiveness of collection programs for out-of-service mercury thermostats in the State and other states, including education and outreach efforts, (ii) collection requirements in other states, (iii) any reports or studies on the number of out-of-service mercury thermostats that are available for collection in this State, other states, and nationally, and (iv) other factors. Prior to establishing the collection goals, the Agency shall consult with stakeholder groups that include, at a minimum, representatives of thermostat manufacturers, environmental groups, thermostat wholesalers, contractors, and thermostat retailers.

(d) The collection goals established by the Agency under subsection (c) of this Section are statements of general applicability under Section 1-70 of the Illinois Administrative Procedure Act and shall be adopted in accordance with the procedures of that Act. Any person adversely affected by a goal established by the Agency under subsection (c) of this Section may obtain a determination of the validity or application of the goal by filing a petition for review within 35 days after the date the adopted goal is published in the Illinois Register pursuant to subsection (d) of Section 40 of the Illinois Administrative Procedure Act. Review shall be afforded directly in the Appellate Court for the District in which the cause of action arose and not the Circuit Court. During the pendency of the review, the goal under review shall remain in effect.

(Source: P.A. 96-1295, eff. 7-26-10; 97-333, eff. 8-12-11.)

(415 ILCS 98/30)

(Section scheduled to be repealed on January 1, 2021)

Sec. 30. Management of out-of-service mercury thermostats. All contractors, thermostat wholesalers, thermostat manufacturers, and thermostat retailers participating in the program shall handle and manage the out-of-service mercury thermostats in a manner that is consistent with the provisions of the universal waste regulations adopted by the Board.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/35)

(Section scheduled to be repealed on January 1, 2021)

Sec. 35. Thermostat wholesaler and contractor responsibilities.

(a) On and after July 1, 2011, no thermostat wholesaler shall sell, offer to sell, distribute, or offer to distribute thermostats unless the wholesaler:

(1) participates as a collection site for out-of-service mercury thermostats;

(2) uses the containers provided by the collection program to facilitate collection of out-of-service mercury thermostats by contractors;

(3) complies with the requirements of the collection program related to the acceptance of out-of-service mercury thermostats; and

(4) distributes to its customers the educational outreach materials developed under item (6) of subsection (b) of Section 15.

(b) On or after July 1, 2011, no contractor or other person shall remove, replace, or otherwise take out of service a mercury thermostat unless the contractor or person delivers it to a collection site established under this Act.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/40)

(Section scheduled to be repealed on January 1, 2021)

Sec. 40. Agency responsibilities.

(a) No later than June 1, 2011, the Agency shall maintain on its website information regarding the collection and proper management of out-of-service mercury thermostats in the State. The information shall include, but is not limited to, the following:

(1) a description of the collection programs established under this Act;

(2) a report on the progress towards achieving the statewide collection goals set forth in Section 25 of this Act; and

(3) a list of all thermostat wholesalers, contractors, qualified local government authorities, and thermostat retailers participating in the program as collection sites.

(b) No later than November 1, 2019, the Agency shall submit a written report to the Governor and General Assembly regarding the effectiveness of the collection programs established under this Act, information on the number of out-of-service thermostats collected, how the out-of-service thermostats were managed, and an estimate of the number of thermostats that are available for collection. The Agency shall use this information to recommend whether the sunset date specified in Section 55 for this Act should be extended, along with any other statutory changes. In preparing the report, the Agency shall consult with mercury thermostat manufacturers, environmental organizations, and other interest groups.

(c) In conjunction with the educational and outreach programs implemented by the thermostat manufacturers under this Act, the Agency shall conduct outreach to promote the collection and proper management of out-of-service mercury thermostats.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/45)

(Section scheduled to be repealed on January 1, 2021)

Sec. 45. Penalties.

(a) Any thermostat manufacturer that violates any provision of this Act or any rule adopted by the Agency pursuant to this Act, or that fails to perform any duty imposed by this Act shall be liable for a civil penalty not to exceed \$2,500 per day for each violation. Each violation of this Act shall constitute a separate offense and violation.

(b) Any thermostat wholesaler, contractor, or other person that violates any provision of this Act, or any rule adopted by the Agency pursuant to this Act, or that fails to perform any duty imposed by this Act shall be liable for a civil penalty not to exceed \$500 per day for each violation. Each violation of this Act shall constitute a separate offense and violation.

(c) The penalties provided for in this Section may be recovered in a civil action brought in the name of the people of the State of Illinois by the State's Attorney of the county in which the violation occurred or by the Attorney General. Any funds collected under this Section in an action in which the Attorney General has prevailed shall be deposited in the Environmental Protection Trust Fund, to be used in accordance with the provisions of the Environmental Trust Fund Act.

(d) There shall be no penalty under this Section for a thermostat manufacturer's failure to achieve the statewide collection goals set forth in Section 25 of this Act.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/50)

(Section scheduled to be repealed on January 1, 2021)

Sec. 50. Disposal prohibition.

(a) Beginning July 1, 2011, no person may knowingly cause or allow the mixing of an out-of-service mercury thermostat with any other municipal waste that is intended for disposal at a sanitary landfill.

(b) Beginning July 1, 2011, no person may knowingly cause or allow the disposal of an out-of-service mercury thermostat in a sanitary landfill.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/55)

(Section scheduled to be repealed on January 1, 2021)

Sec. 55. Repealer. This Act is repealed on January 1, 2021.

(Source: P.A. 96-1295, eff. 7-26-10.)

(415 ILCS 98/99)

(Section scheduled to be repealed on January 1, 2021)

Sec. 99. Effective date. This Act takes effect upon becoming law.

