Solid Waste Disposal
1968-1972

LEAGUE OF WOMEN VOTERS OF APPLETON, WISCONSIN

Solid Waste Management - Local Facts

League Local Study, 1968-1969. Appleton Solid Waste Disposal:

Support of:

a. Regional cooperation to solve solid waste problems
b. Support of minimum standards as proposed by Wisconsin Department of Natural Resources for solid waste disposal sites.
c. Discontinue use of Center Swamp disposal site as soon as possible.

History of Local Department of Public Works

The Sanitation Division of the DPW was first organized on July 1, 1947 for the primary purpose of collecting and disposing of garbage. The division has grown to include the following: residential garbage, rubbish and brush collection, commercial refuse collection, sanitary landfill operation, insect control, street cleaning, and the recycling program.

Prior to August, 1964, garbage was collected twice a week from the yard, either on Mondays and Thursdays, or on Tuesdays and Fridays. On Wednesday, rubbish was collected from the curb on a one-fourth of the city once-a-month basis.

August 3, 1964 - collection of residential rubbish and brush from the curb every other week was begun
June, 1965 - outdoor burning ban was put into effect
June 2, 1965 - weighing all refuse collected by the sanitation crews was begun to help in planning
Sept. 25, 1967 - once-a-week combined collection of garbage and refuse from the curb was inaugurated
April 21, 1970 - full operation of the sanitary landfill was taken over
Sept. 13, 1971 - picking up material at eight collection points under the newly established recycling program was started
Oct. 6, 1971 - ten additional supermarket sites were authorized for recycling pick-ups
Oct. 20, 1971 - permission was granted to pick up at business establishments or other places with high generation of recyclable material.

Personnel, Equipment, and Collection

The Sanitation division has an average of 44 employees, and the refuse collection section includes 33. A maximum of 11 trucks and 33 men are required on regular collection days using the combined collection system. On days following holidays, all available packer trucks work overtime with additional men from the street division. A study is to be made to compare the advantages and disadvantages of two versus three man collection crews. Turnover of personnel is high; in 1971 three men were hired and two resigned.

Collection equipment includes 13 packer trucks ranging in size from 17 cu. yds. to 25 cu. yds. A new pick-up truck was purchased to provide transportation back and forth for the attendant at the landfill site. Packer trucks are washed nightly. Additional cleaning and painting are done when necessary. During the summer, odor is controlled by thorough cleansing and application of odor control chemicals.

In winter, white nylon coveralls are furnished to each employee bi-weekly with his name and City of Apoleton lettered on the front. During the summer, they are replaced with two-piece white uniforms. Chopper mittens with wool liners for winter and leather gloves in more moderate weather are provided. Each man is also issued a rain suit.

Five commercial refuse routes are collected on Wednesday, two on Friday, and one on Saturday each week. Other commercial stops are assigned throughout the residential routes during the week. Each commercial stop receives one collection per week at no charge. Effective April 1, 1971, extra collections are billed at $1.25 per stop and $2.50 per stop on Saturday.

	1970 - Residential Refuse	1971 Residential Refuse
Man Days	6,756	6,486
Trips to landfill	3,832	3,447
Tons collected	20,699	21,201

	1970 - Commercial Refuse	1971 - Commercial Refuse
Man Days	1,682	1,663
Trips to Landfill	1,008	1,004
Tons collected	4,925	5,283

City of Appleton Sanitary Landfill

The sanitary landfill is located two miles west of Mackville on Quarry Road where the city owns 120 acres of Center Swamp, in which it disposes of all refuse collected. The operation of the disposal site was on a contract basis with Landwehr, Inc. until July 31, 1970. Adjacent land is rented from Landwehr, Inc. for the storage of cover material and for additional disposal area. During the winter months, street and sanitation division crews are used to cut trees, clear fire lanes, build roads and to maintain ditches, fences, well houses, and buildings.

The city of Appleton received its first license to operate the landfill from the DNR in 1969. On April 21, 1970, an attendant was placed at the disposal site to control its use. During the remainder of the summer months the old fence and gates were removed and replaced with chain link fence. A permanent road was constructed and extensive landscaping including grading, grass seeding, selective tree planting and additional wire mesh fencing was installed in the vicinity of the actual dumping area to control wind blowing materials. The drainage ditch was altered and extended to improve the water drainage around the disposal area.

During July 1970, the city of Appleton took over the entire operation of the sanitary landfill. A Caterpillar traxcavator was placed into operation with an operator selected from the Sanitation Division. Steps were taken to advise all users of the landfill of the hours and regulations of its operation. Later in the summer, an insulated and heated storage building was constructed for the traxcavator and other equipment. Cover material was hauled to a selected storage site and covered with leaves for use during the winter months. During our conversion of the dump to a sanitary landfill every effort was directed towards compliance with the standards as set forth by the DNR.

During 1970, an ordinance was adopted by the Common Council governing the issuance of permits for the collection and transportation of solid waste in the City of Appleton. The first permits were issued on August 12, 1970. At present, there are 8 private collectors having a combined total of 28 vehicles registered to collect solid waste in Appleton.

After the first winter at the landfill, several areas needed improvement. Three most important changes to be made involved the handling of cover material, improving roads (especially for wet weather operations), and providing adequate drainage to carry run-off from snow and rain.

