

DU PAGE COUNTY, ILLINOIS



FIVE YEAR UPDATE SOLID WASTE MANAGEMENT PLAN 2007

February 1991, Adopted DuPage County Solid Waste Management Plan
June 1996, Adopted the first Solid Waste Plan Five Year Update
April 2002, Adopted the second Solid Waste Management Plan 2001

Approved by: DuPage Environmental Committee on February 12, 2008
Approved by: DuPage County Board on February 26, 2008

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INTRODUCTION

The 2007 Solid Waste Management Plan Update goals are to review the current status of solid waste management activities within the County and set the priorities for the next five years.

The DuPage County Solid Waste Management Plan (the “Plan”) was first adopted in 1991 to comply with the Solid Waste Planning and Recycling Act (“Act”). As mandated by the State, subsequent five-year updates were done and were approved by the County Board. The intent of the Act is for counties to continually evaluate waste generation, capacity, technology and other solid waste components.

This Plan update has been drafted to comply with the Act. It serves to provide direction to the County and evaluate the status of waste disposal capacity. The status of waste management in the County has changed drastically since the first Plan was adopted. All landfills have closed and transfer stations have become the preferred method of disposal. This not only affects waste capacity, but the revenue to accomplish the goals set forth in the original Solid Waste Plan.

As for the County’s role in determining the future of waste handling facilities, the {Illinois} Environmental Protection Act provides authority to the county board of the county or the governing body of the municipality to approve or disapprove a request for local siting approval for each pollution control facility which is subject to such review. An applicant for local siting approval shall submit sufficient details describing the proposed facility to demonstrate compliance, and local siting approval shall be granted only if the proposed facility meets nine criteria. The governing body must decide if the pollution control facility is needed to meet the waste generation needs of the area and they must decide if the facility that is proposed is consistent with the County’s Solid Waste Plan.

BACKGROUND

WASTE GENERATION

Previous solid waste plans have included a waste generation rate (pounds per capita per day). Periodically the rate must be evaluated and compared to the region’s disposal trends. For this document, DuPage County worked with Shaw Environmental, Inc. to develop a more accurate reporting method. The methodology employed utilized recent landfill disposal data including Cook, Will Lake, Grundy, Lee, Livingston, Ogle, and Kane counties in Illinois, and multiple sites in Michigan, Wisconsin and Indiana. Forty-six landfills were identified as having accepted waste from the Chicago metropolitan region during the period between 1996 and 2006. The evaluation found that in general, waste disposal within the metropolitan region has been consistently increasing.

The result was that in 2006, waste is estimated to be disposed at a rate of 7.5 pounds per capita per day (pcd). This is an increase from the rate of 6.9 pcd that was reported in 2001.

The 2006 population of DuPage County was estimated to be 932,670. When multiplied by the waste generation rate listed above, the County is currently disposing of 6,995,025 pounds of waste per day, or 3,498 tons of waste per day for a total of 1,276,592 tons per year. Considering the recycling rate of 31%, the County is landfilling 893,614 tons of waste each year.

WASTE DISPOSAL

DuPage County is currently home to one municipal solid waste transfer station⁽¹⁾, one landscape waste transfer station and three construction and demolition debris recycling facilities. All waste intended for landfilling or incineration is shipped out of the County.

The 2001 Plan Update concluded that an additional one or 2 more transfer stations were necessary assuming that 50% of the capacity at the DuKane Transfer Station was for DuPage County waste. It also recommended that the capacity of the DuKane facility be increased.

In 2002, DuKane's capacity was increased to 3,000 tons per day. Three new transfer stations have been proposed since the last update, however, none were approved. Transfer facilities have been constructed outside the County border that are close enough to serve our needs.

To provide an accurate snapshot of the current waste disposal capacity, an evaluation was done of existing transfer stations and disposal facilities (Attachment A). The County was divided into quadrants and the consultant reviewed the nearest three transfer stations to each quadrant. The ideal transport distance is no more than 10 miles. Out of the ten stations that were analyzed, only two facilities serving southern DuPage County failed to meet this criterion (Attachment B).