(Source: P.A. 96-1295, eff. 7-26-10.)

**Appendix R: News Article Regarding Emissions Monitoring at
Sauget Incinerator**

Environmentalists urge more emissions monitoring at Sauget incinerator

FEBRUARY 19, 2013 8:44 PM • BY JEFFREY TOMICH JTOMICH@POST-DISPATCH.COM 314-340-8320

EAST ST. LOUIS • Area environmental groups said they welcome a federal proposal to establish limits on the amount of toxic metals burned at Veolia Environmental Services' hazardous waste incinerator in Sauget, but they also pressed regulators for additional emissions monitoring.

The groups' comments came during a public hearing Tuesday night in East St. Louis in response to a proposal by the U.S. Environmental Protection Agency to limit the amount of mercury, lead, arsenic and other heavy metals that can be burned every hour at the Metro East plant.

The EPA is also proposing to monitor emissions at one of the facility's three units for a year to make sure it complies with the federal Clean Air Act.

The American Bottom Conservancy and Missouri Coalition for the Environment urged EPA to track emissions from all three of the plant's incinerators.

"There are all sorts of ways for the company to game the system," Kathy Andria, president of the American Bottom Conservancy, told the agency. "We worry that the company will simply shift metal-bearing waste streams to the other two units."

The incinerator, which burns and disposes of medical, chemical and other hazardous waste, is one of 22 such facilities in the country. It has long been a target of environmental groups concerned about the plant's emissions in the midst of an urban setting. A third of the people living around the incinerator have incomes below the poverty rate, and there is concern about the effect of mercury settling in the lakes at nearby Frank Holten State Park, which is used for subsistence fishing.

Andria cited the plant's history of environmental troubles, including a finding by the EPA last summer alleging Clean Air Act violations.

Joe Kellmeyer, an attorney representing Veolia, was present at Tuesday's hearing, but said the company would submit its comments on the permit proposal in writing. He didn't comment on the EPA's finding of violation issued in August, and said the company would respond to that, too, in writing.

Operating permits for large industrial facilities like the Sauget incinerator are usually issued by the state. But a 2005 lawsuit by the American Bottom Conservancy and the Sierra Club forced the U.S. EPA to take over as the permitting agency.

The EPA issued the initial operating permit to Veolia in 2008. At the time, the permit didn't include hourly limits on the amount of mercury and other heavy metals that are fed to the plant's incinerators.

Veolia itself has proposed such limits to the EPA using data extrapolated from tests conducted in 2008. But the EPA rejected the company's calculations and opted to propose its own limits more closely based on actual performance data.

The proposed permit revisions also require Veolia to install a continuous emissions monitoring system on one of its combustion units for 12 months to help ensure the established limits protect air quality.

Veolia will continue operating the facility under its existing permit until a revision is issued.

The EPA will accept comments on the permit proposal until April 1.

Appendix S: IEPA One-Day HHW Collection Results for Study

Area

Champaign County One-Day Collection Results

Date: 4/7/1990

Location: Champaign

Contractor: Information not available

Population	Data not available
# Attending	637
Households Participating	637
Eligible Households	Data not available
Percentage of households participating	Data not available
Cost per household	\$245.14
Total Cost	\$156,157.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	98.25	37.08%
Latex Paints	91.00	34.34%
Flammable Solvents	11.78	4.45%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	0	0.00%
Corrosives	8.43	3.18%
Poisons and Pesticides	13.88	5.24%
Oils	8.61	3.25%
Oxidizers	1.92	0.72%
Aerosol Paints	0	0.00%

Aerosol Poisons	17	6.42%
Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	14.09	5.32%
Flammable Liquids not bulkable	0	0.00%
Total	264.96	

Date: 3/27/1993

Location: Rantoul

Contractor: Heritage Environmental Services, LLC

Population	29,859
# Attending	396
Households Participating	574
Eligible Households	9,869.00
Percentage of households participating	5.82%
Cost per household	\$102.91
Total Cost	\$59,071.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	45.00	44.07%
Latex Paints	0.00	0.00%

Flammable Solvents	10.27	10.06%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	13.28	13.01%
Corrosives	4	3.92%
Poisons and Pesticides	10	9.79%
Oils	5.56	5.45%
Oxidizers	3	2.94%
Aerosol Paints	0	0.00%
Aerosol Poisons	11	10.77%
Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0	0.00%
Flammable Liquids not bulkable	0	0.00%
Total	102.11	

Date: 4/13/1996

Location: Urbana

Contractor: Pat Perretti Freight Services, Inc.

Population	36,344
# Attending	563
Households Participating	658

Eligible Households	13,210.00
Percentage of households participating	4.98%
Cost per household	\$55.71
Total Cost	\$36,659.50

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	31.00	22.77%
Latex Paints	0.00	0.00%
Flammable Solvents	16	11.75%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	23	16.89%
Corrosives	3	2.20%
Poisons and Pesticides	22	16.16%
Oils	25.45	18.69%
Oxidizers	1	0.73%
Aerosol Paints	0	0.00%
Aerosol Poisons	12	8.81%
Household Batteries	1.18	0.87%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	1.54	1.13%
Flammable Liquids not bulkable	0	0.00%
Total	136.17	

Date: 9/15/2001

Location: Rantoul

Contractor: MSE Environmental Services, Inc.