The first step in trying to resolve the cover material problem was to avoid handling it twice - once to bring it from the quarry and again when dumping operations moved too far from the storage area. The overburden at the quarry was prepared by using leaves from the annual leaf collection program as insulation material with sufficient reserve to recover the face during prolonged cold spells. This seems to be working quite well.

The problem of roads and drainage was lessened by installing salvaged drain pipe and road material. A special area is reserved for dumping during spring thaw and periods of heavy rainfall.

The city had its solid waste disposal operations licenses renewed by the DNR for Oct.1, 1971 - Sept. 30, 1972. The DNR also granted the following exemption to NR-151 - only partial fencing of the site is required. A letter was received from the DNR indicating that the landfill site seems to be operating in conformance with State of Wisconsin solid waste disposal standards. Effective April 1, 1971, the landfill closes at 3:00 P.M. instead of 4:00 P.M.

Town of Center residents are permitted free use of the landfill if they comply with regulations and obtain a sticker and permit from the Town Board.

Appleton's Director of Public Works has estimated that this site can be used for only about one more year.

Supervisory Division

The supervisory division involves one superintendent and one foreman, and it involves budget preparation and administration, route layout and adjustment, daily crew and equipment assignments, complaint and special service requests, preparing reports, purchasing, studies, etc. The records clerk prepares forms, reports, makes up payrolls, and receives complaints from citizens concerning schedules, special services, and regulations.

Appleton Recycling Program

As of May 1, 1972, the recycling program had collected an estimated 342 ton of material. This material if disposed of by the conventional collection and landfill method would have consumed .42 of an acre three feet deep. The total value of this material when delivered to the recycling plants will be $5,130.00.

Collection Breakdown

	1971 4 Months		1972 Monthly			
	Total	Monthly Average	Jan.	Feb.	Mar.	Apr.
Metal	43.95 tons	10.99 tons	15.42	16.92	21.0	20.5
Clear Glass	66.61 tons	16.65 tons	22.84	22.51	27.0	29.2
Color Glass	22.26 tons	5.57 tons	8.73	9.24	8.0	3.7
Total	132.82 tons	33.21 tons	46.99	48.67	56.0	58.4
Weekly Avg.	8.39 tons	8.39 tons	10.60	12.16	12.6	13.5