The trend in the Chicagoland area has been to utilize transfer stations because viable landfills are closing. The waste must be moved farther distances to landfills located in more rural areas, contributing to higher waste disposal/hauling costs. To determine the extent of this trend, a comparison of the disposal fees of municipalities was completed. It found that on average rates had increased 37.5% since 1995.

RECYCLING

One of the opportunities to reduce disposal costs is to increase recycling. As identified in the Solid Waste and Recycling 2006 Report, DuPage County has achieved a residential recycling rate of 37% and a commercial recycling rate of 22%, making the overall recycling rate 31%. This is well above the State mandated 25%. The County has been successful in maintaining a high residential recycling rate, however, there is room for improvement in commercial recycling.

⁽¹⁾ *A transfer station is a materials consolidation facility in which loads from several collection vehicles are combined into a single transfer trailer (or rail car or barge) for long haul to a landfill or other permanent disposal site.*

CHANGES AND DEVELOPMENTS 1991 to 2007

DuPage County is home to 39 municipalities (wholly and partially) and as of 2006 approximately 932,670 residents. It is 332 square miles and as of 2004, there were 32,908 business establishments and 337,454 households.

At the adoption of the 1991 Plan, DuPage County's population was 813,806 and there were 169,040 single-family homes and 83,010 multi-family households. There were two operating sanitary landfills which had 6,861,362 cubic yards of capacity. Today there are no operating landfills, and due to the setback and expansive space requirements, siting a new landfill is nearly impossible.

FIVE YEAR DISPOSAL

Attachment A indicates that the northwestern portion of the County is being served by one in-county transfer station and three outside the county line. The northeastern portion is being and/or could be served by three transfer stations. The analysis concluded that the only areas that might benefit from a waste transfer station are located in the southern portion of the County. The distances exceed the ideal maximum of 10 miles, however, it appears that current disposal costs are at a level that satisfies supply and demand.