Population	40,871
# Attending	532
Households Participating	778
Eligible Households	17,082.00
Percentage of households participating	4.55%
Cost per household	\$74.87
Total Cost	\$58,246.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	32.00	16.36%
Latex Paints	18.00	9.20%
Flammable Solvents	4.09	2.09%
Anti-Freeze	3	1.53%
Adhesives, Sealers and Flammables not bulked	18.5	9.46%
Corrosives	3.24	1.66%
Poisons and Pesticides	60.09	30.73%
Oils	27.27	13.94%
Oxidizers	7.74	3.96%
Aerosol Paints	11.1	5.68%
Aerosol Poisons	3.7	1.89%
Household Batteries	1.71	0.87%

Fluorescent Lamps	1.7	0.87%
Mercury	0.54	0.28%
Asbestos	1	0.51%
Others	1.89	0.97%
Flammable Liquids not bulkable	0	0.00%
Total	195.57	

Date: 11/3/2001

Location: Champaign

Contractor: Heritage Environmental Services, LLC

Population	104,707
# Attending	1,319
Households Participating	1,560
Eligible Households	41,882
Percentage of households participating	3.72%
Cost per household	\$59.23
Total Cost	\$93,651.70

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	25.00	10.26%
Latex Paints	12.00	4.93%
Flammable Solvents	12	4.93%
Anti-Freeze	5	2.05%

Adhesives, Sealers and Flammables not bulked	38	15.60%
Corrosives	10.9	4.48%
Poisons and Pesticides	54.9	22.54%
Oils	42	17.24%
Oxidizers	2.62	1.08%
Aerosol Paints	14.8	6.08%
Aerosol Poisons	8	3.28%
Household Batteries	2.09	0.86%
Fluorescent Lamps	9	3.70%
Mercury	1.09	0.45%
Asbestos	0.54	0.22%
Others	5.63	2.31%
Flammable Liquids not bulkable	0	0.00%
Total	243.57	

Date: 11/1/2003

Location: Champaign

Contractor: Heritage Environmental Services, LLC

Population	173,025
# Attending	1,535
Households Participating	1,929
Eligible Households	63,900
Percentage of households participating	3.02%

Cost per household	\$55.17
Total Cost	\$106,426.40

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	16.00	7.29%
Latex Paints	11.00	5.01%
Flammable Solvents	15.54	7.08%
Anti-Freeze	8	3.65%
Adhesives, Sealers and Flammables not bulked	37	16.86%
Corrosives	9	4.10%
Poisons and Pesticides	48.1	21.92%
Oils	28	12.76%
Oxidizers	1.54	0.70%
Aerosol Paints	12	5.47%
Aerosol Poisons	11.1	5.06%
Household Batteries	1.27	0.58%
Fluorescent Lamps	11	5.01%
Mercury	1.09	0.50%
Asbestos	0.27	0.12%
Others	1.09	0.50%
Flammable Liquids not bulkable	7.4	3.37%
Total	219.40	

Date: 4/29/2006

Location: Urbana

Contractor: Onyx Environmental Services

Population	39,178
# Attending	1,254
Households Participating	1,503
Eligible Households	15,311
Percentage of households participating	9.82%
Cost per household	\$64.34
Total Cost	\$96,705.25

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	18.00	7.83%
Latex Paints	9.00	3.91%
Flammable Solvents	20.27	8.81%
Anti-Freeze	8	3.48%
Adhesives, Sealers and Flammables not bulked	37	16.09%
Corrosives	9	3.91%
Poisons and Pesticides	59.9	26.05%
Oils	27.43	11.93%
Oxidizers	1.61	0.70%
Aerosol Paints	22.2	9.65%
Aerosol Poisons	3	1.30%
Household Batteries	4.89	2.13%

Fluorescent Lamps	7.5	3.26%
Mercury	1	0.43%
Asbestos	1	0.43%
Others	0.18	0.08%
Flammable Liquids not bulkable	0	0.00%
Total	229.98	

Date: 9/29/2012

Location: Champaign

Contractor: Heritage Environmental Services, LLC

Population	184,905
# Attending	1,555
Households Participating	2,293
Eligible Households	80,549
Percentage of households participating	2.85%
Cost per household	\$59.07
Total Cost	\$135,445.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	28.00	5.50%
Latex Paints	16.00	3.14%
Flammable Solvents	21.55	4.23%
Anti-Freeze	9	1.77%

Adhesives, Sealers and Flammables not bulked	135.79	26.68%
Corrosives	21	4.13%
Poisons and Pesticides	122.05	23.98%
Oils	24	4.72%
Oxidizers	3.64	0.72%
Aerosol Paints	40.37	7.93%
Aerosol Poisons	11	2.16%
Household Batteries	6.73	1.32%
Fluorescent Lamps	37.09	0.11%
Mercury	0.55	4.33%
Asbestos	22.02	2.00%
Others	10.18	7.29%
Flammable Liquids not bulkable	0	0.00%
Total	508.97	

Clark County One-Day Collection Results

Date: 5/22/2004

Location: Martinsville

Contractor: MSE Environmental Services, Inc.

