

Champaign County Solid Waste Plan Update 1996

Introduction

As required by Illinois state law, counties with approved solid waste management plans must review and update those plans every five years. The purpose of this report is to provide an update to the 1991 "Champaign County Solid Waste Management Plan" (ISWDA, 1991). This document begins with a review of state regulations governing solid waste management at the county level followed by a brief description of events related to solid waste management in Champaign County since approval of the county's solid waste management plan in 1991. Information on the status of solid waste management and recycling in Champaign County in 1995 is included, followed by a list of recommendations for management of Champaign County's solid waste into the next century.

State Regulations

The Illinois Solid Waste Management Act (PA 84-1319) was signed into law in 1986. The Act established a hierarchy for solid waste management for local governments in the state. That hierarchy, and its objectives, were stated as follows:

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.

Three years later, the Solid Waste Planning and Recycling Act (SWPRA) (PA85-1198) became effective January 1, 1989. The intention of SWPRA was to further clarify the directives for local solid waste planning and management. All counties in Illinois with a population of 100,000 or more were required to develop and adopt a solid waste management plan by March, 1991. The Act detailed specific provisions that were required to be in the plan including:

- 1) a description of the origin, content and weight or volume of municipal waste currently generated within the county's boundaries and the projected yearly volume of municipal waste generated over the next 20 years;
- 2) the location and expected remaining capacity of disposal facilities currently used;
- 3) a description of the facilities and programs proposed to handle the county's municipal waste over the next 20 years;
- 4) an evaluation of the environmental, energy, life cycle cost and economic advantages and disadvantages of any proposed waste management facilities and programs;
- 5) a time frame for development and operation of the proposed facilities and programs;
- 6) a description of the process used to identify potential sites where each proposed waste processing, disposal and recycling program will be located;
- 7) the identity of which governmental entity would be responsible for implementing the plan on behalf of the county.

The Act also stated that "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.

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- 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." (SWPRA, 1989).

Additional items described other, non-mandatory provisions that could be included in the recycling plan.

While counties are responsible for the implementation of the county solid waste management 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." (Section 15/7, 7(a), SWPRA, 1989)

Development and Implementation of 1991 Solid Waste Plan for Champaign County

In anticipation of state regulations, Champaign County, the City of Champaign and the City of Urbana, formed the Intergovernmental Solid Waste Disposal Association (ISWDA) in July, 1986 and gave it the authority to develop and implement a solid waste management plan for Champaign County (ISWDA, 1986). When the Solid Waste Planning and Recycling Act was passed in 1989, the ISWDA was well on its way to completing a solid waste plan for the county. The ISWDA prepared a detailed five volume solid waste management plan that was approved in February,,

1991 (ISWDA, 1991). The plan met all criteria established by SWPRA and contained extensive background information on solid waste generation and disposal in Champaign County, as well as approximately 46 recommendations for implementing the plan in compliance with state law. The ISWDA was responsible for implementing most of the recommendations including hiring a recycling coordinator, siting a new landfill in Champaign County, and supervising the construction of a waste transfer station.

Although the ISWDA had been granted the authority to develop and implement the plan, it had the difficult task of developing a consensus between the various local municipalities, the private and nonprofit sector, and the larger citizenry of Champaign County. It became apparent, however, that there were many philosophical and practical barriers to the ISWDA acting as the implementing agency for all of Champaign County. Large projects such as locating, financing and managing the transfer station and landfill facilities recommended in the 1991 plan fostered disagreement and dissension among various stakeholders. In addition, initiatives to standardize collection and processing procedures throughout the county through flow control measures met with resistance. Costs of, and public opposition to the projects were underestimated, and the ISWDA found itself with little support.

In the spring of 1992 , the City of Champaign voted to withdraw from the ISWDA. As a result, the agency lost its original authority, and its power to implement aspects of the Solid Waste Management Act became severely limited. Thus, most of the recommendations made in the 1991 Champaign County Solid Waste Management Plan were not implemented (See Appendix C).

Present Day

At the present time, Champaign County has no further plans to establish a municipally-owned landfill or transfer station. Instead, Champaign County will direct its efforts in next few years towards supporting and encouraging source reduction and recycling. Champaign County will work with the private and non-profit sectors to accomplish these goals.

Champaign County Solid Waste Plan 1996 Update

Characteristics of Solid Waste in Champaign County, 1995

Overview of Champaign County

Located in East-Central Illinois, Champaign County covers approximately 1,000 sq. miles, 89% of which is utilized for agricultural purposes. According to the July, 1995 U.S. Census Bureau, 169,096 people reside in Champaign County, although county planners believe census figures for Rantoul and Mahomet are underestimated (Champaign County Regional Planning Commission, May, 1996). Sixty-seven percent of the population in Champaign County live in either the City of Champaign, the City of Urbana, or the Village of Rantoul. The remaining live in 23 other incorporated villages or in scattered rural populations throughout the county. Home to the University of Illinois, the population in the twin cities of Champaign and Urbana continues to grow, with a net percent increase of 5.3% for Champaign and 3.2% for Urbana between 1990 and 1994 (Table 2.1). The fastest growing county village is Philo, with an increase of 16.8%. St. Joseph (10.9%) and Savoy (8.4%) are also increasing. Although the 1995 report from the U.S. Census Bureau estimates a population decline of 2.3%, county planners believe the population of Champaign County has in fact remained stable and will continue to grow at a declining rate over the next 25 years to a population of 195,000 in the year 2020 (Champaign County Regional Planning Commission, April, 1995).

Table 2.1 Population changes in Champaign County Municipalities: 1990-1994

| | Population in <u>1990</u> | Population in <u>1994</u> | Change (%) <u>1990-1994</u> |
|---|------------------------------|------------------------------|--------------------------------|
| Champaign County | 173,025 | 167,487 | -3.2% |
| Champaign City | 63,502 | 66,888 | 5.3% |
| Urbana | 36,383 | 37,546 | 3.2% |
| Rantoul | 17,212 | 7,698 | -55.3%* |
| Allerton (pt.) | 0 | 0 | 0% |
| Bondville | 446 | 431 | -3.4% |
| Broadlands | 340 | 333 | -2.1% |
| Fisher | 1,561 | 1,556 | -0.3% |
| Foosland | 132 | 120 | -9.1% |
| Gifford | 845 | 902 | 6.7% |
| Homer | 1,264 | 1,342 | 6.2% |
| Ivesdale (pt.) | 339 | 338 | -0.3% |
| Longview | 180 | 180 | - |
| Ludlow | 323 | 311 | -3.7% |
| Mahomet Village | 3,103 | 2,958 | -4.7%* |
| Mahomet Twp (includes Mahomet Village) | 8,440 | 8,907 | 5.5% |
| Ogden | 671 | 711 | 5.9% |
| Pesotum | 558 | 573 | 2.7% |
| Philo | 1,028 | 1,201 | 16.8% |
| Royal | 217 | 221 | 1.8% |
| Sadorus | 469 | 495 | 5.5% |
| St. Joseph | 2,052 | 2,276 | 10.9% |
| Savoy | 2,674 | 2,898 | 8.4%* |
| Sidney | 1,027 | 1,077 | 4.8% |
| Thomasboro | 1,250 | 1,234 | -1.3% |
| Tolono | 2,605 | 2,682 | 2.9% |
| Small Municipalities (avg) | 1,004 | 1,040 | 3.6% |

*Villages of Mahomet, Rantoul and Savoy estimate their populations to be higher than U.S. Census figures.

Municipal Solid Waste

The purpose of this report is to report on the status of municipal solid waste in Champaign County. According to the Illinois Solid Waste Planning and Recycling Act, municipal waste is defined as "garbage, general household, institutional and commercial waste, industrial lunchroom or office waste, landscape waste, and

construction and demolition debris. Municipal waste does not include industrial process waste, special wastes, hazardous waste, earth materials, scrap motor vehicles, agricultural wastes, and sludge from treating water or sewage at publicly owned treatments works (See Appendix B).

Solid Waste Collection

All waste collection and disposal (excluding recycling) in Champaign County is handled by the private sector. Approximately 30 haulers and processors service residential, commercial, institutional, and industrial customers in Champaign County. This number is declining as businesses close or consolidate to become better equipped to meet stricter state and local regulations. Costs and competition between haulers determines services and rates offered.

Almost all communities in Champaign County allow residents and businesses to contract with the hauler of their choice. Some villages in the county are served by one hauler because no other haulers offer their services in the area. The village of Foosland contracts with one hauler to provide garbage service for residences and businesses. Similarly, the village of Fisher contracts with one hauler to provide residential garbage services, and issues up to two commercial licenses for all other types of waste collection (Village of Fisher, 1993).

Volume based pricing is up to the discretion of the waste hauler, except in the City of Urbana, which requires haulers to offer a basic curbside service with increasing service levels and rates based on the frequency and amount of municipal waste collected.

Waste Collection at the University of Illinois

Non-recycled waste generated on the campus of the University of Illinois is collected by the University's Operations and Maintenance staff. Waste is brought to a University-owned transfer station at the southern edge of the campus. Operation of the transfer station is bid out to a private company on a one year contract with option for renewal of up to four years. Once at the transfer station, additional materials are pulled from the waste stream for recycling and the rest of the waste is sent to an out-of-county landfill for disposal. Transportation of the waste and landfill tipping fees are bid out as separate contracts to the private sector. The University is planning to expand its transfer station to include a recovery facility and hopes to have it operational by May of 1997. The addition of the recovery facility will greatly improve the University's ability to pull recyclables from the waste stream and create new jobs in the community. Operation of the recovery facility will be bid out to a private contractor, as will the transportation of the waste to an area landfill and the landfill tipping fee.

Licensing of Private Haulers

Sixteen municipalities in Champaign County do not require commercial haulers to obtain a license or permit from the community government. The other seven have some form of licensing requirement regulating commercial haulers. The villages of Fisher and Foosland contract with a private hauler to provide city-wide garbage collection, whereas the villages of Ludlow, Mahomet, Rantoul and the cities of Champaign and Urbana require all haulers providing services in the municipality to obtain a city license. In addition, haulers licensed in the city of Champaign and/or the city of Urbana are required to report the amount of recycled materials collected from residences on a monthly (Champaign) or quarterly (Urbana) basis.