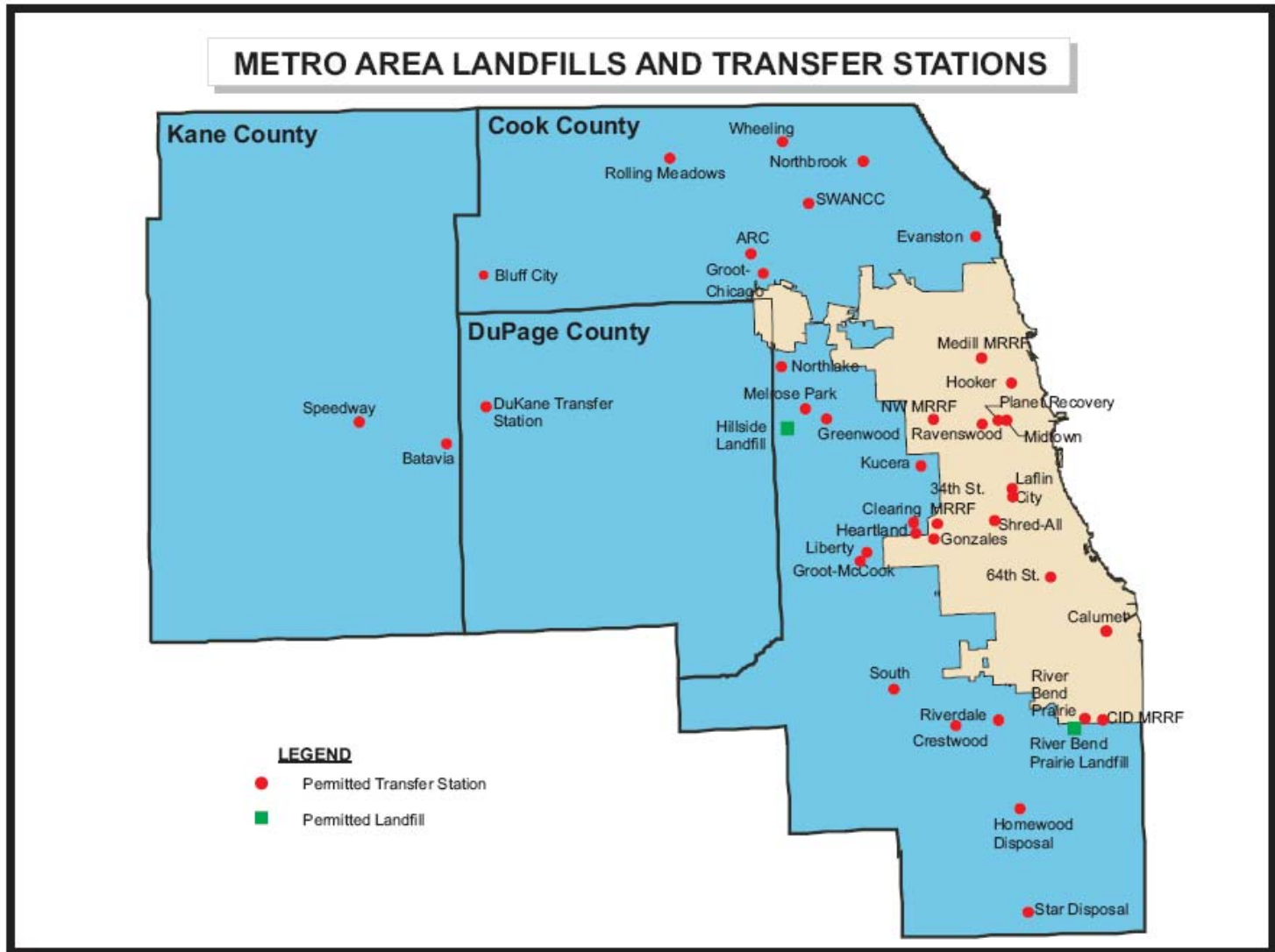
Regardless of this analysis, setback requirements and space limitations continue to challenge the private sector in locating new pollution control facilities. An additional hurdle is the current sentiment of local governments which makes the possibility of siting any additional waste transfer stations in DuPage County highly unlikely.

The position at this time is to rely on existing stations both inside and outside of the County borders. While this reliance comes at the cost of higher disposal rates, it is the preferred method. This method will serve the County's needs for the next 5 years.

Attachment C lists the recommendations of the original Solid Waste Plan and subsequent updates. It provides a review of those recommendations including status of implementation and any future plans.

ATTACHMENT A

SHAW ENVIRONMENTAL, INC.



ATTACHMENT B

SHAW ENVIRONMENTAL, INC.

TABLE 1. DISTANCES TO NEAREST TRANSFER STATIONS, BY QUADRANT			
	One-Way Travel		Average Travel Speed (mph)
	Miles	Minutes	
Northwest DuPage County			
DuKane Transfer	4.7	8	35
Batavia Transfer	8.8	18	29
Bluff City Transfer	12.0	22	33
Average	8.4	16	32
Northeast DuPage County			
Northlake Transfer	5.6	13	28
Melrose Park Transfer	6.8	12	34
Groot-Chicago Transfer	8.9	17	31
Average	7.1	14	30
Southwest DuPage County			
Batavia Transfer	10.3	23	27
DuKane Transfer	12.6	22	34
Speedway Transfer	18.8	36	31
Average	13.9	27	31
Southeast DuPage County			
Groot-McCook Transfer	8.8	22	24
Liberty Transfer	9.7	25	23
Heartland Transfer	13.1	22	38
Average	10.5	23	28

The areas served by each of these facilities are indicated on the figures contained in Attachment 2. Service areas were obtained from applications for local siting approval, where available. For all other facilities, a service area consisting of a 10-mile radius around the facility was assumed, based on the distance that waste may be economically transported in areas of higher population density.