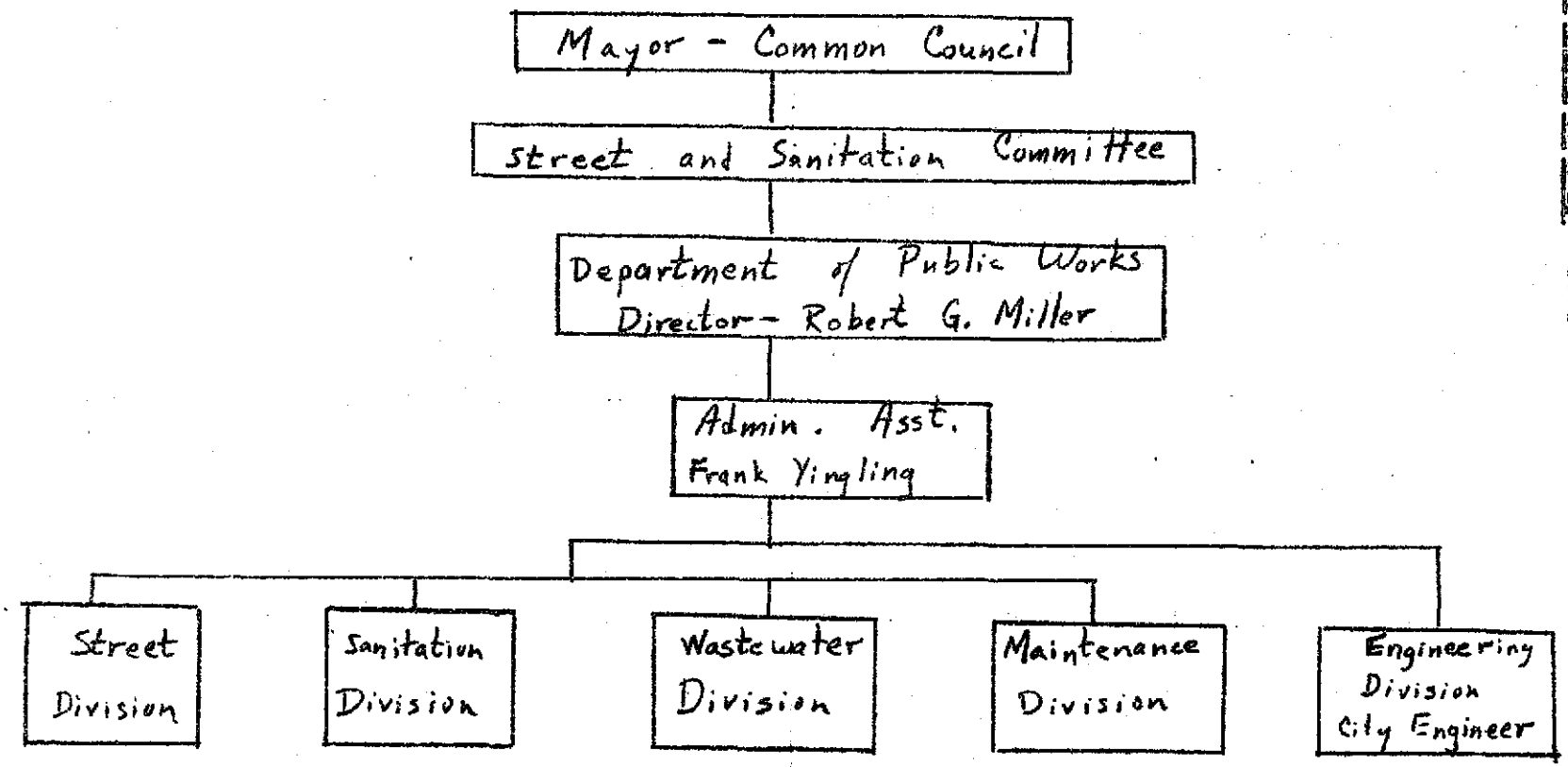
Program Cost

Total Cost - all phases	$6,375
Initial Cost and Refurbishing site and barrels	-955
Net Cost (Collection-Handling-Shipping)	$5,620
Return from sale of materials	-2,424
Net Cost of Program	$3,196

3196 ÷ 342 ton = $9.34 ton

Versus 1970 disposal cost - $13.50 ton

Organizational Chart
for
Department of Public Works
City of Appleton, Wis.
Adopted - Common Council - Nov, 1970



(Each Division headed by a superintendent)

Prepared for use in unit meetings Nov. 6 and 8, 1972. To be used in conjunction with the publications of the LWVUS:
Solid Waste - It Won't Go Away - 1971
Recycle - 1972

APPLETON LEAGUE OF WOMEN VOTERS POSITION PAPER

SOLID WASTE DISPOSAL

Adoption: In 1968 the Appleton League of Women Voters adopted a one year study of solid waste disposal. League's interest stemmed from a concern for the preservation of wildlife areas within the county, particularly Center Swamp, adjacent to the Appleton city dump. League members saw a possibility for action when the Fox Valley Council of Governments initiated a regional solid waste disposal study in 1968.

Study: League study included films, research, on-site inspection of disposal sites, discussions with persons directly involved with disposal problems, and evaluation of Appleton's method of disposal using minimum standards suggested by the Wisconsin Department of Natural Resources.

Consensus: In 1969 the following consensus was adopted:

a. Support of regional cooperation to solve waste disposal problems.
2. Support of the minimum standards as proposed by the Wisconsin Department of Natural Resources for solid waste disposal sites.
3. Discontinue use of Center Swamp disposal site as soon as possible.

League members agreed that the use of sanitary landfills was the most desirable method of present alternatives.

Action: When the solid waste disposal study made by the Council of Governments was completed in September 1969, the League met with a COG representative to discuss its conclusions. Appleton aldermen were invited to the meeting. The COG study favored a regional solution to the problem, but no site proposals proved to be acceptable. Outagamie County appointed a county site committee, and League representatives attended those committee meetings.

In May 1970 the League made a statement before the Solid Waste Disposal Seminar in support of regional cooperation in solving disposal problems, in support of DNR minimum standards for sites, and for the elimination of Center Swamp as a dump site. During July 1970 the Appleton dump was converted into a sanitary landfill which met DNR standards.

In November 1970 League made a statement before a DNR hearing in Green Bay in opposition to the use of the Killian farm site as a sanitary landfill for the city of Kaukauna. This site was subsequently certified for use by the DNR.

National Adoption and Study: In 1971 the League of Women Voters of the United States began to study solid waste disposal and in 1972 adopted "an evaluation of Solid Waste Management including reuse, reclamation and recycling. National consensus will be announced in 1973.

Action: Membership interest in recycling, an outcome of the local disposal study and permitted by the national study, prompted League particicpation with other civic groups in generating support for the recycling of bottles and cans by the Appleton Department of Public Works. In August 1971 the League sent a letter to each Alderman urging adoption of city-sponsored recycling of glass and cans. This recycling program was begun in September 1971.

In October 1971 the local Environmental Quality committee conducted a bus tour of various recycling and disposal sites in the area. This tour included a stop at the Center Swamp site to learn about the changes which had been made when it was converted to a sanitary landfill. While the site now meets DNR standards, its space is limited and a new site for the city will eventually have to be found.

In the fall of 1972 League attended several county board meetings when the board was considering adopting a county-wide solid waste management plan and hearing presentations from various companies with regard to specific systems to be used.

Following the County Board's adoption of a county-wide system, a letter was sent on January 8, 1973 to all county supervisors commending them for addressing the problem of solid waste management.

League attended a joint meeting of the County Board Zoning Committee and the Appleton Street and Sanitation Committee where the shredder versus incinerator methods were discussed. A statement urging cooperation and participation by all communities in a county system was presented to the Appleton Street and Sanitation Committee.