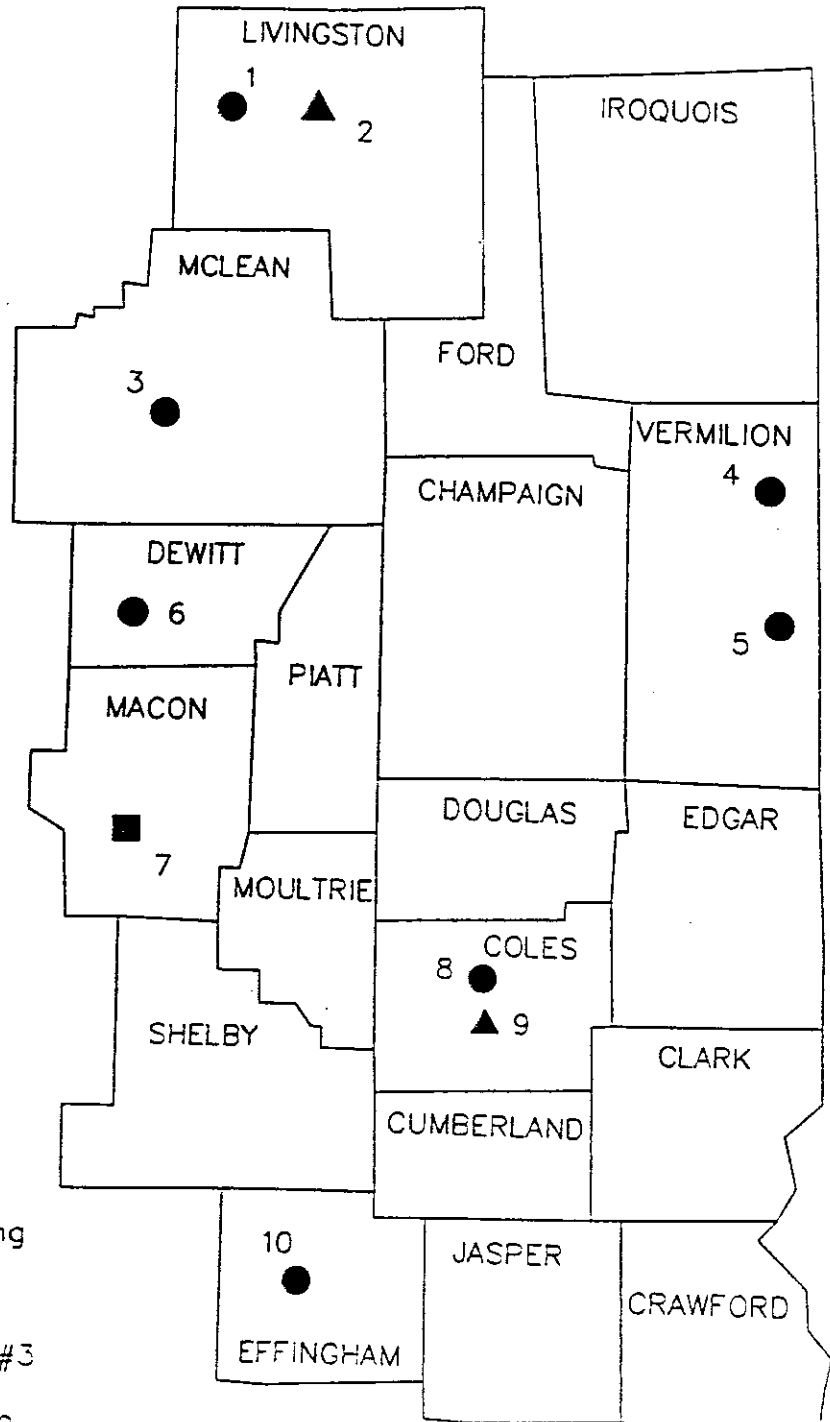
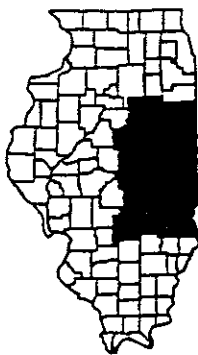
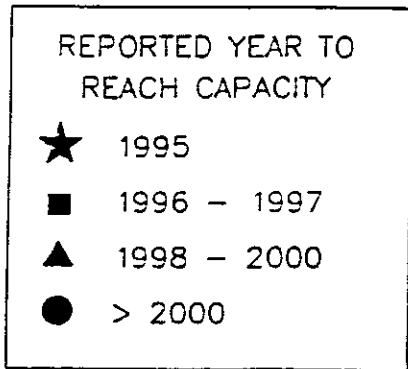
Disposal of Solid Waste

Municipal waste generated in Champaign County is either recycled or landfilled outside of the county. Although several privately owned incinerators are active in Champaign County, they are used to burn special medical waste generated by the hospitals and industrial process wastes that are not considered municipal solid waste as defined by the Illinois Environmental Protection Agency (IEPA, 1994) (See Appendices A & B). Some of the smaller villages in Champaign County allow residents to burn yardwaste and/or residential garbage, but no information exists as to the quantity of residential waste that is burned. Several towns sponsor annual community-wide clean-up days. On a specified day or weekend, residents bring wastes to a community site for disposal. Most villages try to reduce the amount of waste destined for the landfill by separating out scrap metals, tires, batteries and/or other materials that are then recycled.

Approximately 86% of Champaign County's waste is landfilled. No landfills are located in Champaign County and all waste is transported out of the county to the Clinton Landfill in DeWitt County or to the Brickyard Disposal & Recycling Landfill in Vermilion County (Fig. 2.1). Other area landfills (e.g. Illinois Landfill, Inc., in Vermilion County; Environmental Reclamation Co. in Coles County; Five Oaks RDF in Christian County; Sexton, M.C.L. in McLean, and Macon County Landfill #2 & #3) reported that they do not receive municipal waste from Champaign County, although they may receive special wastes such as contaminated demolition waste or industrial process wastes.

According to the 9th Annual Report of Available Disposal Capacity for Solid Waste in Illinois, as of January 1, 1996, the estimated remaining available capacity at the Clinton Landfill is 9,872,800 cu. yds. and the Brickyard landfill is estimated to have a

FIG. 2.1 Active non-hazardous solid waste landfills in Central Illinois



1. Streator Area Landfill
2. Livingston Landfill
3. Sexton M.C.L.
4. Illinois Landfill, Inc.
5. Brickyard Disposal & Recycling
6. Clinton Landfill #2
7. Macon County Landfill #2 & #3
8. Environmental Reclamation Co.
9. Western Lion Ltd.
10. Landfill 33 Ltd.

remaining capacity of 19,289,451 cu. yds. At present generation rates, the Clinton Landfill is expected to remain open for at least another eleven years, and the Brickyard Landfill is expected to remain open for at least forty years (IEPA, 1996).

Tipping fees are charged by volume measured in cubic yards. In 1995, the Clinton landfill charged a tipping fee of \$7.15/cu. yd. and the Brickyard landfill charged \$7.25/cu.yd. Because of the distance haulers must travel to the landfill (approximately 35 miles one way from Champaign-Urbana), waste is usually compacted.

Generation Rate

It is estimated that between 194,569 and 199,238 tons of municipal waste were generated in Champaign County in 1995. This estimate is based upon information obtained from each of the two landfills accepting waste from Champaign County (Table 2.2), and includes the amount of materials that were removed from the waste stream and recycled (see Table 3.3). With a county population of 169,096 people, the estimated generation rate per person per day is approximately 6.3 to 6.5 lbs. This generation rate is higher than the national average of 4.4 lbs per day as computed by the U.S. Environmental Protection Agency in its annual report, "Characterization of Municipal Solid Waste in the United States: 1995 Update." (U.S. E.P.A., 1996) However, according to the 1991 Champaign County Solid Waste Management Plan, an estimated 197,800 tons per year (6.25 pounds per capita day) of solid waste was generated in Champaign County in 1988 (Champaign County Solid Waste Management Plan, Part I: Solid Waste Characteristics, p.17).

An estimated 150,621 to 155,290 tons of waste generated in Champaign County were sent to area landfills (Table 2.2). Because of the different conversion factors, these

figures only provide a rough estimate of total disposed waste. The two landfills accepting the county's waste could not provide detailed information on the origin, type of waste, or degree of compactness of the waste brought to their facility. Nor were they able to estimate the percentages of residential, commercial, institutional and construction/demolition wastes brought to the landfill.

Table 2.2: Estimated volumes and weight equivalents for waste brought to area landfills from Champaign County

| Waste | Clinton Landfill | Brickyard Landfill* | Totals |
|-------------------------------------|-----------------------------|-----------------------------|-------------------------------|
| Compacted | (153,600 cu. yds.) | (205,518.5 cu. yds.) | (359,118.5 cu. yds.) |
| @580 lbs/cu. yd.‡ | 44,544 tons+ | 59,600 tons+ | 104,144 tons+ |
| @606 lbs/cu. yd.^ | 46,541 tons+ | 62,272 tons+ | 108,813 tons+ |
| Loose | (38,400 cu. yds.) | (85,676.5 cu. yds.) | (124,076.5 cu. yds.) |
| @660 lbs/cu. yd.‡ | 12,672 tons+ | 28,273 tons+ | 40,945 tons+ |
| Construction/ Demolition | not available | (12573 cu. yds.) | (12573 cu. yds.) |
| @880 lbs/cu. yd.‡ | | 5532 tons+ | 5532 tons+ |
| Totals: | 57,216 - 59,213 tons | 93,405 - 96,077 tons | 150,621 - 155,290 tons |

* Annual amounts averaged from totals provided for October, 1995 through July, 1996.

+ total pounds divided by 2000 to convert into tons.

^ standard industry conversion factor for 1 ton compacted municipal solid waste

‡ as calculated in 1991 Solid Waste Management Plan for Champaign County

For reporting purposes, data obtained from the landfills was converted from cubic yards into tons. The standard industry conversion factor for one ton of compacted, municipal solid waste is 3.3 cubic yards or an average of 606 lbs/cu. yd., but this factor is influenced by the type of material and degree of compaction. The 1991 Solid Waste Management Plan found that Champaign County's waste stream was consistent with national trends except in the area of construction/demolition debris, where Champaign County's generation was higher than the national average. The 1991 plan estimated an average of 660 lbs per cubic yard (including construction/demolition waste) of loose waste and 580 lbs per cubic yard of

compacted waste (1991 Solid Waste Management Plan, Part 1). The range shown in Table 2.2 reflects the different conversion factors used to calculate Champaign County's annual waste disposal in area landfills.

Conclusion

Without a closer look at the data, Champaign County's generation of solid waste appears to remain relatively constant over the past five years. However, different methods of gathering data, changing definitions of solid waste and population fluctuations make it difficult to compare solid waste generation rates. In Champaign County's 1991 plan, the estimated amount of waste generated in the county (197,809 tons) was compiled from three different studies and based on annual projections made from limited weigh programs conducted at the Urbana and Rantoul landfills. The 1995 data (estimated to be between 194,569 and 199,238 tons) was obtained from rough annual volume estimates provided from the two landfills accepting waste from Champaign County, plus the amount of waste that was recycled. The amount of waste actually generated in 1995 is higher because estimates do not include all materials diverted from the waste stream for recycling.

In addition, the 1991 plan included industrial process waste and water treatment sludge in calculating waste generation (an estimated 32,585 tons). Neither of these waste classifications are considered municipal solid waste and were not intentionally included in estimations of Champaign County's municipal waste generated in 1995. Although landfill operators were asked to provide an estimation of annual municipal solid waste originating in Champaign County that was brought to their landfill, industrial process waste may have been included in the totals provided.

Champaign County's waste generation will continue to rise with a growing population and increasing demand for services. At the present time, landfill space is available to meet Champaign County's current needs. Because solid waste disposal is handled by the private sector, market forces rather than governmental directives will continue to determine how solid waste is managed in Champaign County.