ATTACHMENT C
1996 TO 2007 ACCOMPLISHMENTS AND RECOMMENDATIONS

<i>1990 Solid Waste Plan and 1996 Update Recommendations</i>	<i>Status</i>	<i>Future</i>
The County will focus on sustaining intergovernmental cooperation with local government agencies authorized by status to perform solid waste management activities, including but not limited to counties, municipalities, townships, special taxing districts, and joint action agencies.	Implemented/ongoing	Through standing and future relationships, the County should continue to remain as an informational clearinghouse for other entities and provide whatever support is necessary to accomplish solid waste and recycling obligations.
The County will continue to monitor and develop legislation as necessary to assist in the development and implementation of sound solid waste management programs.	Implemented/ongoing.	As potential problems or existing problems arise that are in need of legislative modifications, the County will draft the necessary language.
The County should encourage local industry to streamline the product design, manufacturing, and packaging processes they utilize by offering general information and technical assistance regarding source reduction practices.	Implemented/ongoing.	This is done on a limited basis through the County's community outreach portion of the contract with SCARCE. Continue program as is.
The County must promote waste prevention.	Implemented/ongoing.	Promoted through education contract and information on the website. Continue to promote waste reduction through outlets and by becoming an example.
As part of the County's waste reduction program, pollution abatement should be aimed at minimizing the negative impact of potentially hazardous refuse on the environment.	Implemented/ongoing	The County hosts one-day HHW events and monetarily supports the regional HHW facility in Naperville.
The County should make an effort to reduce the total amount of waste it generates and should minimize the use of highly toxic or disposable products whenever possible.	Implemented/ongoing	The County has jointed Clean Air Counts and committed to reduce toxics generated. It participates in many special and hazardous waste recycling and proper disposal programs. It utilizes low or non toxic cleaners.
Continue to provide assistance to the existing drop-off center facilities.	Implemented	The County purchased the IPF where recycling drop off is available 7 days a week. Even after the sale of the property, the

		purchaser continues this program.
Pursue the implementation of curbside collection services to additional households within DuPage County.	Implemented.	All municipalities provide curbside recycling service. Haulers offer recycling in unincorporated areas on a limited basis.
Encourage drop-off facilities single-family, and multi-family collection services to accept and market the maximum range of recyclable materials.	Implemented/ongoing	Drop off facilities accept a range of materials for recycling. Provides the Recycling Guide which lists companies that accept hard-to-handle items.
Encourage the implementation of residential collection programs which are designed for the convenience of the resident.	Implemented/ongoing	All DuPage municipalities provide curbside recycling. In addition, there are several drop off centers for use.
Facilitate the development and expansion of recycling services for multi-family housing complexes.	Implemented/ongoing.	The County provided a sample multi-family recycling ordinance for municipalities. Drop off sites are listed on the website.
Document the recycling levels of the residential waste stream.	Implemented/ongoing.	The County calculates the recycling rate annually with rates consistently exceeding the State mandated 25%.
Research the feasibility of coordinating the implementation of volume-based solid waste collection systems for all residents in the County.	Not pursued.	At this time, State regulations do not permit county-wide waste collection.
Develop a county-wide public awareness and information program utilizing outlets for such distribution of information.	Implemented/ongoing.	EDP maintains a website, distributes brochures including the Recycling Guide, Green Building brochure and Safer Household Cleaner Alternatives.
Resume printing of a Solid Waste Newsletter on a regular basis and distribute to individuals on an existing and an expanding list at the County.	Implemented/ongoing.	Due to technological advancements, the website is a more reliable and up-to-date tool for disseminating information.
Provide mass appeal informational material.	Implemented/ongoing	The County continues to develop new information that is distributed and posted on the website.
Provide a clearinghouse capability for information requests.	Implemented/ongoing	EDP call center, pamphlets and the website all provide information to the public.
Continue regular intergovernmental network meetings but strive	Implemented	The Solid Waste Committee was dissolved in