Population	16,964
# Attending	174
Households Participating	240
Eligible Households	6,971
Percentage of households participating	3.44%
Cost per household	\$137.97
Total Cost	\$33,112.50

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	11.00	10.81%
Latex Paints	15	14.74%
Flammable Solvents	2	1.97%
Anti-Freeze	2	1.97%
Adhesives, Sealers and Flammables not bulked	14.8	14.54%
Corrosives	2.16	2.12%
Poisons and Pesticides	17.7	17.39%
Oils	26	25.55%
Oxidizers	0.63	0.62%
Aerosol Paints	7.4	7.27%

Aerosol Poisons	0	0.00%
Household Batteries	0.27	0.27%
Fluorescent Lamps	0.54	0.53%
Mercury	0.09	0.09%
Asbestos	2	1.97%
Others	0.18	0.18%
Flammable Liquids not bulkable	0	0.00%
Total	101.77	

Coles County One-Day Collection Results

Date: 9/18/1993

Location: Charleston

Contractor: Heritage Environmental Services, LLC

Population	51,644
# Attending	447
Households Participating	547
Eligible Households	18,957
Percentage of households participating	2.89%
Cost per household	\$123.26
Total Cost	\$67,422.99

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	22.5	18.71%
Latex Paints	0	0.00%
Flammable Solvents	19.54	16.25%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	19	15.80%
Corrosives	3.63	3.02%
Poisons and Pesticides	33	27.44%
Oils	12.25	10.18%
Oxidizers	1	0.83%
Aerosol Paints	0	0.00%

Aerosol Poisons	9	7.48%
Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0.36	0.30%
Flammable Liquids not bulkable	0	0.00%
Total	120.28	

Date: 10/27/2001

Location: Charleston

Contractor: Onyx Environmental Services

Population	50,000
# Attending	204
Households Participating	248
Eligible Households	12,500
Percentage of households participating	1.98%
Cost per household	\$192.29
Total Cost	\$48,818.75

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	6	9.52%
Latex Paints	4	6.34%

Flammable Solvents	9	14.27%
Anti-Freeze	1	1.59%
Adhesives, Sealers and Flammables not bulked	11.1	17.61%
Corrosives	2.09	3.31%
Poisons and Pesticides	11.97	18.98%
Oils	11	17.45%
Oxidizers	0.27	0.43%
Aerosol Paints	3.7	5.87%
Aerosol Poisons	1	1.59%
Household Batteries	0.09	0.14%
Fluorescent Lamps	0.38	0.60%
Mercury	0.18	0.29%
Asbestos	1	1.59%
Others	0.27	0.43%
Flammable Liquids not bulkable	0	0.00%
Total	63.05	

Date: 5/1/2004

Location: Mattoon

Contractor: Heritage Environmental Services, LLC

Population	53,196
# Attending	306
Households Participating	338

Eligible Households	20,000
Percentage of households participating	1.69%
Cost per household	\$103.48
Total Cost	\$34,976.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	5	7.06%
Latex Paints	5	7.06%
Flammable Solvents	4	5.65%
Anti-Freeze	3	4.23%
Adhesives, Sealers and Flammables not bulked	11.13	15.71%
Corrosives	2	2.82%
Poisons and Pesticides	9.28	13.10%
Oils	20.55	29.00%
Oxidizers	0.09	0.13%
Aerosol Paints	3	4.23%
Aerosol Poisons	2	2.82%
Household Batteries	0.27	0.38%
Fluorescent Lamps	1	1.41%
Mercury	0.55	0.78%
Asbestos	0.09	0.13%
Others	0.18	0.25%
Flammable Liquids not bulkable	3.71	5.24%
Total	70.85	

Cumberland County One-Day Collection Results

Date: 10/21/1995

Location: Greenup

Contractor: Pat Perretti Freight Services, Inc.

Population	10,670
# Attending	80
Households Participating	88
Eligible Households	4,029
Percentage of households participating	2.18%
Cost per household	\$146.99
Total Cost	\$12,935.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	5	15.23%
Latex Paints	0	0.00%
Flammable Solvents	6	18.28%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	2	6.09%
Corrosives	2	6.09%
Poisons and Pesticides	8	24.37%
Oils	5.83	17.76%
Oxidizers	1	3.05%
Aerosol Paints	0	0.00%

Aerosol Poisons	3	9.14%
Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0	0.00%
Flammable Liquids not bulkable	0	0.00%
Total	32.83	

Date: 6/16/2001

Location: Toledo

Contractor: Onyx Environmental Services

Population	26,591
# Attending	88
Households Participating	99
Eligible Households	8,602
Percentage of households participating	1.15%
Cost per household	\$222.19
Total Cost	\$22,208.50

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	2	5.42%
Latex Paints	1	2.71%

Flammable Solvents	1	2.71%
Anti-Freeze	1	2.71%
Adhesives, Sealers and Flammables not bulked	7.42	20.10%
Corrosives	0.91	2.46%
Poisons and Pesticides	7.62	20.64%
Oils	10	27.09%
Oxidizers	0	0.00%
Aerosol Paints	3.71	10.05%
Aerosol Poisons	0.36	0.98%
Household Batteries	0.18	0.49%
Fluorescent Lamps	1.36	3.68%
Mercury	0.09	0.24%
Asbestos	0	0.00%
Others	0.27	0.73%
Flammable Liquids not bulkable	0	0.00%
Total	36.92	

Douglas County One-Day Collection Results

Date: 4/4/1998

Location: Tuscola

Contractor: Laidlaw Environmental Services, Inc.