Champaign County Solid Waste Plan 1996 Update

Characteristics of Recycling in Champaign County, 1995

Introduction

According to the Solid Waste Planning and Recycling Act, "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...
- (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 (*SWPRA, 1989, 15/6 Recycling Program*).

Plans for a comprehensive recycling program in Champaign County proposed in the 1991 Solid Waste Management Plan by the Intergovernmental Solid Waste Disposal Authority were never fully implemented because of problems that arose with the ISWDA. The County has provided some assistance with recycling efforts but most of the responsibility for recycling and recycling education has been assumed by Champaign County's municipal governments and the private sector.

Recycling Programs in Champaign County

Recycling is not mandatory in Champaign County, and businesses and institutions are free to choose whether or not to institute a recycling program. Businesses and industries recycle a significant amount of materials, as was documented in the 1991 Solid Waste Plan for Champaign County (*Part III, Recycling*). The most commonly recycled materials in the private commercial sector are cardboard and office paper as well as scrap metals, white goods, and other ferrous metals. However, because of the large number of small processors, little current information is available about the amount of materials recycled by the commercial sector. While most businesses with recycling programs contract with a hauler to collect recyclable materials, some businesses such as grocery stores or large warehouses process their own recyclables and send them directly to recycling markets or backhaul materials to regional distribution centers outside of Champaign county.

Residential recycling is better documented in Champaign County. Some municipalities and institutions have tried different approaches to encourage residential recycling including easy access to recycling containers, volume-based pricing, sponsorship of public drop-off facilities, and ordinances regulating recycling

services. Following is a description of the residential recycling programs in various Champaign County communities.

City of Champaign

In 1993, the City of Champaign switched from a city-sponsored residential recycling program (REEECycle!) to private collection. According to Champaign City Code (Section 15-57) commercial haulers must offer to collect at least newspaper, glass jars and bottles, tin cans, aluminum cans and HDPE plastic containers from residences of four units or less, at no additional cost to the customer. Recycling services must be offered at least once per week and the recyclables must be collected separately from the regular garbage pick-up. City residents select their own garbage hauler and may or may not choose to use their hauler's recycling service. Haulers may collect additional materials for recycling and some pick up yard waste, and/or additional grades of plastics. The City of Champaign requires haulers to be licensed with the city and to submit monthly reports documenting the amount of materials collected for recycling from the city's residents. According to the City's Special Services Manager, 2603 tons of recycled materials were collected in Champaign by private haulers from July 1, 1995 to June 30, 1996. This total may include recyclables collected from neighborhoods located just outside the city limits. No figures are available for the number of households that recycle, but the city is considering conducting a survey to obtain that information.

City of Urbana

The City of Urbana operates a city-sponsored curbside recycling program. U-Cycle, established in September of 1986, collects glass, newspaper, and aluminum and tin cans from residences of six units or less. Collection of magazines, plastics, cardboard and office paper is scheduled to be added in the near future. Materials collected in

the U-Cycle program are taken to a local recycling processor. Until recently, costs to run U-Cycle were absorbed indirectly within the City's budget. Effective April 1996 however, all Urbana residents pay a \$2.00 per month recycling tax, whether they participate in the program or not. This fee is expected to increase in order to cover rising recycling costs. Residents may still choose to recycle materials with their garbage hauler, although most do not offer the service. Like the City of Champaign, Urbana requires haulers to be licensed, and to submit reports on the amount of materials collected for recycling from Urbana residents. To encourage source reduction and recycling, Urbana requires volume-based pricing for garbage collection. According to the City's Environmental Manager, 685 tons of materials were collected through U-Cycle in 1995.

The City of Urbana also pays the costs of maintaining a public drop-off for recyclable materials at the Urbana IGA. The city spends approximately \$37,000 per year to a private processor to service the drop-off. In addition to glass, cans and newspaper, the public drop-off accepts cardboard, #1 (PET) and #2 (HDPE) plastics, and magazines. Five hundred seventy-six tons of materials were collected at the Urbana drop-off in 1995 .

Rantoul

The Village of Rantoul requires licensing of haulers but does not have recycling requirements. A curbside recycling program has been discussed, but no action has been taken. The Village contracts with a private processor to operate two public drop-offs: one at the IGA and the other at the former Chanute Air Force Base. Newspaper, cardboard, #1 & #2 plastics, glass, steel and aluminum cans are collected at the drop-off sites. Magazines and office paper are not accepted.

Rantoul also funds a part-time Recycling Coordinator, whose job it is to provide educational programs, coordinate special collections, and act as an information clearinghouse for the village. The Recycling Coordinator writes grants to obtain funding for special projects (such as a household hazardous waste collection), coordinates a "furniture drop and swap", and speaks to children and adult groups about the 3R's: Reduce, Reuse, Recycle.

Hometown Drop-offs

In 1993, Champaign County co-sponsored the establishment of six public drop-off sites for recycling in smaller communities in the county: Homer, Ogden, Philo, Tolono, Sidney and St. Joseph (Fig. 3.1). Under the "Hometown Drop-off" program, the communities received a 50% matching grant to pay for fencing, collection containers and signage, with the stipulation that the communities continue to sponsor the drop-offs once the grant money ran out. As of 1996, public drop-offs still exist in all six communities. Each community contracts with a private hauler to service the drop off, and the amount of materials collected at the drop-offs in 1995 is listed in Table 3.1. Two other villages in Champaign County, Fisher and Thomasboro, are considering establishing public recycling drop-offs.

Table 3.1 Amount of Materials Collected from Hometown Drop-offs in 1995 (in tons)

| | Newspaper | Tin Cans | Aluminum | Glass | Plastic |
|--------------------|-----------|----------|----------|-------|---------|
| Homer [^] | 46.7 | 2.2 | .57 | 11.6 | 2.8 |
| Philo | 45.5 | 1.7 | .48 | 9.3 | 2.7 |
| Ogden ⁺ | 34.2 | 1.8 | .39 | 10.1 | 2.8 |
| Sidney | 46.2 | 2.1 | .42 | 12.0 | 2.8 |
| St. Joseph | 89.1 | 3.7 | 1.1 | 19.8 | 5.3 |
| Tolono | 74.2 | 2.9 | .62 | 16.3 | 4.0 |
| Total: | 335.9 | 14.4 | 3.58 | 79.1 | 20.4 |

[^]does not include totals for November
⁺does not include totals for May & June

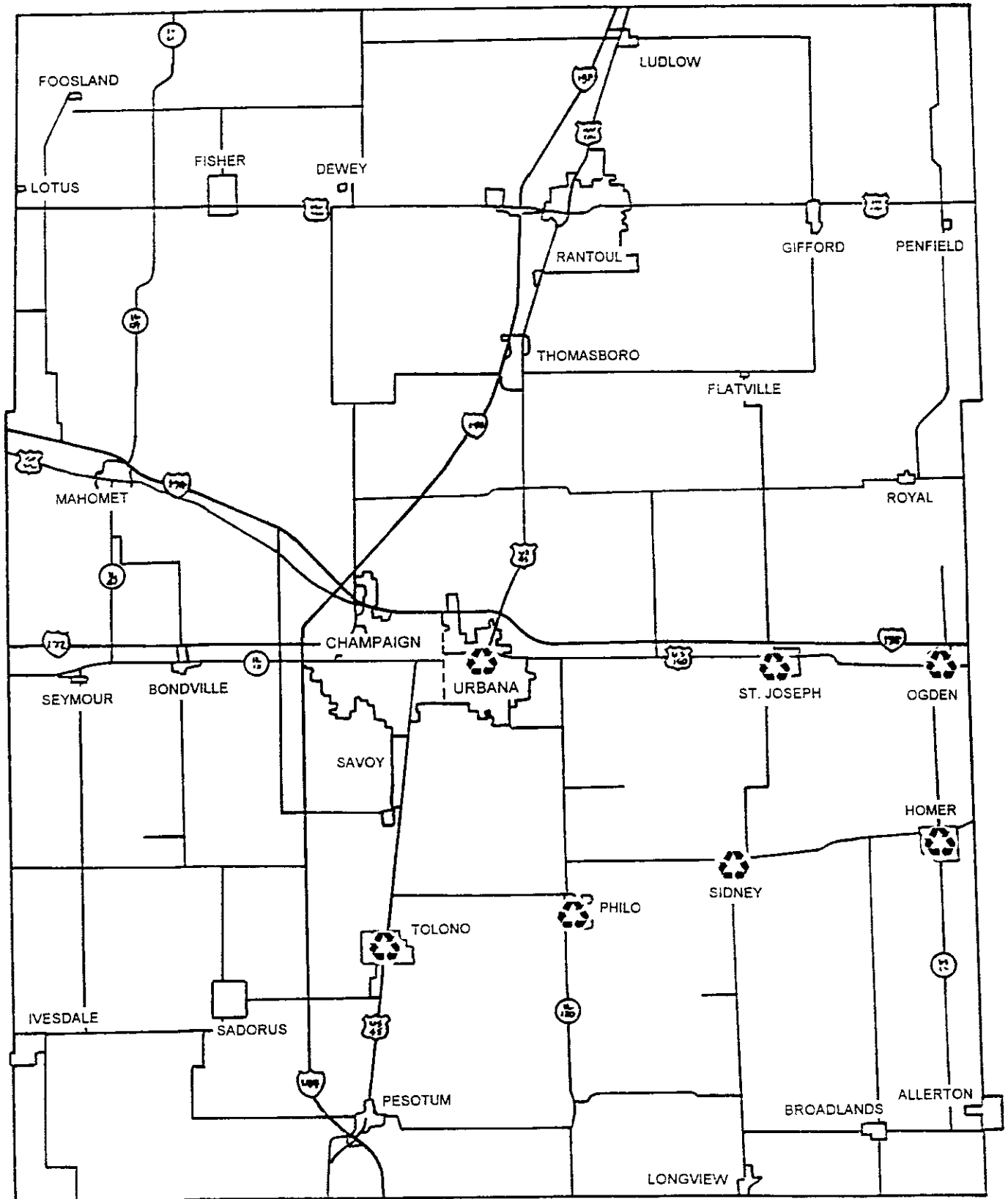


FIGURE 3.1
 Hometown Locations
Champaign County

In addition to the hometown drop-offs, several municipalities have drop-offs open to the public that are owned and operated by private businesses or civic groups. Several processors in the city of Champaign allow the public to bring recyclables to their facilities. A private waste hauler in the Village of Mahomet recently started a recycling collection for village residents every Saturday morning from 9 to noon. Accepted are: glass, aluminum, tin, newspaper, cardboard, mixed plastic, milk jugs and magazines for recycling. These private enterprises are not supported by public funds and are influenced by fluctuations in recycling markets.

A community recycling program coordinated by the local boy scout troop has been in operation in the village of Pesotum since the early 1980's. Pesotum residents bring newspaper, bimetal, aluminum, glass and steel cans to the old railroad depot the 2nd and 4th Saturday of every month. The depot is owned by the village and made available to the troop for the recycling program. The boy scout troop is responsible for sorting, storing and transporting loads of recyclables up to processors in Champaign/Urbana. This program not only serves as a public service project, but is also a fundraiser for the troop and provides visibility to attract future scouts.