for format which encourages local reports and attendance by elected officials.		2003 due to a diminished need for its existence. The majority of the work had been completed and the municipalities had taken on recycling responsibilities.
Continue general meetings with public as requested.	Implemented/ongoing.	Continue to hold Environmental Committee meetings to address these items.
Develop and implement information programs for schools	Implemented/ongoing.	S.C.A.R.C.E. has been contracted through 2008 to provide education to teachers and community groups.
Develop and expand working relationships with grass roots and special interest organizations as well as trade groups.	Implemented/ongoing	S.C.A.R.C.E. has been contracted through 2008 to provide information to community groups and businesses as necessary. The DuPage Environmental Commission meets monthly on a range of environmental topics and hosts an annual environmental summit.
Investigate and utilize resources available through public service/community access media outlets.	Implemented.	Addressed under several other recommendations.
Initiate promotional activities.	Implemented.	The County recognizes successful and innovative programs and through S.C.A.R.C.E. presents Earth Flags to schools.
Solicit regional and national coverage by preparation of articles for journals and presentations of papers at conferences.	Implemented.	Due to financial restrictions, this will be done on a limited basis.
Develop mass media programs.	Implemented/ongoing	On a program basis, advertising will continue to be pursued through newspapers, websites, press releases and brochures.
Pursue additional funding resources.	Implemented/ongoing	The County has received grant funding in the past and will consistently look into alternate funding sources.
Strongly encourage private business to actively pursue recycling and waste reduction practices, as well as to procure secondary materials.	Implemented/ongoing	The County continues to provide the Recycling Guide which provides recycling outlets to all entities. S.C.A.R.C.E. provides

		education on recycling, energy efficiency, waste audits and other green recommendations to businesses.
Expand the commercial/institutional/industrial outreach program.	Implemented.	Due to staffing levels, this program will not be maintained on a full scale. Educational information will be posted on the website periodically. The WeReduce program educated an array of entities.
Document the recycling levels from the commercial/institutional/industrial waste stream.	Implemented/ongoing.	Each year, staff expands its request for recycling information. Unfortunately, due to its voluntary nature and privacy issues, this will receive minimal time.
Encourage the siting and development of the industries that use secondary materials in DuPage County area.	Implemented.	The County annually supports entities applying to DECO for recycling grants.
Develop guidelines for the County's procurement of recycled products.	Pursuing	The County is currently working on a Conservation Policy that will incorporate purchasing practices. It is expected to be introduced in early 2008.
The County should itself practice and assist other local governments including the Forest Preserve District in the design and implementation of in-house recycling, waste reduction, and procurement programs.	Implemented.	The County is currently working on a Conservation Policy that will incorporate purchasing practices. The environmental educator also provides assistance.
Document the recycling levels from the public sector's waste stream.	Implemented/ongoing	The County calculates the recycling rate annually with rates consistently exceeding the State mandated 25%.
Establish a new target recycling goal of beyond 25% after 1996.	Implemented/ongoing	Through the implementation of many of the County's programs, significant efforts have been made to increase the recycling rate. The County has consistently exceeded 25% without mandating a target.
Goals for the reduction in this component (construction and demolition debris) of the waste stream should be parallel with other County recycling goals. The County should encourage steps	Implemented	The County assisted in the development and distribution of the Illinois Construction and Demolition Site Recycling Guidebook in