Population	20,000
# Attending	234
Households Participating	297
Eligible Households	6,100
Percentage of households participating	4.87%
Cost per household	\$66.22
Total Cost	\$19,668.61

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	24	36.74%
Latex Paints	0	0.00%
Flammable Solvents	2	3.06%
Anti-Freeze	1	1.53%
Adhesives, Sealers and Flammables not bulked	7.54	11.54%
Corrosives	3.37	5.16%
Poisons and Pesticides	14.71	22.52%
Oils	4	6.12%
Oxidizers	0.09	0.14%
Aerosol Paints	0	0.00%

Aerosol Poisons	6	9.18%
Household Batteries	0.63	0.96%
Fluorescent Lamps	0.36	0.55%
Mercury	0	0.00%
Asbestos	1	1.53%
Others	0.63	0.96%
Flammable Liquids not bulkable	0	0.00%
Total	65.33	

Date: 9/21/2002

Location: Tuscola

Contractor: Onyx Environmental Services

Population	19,922
# Attending	192
Households Participating	251
Eligible Households	9,000
Percentage of households participating	2.79%
Cost per household	\$89.25
Total Cost	\$22,830.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	23.5	29.85%
Latex Paints	20.5	26.04%

Flammable Solvents	3	3.81%
Anti-Freeze	1	1.27%
Adhesives, Sealers and Flammables not bulked	3.7	4.70%
Corrosives	2	2.54%
Poisons and Pesticides	8.7	11.05%
Oils	6	7.62%
Oxidizers	0.29	0.37%
Aerosol Paints	3.7	4.70%
Aerosol Poisons	1	1.27%
Household Batteries	0.38	0.48%
Fluorescent Lamps	0.87	1.10%
Mercury	0.09	0.11%
Asbestos	1.54	1.96%
Others	0.47	0.60%
Flammable Liquids not bulkable	2	2.54%
Total	78.74	

Edgar County One-Day Collection Results

Date: 11/5/1994

Location: Paris

Contractor: Heritage Environmental Services, LLC

Population	15,595
# Attending	284
Households Participating	338
Eligible Households	10,000
Percentage of households participating	3.38%
Cost per household	\$157.07
Total Cost	\$53,088.59

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	22.5	25.12%
Latex Paints	0	0.00%
Flammable Solvents	2.63	2.94%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	17.72	19.78%
Corrosives	2	2.23%
Poisons and Pesticides	19	21.21%
Oils	17.54	19.58%
Oxidizers	0.09	0.10%
Aerosol Paints	0	0.00%

Aerosol Poisons	7	7.82%
Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	1.09	1.22%
Flammable Liquids not bulkable	0	0.00%
Total	89.57	

Date: 4/5/1997

Location: Paris

Contractor: Aptus/Rollins

Population	19,595
# Attending	186
Households Participating	212
Eligible Households	10,000
Percentage of households participating	2.12%
Cost per household	\$76.68
Total Cost	\$16,256.58

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	12	21.79%
Latex Paints	0	0.00%

Flammable Solvents	7.63	13.86%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	7	12.71%
Corrosives	2.9	5.27%
Poisons and Pesticides	12.36	22.45%
Oils	8	14.53%
Oxidizers	0.09	0.16%
Aerosol Paints	0	0.00%
Aerosol Poisons	4.36	7.92%
Household Batteries	0.36	0.65%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0.36	0.65%
Flammable Liquids not bulkable	0	0.00%
Total	55.06	

Date: 4/13/2002

Location: Paris

Contractor: Heritage Environmental Services, LLC

Population	9,500
# Attending	316
Households Participating	461

Eligible Households	3,500
Percentage of households participating	13.17%
Cost per household	\$79.47
Total Cost	\$36,636.15

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	11	13.63%
Latex Paints	8	9.91%
Flammable Solvents	5	6.20%
Anti-Freeze	3.62	4.49%
Adhesives, Sealers and Flammables not bulked	11.1	13.75%
Corrosives	4.37	5.42%
Poisons and Pesticides	7	8.67%
Oils	18.62	23.07%
Oxidizers	0.09	0.11%
Aerosol Paints	4	4.96%
Aerosol Poisons	2	2.48%
Household Batteries	0.27	0.33%
Fluorescent Lamps	2	2.48%
Mercury	0.09	0.11%
Asbestos	0.54	0.67%
Others	3	3.72%
Flammable Liquids not bulkable	0	0.00%
Total	80.7	

Vermilion County One-Day Collection Results

Date: 4/9/1994

Location: Danville

Contractor: Chemical Waste Management, Inc.

Population	88,257
# Attending	316
Households Participating	364
Eligible Households	34,072
Percentage of households participating	1.07%
Cost per household	\$82.95
Total Cost	\$30,192.46

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	52.4	65.53%
Latex Paints	0	0.00%
Flammable Solvents	1.8	2.25%
Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	3	3.75%
Corrosives	3.69	4.61%
Poisons and Pesticides	11.45	14.32%
Oils	1	1.25%
Oxidizers	0.63	0.79%
Aerosol Paints	0	0.00%
Aerosol Poisons	5.18	6.48%

Household Batteries	0	0.00%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0.81	1.01%
Flammable Liquids not bulkable	0	0.00%
Total	79.96	

Date: 4/12/1997

Location: Danville

Contractor: Pat Perretti Freight Services, Inc.

Population	88,247
# Attending	721
Households Participating	1,013
Eligible Households	34,072
Percentage of households participating	2.97%
Cost per household	\$50.58
Total Cost	\$51,234.78

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	77.85	37.64%
Latex Paints	0	0.00%
Flammable Solvents	14	6.77%

Anti-Freeze	0	0.00%
Adhesives, Sealers and Flammables not bulked	24	11.60%
Corrosives	4	1.93%
Poisons and Pesticides	33	15.95%
Oils	37	17.89%
Oxidizers	2	0.97%
Aerosol Paints	0	0.00%
Aerosol Poisons	14	6.77%
Household Batteries	1	0.48%
Fluorescent Lamps	0	0.00%
Mercury	0	0.00%
Asbestos	0	0.00%
Others	0	0.00%
Flammable Liquids not bulkable	0	0.00%
Total	206.85	