Local Item, Solid Waste Disposal

Committee

Chrm.	Dolly Butler (Mrs. John)	46 River Drive	4-5516
	Irene Purdo (Mrs. Dane)	2412 N. Morrison	9-5830
	Sue Kinde (Mrs. Robert)	Palisades	4-5759
	Barbara Hussin (Mrs. Joe)	530 S. Fairview	9-7293
	Patty LaFountain (Thomas)	1325 W. Harris	9-2654
	Janet Van Asten (Mrs. Virgil)	1214 E. Fremont	4-0376
	Emily Schulze (Mrs. Joseph)	1206 S. Memorial Dr.	9-9244
	Donna Weis (Mrs. Leonard)	1501 S. Alicia Dr.	3-4790

Plat Maps of Orangeburg County —

Local Item, Solid Waste Disposal

First Committee meeting September 17, 1968

Assignments to report to committee on October 11 when committee makes trip to dump

Donna Weis - talk with Roy Pointer, former member of Street and San. Committee

Barbara Hussin - talk with Mr. Colbert, Superintendent of Sewage Treatment Plant about disposal of solids there

Irene Purdo - write to Town Chairman of Mackville and ask if he can meet us at the dump on October 11

Janet Van Asten - talk with Mr. Paul, Northeastern Regional Planning Commission read his report on health study done for County Board

Emily Schulze - talk with Mr. Franchett, FVCOG, about progress of regional solid waste study and obtain ideas of things LWV might see on bus tour

Patty LaFountain - obtain prices from bus companies for tour
write to list of Leagues obtained from National to see how they tackled similar study

Dolly Buthner - talk with head of Street and Sanitation Committee, Dept. after Donna has talked with Mr. Pointer. (Maybe Sue Kinde will do this)

SOLID WASTE [illegible]S

To date our local study of Solid Waste Disposal problem has included:

1. Go-see bus tour of several solid waste disposal sites in the area
2. Discussion of various methods of solid waste disposal

   Movie: "The 3rd Pollution"

3. Evaluation of Appleton's method of solid waste disposal using minimum standards suggested by the Wisconsin Department of Natural Resources

To conclude this one-year local study, I submit the following question for our League's consensus:

Support change in Appleton's method of solid waste disposal to eliminate use of Peter Vawp as an open dump.

Recognition that solid waste disposal is an area-wide problem.

I suggest that a general meeting on the subject of Solid Waste Disposal be held in April with Mr. Pharbach of the F.V.C.G. presenting an up-to-date report on the Council's survey and that Consensus be taken toward the end of this meeting. If there is League consensus on this subject it can be presented at the local annual meeting and placed on our local program support positions under Health and Welfare.

If there is League agreement that solid waste disposal is an area-wide problem, there is no obligation for League members to propose a new site and/or method for the City of Appleton at this time. The Fox Valley Council of Governments expects to complete its area-wide survey on this subject in August, and I suggest that this report and its recommendations be studied during one set of unit meetings next fall.

SOLID WASTE BUS TOUR

APPLETON LEAGUE OF WOMEN VOTERS
OCTOBER 13, 1971

Solid waste, termed by some our only growing resource, is estimated to cost 4.5 billion dollars a year for the portion that is publically collected, and this may be only a third of what is discarded. Other waste is dumped directly by farms, mines and industries, or thrown aside as litter.

In order to cope with Wisconsin's share of this waste, on March 12, 1969, the "State of Wisconsin Solid Waste Disposal Standards" were adopted by the Wisconsin Natural Resources Board. The standards introduce the problems, mention the close interrelationship of air, land and water pollution, and define the terms used. Specific requirements are given for licensing for solid waste disposal operations, including siting and method of operation for sanitary landfills, incinearators and salvage yards. For example, a sanitary landfill must be located so it will not pollute ground or surface water: (i.e., prohibited "within 1000 feet of any navigable lake, pond, or flowage," "withing 300 feet of a navigable river or stream or to the landward side of the flood plain..." and so on with exact distances specified.) A sanitary landfill must not be unsightly: (i.e., prohibited "within 1000 feet of the nearest edge of the right-of-way of any state trunk highway or the boundary of a public park;" "the site shall be surrounded by rapidly growing trees, shrubbery or other appropriate means...") The landfill must not be a nuisance:("open burning is prohibited unless otherwise approved," wind-blown materials must be minimized and picked up each day, "solid waste shall be compacted and covered after each day of operation ... with a compacted layer of at least 6 inches of suitable cover material," including in the winter, to prevent the attraction of flies, rodents, and other insects or vermin.) The sanitary landfill must be controlled to be sure it is not misused: (it must be fenced and have an attendent on duty when it is open for public use.)

These regulations are spelled out in more detail in the 1969 standards, including regulations on inspection and enforcement, exemptions, appeals and so on.

Currently there is pressure to change these standards, which the Eco-Bulletin praised as strict, and bills have been introduced in the legislature. Small towns, particularly, want permission to relax regulations on burning, fencing, attendents, and other requirements which they feel are less appropriate to a small operation. Pressure also exists for counties to set standards, which would weaken the DNR's strong existing standards.

1. APPLETON WASTE WATER TREATMENT PLANT:

"Solid waste," by definition, does not always include waste water effluent, but in the League of Women Voters Current Focus "Solid Waste- It Won't Go Away,"April 1971, is this definition: "Solid waste also includes deposited waste particulates, even when temporarily suspended in air and water." The residue remaining after treatment and water removal is called sludge, which has generally been landfilled or burned, but new uses for sludge, another growing resource, are being developed. According to a Wall Street Journal article of September 10, 1971, sludge may be used as a "molasses-like, protein-packed animal feed supplement," or according to a Time Magazine article of September 27, 1971, sludge may be used to repair the ravages of strip mining.