leading towards a minimum reduction in this waste component of 25 percent in three years and 50 percent within five years.		1997. An update was printed in 2001. A pilot program working with general contractors to recycle was also conducted. Currently outlets are listed on the website and in the Recycling Guide.
The implementation of programs to achieve the goals stated in Recommendation 1 should proceed in a phased manner. The following methods to reduce or recover materials should be considered. They are listed in ascending order of anticipated costs for implementation. (construction and demolition debris)	Implemented	The County assisted in the development and distribution of the Illinois Construction and Demolition Site Recycling Guidebook in 1997. An update was printed in 2001. A pilot program working with general contractors to recycle was also conducted. Outlets are listed on the website and in the Recycling Guide.
The County will focus on reducing the C&D materials that will be leaving DuPage County for disposal once the two DuPage landfills close.	Implemented	The County assisted in the development and distribution of the Illinois Construction and Demolition Site Recycling Guidebook in 1997. An update was printed in 2001. A pilot program working with general contractors to recycle was also conducted. Currently outlets are listed on the website and in the Recycling Guide.
The County should reduce disposal of the C&D waste stream by 50% through reuse and recycling by the year 2000.	Implemented	Unfortunately, the tracking of construction and demolition debris recycling is difficult. There are two recycling facilities operating in the County that divert this waste stream. Proprietary issues limit the amount of information obtained.
In cooperation with the private sector, the County will promote whenever appropriate, legislation to enhance C&D recycling.	Implemented	The County assisted in changing the regulations to allow construction and demolition debris facilities operating in DuPage to be exempt from IEPA permits
The County will promote development of markets to ensure permanent recycling of C&D materials.	Not pursued	The County is working on a Conservation Policy which will encourage the purchase of recycled goods. It is slated to be approved in

		early 2008.
The County will promote waste reduction of C&D materials through a comprehensive educational program.	Implemented	The County created a pilot program to teach waste handlers and construction contractors on how to recycle C&D. There are now 2 recyclers operating in the County.
Provision of equipment and facilities for construction/demolition waste recycling should be sought first from private developers. The implementation of any of the methods discussed in recommendations would logically first be incorporated at the present disposal sites. Other entrepreneurial interests may exist to provide facilities for this action throughout the County.	Not pursued	The County has taken an approach to allow the private sector and the market to drive this economy.
The County will encourage the private sector to voluntarily implement C&D recycling programs and adopt an ordinance if needed.	Implemented	The County created a pilot program to teach waste handlers and construction contractors on how to recycle C&D. There are now 2 recyclers operating in the County.
The County should work in cooperation with the State and the municipalities to intensify public education campaigns which promote landscape waste reduction and backyard composting.	Implemented.	The County utilized the environmental educator to work with composting in addition to distributing a brochure.
The County should develop and implement new innovative public education programs that promote landscape waste reduction and backyard composting.	Implemented	The County utilized the environmental educator to work with composting in addition to distributing a brochure.
The County should monitor the adequacy of available landscape waste disposal capacity and (if required) continue to provide a processing facility for the diverted waste stream.	Implemented/ongoing	As required as part of the Solid Waste Plan Update the County will monitor landscape waste disposal capacity. Establishing new facilities will be left to the private sector. The County no longer is operating a compost site.
To assure maximum compliance with Illinois Public Act 85-1430, the County should continuously monitor and evaluate the efficacy	Implemented/ongoing	The County annually reviews recycling by compiling the Solid Waste and Recycling

of the diversion system.		Annual Report and calculating the recycling rate.
As part of the County's waste reduction program, pollution abatement should be aimed at minimizing the negative impact of potentially hazardous refuse on the environment.	Implemented/ongoing	The County continues to host one-day HHW collection events and has provided monetary assistance to the Regional Household Hazardous Waste Facility. The County also operates a Latex Paint Recycling Program.
Pursue the implementation of an integrated household hazardous waste program.	Implemented/ongoing	The County continues to host one-day HHW collection events and has provided monetary assistance to the Regional Household Hazardous Waste Facility. The County also operates a Latex Paint Recycling Program.
The County should attempt to increase the general public's awareness of the need to divert these wastes from the municipal waste stream.	Implemented/ongoing	The County continues to offer these alternative disposal outlets. Municipalities and waste haulers are taking the lead in providing education. The County maintains information on alternate outlets for waste.
Promote HHW avoidance and use of safer alternatives.	Implemented/ongoing	The County distributes A Guide to Safer Household Cleaners and provides this information on the website.
Promote proper use or re-use of products with hazardous materials/ingredients.	Implemented	The County provides assistance on an as needed basis to inquirers but a full blown program has not been pursued.
Inform residents about the availability of HHW collection as the option of last resort.	Implemented	The County has attempted to educate residents to reduce purchases to only necessary amounts and to donate usable items.
The County should develop a paint re-use program.	Implemented	The County has operated the Latex Paint Recycling Program since 2002.
Foster the development of private sector efforts to re-use, recycle, or otherwise divert HHW from the municipal waste stream.	Partially implemented	The County lists these businesses on the website and in the Recycling Guide.
The County's mobile HHW collection program should include a re-use component.	Implemented	Due to the impractical nature of giving products to the public, this program has been