The remaining villages in Champaign County do not currently have easy access to recycling programs. Too small to support a public drop-off, residents wishing to recycle take their recyclables to public drop-offs in other nearby communities. Groups in several communities occasionally sponsor special collections of aluminum cans as fundraisers. Some villages sponsor an annual community clean-up event where residents can bring unwanted materials to dumpsters paid for by the village. Scrap metals, tires, batteries and/or other materials are separated from the waste stream and sent elsewhere for recycling. In general, no records are kept on the amounts of materials collected for recycling.

University of Illinois

As a state institution, the University of Illinois is required by state mandate to achieve a 40% recycling rate by the year 2000. Recycling containers for paper, glass, cans and plastics are available in residence halls and buildings across the campus. Recently, Students for Environmental Concerns (SECS) conducted a fundraising campaign to place recycling containers on the University Quadrangle.

According to the University's Recycling Coordinator, the University recycled an estimated 38.7%, or 4807 tons in 1995. This included cardboard, landscape waste, bedding pallets and woodscraps that were recycled by the University either on site or directly to recycling markets, as well as paper, metals, glass and plastics that were processed by local recyclers. Broken concrete from University construction and demolition projects is not included in the recycling totals although it is recycled by a local sand and gravel company.

The University is planning to build a recovery facility at its transfer station that is projected to be operational in mid 1997. The sorting platforms in the new facility will enable more recyclables to be pulled from the waste stream and the University expects to easily exceed a 40% recycling rate.

Common Materials Collected for Recycling

Private processing companies collect recyclable materials and prepare them for recycling markets in Illinois, out of state, and even overseas. There are approximately ten municipal and seven private drop-off sites in Champaign County for recyclable materials. The following common household items can be recycled in Champaign County:

Newspaper Newspapers and newspaper inserts are either baled or shipped loose to recycling markets. Newspapers are shredded and used to make recycled paper, cardboard, products such as acoustic ceiling tiles, or used as animal bedding.

Corrugated Cardboard Cardboard boxes and inserts, cereal boxes, toilet tissue tubes and other paperboards are crushed and baled and sent to markets to be made into new cardboard and paper boxes. Some businesses such as large grocery stores, the University of Illinois, and industries have their own baling equipment and ship their cardboard directly to markets. Others will contract with local processors to act as a broker for them.

High Grade Papers High grade paper is composed of office, computer, and ledger papers, notecards, copy paper, envelopes, and stationery papers. It is baled and shipped to markets to be turned into paper towels, napkins, tissue, toilet paper and recycled paper.

Magazines Magazines are baled and shipped to markets to be recycled into paper towels, napkins, tissue, and toilet paper.

Glass Clear and colored food and beverage glass jars and bottles are either separated or co-mingled, depending on the specifications of the end market. It is either crushed and shipped in Gaylords (big cardboard boxes) or shipped loose in large dumpsters. Glass is melted and mixed with additional raw materials to make new glass bottles and jars.

Aluminum Cans Aluminum food and beverage cans are crushed and sent to markets to be manufactured into new food and beverage cans. Markets for aluminum are the strongest as recycled aluminum uses 95% less energy than making new aluminum from raw materials. Several buy-back programs for aluminum are operated by the private sector in Champaign County.

Other Metals Tin and steel food and beverage cans, household appliances, and other scrap metals are recycled in Champaign County. Food and beverage cans are crushed and baled and sent to steel markets for recycling into new steel products. Appliances and other scrap metals are also shipped to steel markets.

Plastics PETE (#1) and HDPE (#2) plastics can be recycled in Champaign County, and markets for #3-#7 are being investigated. Collected plastics are either crushed and baled or ground up and shipped in large boxes to plastics markets. After being cleaned, plastics are melted and reformulated into new plastic products. PETE plastic is used to make fiberfill insulation, carpeting, or other plastic products. HDPE can be used to make plastic lumber, drain tiles, or other plastic products. In addition, some grocery stores in Champaign County collect used grocery sacks (usually #3 or #4) for recycling.

Landscape Waste Recycling Program

As of July 1, 1990, it is illegal to deposit landscape waste in Illinois landfills (415 ILCS 5/22.22 "Landscape Waste"). Landscape waste is defined as "all accumulations of grass or shrubbery cuttings, leaves, tree limbs and other materials accumulated as the result of the care of lawns, shrubbery, vines and trees" (ILCS 5/3.20 "Landscape Waste"). The Landscape Recycling Center, located in Urbana, is the only IEPA permitted landscape recycling center in Champaign County. The village of Rantoul also operated a landscape recycling center, but closed the facility in the fall of 1995 when the IEPA imposed stricter regulations on landscape waste management. Yardwaste generated in the Rantoul area is now brought to the Landscape Recycling Center in Urbana. Information about how much yardwaste was accepted at the Rantoul site from January 1, 1995 until it closed is not available.

FIG. 3.2 Table

URBANA LANDSCAPE RECYCLING CENTER
IEPA PERMIT #1990-073-DE-OP
[1995 Quantity Analysis]

| ITEM | CONVERSION FACTOR | QUANTITY | | PROCESSING TECHNIQUE |
|------------------|--------------------------|-----------------|---------------|-----------------------------------|
| | | YD ³ | TONS | |
| Brush | 300 lbs./yd ³ | 9,580.5 | 1,437 | Grinding |
| Grass | 800 lbs./yd ³ | 1,455 | 582 | Composted |
| Leaves | 400 lbs./yd ³ | 25,748 | 5,150 | Composted |
| Bagged and Mixed | 600 lbs./yd ³ | 2,852 | 856 | Composted |
| Compacted Mixed | 600 lbs./yd ³ | 19,343 | 5,803 | Segregated/Grinding and Composted |
| Bulk Wood | 800 lbs./yd ³ | 977 | 391 | Cur and Split Firewood |
| Wood Chips | 600 lbs./yd ³ | 1,099 | 330 | Stockpiled and Sold |
| TOTAL | | 61,054.5 | 14,549 | |

NOTE:

- Compacted cubic yards were converted to straight cubic yards by the following ratios:
 - 5-to-1 for mixed; one compacted cubic yard = 5 total cubic yards
 - 5-to-1 for leaves; one compacted cubic yard = 5 total cubic yards
 - 2-to-1 for grass; one compacted cubic yard = 2 total cubic yards
- Approximately 9,490 incoming tons of material were composted.
- All brush received is shredded into landscape mulch.
- All bulkwood over 8" in diameter is given away or split for firewood; remainder is processed into landscape mulch.

The Landscape Recycling Center is a cooperative effort between the Cities of Champaign and Urbana, and Champaign County. The City of Urbana is designated as the operator of the Landscape Recycling Center. According to the 1995 Annual Report submitted to the IEPA, the Landscape Recycling Center accepted a total of 14,549 tons of yardwaste (Table 3.2). Although the bulk of the waste processed at the Center originated in Champaign County, some out of county yardwaste is brought to the Landscape Recycling Center and is included in the totals for 1995.

Special Collections

In addition to regular private and public collection of recyclable materials, special collections of used motor oil, latex paint, and household hazardous wastes are periodically conducted in Champaign County on an irregular basis. These special collections are sponsored by either one or more municipalities, the county and/or the private sector. The importance of these special collections grows as materials are banned from landfills. For example, yardwaste was banned from landfill disposal in July of 1990, and in 1996, waste motor oil is no longer legally accepted at Illinois landfills (415 ILCS 5/21.6).

In 1995, two used motor oil collections and one latex paint collection were sponsored by the Community Recycling Center (a not-for-profit organization), Safety-Kleen (a private business), the Cities of Champaign and Urbana, and Champaign County. At least 4500 gallons of residential used motor oil (16.9 tons @ 7.5 lbs/gal.) was collected and 2200 gallons (8.5 tons @ 7.5 lbs/gal.) of latex paint. The oil was cleaned and reprocessed into recycled motor oil and the paint was fuel blended. In addition, an undisclosed amount of residential used motor oil is accepted at several service stations in Champaign County, and collections of used motor oil are also organized by the Champaign County Farm Bureau.

In addition to scrap yards that recycle appliances and other metals, recycling and reuse programs for commonly discarded items such as used mattresses, batteries and tires exist in the private sector in Champaign County.

Some municipalities in Champaign County sponsor community-wide collections of yardwaste at different times of the year. For example, the City of Champaign collects leaves in the fall and yardwaste in the spring, and both Champaign and Urbana collect Christmas trees after the holidays. All yardwaste is brought to the Landscape Recycling Center located in Urbana.

Recycling Education

Recycling Education occurs in both the private and public sector. The Community Recycling Center (CRC), a not-for-profit organization established in 1978 has provided recycling education and coordinated special recycling collections in the county for over fifteen years. CRC's educator and volunteers have promoted recycling awareness through special events such as "Recycling Week", school programs, media contacts, written curriculum and other printed materials, tours of the recycling center, research projects, and consulting services. The depressed recycling market in 1996 has forced CRC to discontinue its education program and re-evaluate its future.

Another private non-profit organization, the Central States Education Center (CSEC) operates "Model Community", a waste-reduction program for stores, offices, manufacturers, neighborhoods, civic groups and religious organizations. To be certified as an environmental model, Central States educators work with an organization to evaluate its waste stream and develop ways to meet standards in

four areas: 1) waste prevention; 2) eliminating toxins; 3) buying recycled products; 4) recycling. Central States receives funding from contracts and is hoping to increase its education staff in the near future.

The private, for-profit sector also provides recycling education. Most private haulers have written materials explaining what materials can be recycled and how they should be prepared. Haulers also field questions about recycling from their customers. Businesses with special recycling services or recycling programs also provide information on recycling through in-store promotion or media events.

Both the cities of Champaign and Urbana have solid waste managers that coordinate city recycling programs, including educating the public about city-sponsored recycling services. The most common forms of education include brochures and newspaper advertisements or articles about upcoming special collections of such items as household hazardous waste or Christmas trees.

The village of Rantoul supports a part-time recycling educator whose job it is to provide programs on recycling and solid waste management to both youth and adults. The coordinator also organizes special recycling collections and acts as a clearinghouse for information about recycling.

Some recycling education is provided in Champaign County schools, although it is not required. The Champaign school district received grant money to develop a recycling unit for 3rd grade, and since 1995 the district has instituted a voluntary classroom recycling program. Classroom recycling has been started in the Urbana schools and like most other schools in Champaign County, relies on the interest and support of the classroom teacher. A variety of recycling education curriculum is

available to classroom teachers and may or may not be incorporated into classroom activities.

Some other agencies that provide recycling education include the Champaign County Cooperative Extension (programs in recycling and composting) and the Champaign and Urbana Park Districts (occasional programs on recycling and composting).

Recycling Rate for Champaign County, 1995

At least 22% - 23% of Champaign County's municipal solid waste is recycled. This percentage was calculated by totaling the tonnage of municipal waste brought to the two landfills accepting wastes from Champaign County (Table 2.2), plus the tonnage of materials collected in Champaign County for recycling in 1995 (Table 3.3). Data on processible (recycled) construction/demolition materials gathered in 1988 was included in the 1995 total because 1995 levels are unknown, yet construction/demolition waste comprises a significant portion of the waste stream and at least the same if not more materials were recycled in 1995.