Locally, the Waste Water Division of the Appleton Department of Public Works is responsible for the treatment of domestic and industrial wastewater, and this treatment consists of the following steps:

1. Preliminary Treatment: Bar screens at the 5 lift stations and the sewage treatment plant remove rags and other materials dangerous to the equipment. A grit chamber slows down the flow so the inert materials may settle out. Materials collected by the screens and grit chamber are transported to the city landfill.
2. Primary Treatment: Four circular sedimation tanks are used to remove most of the settleable solids as well as part of the suspended solids. Polymers are added to aid in primary treatment, and sludge removed from primary tanks for digestion.
3. Secondary Treatment: Primary effluent is aerated, with active sludge added in the aeration system. Secondary clarifiers remove solids. Chlorine is added to the effluent being discharged to the river, with a residual of .3 to .5 PPM maintained over and above the chlorine demand.
4. Sludge Disposal: Raw sludge is digested, conditioned with lime and ferric chloride, and treated by vaccuum filtration to remove water, then disposed of in a DNR licensed landfill site on the plant grounds.

The 1970 Report of the Department of Public Works, which furnished the treatment information, also listed the high-lights of 1970:

1. Recognizing that our present sewage treatment plant is not capable of meeting the needs of the community, the City of Appleton has retained the firm of Consoer, Townsend and Associates of Chicago to perform the engineering services for the reconstruction of the sewage treatment plant. The contract was let on July 7, 1970 with construction anticipated for September 1972.
2. The solids were reaching a point where our already overcrowded facilities were unable to cope with the problem. Research on chemicals commonly known as polymers indicated that we might be able to get some help on our solids removal if we used these chemicals. [Studies were run, with gratifying results.] During the normal flow we were able to increase our flow through the secondary treatment by almost 25% and even during periods of heavy industrial flows we were able to show substantial increases.
3. We have been doing year round chlorination on the primary effluent and as of June 1, 1970, in accordance with the DNR ruling, we have added chlorine to the final effluent.

...

5. An ordinance was enacted controlling materials which can be discharged into a sanitary sewer.

The plans for reconstruction of the sewage treatment plant will include an incinerator which will burn the sludge, and will also permit digging up previously buried sludge which will be burned and then the ash residue reburied.

2. RIVERSIDE PAPER COMPANY:

Riverside Paper Company has developed a process for converting specially-coated paper food containers into quality writing and printing paper, Ecology Bond. The reclaiming process, called Polysolv, recycles the paper fibers and the residual waxes, adhesives and plastics are combined with fuel oil and used to operate the process--thereby accomplishing 100% waste recycling. The company plans to produce half of its paper with this process.

Food packaging manufacturers use fine paper fibers, but by impregnating them with wax, the fibers are locked or sealed, thus preventing them from being recycled. Riverside received from these manufacturers compressed bales of scrap food packages: the formerly "junked" fine paper fibers that result from the trimming, scrapping and rejecting of the manufacturing process. Thus Riverside is able to take this waste that would otherwise be dumped or burned and upgrade it to a high-quality paper, saving an estimated 850 trees a day if virgin fiber were used.

Riverside is preparing to participate in an experimental consumer collection venture in Denver that the Excello Corporation has undertaken. Supermarkets will be collection stations for used milk cartons which will be sent to Riverside where the Polysolv process will convert them to writing paper which will then be sent back to Excello.

Students at the University of Wisconsin-Green Bay, Fox Valley Campus, wrote a letter to the editor of the Post-Crescent October 10, 1971, indicating their desire to begin such a project here with used school milk cartons.

3. ST. ELIZABETH HOSPITAL:

Hospital wastes are growing in size and complexity, as disposable, single-use items are introduced. Mr. Charles Paul, Assistant Administrator, estimated a ton of solid wastes are generated daily, with approximately 1000 pounds of food residues, cans, bottles, plastics, and paper goods being picked up each day by the City of Appleton and taken to the city sanitary landfill. Approximately another 1000 pounds of paper goods, soiled dressings, and pathological specimens are burned in the hospital Vulcan gas-fired incinerator. Hypodermic needles and syringes are first broken, then welded shut in a steel barrel before being landfilled.

Mercury used in solutions is stored until evaporation of the water has decreased the volume, then it is sealed in a container and disposed of by the city monthly. Radioactive wastes used in nuclear medicine studies are short-lived, and are permitted to decay on the site in a basement storage area. After 6 to 8 weeks, they are disposed of normally.

When the hospital was renovated, the stack from the furnaces, which also serves the incinerator, was built to state standards. The hospital is considering the possibility of air washing in the future.

Hospitals have been mentioned as possible sources of large numbers of bottles and cans for the city recycling program, although cleaning, sorting, and storing the wastes might be expensive or difficult.

4. JAHNKE AUTO PARTS COMPANY:

Estimates of the number of abandoned automobiles in the United States run as high as 20 million and growing, even though about 80 to 85 per cent of junked cars are reused. The LWV publication said nearly 8 million more cars will go out of service this year, 85 per cent of which will be recycled into new metal and 15 percent abandoned. Various proposals have been suggested to encourage more complete automobile recycling, such as additional charges to the new car purchaser to cover later disposal.