Date: 10/6/2001

Location: Hoopston

Contractor: Onyx Environmental Services

Population	88,257
# Attending	376
Households Participating	519
Eligible Households	34,072

Percentage of households participating	1.52%
Cost per household	\$105.11
Total Cost	\$56,121.00

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	8	6.33%
Latex Paints	2	1.58%
Flammable Solvents	6.7	5.30%
Anti-Freeze	2	1.58%
Adhesives, Sealers and Flammables not bulked	14.8	11.71%
Corrosives	4.09	3.24%
Poisons and Pesticides	20.4	16.14%
Oils	37	29.27%
Oxidizers	1.09	0.86%
Aerosol Paints	11.1	8.78%
Aerosol Poisons	2	1.58%
Household Batteries	1.09	0.86%
Fluorescent Lamps	6.38	5.05%
Mercury	1.09	0.86%
Asbestos	7.4	5.85%
Others	1.26	1.00%
Flammable Liquids not bulkable	0	0.00%
Total	126.4	

Date: 6/5/2004

Location: Westville

Contractor: Clean Harbors Environmental Services

Population	83,097
# Attending	321
Households Participating	420
Eligible Households	32,072
Percentage of households participating	1.31%
Cost per household	\$69.79
Total Cost	\$29,311.40

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	14	14.14%
Latex Paints	3	3.03%
Flammable Solvents	3.55	3.59%
Anti-Freeze	2	2.02%
Adhesives, Sealers and Flammables not bulked	14.84	14.99%
Corrosives	2.18	2.20%
Poisons and Pesticides	14.55	14.70%
Oils	23.73	23.97%
Oxidizers	1.64	1.66%
Aerosol Paints	7	7.07%
Aerosol Poisons	3	3.03%
Household Batteries	0.56	0.57%

Fluorescent Lamps	2.71	2.74%
Mercury	0.29	0.29%
Asbestos	0.29	0.29%
Others	0.93	0.94%
Flammable Liquids not bulkable	4.71	4.76%
Total	98.98	

Date: 4/30/2005

Location: Danville

Contractor: Heritage Environmental Services, LLC

Population	85,000
# Attending	1,053
Households Participating	1,111
Eligible Households	34,000
Percentage of households participating	3.27%
Cost per household	\$54.52
Total Cost	\$60,567.25

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	13	7.76%
Latex Paints	6	3.58%
Flammable Solvents	9.54	5.69%
Anti-Freeze	4.08	2.43%

Adhesives, Sealers and Flammables not bulked	22.2	13.25%
Corrosives	8	4.77%
Poisons and Pesticides	30.6	18.26%
Oils	35	20.89%
Oxidizers	1.09	0.65%
Aerosol Paints	11.1	6.62%
Aerosol Poisons	4	2.39%
Household Batteries	1.3	0.78%
Fluorescent Lamps	3	1.79%
Mercury	0.38	0.23%
Asbestos	0.29	0.17%
Others	6.88	4.11%
Flammable Liquids not bulkable	11.1	6.62%
Total	202.56	

Date: 11/8/2008

Location: Hoopston

Contractor: Veolia Environmental Services

Population	83,097
# Attending	339
Households Participating	418
Eligible Households	32,072
Percentage of households participating	1.30%

Cost per household	\$108.25
Total Cost	\$45,247.80

Waste collected	No. of 55 Gallon drums	Percentage
Oil-Based Paints	6	4.87%
Latex Paints	10	8.12%
Flammable Solvents	5	4.06%
Anti-Freeze	2	1.62%
Adhesives, Sealers and Flammables not bulked	22.02	17.89%
Corrosives	5	4.06%
Poisons and Pesticides	23.98	19.48%
Oils	14	11.37%
Oxidizers	1	0.81%
Aerosol Paints	7.34	5.96%
Aerosol Poisons	2	1.62%
Household Batteries	2.45	1.99%
Fluorescent Lamps	11.76	9.55%
Mercury	0.38	0.31%
Asbestos	9.34	7.59%
Others	0.84	0.68%
Flammable Liquids not bulkable	0	0.00%
Total	123.11	

Appendix T: Existing Collection Options in Study Area for Specific

Types of HHW

MOTOR OIL COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Urbana	110 N Vine Street
Advance Auto Parts	Champaign	805 W Marketview Drive
Advance Auto Parts	Champaign	403 N Mattis Avenue
Autozone	Champaign	609 N Mattis Avenue
Autozone	Champaign	311 E University Avenue
Autozone	Urbana	606 E Main Street
Autozone	Rantoul	1424 E Grove Avenue
O'Reilly Auto Parts	Champaign	1009 N Mattis Avenue
Speed Lube	Urbana	710 N Cunningham Avenue
Speed Lube	Champaign	307 E University Avenue
Speed Lube	Champaign	901 W Springfield Avenue
Valvoline Instant Oil Change	Champaign	1301 N Mattis Avenue
Valvoline Instant Oil Change	Rantoul	400 E Champaign Avenue
Walmart Supercenter Tire & Lube Express	Champaign	2610 N Prospect Avenue
Walmart Supercenter Tire & Lube Express	Rantoul	845 Broadmeadow Road
Walmart Supercenter Tire & Lube Express	Savoy	505 S Dunlap Avenue
Walmart Supercenter Tire & Lube Express	Urbana	100 S High Cross Road