The total was then divided by the total tonnage of recycled materials and multiplied by one hundred to arrive at a percentage. This estimate is low, however, because information about the amounts of materials collected in the commercial sector was not available from all recycling processors. In order to obtain that information, a survey of all processors in Champaign County would have had to have been conducted, a task that was beyond the authority of this report.

**Table 3.3 Amount of Materials Recycled in Champaign County
1988 & 1995**

| Type of Material | Tons Recycled in 1988 [±] | | Tons Recycled in 1995 [^] |
|---|------------------------------------|----------------|------------------------------------|
| | Public sector | Private sector | (public sector + some private) |
| Glass | 1056 | - | 1402 |
| Newspaper | 2588 | - | 3500 |
| Aluminum/ Bi-metal | 354 | 11 | 288 |
| Other metals | 495 | 3609 | 446 |
| Appliances | - | 900 | 60 |
| Plastics | 19 | UNK | 417 |
| Paper | 706 | UNK | 1901 |
| Cardboard | 271 | 4400 | 4242 |
| Yardwaste | 5523 | - | 14549 |
| Used Motor Oil | 415 | UNK | 17 |
| Latex Paint | UNK | UNK | 9 |
| Other | - | 120 | 2744 |
| Processible Construction/ Demolition | - | 14373 | 14373* |
| Industrial Process Waste | | 5933+ | UNK |
| Total: | 11427 | 29346 | 43948 |

[±] From "Estimated Recycling Rate by Sector in Champaign County, 1988" in "Champaign County Solid Waste Management Plan, Part III, Recycling" (1991).

[^]Compiled from information gathered from two private recycling processors, the Landscape Recycling Center, & the University of Illinois. *Does not include information from all recycling processors*

*Data from 1988 study: data for 1995 not available.

+Not included in current IEPA definition of recycled waste.

As can be seen in Table 3.3, materials traditionally collected from residences such as newspapers, glass and plastics have increased, whereas materials traditionally collected in the commercial sector such as metals, cardboard, appliances and office paper show dramatic declines. This can be attributed to the lack of information available about the amount of materials collected from commercial accounts by the private sector. It is safe to assume that Champaign County's recycling rate is higher than 22% because most of the recycling conducted in the commercial sector was not included in this report.

Conclusion

Recycling of more than ten different materials is available in Champaign County through public and private drop-off sites, special collections, private collection services and one municipally-sponsored curbside program. All materials collected for recycling except yardwaste are processed by the private sector. Larger communities such as Champaign, Urbana, and Rantoul, have many recycling options whereas residents of smaller communities either depend on a municipally-sponsored public drop-off, a special collection, or transport their recyclables to drop-off sites in other communities. Four years ago, Champaign County encouraged the establishment of Hometown drop-off sites in smaller communities around the county and these important recycling oasis remain popular. Recycling education and general public awareness about recycling has contributed to Champaign County's increasing recycling rate. Because recycling is conducted primarily by the private sector, recycling is largely dependent upon the interest of the public and private sectors and their willingness to subsidize recycling when markets are down.

Champaign County Solid Waste Plan Update 1996

Recommendations and Implementation Schedule

Although much of the data gathered for the 1991 Champaign County Solid Waste Plan is still applicable to Champaign County in 1996, the County has no further plans to construct a landfill or transfer station as recommended by the Inter-governmental Solid Waste Disposal Authority in the 1991 plan. Champaign County is taking a practical approach to solid waste management over the next five years.

It is the goal of Champaign County to reduce the amount of landfilled municipal waste by supporting source reduction, reuse and recycling efforts and programs implemented by local municipalities, and the private and non-profit sectors. The following recommendations are intended to improve the process of coordinating countywide information, reduce the amount of waste generated and increase the amount of waste that is recycled in Champaign County.

1. Champaign County should designate someone to be the county's solid waste coordinator. As required by SWPRA (Section 15/6 (2)), Champaign County will designate the County Administrator as the solid waste coordinator. The coordinator will act as an information clearinghouse and will assist municipalities, the private and non-profit sectors to promote source reduction, reuse and recycling efforts in the county. He/she will keep the county updated on new state and federal legislation, and be responsible for preparing reports as required.

2. Waste hauling companies should be required to obtain a license from the county. In order to discourage illegal dumping, all commercial haulers handling municipal solid waste in Champaign County will be required to obtain an annual license from the County starting on January 1, 1997. Some conditions for licensing will include: guidelines for identifying vehicles; proper handling of waste; and periodic submission of reports. Repeated violations of unlicensed hauling will be met with stiff fines and prosecution.

3. County and municipal governments as well as other municipal agencies and institutions should be encouraged to conduct an audit of their waste stream. By conducting a waste audit, governments, agencies and institutions can identify ways to reduce the amount of waste that is generated through source reduction policies, reuse programs and increased recycling. Waste audits should be conducted on a bi-annual basis.

4. Waste audits should be encouraged in the private sector. The County and municipalities should encourage businesses and industries to conduct their own waste audits to evaluate their current waste generation and evaluate ways to reduce the amount of waste that is generated at their facilities. Champaign County may consider partial funding of a waste audit program similar to the Model Community program operated by the Central States Education Center. This initiative would assist businesses, industries and community organizations in determining where and how they may be able to reduce their waste generation and toxicity levels or to alter their waste to make it more easily processed.

5. Champaign County should work with municipal governments and the private sector to encourage and sponsor periodic special collections of materials for recycling, reuse or proper disposal. Champaign County should set up a mechanism to work with local governments, institutions and the private sector to sponsor periodic collections of used motor oil, paint, household hazardous waste, and/or other special items such as batteries or tires. This responsibility could be assumed by the Champaign County Solid Waste Coordinator, who should keep informed on new source reduction and recycling programs sponsored by the state and try to tap into available funds in the public and private sectors.

6. Champaign County should encourage local municipalities to conduct a five year recycling survey of residences and businesses in order to accurately assess the participation rates associated with their recycling program. By becoming more aware of participation rates in recycling programs, municipalities and the County can better evaluate strengths and weaknesses of various recycling programs. To assist municipalities with the survey, an extension of the Hometown Assistance Grant Program could provide funds for qualifying municipalities.

7. Champaign County should support public education programs about solid waste and recycling. The Champaign County Solid Waste Coordinator should work with the private and nonprofit sector to provide education programs related to source reduction, toxicity reduction and recycling for municipalities, businesses and residents of Champaign County. Several private organizations such as the Champaign County Cooperative Extension and the Central States Education Center are already active in providing solid waste education. The County may provide partial funding in the form of contracts or grants to support some of these county-wide programs.

8. The County will review and update the County's solid waste plan within five years or by the year 2002. As required by SWPRA (415 ILCS 15/5(e)), Champaign County will review and update its solid waste plan five years from the date of approval of the current plan. The plan will contain updated information about the amount of waste generated and recycled in Champaign county, enabling the county to identify its strengths and weaknesses in solid waste management over the past decade and make plans for the future.

Conclusion

Champaign County recognizes its responsibility to provide leadership in the management of the county's solid waste. Through the commitment of the solid waste coordinator, the County will act as an information clearinghouse and will assist municipalities, and the private and non-profit sectors to promote source reduction, reuse and recycling efforts in the county.

The county also believes in the value of encouraging decision-making at the local level. Municipalities in Champaign County will be allowed to determine the best way to handle solid waste and recycling within their jurisdiction based on their own unique parameters. During the next five years, the county will encourage and provide support for those endeavors by making available the expertise and efforts of the County's solid waste coordinator. In addition, some form of financial assistance or cooperative partnerships may be made available to support source reduction, recycling and education programs.

Champaign County Solid Waste Plan
1996 Update

Appendices

- A Glossary of terms as defined in the Illinois State Statutes
- B Letter from the Illinois Environmental Protection Agency defining municipal solid waste
- C 1991 Solid Waste Management Plan Update, February, 1996

ATTACHMENT

"Agricultural Wastes" means any refuse, except garbage and dead animals, generated on a farm or ranch by crop and livestock production practices including such items as bags, cartons, dry bedding, structural materials and crop residues but excluding landscape wastes (35 Ill. Adm. Code 237.101).

"Clean construction or demolition debris" means broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement or uncontaminated dirt or sand generated from construction or demolition activities (415 ILCS 5/3.78).

"Garbage" is waste resulting from the handling, processing, preparation, cooking, and consumption of food, and wastes from the handling, processing, storage, and sale of produce (415 ILCS 5/3.11).

"Hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly managed, and which has been identified, by characteristics or listing, as hazardous pursuant to Section 3001 of the Resource Conservation and Recovery Act of 1976, P.L. 94-580, or pursuant to Board regulations.

Potentially infectious medical waste is not a hazardous waste, except for those potentially infectious medical wastes identified by characteristics or listing as hazardous under Section 3001 of the Resource Conservation and Recovery Act of 1976, P.L. 94-580, or pursuant to Board regulations (415 ILCS 5/3.15).

"Industrial process waste" means any liquid, solid, semi-solid, or gaseous waste generated as a direct or indirect result of the manufacture of a product or the performance of a service. Any such waste which would pose a present or potential threat to human health or the environment or with inherent properties which make the disposal of such waste in a landfill difficult to manage by normal means is an industrial process waste. "Industrial Process Waste" includes but is not limited to spent pickling liquors, cutting oils, chemical catalysts, distillation bottoms, etching acids, equipment cleanings, paint sludges, incinerator ashes (including but not limited to ash resulting from the incineration of potentially infectious medical waste), core sands, metallic dust sweepings, asbestos dust, and off-specification, contaminated or recalled wholesale or retail products. Specifically excluded are uncontaminated packaging materials, uncontaminated machinery components, general household waste, landscape waste and construction or demolition debris (415 ILCS 5/3.17).

"Landscape waste" means all accumulations of grass or shrubbery cuttings, leaves.

tree limbs and other materials accumulated as the result of the care of lawns, shrubbery, vines, and trees (415 ILCS 5/3.20).

"Municipal waste" means garbage, general household, institutional and commercial waste, industrial lunchroom or office waste, landscape waste, and construction and demolition debris (415 ILCS 15/3).

"Pollution control waste" means any liquid, solid, semi-solid or gaseous waste generated as a direct or indirect result of the removal of contaminants from the air, water or land, and which pose a present or potential threat to human health or the environment or with inherent properties which make the disposal of such waste in a landfill difficult to manage by normal means. "Pollution Control Waste" includes but is not limited to water and wastewater treatment plant sludges, baghouse dusts, landfill waste, scrubber sludges and chemical spill cleanings (415 ILCS 5/3.27).