Mr. Jahnke, whose company is located at 1047 Valley Road, is in the auto parts business, not in the junk business, and will buy no cars made before 1965. His cars are bought from insurance companies and individuals. Mr. Jahnke now has an inventory of 500 cars. After a car is stripped of its usable parts, the body remains. Mr. Jahnke used to flatten the old car bodies to send them to a shredder in Fond du Lac, but he is now keeping the bodies in anticipation of the Department of Natural Resources sending a portable mobile car crusher around the state. Other junk car dealers in the area are still sending their cars to Fond du Lac to the Sadoff Iron and Metal Company, which owns a shredder.

A Post-Crescent article of July 18, 1971, indicated that the Sadoff twenty acre site is criticised by its troubled neighbors as an "unsightly mess," with high piles of auto bodies and visible smoke, though a health department inspector has said there is "no emission problem." The article said the metal works "gobbles up junked cars from over a 100-mile radius of the city, shredding 250 auto bodies per day into usable chunks for steel mills and foundries," and that city officials praise the operation for its "socially useful purpose." Thus our desire for perfectly unique transportation and our affluence come up against our economic and aesthetic senses.

5. PROPOSED CITY OF MENASHA LANDFILL (no longer under active consideration):

The City of Menasha proposed making a sanitary landfill out of 17.5 acres of land on the city's north side, at a purchase cost of $170,000, planning to convert it to a winter park after 3 to 5 years. Eleven acres of the partially wooded land were to be used for landfill, with the solid waste eventually forming a tobaggan hill. The project was to be a disposal site for construction waste and non-burnables only, with strict rules to avoid the dumping of organic or toxic wastes. Menasha Mayor James Adams estimated the city collects about 8,000 pounds of non-burnable wastes every two weeks.

However, in the Twin City News Record, September 2, 1971, Mayor Adams indicated the landfill plans were being dropped. "The reasons, Adams said, are that the city can get rid of non-burnable waste much more cheaply (he said about $24 per month) by hauling it to a dump site in Kaukauna; the city does not have a great need for a landfill site; the Department of Natural Resources (DNR) has indicated that 50 to 75 per cent funding of the land purchase (total of $106,000) will not be available until at least the end of the year, and last minute additions the city must make to its already large 1972 proposed budget."

The proposed site which lies near the Town of Menasha was opposed by Roland Kampo, the town chairman, because of its proximity to the town's Wittman Park.

6. BADGER QUARRY DUMP (now closed by state order):

The City of Menasha's two dumps, along Brighton Drive and at Badger Quarry, were closed by the orders of the Department of Natural Resources on October 1, 1971. The city must now have most of its non-burnable material, which cannot be incinerated, transported to private dumps in the area. The Twin City News Record, on October 4, 1971, quoted Menasha Director of Public Works Bruno Haas who said the first haul to a private site would be October 6 by the Lehrer Sanitary Service of Kaukauna. The cost was to be $3 per ton.

Stone and dirt may still be dumped at the Badger Quarry Dump Site, but the materials that sustained frequent dump-fires are no longer allowed.

7. REGIONAL RECYCLING: 56 Lush Street, Menasha 725-9691

Lynn Williamson (Mrs. William Hurrle) believes that wastes generated in our area should be used here and she has opened the Regional Recycling Company to do exactly this. Collecting glass, paper, and metal from the Neenah-Menasha area homes on the first Saturday of every month, with volunteer help, Ms. Williamson is trying to find local markets for recycling. The Twin Cities put out an average of 2500 tons of refuse each month for the first six months of 1971, of which up to 70 % was recyclable, she noted in a July 28, 1971 Twin City News Record article.

Ms. Williamson is paying $10 a ton for glass, $8 a ton for paper and $5 a ton for metal to the volunteer groups who change for each month's drive. She is able to take any household paper except coated paper, any glass, and any metal including old aluminum chair frames, old crank shafts, and even old stoves if they can be brought to the office, despite the difficulties of salvaging porcelain-coated metals.

The address at Lush Street is temporary, and Ms. Williamson hopes to move to a building which will permit dumping, in additon to delivery in barrels, within 6 months. Large loads may be weighed at Badger Ready-mix, and Ms. Williamson has no minimum so loads of any size may be delivered.

Recycling is significant, not only for the resources that can be reused, but because reuse typically demands less electricity than the processing of virgin resources.

8. JOHN STRANGE ECOLOGY CORNER:

John Strange Paperboard Division of Menasha Corporation has erected a waste paper drop-off center on Washington Street in Menasha. The covered container is for the collection of bundled newspapers, magazines and used corrugated boxes. There is ready access to the container with parking available at the station.

The company will contribute an amount equal to the value of the paper collected to the Neenah-Menasha Community Chest Drive. The company uses more that 300 tons or twelve freight car loads of reclaimed wastepaper each day in the manufacture of paperboard, which is equivalent to 1,445,000 trees per year.

9. NEENAH-MENASHA SEWAGE TREATMENT PLANT, AND INCINERATOR:

The Neenah-Menasha Sewerage Commission, which is independent of the two cities using its services though it relies on them for funding, is composed of five members, two from Neenah and two from Menasha with one selected by the other four. The Commission directs the sewage treatment plant and incinerator on Garfield Avenue in Menasha.

The sewage treatment plant, though not the object of our bus tour, has been more in the news than the incinerator. Recently on September 29, 1971 the state's lawsuit against the cities and the sewerage commission for failure to comply with pollution abatement orders resulted in a $46,500 fine to be paid equally by the two cities. Clear water infiltration in the cities' sanitary sewer system has caused overloading at the plant and necessitated bypassing sewerage into Little Lake Butte des Morts, although improvements in the running of the plant under the direction of manager-engineer Ronald St. Laurent and Plant Superintendent Bud Schuelke have decreased the by-passing.