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Charleston	440 W Lincoln Avenue
Autozone	Mattoon	805 Lakeland Blvd
O'Reilly Auto Parts	Charleston	1416 Lincoln Avenue
Valvoline Instant Oil Change	Charleston	811 W Lincoln Avenue
Valvoline Instant Oil Change	Mattoon	2201 Lakeland Blvd
Valvoline Instant Oil Change	Mattoon	521 N 19th Street
Walmart Tire and Lube Express	Charleston	2250 Lincoln Avenue
Walmart Tire and Lube Express	Mattoon	101 Dettro Drive

Edgar County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Autozone	Paris	523 E Jasper Street
O'Reilly Auto Parts	Paris	503 E Jasper Street

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Danville	310 N Gilbert Street
AutoZone	Danville	717 N Vermilion
Autozone	Tilton	1628 Georgetown Road
O'Reilly Auto Parts	Danville	603 N Gilbert Street
Tractor Supply	Oakwood	12078 US Route 150
Valvoline Instant Oil Change	Danville	900 N Vermilion Street
Walmart Tire and Lube Express	Danville	4101 N Vermilion Street

CELL PHONE COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Best Buy	Champaign	2117 N Prospect Avenue
Best Buy Mobile	Champaign	2000 N Neil Street
Habitat for Humanity ReStore	Champaign	119 E University Avenue
Home Depot	Champaign	820 Bloomington Road
Interstate All Battery Center	Champaign	2504 N Mattis Avenue
Lowe's	Champaign	1904 N Prospect Avenue
Mack's Twin City Recycling	Urbana	2808 N Lincoln Avenue
RadioShack	Champaign	2020 N Prospect Avenue
RadioShack	Savoy	503 S Dunlap Unit F
RadioShack	Tuscola	407 E Southline Road
RadioShack	Urbana	114 N Vine Street, Suite K
Sprint Store	Champaign	61 E Marketview Drive
Staples	Champaign	2005 N Prospect Avenue
Target	Champaign	2102 N Prospect Avenue
Urbana City Building	Urbana	400 S Vine Street
Urbana Free Library	Urbana	210 W Green Street
Urbana Public Works	Urbana	706 S Glover Avenue
Wireless Experts	Champaign	2000 N Neil Street

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Home Depot	Mattoon	1301 Fort Worth Way
COM2 Recycling Solutions	Mattoon	5001 Lake Land Blvd
COM2 Recycling Solutions	Charleston	110 5th Street
COM2 Recycling Solutions	Charleston	683 Castle Drive
RadioShack	Mattoon	700 E Broadway
Staples	Mattoon	1201 Charleston Avenue E
Wireless Experts	Charleston	433 W Lincoln Avenue

Douglas County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
RadioShack	Arthur	412 N Vine Street
RadioShack	Arcola	111 W Springfield Road

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Lowe's Home Improvement	Danville	3636 N Vermilion Street
RadioShack	Danville	2830 N Vermilion Street
RadioShack	Hoopeston	300 E Main Street

RECHARGEABLE BATTERY COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Anita Purves Nature Center	Urbana	1505 N Broadway Avenue
Battery Specialists	Champaign	133 Kenyon Road
Best Buy	Champaign	2117 N Prospect Avenue
Best Buy Mobile	Champaign	2000 N Neil Street
Green Purpose, LLC	Champaign	807 Pioneer Street
Home Depot	Champaign	820 Bloomington Road
Interstate All Battery Center	Champaign	2504 N Mattis Avenue
Lowe's	Champaign	1904 N Prospect Avenue
Phillips Recreation Center	Urbana	505 W Stoughton Street
RadioShack	Champaign	2020 N Prospect Avenue
RadioShack	Savoy	503 S Dunlap Unit F
RadioShack	Tuscola	407 E Southline Road
RadioShack	Urbana	114 N Vine Street Suite K
Staples	Champaign	2005 N Prospect Avenue
Urbana City Building	Urbana	400 S Vine Street
Urbana Free Library	Urbana	210 W Green Street
Urbana Public Works	Urbana	706 S Glover Avenue

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Battery Specialists	Charleston	1519 Madison Avenue
Battery Specialists	Mattoon	309 N 15th Street
COM2 Recycling Solutions	Mattoon	5001 Lake Land Blvd
COM2 Recycling Solutions	Charleston	110 5th Street
COM2 Recycling Solutions	Charleston	683 Castle Drive
Home Depot	Mattoon	1301 Fort Worth Way
RadioShack	Mattoon	700 E Broadway
Staples	Mattoon	1201 Charleston Avenue E

Douglas County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
RadioShack	Arthur	412 N Vine Street
RadioShack	Arcola	111 W Springfield Road

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Lowe's Home Improvement	Danville	3636 N Vermilion Street
RadioShack	Danville	2830 N Vermilion Street
RadioShack	Hoopeston	300 E Main Street
Vermilion County Health Department	Danville	200 S College Avenue

COMPACT FLUORESCENT LAMP COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Home Depot	Champaign	820 Bloomington Road
Lowe's	Champaign	1904 N Prospect Avenue
Springfield Electric	Champaign	901 N Mattis Avenue
Tepper Electric	Champaign	608 S Neil Street

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Home Depot	Mattoon	1301 Fort Worth Way

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Lowe's Home Improvement	Danville	3636 N Vermilion Street

FLUORESCENT TUBE AND HID LAMP COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Springfield Electric	Champaign	901 N Mattis Avenue
Tepper Electric	Champaign	608 S Neil Street
Urbana Public Works	Urbana	706 S Glover Avenue