"Potentially infectious medical waste" means the following types of waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the production or testing of biologicals:

1. Cultures and stocks. This waste shall include but not be limited to cultures and stocks of agents infectious to humans, and associated biologicals; cultures from medical or pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live or attenuated vaccines; or culture dishes and devices used to transfer, inoculate, or mix cultures.
2. Human pathological wastes. This waste shall included tissue, organs, and body parts (except teeth and the contiguous structures of bone and gums); body fluids that are removed during surgery, autopsy, or other medical procedures, or specimens of body fluids and their containers.
3. Human blood and blood products. This waste shall include discarded waste human blood, blood components (e.g., serum and plasma), or saturated material containing free flowing blood or blood components.
4. Used sharps. This waste shall include but not be limited to discarded sharps used in animal or human patient care, medical research, or clinical or pharmaceutical laboratories, hypodermic or intravenous syringes; Pasteur pipettes; scalpel blades; or blood vials. This waste shall also include but not be limited to other types of broken or unbroken glass (including slides and cover slips) in contact with infectious agents.

5. Animal waste. Animal waste means discarded materials, including carcasses, body parts, body fluids, blood, or bedding originating from animals inoculated during research, production of biologicals, or pharmaceutical testing with agents infectious to humans.
6. Isolation waste. This waste shall include discarded waste materials contaminated with blood, excretions, exudates, and secretions from humans that are isolated to protect others from highly communicable diseases. "Highly communicable diseases" means those diseases identified by the Board in rules adopted under subsection (e) of Section 56.2 of this Act.
7. Unused sharps. This waste shall include but not be limited to the following unused, discarded sharps: hypodermic, intravenous, or other needles; hypodermic or intravenous syringes; or scalpel blades.

Potentially infectious medical waste does not include:

1. waste generated as general household waste;
2. waste (except for sharps) for which the infectious potential has been eliminated by treatment; or
3. sharps that meet both of the following conditions:
 - A. the infectious potential has been eliminated from the sharps by treatment; and
 - B. the sharps are rendered unrecognizable by treatment (415 ILCS 5/3.84).

"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 (415 ILCS 5/3.30).

"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 (415 ILCS 5/3.81).

"Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effects (415 ILCS 5/3.44).



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

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217/785-8604
217/782-9290 (fax)

June 1, 1994

Dear Solid Waste Planner:

This letter presents the Agency's updated interpretation of issues related to the Solid Waste Planning and Recycling Act's recycling rate provisions. It has been prepared in response to inquiries we have received concerning the collection of data on municipal waste, amounts recycled, and the calculation of recycling rates. It includes the Agency's interpretation of materials to be included in, and excluded from, the definition of municipal waste, and activities which should and should not be considered as recycling. It concludes by recommending that recycling rates be calculated by dividing the weight of the recycled municipal waste by the weight of the municipal waste generated annually.

Background

The Solid Waste Planning and Recycling Act requires that adopted municipal waste management plans include a recycling program designed to recycle 15% by weight of the municipal waste generated in each county within 3 years of plan implementation and 25% by weight within 5 years, subject to the existence of a viable market for the recycled materials. The law only references recycling, not source or waste reduction, in the determination of a recycling rate. The law places the responsibility for plan development, adoption, and implementation on counties and the City of Chicago.

As you know, the statute defines most applicable terms. This guidance simply addresses the Agency's interpretation of a number of questions related to the statute. This guidance may not address every possibility. New questions are posed to us regularly. An activity or material that is not included in these interpretations should be compared with the statutory definitions. A list of terms used in this letter is presented below; definitions are from the Environmental Protection Act ("Act") or the Solid Waste Planning and Recycling Act ("SWPRA"). The definitions are included in the Attachment.

Planners may wish to utilize this interpretation when beginning the data collection, waste generation, or recycling rate determination process.

The recycling rate should be calculated as the percentage derived by dividing the weight of the generated municipal waste that is being recycled (or planned for recycling) by the weight of the municipal waste generated, (or expected to be generated) within the area of concern during the same year. The weight of municipal waste being recycled is the weighed amount of municipal waste received (or planned for receipt) for recycling, minus the weighed amount of material remaining after processing that is not recyclable. Source or volume reduction programs should not be included in the determination of a recycling program.

In addition, five year plan updates required under the SWPRA should include a description of the weight or volume of municipal waste generated within the county's boundaries and a description of the weight or volume of the municipal waste generated within the county's boundaries that is recycled.

If you have any questions related to issues outside the scope of this letter, please contact me at the above number.

Sincerely,

A handwritten signature in cursive script that reads "Linda Hinsman".

Linda Hinsman, Manager
Planning and Grants Unit
Solid Waste Management Section
Division of Land Pollution Control
Bureau of Land

LIST OF TERMS

Agricultural wastes is defined in 35 Ill. Adm. Code 237.101.

Clean construction or demolition debris is defined in Sec. 3.78 of the Act. Clean construction or demolition debris is not considered to be municipal waste.

Garbage is defined in Sec. 3.11 of the Act.

Hazardous waste is defined in Sec. 3.15 of the Act.

Industrial process waste is defined in Sec. 3.17 of the Act.

Landscape waste is defined in Sec. 3.20 of the Act.

Municipal waste is defined in Sec. 15.3 of the SWPRA.

Pollution control waste is defined in Sec. 3.27 of the Act.

Potentially infectious medical waste is defined in Sec. 3.84 of the Act.

Recycling, reclamation or reuse is defined in Sec. 3.3 of the Act.

Recycling center is defined in Sec. 3.81 of the Act.

Sludge is defined in Sec. 3.44 of the Act.

Special waste is defined in Sec. 3.45 of the Act.

Transfer station is defined in Sec. 3.83 of the Act.

White Goods is defined in Sec. 22.28 of the Act.

NON-STATUTORY DEFINITIONS

Not all terms used in state statutes are defined there. In the absence of legislatively determined definitions, the Agency, using guidance from USEPA and the National Recycling Coalition (NRC), has developed the following recommended definitions.

"Commercial waste" as applied to municipal waste, means nonhazardous waste originating from wholesale, retail, or service establishments such as office buildings, stores, markets, theaters, hotels, motels, and warehouses.

"Construction or demolition debris" as applied to municipal waste, means mixed nonhazardous materials, such as broken concrete, stone, rock, bricks or building or construction debris resulting from construction or demolition activities.

"General household waste" as applied to municipal waste, means nonhazardous residential waste originating in single and multiple-family dwellings.

"Industrial lunchroom or office waste" means non-industrial waste produced in industrial lunchrooms, cafeterias or food-serving functions, or non-industrial waste produced at commercial offices. (Planners may categorize office waste as either commercial waste or industrial office waste).

"Institutional waste" as applied to municipal waste, means non-industrial waste originating in facilities such as schools, hospitals, correctional facilities, and research institutions.

"Recycling program" means facilities, projects, activities, or recommendations included in a municipal waste management plan that comply with the provisions of the Solid Waste Planning and Recycling Act.

"Waste generation" as applied to municipal waste, means the weight or volume of materials and products after they are discarded or enter the municipal waste stream, and before materials recovery, combustion, landfilling or other disposal methods occur.

Agency Interpretation of Certain Issues

The SWPRA requires that adopted plans' recycling programs 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; commercial, institutional or industrial machinery or equipment.

In determining a county's recycling rate, it is important to distinguish between amounts generated and amounts disposed. Although the SWPRA does not define "generation" it does require each county to "submit an officially adopted plan for the management of municipal waste generated within its boundaries." Some waste that is generated may be improperly disposed, littered, or illegally dumped; transported outside the area; stored; or disposed of on-site. Because some of this waste may eventually be discarded, collected, and disposed, planners should account for this waste when determining their overall waste generation numbers.

Wastes that are generated in the planning area which are outside the definition of municipal waste may be calculated and included in an overall total waste generated number.

To assist local governments in the determination of recycling rates, the Agency has developed the following interpretation.

A. For the purposes of calculating municipal waste generation and recycling rates, municipal waste does include:

- (1) garbage, general household, commercial, and institutional waste, industrial lunchroom or office waste, and landscape waste;
- (2) construction or demolition debris from buildings and roads that is not clean construction or demolition waste (clean construction or demolition waste is not considered to be a municipal waste);
- (3) abandoned or discarded household or commercial appliances, including white goods or white goods components;
- (4) waste parts from motor vehicles normally removed as a part of regular maintenance such as tires and batteries;
- (5) wastes collected at a household hazardous waste collection or other waste component collection, such as tires;
- (6) wastes that are generated, discarded, and collected for recycling; and
- (7) wastes that are generated and discarded for final treatment (incineration) and for disposal (landfilling) or management.

B. For the purposes of calculating municipal waste generation and recycling rates, municipal waste does not include:

- (1) special waste, including industrial process waste, pollution control waste, and potentially infectious medical waste; ash produced from incinerating municipal waste at a municipal waste incinerator; and special wastes such as liquid used oil from service stations, oil change shops, and the like;
- (2) hazardous waste;
- (3) earth materials moved or removed during demolition or construction;
- (4) scrap metal, plastic, wood, or other materials from pre-consumer industrial or commercial operations such as machining, lathe work, tool and die operations and the like;
- (5) industrial waste that is not generated from an industrial lunchroom or industrial office;
- (6) abandoned or scrap motor vehicles;
- (7) surplus or donated clothing, or usable or reusable commodities donated or given to charitable organizations, such as Goodwill or Salvation Army;
- (8) surplus or donated food contributed for human consumption;
- (9) agricultural wastes;
- (10) sludge generated from treating water or sewage at publicly owned treatment works; and
- (11) wastes that have not been discarded or collected for disposal, such as grass clippings which are left on the lawn.

C. For the purposes of calculating municipal waste generation and recycling rates, recycling does include:

- (1) re-using or reclaiming municipal waste that has been discarded, collected, separated or processed and returned to the economic mainstream in the form of raw materials or products;
- (2) composting operations where the waste, once composted, is returned to the economic mainstream or replaces other raw materials for fertilizer, soil conditioner or mulch;
- (3) applying landscape waste (grass clippings, leaves, tree limbs, etc.) or other municipal waste directly to agricultural land at agronomic rates;
- (4) landscape waste that is collected, separated or processed and returned to the economic mainstream in the form of raw materials or products;
- (5) shredding operations where the waste is returned to the economic mainstream or replaces other raw materials for fertilizer, soil conditioner or mulch;
- (6) re-using construction or demolition debris for building construction purposes or reuse as road surface materials;
- (7) using waste for commercial feed for such things as mink farms, swine operations, or fish production;
- (8) processing waste at a rendering facility for return to the economic mainstream; and
- (9) processing municipal waste, including white goods, for metal recovery.

D. For the purposes of calculating municipal waste generation and recycling rates, recycling does not include:

- (1) incineration for volume reduction, including the use of burn barrels;
- (2) incineration for energy recovery;
- (3) producing or burning refuse derived fuel or tire derived fuel;
- (4) re-using or reclaiming household or commercial waste components for the same or another use when that waste component has not been discarded;
- (5) re-using or reclaiming municipal waste, that has not been discarded, collected, separated or processed and returned to the economic mainstream in the form of raw materials or products;
- (6) waste reduced through source reduction actions or programs, such as lawn clippings left on the lawn;
- (7) used whole tires, or retreaded/remanufactured tires which are sold or re-used; or other automotive parts which have been rebuilt or salvaged, such as alternators or other body parts; and
- (8) on-site (in-process) industrial recycling.