A wet sludge hauling experiment, of the damp cardboard-like sludge, was conducted for 15 days in August at a cost of $15,707, but despite the cost, under state orders the plant will have to wet haul rather than bypass until a proposed $24 million plant expansion can be completed in 2½ to 3½ years. A user fee is also being prepared which has been in the news frequently.

The two 150 ton incinerators burn domestic and industrial solid waste which provides the fuel to burn the sewage treatment plant sludge, although the heat value of the solid waste varies seasonally or with the weather, depending on what the cities throw away and if the refuse is wet. Mr. Schuelke estimates the two incinerators burn around 200 tons or more a day.

The incinerators now meet air pollution standards with scrubbers to knock down fly ash, although Mayor James Adams reported possible costs of $450,000 to meet future air pollution standards, which might be so expensive the incinerators might have to be closed in favor of a sanitary landfill. (Twin City News Record, September 16, 1971) Coenser and Townsend will be studying stack emissions to determine their content.

10. TOWN OF MENASHA LANDFILL:

The Town of Menasha landfill is located on the west side of Little Lake Butte des Morts on County Trunk "U". It is an area covering 140 acres, which was purchased by the Town of Menasha for $140,000, and is located in a partially excavated gravel pit. The landfill is open Tuesdays, Thursdays and Saturdays and is for Town of Menasha use exclusively. The area is fenced in, with a man on duty while the site is open, and trees have been planted to screen the site.

Mr. Roland Kampo, town chairman, mentioned that by segregating chemical wastes (plastics, wax paper, and other products which do not decompose), [illegible] area of the landfill site, the rest of the landfill can be made to last a much longer time.

11. FUTURE SITES FOR OUTAGAMIE COUNTY LANDFILL:

The Airport site is the only one that seems realistic at this point, and is recommended by the Fox Valley Council of Governments.

Both Winnebago and Outagamie Counties have been investigating sanitary landfill sites, but they are being hindered by the uncertainties of the counties' authority to run them. Fond Du Lac County has purchased property for a sanitary landfill, then leased it to a private concern to run, and their landfill has been cited as a model operation

in the state. A study on placement of sanitary landfills in Winnebago County was released by Northeastern Wisconsin Regional Planning Commission early in 1971, but the county is exploring state statutes to determine if counties have the authority to run landfills by enforcing DNR regulations. Outagamie County, extensively studied by an earlier Council of Governments solid waste study of the Fox Valley, and object of a Northeastern Wisconsin Regional Planning Commission study to be released at the end of October, 1971, studied seven sites, but all were eliminated for various reasons.

Enabling legislation, supported by the Wisconsin League of Women Voters, in a statement by Mrs. James B. McDonald on July 19, 1971, "would extend to all counties of the state the authority to perform waste disposal functions which Milwaukee County now alone has. . . . The League would not, however, support fragmenting responsibility for solid waste management by withdrawing minimum standard setting and enforcement authority from the Department of Natural Resources and giving counties responsibility autonomously...." The League would also "like to be sure that in the final proposal, there is a method provided which will allow adequate financing of the construction and the operation of such waste disposal systems," and that Milwaukee County be able to maintain their present system.

12. CITY OF APPLETON SANITARY LANDFILL:

The sanitary landfill is located two miles west of Mackville on Quarry Road where the city owns 120 acres of Center Swamp, in which it disposes of all refuse collected. The operation of the disposal site was on a contract basis with Landwehr, Inc. until July 31, 1970. Adjacent land is rented from Landwehr, Inc. for the storage of cover material and for additional disposal area. During the winter months Street and Sanitation Division crews are used to cut brees, clear fire lanes, build roads and to maintain ditches, fences, well houses and buildings.

The city of Appleton received its first license to operate the landfill from the Department of Natural Resources in 1969.

On April 21, 1970, an attendant was placed at the Disposal site to control its use. During the remainder of the summer months the old fence and gates were removed and replaced with chain link fence. A permanent road was constructed and extensive landscaping including grading, grass seeding, selective tree planting and additional wire mesh fencing was installed in the vicinity of the actual dumping area to control wind blowing materials. The drainage ditch was altered and extended to improve the water drainage around the disposal area.

During July, 1970, the city of Appleton took over the entire operation of the sanitary landfill. A Caterpillar traxcavator was placed into operation with an operater selected from the Sanitation Division. Steps were taken to advise all users of the landfill of the hours and regulations of its operation. Later in the summer an insulated and heated storage building was constructed for the traxcavator and other equipment. Cover material was hauled to a selected storage site and covered with leaves for use during the winter months. During our conversion of the dump to a sanitary landfill every effort was directed towards compliance with the standards as set forth by the DNR.

During 1970, an ordinance was adopted by the Common Council governing the issuance of permits for the collection and transportation of solid waste in the city of Appleton. The first permits were issued on August 12, 1970. At present there are 7 private collectors having a combined total of 15 vehicles, registered to collect solid waste in Appleton.