		discontinued.
HHW collection should be considered the option of last resort.	Implemented	This has been an internal mantra however due to the availability and success of the HHW program it has not been implemented.
Maximize the number of IEPA one-day HHW collection events held within DuPage County.	Implemented	The County continues to make attempts at hosting as many HHW events as possible but due to financial constraints this has been restricted. Delete
Maintain an intergovernmental agreement with the City of Naperville to provide permanent HHW collection services for DuPage County residents in a cost-efficient manner.	Implemented	The County has provided funding for both capital and operational expenses since 1995. Continued funding is dependent upon available revenue and will be considered on an annual basis.
Establish a mobile HHW collection program.	Implemented/ongoing	Since 1996, the County has hosted 63 one day HHW events.
The County should continue to monitor the technical and economic feasibility of waste-to-energy as a final disposal method.	Implemented/ongoing	Staff continues to evaluate waste-to-energy technologies.
The County should continue to monitor the availability of waste-to-energy facilities in the region.	Implemented/ongoing	Staff continues to evaluate waste-to-energy technologies.
The County should continue to monitor and, when appropriate, lobby the General Assembly and the U.S. Congress to shape legislation impacting waste-to-energy.	Not pursued	As technology becomes more standardized and reliable, the County could consider this opportunity.
Any proposals for siting a landfill in DuPage County will be monitored and evaluated.	Implemented	As no property can meet the setback criteria for siting a landfill, transfer stations are the primary method of waste disposal. Delete
The County shall continue to provide educational information on landfilling as it becomes available.	Implemented/ongoing	This item has been addressed by SCARCE with education and the purchase of a landfill

		model.
The County will continue efforts to find alternative uses for sludges.	Not pursued	This has been handled through the Department of Public Works.
The availability of in-county disposal capability should be determined. If in-county disposal will be available for an extended period of time, the provisions of transfer capability may be unnecessary. However, even if in-county disposal capability will be available for an extended period of time, the practicality and desirability of providing transfer capability in the county should be evaluated as a mechanism to improve waste transport efficiencies and to minimize local traffic impacts.	Implemented	As part of this update, the County will be reviewing disposal capacity and making recommendations. Transfer of waste is the preferable method of disposal. In the 2001 update, the County recommended siting additional transfer stations.
The County should encourage development of three to five waste transfer facilities throughout the County. The County should assist the private sector in determining the most appropriate and efficient locations for transfer facilities, and providing education and more about waste transfer stations.	Implemented/ongoing	The County is currently evaluating disposal capacity. Transfer of waste is the preferred method. DuPage published the Solid Waste Transfer in Illinois Handbook in December 1998.
The County should encourage development of recycling operations and landscape waste operations throughout the county. The County assist the private sector in siting such operations. One means by which this may be accomplished is to amend legislation to provide for an expanded definition of construction and demolition debris.	Partially implemented	The County assisted in changing the regulations to allow construction and demolition debris facilities operating in DuPage to be exempt from IEPA permits
The County will continue with and adapt the enforcement program as the two DuPage landfills close to focus on education of proper waste disposal, open dumps, and unpermitted/permited transfer stations. The County will continue to monitor the landfills through the closure/post closure periods.	Implemented/ongoing	The County currently holds an agreement with the IEPA to conduct inspections through 2010.