CHAMPAIGN COUNTY
SOLID WASTE
MANAGEMENT PLAN UPDATE

Prepared For:
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February, 1996

FIVE YEAR MUNICIPAL WASTE MANAGEMENT PLAN UPDATE

GENERAL INFORMATION

Local Government: Champaign County
Contact Person: Jacquelin Ann White
Address: 204 East Elm
Urbana, IL 61801

Telephone: 217-384-3776 Plan Adoption Date: February 19, 1991
Re-Adoption Date: May 31, 1996 Plan Update Due: February 19, 1996

1. Recommendations and Implementation Schedule Contained in the Adopted Plan

Approximately forty-six recommendations were made in the 1991 Champaign County Solid Waste Management Plan. These include both specific and general recommendations directed at Champaign County, the City of Urbana, the City of Champaign and interested parties in the private and nonprofit sector. The implementation schedule for most of these suggestions was left to the discretion of the implementing agency, the Intergovernmental Solid Waste Disposal Agency.

a. Source Reduction

Source reduction recommendations can be divided into four different areas: Post-Consumer Source Reduction, Toxicity Reduction, Increasing the "Recyclability" of the Waste stream and Industrial Source Reduction. No specific implementation schedule was associated with the eighteen source reduction recommendations.

Post-Consumer Source Reduction

1. An education coordinator should be part of the implementing agency's staff.
2. The County and municipal governments, as well as other municipal agencies, should encourage source reduction activities whenever possible.
3. County and municipal governments should encourage State and Federal officials and representatives to address the issue of source reduction in whatever means possible.
4. County and municipal governments, as well as other municipal agencies, should require that all departments complete a waste audit.
5. County and municipal governments should require that the ultimate disposal costs be calculated as part of their procurement process.

Toxicity Reduction and Increasing the "Recyclability" of the Wastestream

1. The education coordinator should develop materials to inform consumers of the type of hazardous waste in their home.
2. A separate publication on the alternatives to hazardous waste should be made available through local offices.
3. Implementation of toxicity reduction should be coordinated with other community groups.
4. County and municipal governments should encourage the introduction and passage of bills at the State and Federal level that address the issue of toxicity reduction.
5. If the State or Federal governments do not pass legislation addressing the proper disposal of hazardous materials, or if no private firm establishes a comprehensive program for proper disposal of the hazardous materials within 5 years, review of this plan should include consideration of banning these materials from any municipally owned or operated facility or review the way and means of adding taxes on select hazardous materials.
6. If there has been no State or Federal legislation enacted to address problem components of the wastestream with 5 years of this plan's adoption, reevaluation of deposits, surcharges, product bans and other related activities should be undertaken.
7. The education coordinator should include information on the recyclability of items in all program material as well as making sure retail and wholesale outlets should use paper bags for the conveyance of purchases.

Industrial Source Reduction

1. The implementing authority should develop a waste audit program that would consist of staff visits to facilities to assist businesses and industries in determining where and how they may be able to reduce their waste generation and toxicity levels or to alter their waste to make it more easily processed.
2. Development of a waste disclosure report should be included as part of the review process within the economic development and planning departments of member governments.
3. The County and municipal governments should encourage efforts to reuse existing structures in the community as much as possible.
4. Demolition permits should have a thirty day waiting period.
5. The creation of a construction material recycling center should be investigated.
6. There should be a municipally sponsored Small Quantity Generator Program.

b. Recycling and Reuse

The twenty-one recommendations for recycling and reuse were divided into two separate implementation schedules: seventeen recommendations for the next five years (1990-1995) and four long-term recommendations. The recommendations for 1990-1995 were divided into five categories: General, Residential, Yardwaste, Commercial, Community Recycling Center.

1990-1995 Recommendations

General

1. The Cities and County should develop a unified recycling system and agency to operate the recycling programs.
2. The Cities and the County, through their membership in the Association, should develop a material recovery facility to 'mainstream' recycling in Champaign County.
3. The Cities and the County should consider altering the current licensing structure for haulers.

Residential

1. The City of Urbana should add HDPE/PET collection to their curbside routes.
2. The City of Champaign and the City of Urbana should expand their curbside collection programs to service buildings with 5-9 units with a targeted participation rate of 30%.
3. Both Cities should use educational and promotional means to raise participation rates to a targeted range of 45-55%.
4. Both Cities should add the collection of cardboard/paperboard to the curbside programs (including the 5-9 unit buildings).
5. The County should maintain their current number of drop-offs.

Yardwaste

1. The City of Champaign should begin a nine-month yardwaste collection program.
2. The City of Urbana should maintain their U-Bag and U-Tie program.
3. Both Cities should investigate the development of residential backyard composting programs.

Commercial

1. There should be no municipally sponsored programs intended to service large commercial and industrial firms in the County.
2. A partnership between the private haulers and the implementing authority should be developed to increase the recycling opportunities for small to medium sized businesses.
3. Both the Cities and the County should review their zoning, building codes, health and safety codes or any other ordinance or regulation that may hinder recycling activity in the commercial and industrial sector.

Community Recycling Center

1. CRC should re-evaluate their operations and determine whether collection or processing should be their primary function.
2. The in-town Drop-off sites should be upgraded.
3. CRC should determine how to optimize their current capacity without any major improvements.

Long-Term Recommendations

1. The database of waste generation recycling and disposal information should be routinely updated.
2. The municipal programs should continuously adapt the materials collected to the changing mix of recyclable materials.
3. Studies on how to service 10 plus unit residential structures should be undertaken.
4. The recycling programs should be amended to accommodate generator-based waste reduction programs when appropriate.

c. Combustion for Energy Recovery

d. Combustion for Volume Reduction

Ten scenarios were considered within the body of Champaign County's Solid Waste Management Plan. Two of the ten scenarios considered in the Solid Waste Management Plan, included the construction of a combustion facility. This facility was to be located in the vicinity of the University of Illinois' Abbott Power Plant. In the final analysis, these scenarios were not recommended to be the most cost effective way to achieve Champaign County's solid waste management goals.

e. Disposal in Landfills

Scenario #6 was chosen as the most cost efficient way to achieve Champaign County's solid waste management goals. This proposal calls for the construction of an in-county transfer station with material recovery component, and the construction of an in-county Landfill. Scenario #6 states that the previously mentioned expanded curb-side program (see residential recommendations) be implemented in 1992, the transfer station with material recovery operational by 1992 and the new landfill opening in 1995. The following six recommendations associated with the implementation of Scenario #6 separated into four categories: Ownership, Operation and Procurement, Implementing Agency, Flow Control, and Financing.

Ownership, Operation and Procurement

1. Local government should own the facilities.
2. Local government should develop a public/private partnership for the operation of the solid waste facilities.

Implementing Agency

1. Designate the Intergovernmental Solid Waste Disposal Association as the implementing agency.
2. Local municipal recycling programs should continue under the direction of the member governments until such time as ISWDA can consolidate services.

Flow Control

1. Flow Control should be enacted immediately after the adoption of the Solid Waste Management Plan to insure demand for services for the future in-county landfill and reduce the municipalities liability with regard to out-of-county disposal sites.

Financing

1. In Champaign County, solid waste facilities should be financed with revenue bonds.

2. Current Plan Implementation Efforts

a. Which recommendations in the adopted plan have been implemented?

Source Reduction

The county and municipal governments, as well as other municipal agencies, should encourage source reduction activities whenever possible.

Implementation of toxicity reduction should be coordinated with other community groups.

The county and municipal governments should encourage efforts to reuse existing structures in the community as much as possible.

Recycling and Reuse

Please see section G of "Current Recycling Program" for details on ^gthe how some of the below initiatives were implemented.

The Cities and the County should consider altering the current licensing structure for haulers.

The City of Urbana should add HDPE/PET collection to their curbside routes. This change in curbside service will be adopted by the end of 1996. Urbana currently services HDPE/PET, white paper and phone books at their drop-off facilities.

The City of Champaign and the City of Urbana should expand their curbside collection programs to service buildings with 5-9 units. (Although municipally run curbside recycling has been discontinued in Champaign, some buildings with 5-9 units are receiving recycling services from independent haulers. The City of Urbana will be adopting a plan in 1996 which requires haulers to service buildings of up to six units.)

Both Cities should add the collection of cardboard/paperboard to the curbside programs. (Urbana now does this. Although municipally run curbside recycling has been discontinued in Champaign, these recycling services are being supplied by some independent haulers).

Both Cities should investigate the development of residential backyard composting programs. The City of Champaign ran a Pilot program whereby they would supply a resident with \$20.00 to begin their own backyard composting programs. The City ran an add in the local newspaper and attracted approximately 30 participants.

There should be no municipally sponsored programs to service large commercial and industrial firms.

Community Recycling Center

CRC should re-evaluate their operations and determine whether collection or processing should be their primary function.

The in-town Drop-off sites should be upgraded.

CRC should determine how to optimize their current capacity without any major improvements.

Briefly describe which recommendations were not implemented and the reasons why these were not implemented.

Few of the some forty-six recommendations were implemented over the last five years. The primary reason for this is due to the community's rejection of the Solid Waste Management Plan's implementing agency, the Intergovernmental Solid Waste Disposal Association (ISWDA). ISWDA was comprised of members from Champaign County, the City of Champaign, and the City of Urbana.

ISWDA was recommended to be the implementing agency because an intergovernmental agency would, according to the Solid Waste Management Plan, "...allow the broadest county representation, ...allow multiple points for public input, and will ...offer a checks and balances system." One may infer from these statements that ISWDA's purpose was to develop a consensus between the various local municipalities, the private and nonprofit sector, and the larger citizenry of Champaign County. Once plans moved forward, however, to centralize authority of Champaign County's solid waste management in the hands of ISWDA, it became apparent that there were many philosophical and practical barriers to ISWDA acting as the implementing agency. Large projects such as locating, financing and managing the recommended transfer and landfill facilities fostered disagreement and dissension. In addition, initiatives to standardize collection and processing procedures throughout the county through flow control measures met with resistance.

ISWDA proposed actions met with opposition mainly from four stakeholders. The farming community in Homer objected to the placement of a landfill in an area that was once farmland. The independent waste haulers who operated in the Urbana-Champaign area formed a Waste Haulers Association in August, 1992 and lobbied for the privatization of solid waste management services in the City of Champaign and the City of Urbana. The Waste Hauler's Association objected to the type of flow control restrictions suggested by ISWDA. These restrictions on where the haulers could take their solid waste were an integral part of ISWDA plan to pay for the operation of a Champaign County landfill and transfer station. Local municipalities and regional nonprofit corporations raised doubts that ISWDA would operate these facilities as efficiently as would a private and/or nonprofit company.

In the spring of 1992, after opposition was met from the farming community in Homer, and amidst negotiations with waste haulers to privatize collection of solid waste, the City of Champaign decided to withdraw from ISWDA. Champaign County had already relaxed its support for the interjurisdictional agency. The agency lost its original authority and its power to implement aspects of the Solid Waste Management Act became severely limited. Consequently the following recommendations did not get implemented:

Source Reduction

An education coordinator should be part of the implementing agency's staff.