The above information came from the Department of Public Works 1970 report which also includes information on tonnages, labor hours and so on. Robert Miller, director of the DPW, also added that no liquid wastes or junked cars are accepted at the landfill, and that these restrictions seem to be forcing recycling of the liquid wastes by industries.

13. APPLETON'S RECYCLING PROGRAM:

Initiated as a trial program with 8 school collection sites, and just broadened to include city supermarkets, Appleton's recycling program is saving the expense of burying glass and metal saved by citizen effort from the Mackville landfill. Glass for this program should be washed, with any metal rings or lids removed, but labels need not be removed since the hot 260 degree wash takes care of the paper. Cans, also washed, must have labels removed because the deplating is by a cold bath method, and the cans should also be flattened. Small metal toys, tops of jars, and other small metal items are also acceptable.

When the first load of collected glass and cans was hauled to Tom's Recycling and Materials Center in Ashwabenon, the city learned its metal can be picked up here, thus saving the cost of its delivery, but glass will still need to be delivered. In the first two weeks of operation, an estimated 15 tons were saved from burial and put back into useful life. Cliff Miller's Post-Crescent article of September 26, 1971 "Complete the Cycle" estimated "every ton takes up six square feet, 10 feet deep" and with an average of three layers of waste, "at least two square feet of land are used up per ton," so 30 square feet of land were saved by two weeks' collection.

The Wisconsin League of Women Voters supports a bill before the assembly which "requires the Department of Natural Resources to conduct research and compile information regarding new processes of solid waste recycling."

WHAT YOU CAN DO:

"When you buy something new, insist that it contain recycled materials, if possible," suggests an article in The American Legion Magazine, August, 1971. Look for the National Association of Secondary Materials Industries' symbol: CONTAINS RECYCLED MATERIALS

Support recycling efforts; reuse goods, or trade with a friend or give them to Goodwill or the Salvation Army for reuse.

Compost your leaves, grass clippings and garbage, except for meat scraps and citrus peelings.

Buy goods with an awareness of excess packaging, durability, and recyclability.

Pick up other people's litter.

DRAFT FOR POSITION PAPER

1972

Appleton Position on

SOLID WASTE DISPOSAL

The Appleton League's interest in solid waste disposal stemmed from a concern for the preservation of wildlife areas within the county. Immediate concern was the preservation of Center Swamp, adjacent to the Appleton city dump. League members saw a possibility for action when the Fox Valley Council of Governments initiated a regional solid waste disposal study in 1968. A one-year study of The Solid Waste Disposal Problem was adopted as the local agenda item at the April 1968 Annual Meeting. The study included films, research, on-site inspection of disposal sites, discussions with persons directly involved with disposal problems, and evaluation of Appleton's method of disposal using minimum standards suggested by the Wisconsin Department of Natural Resources. The following consensus was adopted at the April 1969 Annual Meeting:

HEALTH AND WELFARE

Solid Waste Disposal:
a. Support of regional cooperation to solve waste disposal problems
b. Support of the minimum standards as proposed by the Wisconsin Department of Natural Resources for solid waste disposal sites
c. Discontinued use of Center Swamp disposal site as soon as possible

League members agreed that sanitary landfills was the most desirable method of present alternatives.

When the solid waste disposal study made by the Council of Governments was completed in September 1969, the League met with a C.O.G. representative to discuss its conclusions. Appleton Aldermen were invited to the meeting. The C.O.G. study favored a regional solution to the problem, but no site proposals proved to be acceptable. Outagamie County appointed a county site committee,

and League representatives attended those committee meetings. To date this committee has not recommended a regional site (A site near the Outagamie airport has been suggested) and there still seems to be some uncertainity as to whether state statutes allow counties the authority to operate regional disposal sites.

In May 1970 the League made a statement before the Solid Waste Disposal Seminar in support of regional cooperation in solving disposal problems, and/ in support of D.N.R. minimum standards for sites, and for the elimination of Center Swamp as a dump site. During July 1970 the Appleton dump was converted into a sanitary landfill which met D.N.R. standards.

In November 1970 League made a statement before a D.N.R. hearing in Green Bay in opposition to the use of the Killian Farm site as a sanitary landfill for the city of Kaukauna. This site was subsequently certified for use by the D.N.R.

Membership interest in recycling, an outcome of the local disposal study, prompted League participation with other civic groups in generating support for the recycling of bottles and cans by the Appleton Department of Public Works. In August 1971 the League sent a letter to each Alderman urging adoption of city-sponsored recycling of glass and cans. This recycling program was begun in September 1971.

In October 1971 the local Environmental Equality committee conducted a bus tour of various recycling and disposal sites in the area. This tour included a stop at the Center Swamp site to learn about the changes which had been made when it was converted to a sanitary landfill. While the site now meets D.N.R. standards, its space is limited and a new site for the city will eventually have to found. The city has expressed a willingness to cooperate on solution of this regional problem, but to date no level of government has a definite proposal.

Consensus of a Study of the Solid Waste Disposal Problem

Support of regional cooperation to solve solid waste disposal problem. Recognition that solid waste disposal is a regional-wide problem and not just a municipal problem to be solved by the City of Appleton alone with no regard to neighboring communities.

Support of minimum standards as proposed by the Wisconsin Department of Natural Resources for solid waste disposal sites. Discontinue use of Center Swamp disposal site as soon as possible.

Consensus was taken at a general meeting April 9, 1969 with 26 members in attendance.