LEAD ACID BATTERY COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Urbana	110 N Vine Street
Advance Auto Parts	Champaign	403 N Mattis Avenue
Advance Auto Parts	Champaign	805 W Marketview Drive
Autozone	Champaign	609 N Mattis Avenue
Autozone	Champaign	311 E University Avenue
Autozone	Urbana	606 E Main Street
Autozone	Rantoul	1424 E Grove Avenue
Battery Specialists	Champaign	133 Kenyon Road
Home Depot	Champaign	820 Bloomington Road
Interstate All Battery Center	Champaign	2504 N Mattis Avenue
NAPA Auto Parts	Champaign	802 W Bloomington Road

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Home Depot	Mattoon	1301 Fort Worth Way
Advance Auto Parts	Charleston	440 W Lincoln Avenue

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Danville	310 N Gilbert Street

MERCURY THERMOSTAT COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Urbana Public Works	Urbana	706 S Glover Avenue

TRANSMISSION FLUID COLLECTION OPTIONS

Champaign County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Autozone	Champaign	609 N Mattis Avenue
Autozone	Champaign	311 E University Avenue
Autozone	Urbana	606 E Main Street
Autozone	Rantoul	1424 E Grove Avenue

Coles County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	CharleStreeton	440 W Lincoln Avenue

Vermilion County

<i>Store Name</i>	<i>City</i>	<i>Address</i>
Advance Auto Parts	Danville	310 N Gilbert Street

**Appendix U: Summary of Discussions at Information Meetings Held
in Study Area**

Summary of Discussions at Information Meetings Held in Study Area

<p>Lincoln Heritage Resource Conservation and Development Council (in Charleston) 9 Attendees, October 1, 2013</p> <ul style="list-style-type: none">• reviewed HHW strategy project and overlap with Lincoln Heritage RC&D service area• Lincoln Heritage RC&D council's purpose is to pursue funding for projects not covered by other sources, help planning groups solve common problems, and help germinate new ideas that will provide expanded opportunities for rural residents. Council seeks to fill a niche of service to rural communities and their under-served citizens.• previously Council assisted in promoting markets for recycled products, sponsor household hazardous waste recycle days, and solid waste removal in rural communities• Council had question regarding liability associated with HHW collections
<p>Champaign County (in Urbana) 14 Attendees, January 23, 2014</p> <ul style="list-style-type: none">• reviewed estimates of staffing and operational cost estimates for a HHW collection facility• would illegal dumping occur at a permanent HHW collection facility; surveillance cameras• costs of modular containment lockers used at a HHW collection facility• Phase 2 project progress• whether HHW program grants are available from Illinois-Indiana Sea Grant, USDA, IL American Water Co.
<p>Clark County (in Martinsville) 5 Attendees, January 16, 2014</p> <ul style="list-style-type: none">• perception that much illegal dumping of HHW occurs given lack of available HHW collection options• public education and outreach needed• whether options for HHW collection exist in Terra Haute in Indiana, approximately 26 miles away• whether local pharmacies collect unwanted pharmaceuticals• project website• whether USDA, Keep America Beautiful, Illinois-Indiana Sea Grant provide grants for HHW
<p>Coles County (in Mattoon) 6 Attendees, January 30, 2014</p> <ul style="list-style-type: none">• marketing as significant cost of IEPA One-Day HHW collection; example of failed local effort to promote event• latex paint• possibility of using the state-owned, capped landfill as a HHW collection facility site• scheduling one-day HHW collections in advance so people can plan ahead• thought only Coles County residents could attend recent IEPA HHW One-Day collection, attendance figures low• perception that collaboration between city workers and county workers is needed• permanent HHW facility staffed by people earning a prevailing wage will be significant expense

continued

Summary of Discussions at Information Meetings Held in Study Area (continued)

<p>Cumberland County (in Toledo) 10 Attendees, January 27, 2014</p> <ul style="list-style-type: none"> • what are estimated costs to process HHW; how HHW collected in Illinois is processed • minimum standards for HHW collection facility site • limited availability of local volunteers; type of training for volunteers • no funds budgeted toward improving local HHW collection option • example of how paying for a HHW program would work • seeking grant funds to participate in periodic pick-ups • what pollution control facilities are nearby Cumberland County
<p>Douglas County (in Tuscola) 8 Attendees, January 14, 2014</p> <ul style="list-style-type: none"> • no local HHW collection since 2002 • how would liability associated with HHW collections be addressed • concerns expressed about ongoing dumping into ditches or into Kaskaskia River • HHW solution needed as an alternative to dumping • applied numerous times for IEPA One-Day HHW collection and not selected; have given up on applying • lack of awareness of nearby IEPA One-Day HHW events • a secure and remote site for a HHW collection facility
<p>Edgar County (Paris) 8 Attendees on January 22, 2014</p> <ul style="list-style-type: none"> • costs for one-day pick-ups seem astronomical; we need a better way to collect HHW • serving poor people is an issue in Edgar County; 15 miles might be an issue for some that don't have a vehicle • mobile pick-ups might be a better option • there is definitely a need for HHW collection--Paris has not had a collection in 4 years • we are giving away free food and dental work and can't get people to participate, HHW might be similar
<p>Vermilion County (Danville) 7 Attendees on January 9, 2014</p> <ul style="list-style-type: none"> • few HHW collections in Vermilion County over past 10-years • curb-side pick-up may be an option—it's expensive and would be paid for by those residents who request it • latex paint, efforts to pass paint stewardship legislation in Illinois • motor oil as potential revenue source • illegal dumping at permanent HHW facilities, and surveillance cameras as a possible solution • preference expressed for a facility that has no limit on HHW materials that residents could drop off • co-locating HHW site with an existing pollution control facility (e.g., sanitary district in Vermilion County) • USDA grants for construction of a HHW permanent facility