County and municipal governments should encourage State and Federal officials and representatives to address the issue of source reduction in whatever means possible.

County and municipal governments, as well as other municipal agencies, should require that all departments complete a waste audit.

County and municipal governments should require that the ultimate disposal costs be calculated as part of their procurement process.

The education coordinator should develop materials to inform consumers of the type of hazardous waste in their home.

A separate publication on the alternatives to hazardous waste should be made available through local offices.

County and municipal governments should encourage the introduction and passage of bills at the State and Federal level that address the issue of toxicity reduction.

The education coordinator should include information on the recyclability of items in all program material as well as making sure retail and wholesale outlets should use paper bags for the conveyance of purchases.

The implementing authority should develop a waste audit program that would consist of staff visits to facilities to assist businesses and industries in determining where and how they may be able to reduce their waste generation and toxicity levels or to alter their waste to make it more easily processed.

Development of a waste disclosure report should be included as part of the review process within the economic development and planning departments of member governments.

Demolition permits should have a thirty day waiting period.

The creation of a construction material recycling center should be investigated.

There should be a municipally sponsored Small Quantity Generator Program.

Recycling and Reuse

The Cities and County should develop a unified recycling system and agency to operate the recycling programs.

The Cities and the County, through their membership in the Association, should develop a material recovery facility to 'mainstream' recycling in Champaign County.

The City of Champaign should begin a nine-month yardwaste collection program. The City of Champaign practices yardwaste collection nine weeks out of the year. Currently, they run a five week leaf collection schedule in the fall, a two week tree collection after Christmas, and a two week general yardwaste collection program in the spring.

Both Cities should use educational and promotional means to raise participation rates to a targeted range of 45-55%. Currently, there are no planned educational or promotional initiatives and the City of Urbana and the City of Champaign has no way to track the participation rates in their respective municipalities.

The City of Urbana should maintain their U-Bag and U-Tie program. Independent Waste Haulers now operate a similar system.

Both the Cities and the County should review their zoning, building codes, health and safety codes or any other ordinance or regulation that may hinder recycling activity in the commercial and industrial sector.

The database of waste generation recycling and disposal information should be routinely updated.

The municipal programs should continuously adapt the materials collected to the changing mix of recyclable materials.

Studies on how to service 10 plus unit residential structures should be undertaken.

The recycling programs should be amended to accommodate generator-based waste reduction programs when appropriate.

A partnership between the private haulers and the implementing authority should be developed to increase the recycling opportunities for small to medium sized businesses.

Disposal in Landfills

Scenario #6 was chosen as the most cost efficient way to achieve Champaign County's solid waste management goals. This proposal calls for the construction of an in-county transfer station with material recovery component, and the construction of an in-county Landfill. Scenario #6 states that the previously mentioned expanded curb-side program (see residential recommendations) be implemented in 1992, the transfer station with material recovery operational by 1992 and the new landfill opening in 1995.

Ownership, Operation and Procurement

Local government should own the facilities.

Local government should develop a public/private partnership for the operation of the solid waste facilities.

Implementing Agency

Designate the Intergovernmental Solid Waste Disposal Association as the implementing agency.

Local municipal recycling programs should continue under the direction of the member governments until such time as ISWDA can consolidate services.

Flow Control

Flow Control should be enacted immediately after the adoption of the Solid Waste Management Plan to insure demand for services for the future in-county landfill and reduce the municipalities liability with regard to out-of-county disposal sites.

Financing

In Champaign County, solid waste facilities should be financed with revenue bonds.

b. Which recommendations in the adopted plan have been implemented according to the plan's schedule?

As stated in the preceding pages, the implementation schedule for most of these suggestions was left to the discretion of the implementing agency, the Intergovernmental Solid Waste Disposal Agency. As a result of this agency's failure, there were no scheduled implementation dates for most of the forty-six recommendations outlined in the Solid Waste Management Plan.

Briefly describe which recommendations were not implemented according to schedule.

The reasons for no implementation of the above cited recommendations according to schedule is covered in the above section entitled "Briefly describe which recommendations were not implemented and the reasons why these were not implemented."

3. Recycling Program Status

Because the Agency's annual landfill capacity report includes data on each adopted plan's recycling status, information on your recycling percentages is not being requested on this form. This will avoid duplication of efforts.

- a. Has the program been implemented throughout the county or planning area?
yes no
- b. Has a recycling coordinator been designated to administer the program?
yes no
- c. Does the program provide for separate collection and composting of leaves?
yes no
- d. Does the recycling program provide for public education and notification to foster understanding of and encourage compliance with the program?
yes no
- e. Does the recycling program include provisions for compliance, including incentives and penalties?
yes no If yes, please describe.
- f. Does the program include provisions for recycling the collected materials, identifying potential markets for at least three materials, and promoting the use of products made from recovered or recycled materials among businesses, newspapers, and local governments?
yes no If yes, please describe.
- g. Provide any other pertinent details on the recycling program.

Champaign County has encouraged local recycling efforts. In 1993, Champaign County distributed over \$22,000.00 to six municipalities through the Hometown Assistance Grant Program. The purpose of these funds was to provide start-up costs for recycling drop-off centers in participating municipalities.

Several recycling initiatives have been developed by the active private and nonprofit sector in Champaign County. The Community Recycling Center (CRC) of Champaign, is the largest Illinois

nonprofit collection and processing recycler south of Chicago. Currently, the CRC is involved in collecting approximately 6,500 tons of municipal waste and processing approximately 10,000 tons of municipal waste per year. Since 1991, they have upgraded two of their supplemental in-town drop-off sites and are considering locating a third in southwest Champaign. CRC will be completing an expansion of its processing facilities in early 1997 which will allow it to process 30,000 tons per year in the near future and a long-term capacity of 60,000 tons per year.

CRC is also active in education and research. They employ a full-time staff educator who operates a recycling hotline, conducts three toxicity reduction collections a year, and speaks to local community groups. CRC, in conjunction with the Mechanical Engineering Department at the University of Illinois, has conducted a pilot study on volume reduction through food waste composting and a pilot study on the environmental costs and benefits of an elementary school's use of paper plates versus reusable washed dishes.

The Central States Education Center of Champaign runs a Model Community program which assists retail stores, offices, manufacturers, neighborhoods, civic groups, and religious organizations reduce their waste stream. The program offers classes and certification for the participants. To be certified, an organization must meet standards in four areas: 1) Waste Prevention; 2) Eliminating Toxins; 3) Buying recycled products, and 4) Recycling. Model Community has certified over twenty five organizations in the Champaign-Urbana area and expects three more organizations to be certified by spring 1996.

In 1994, the City of Champaign allocated \$10,000.00 to the Champaign Schools Waste Prevention Curriculum Development Project. The program educated students in eleven elementary schools by employing them in a program which recycled paper, cardboard, and aluminum. As part of an increase in recycling awareness, a district wide Waste Free Lunch Day, a Recycling Day, and Earth Day activities were held.

In 1994, the Landscape Recycling Center, an operation jointly funded by the City of Urbana and the County of Champaign, processed a total of 15,538 tons of yardwaste from residences located in the City of Champaign, the City of Urbana and other local municipalities in the immediate vicinity of the City of Urbana. This yardwaste included grass, leaves, brush, bagged and mixed, compacted mixed, bulk wood and wood chips.

There are approximately eighteen independent waste haulers which operate in Champaign County and comprise the Waste Haulers Association. They are required by the City of Champaign and the City of Urbana to collect at least four recyclable materials (cans, glass, newspapers, and plastic) from their residential customers. Many of these private collection companies collect cardboard, mail, and paperboard as well.

4. Current Needs Assessment Information (optional)

| | |
|-----------------------------------|------|
| a. MW generated per year: | NA |
| b. MW generation rate | NA |
| c. MW recycled/year | NA |
| d. MW incinerated/year | 0 |
| e. MW landfilled/year | NA |
| Time period for this information: | 1995 |

More complete estimates for 1995 Champaign County municipal waste will become available in February, 1996. We will update this report as those figures become available. It can be stated with a high degree of certainty that the percentage of municipal waste recycled in the county is between 13% to 30% of its total waste stream. This estimate is based upon figures of municipal waste generated in the county in prior years compared with the recycling information collected for 1995 as of January 9, 1996.

5. New Recommendations and Implementation Schedule

Recognizing the demonstrated lack of political sentiment for a centralized, countywide solid waste management system, Champaign County should pursue a practical approach to solid waste management in the next five years. At this time, Champaign County has no further plans to construct a transfer or landfill facility. The county will focus its resources upon providing support for the current source reduction and recycling efforts initiated by local municipalities, the private and nonprofit sector.

The central goal of the county should be to reduce the amount of municipal waste landfilled outside of the county by reducing the wastestream and improving the ratio of waste recycled to waste generated. Before Champaign County can accomplish this goal, a system to measure the efficiency of the current source reduction and recycling efforts must be created.

Currently, there is no countywide system tracking municipal waste once it is generated. Information regarding who is hauling municipal waste in the county, what is being hauled, and what is being recycled, landfilled, or incinerated must be collected and regularly monitored for all of Champaign County. Once there is a system in place to gauge the success of local municipalities, the private and nonprofit sector in managing the wastestream, Champaign County can experiment with new ways to facilitate the improvement of these separate management activities.

The following recommendations outlined below are intended to improve the process of gathering countywide data, reduce the amount of waste generated and increase the amount of waste recycled.

1. Champaign County should ordain that haulers must be licensed with the County if they are going to be recognized as a legal solid waste hauler. Repeated violations of unlicensed hauling must be met with stiff fines and prosecution.
2. Champaign County must establish a complete, consistent and confidential system of collecting information regarding the annual municipal waste landfilled by the three major landfills which service the county.
3. Champaign County must establish a complete, consistent and confidential system of collecting information regarding the annual municipal waste recycled by the seven recycling processing centers which currently service the county.
4. Champaign County must designate an employee to manage all solid waste information reported to the county.
5. County and municipal governments should encourage State and Federal officials and representatives to address the issue of source reduction in whatever means possible.
6. County and municipal governments should encourage all departments to complete a waste audit. Ultimate disposal costs should be calculated as part of their procurement process.
7. Efforts to educate Champaign County residents regarding the type of hazardous waste in their home, alternatives to hazardous waste, toxicity reduction, and the recyclability of items should be initiated by the private and nonprofit sector and partially funded by Champaign County.
8. All residents should be made aware that paper bags are the appropriate choice for transporting purchased items. The private and nonprofit sector should be encouraged to undertake this task.
9. Champaign County may consider partial funding of a waste audit program similar to the Model Community program operated by the Central States Education Center. This initiative would assist businesses, industries and community organizations in determining where and how they may be able to reduce their waste generation and toxicity levels or to alter their waste to make it more easily processed.

10. Champaign County should encourage local municipalities to conduct a five year recycling survey of residences and businesses in order to accurately assess the participation rates associated with their recycling program. An extension of the Hometown Assistance Grant Program will provide funds for qualifying municipalities.

Champaign County Solid Waste Plan 1996 Update

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