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COLUMBUS' MUNICIPAL SOLID WASTE
MANAGEMENT SYSTEM: A CASE STUDY

Applied Management Sciences, Incorporated

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1973

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COLUMBUS' MUNICIPAL SOLID WASTE MANAGEMENT SYSTEM

A Case Study

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for the Federal solid waste management programs under contract No. 68-03-0041
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U.S. ENVIRONMENTAL PROTECTION AGENCY

1974

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in the solid waste management series*

FOREWORD

Solid waste management systems are an integral part of the environment of nearly every citizen in the United States. Yet until recent years, these systems have not received the attention other visible residential services have enjoyed. This historical neglect has resulted in systems which may not be cost-effective, especially with respect to the rising cost trends encountered in solid waste management activities. These trends arise from two principal factors:

- * Environmentally sound disposal methodology is being enforced or strongly encouraged; as a result, disposal sites and needed equipment are now expensive to procure and operate.
- * The collection function is highly labor intensive. Thus, the costs of unskilled labor, which have been rising to meet socioeconomic demands, have had enormous impacts on local agency budgets.

This rise in cost pressure has forced all levels of governmental organizations to consider more closely the management and costs of solid waste management activities.

Because efforts to upgrade solid waste management practices are in their infancy, there is still an obvious lack of data bases for evaluative and comparative analyses. This case study is one in a series of case studies of solid waste management systems which has been conducted under the sponsorship of the Office of Solid Waste Management Programs, U. S. Environmental Protection Agency. Kenneth Shuster and Cindy McLaren served as EPA project officers on the case study reported herein. The purpose of these case studies is to fill in this data gap with actual case histories of how cities are handling their solid waste problems.

Concerned agencies at all government levels, as well as private firms, will be able to assess information of the following types:

- * The management and operating characteristics of public sector solid waste management systems.
- * The institutional forces which give rise to these characteristics.

- * Those techniques that have been or are being applied to enhance the measures of productivity, aesthetics, level of service, and environmental control.

These agencies and firms can then use these comparisons to upgrade their systems according to the norms achieved in other cities of similar size, geographical location, and operational and institutional characteristics.

--ARSEN J. DARNAY
*Deputy Assistant Administrator
for Solid Waste Management*

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INTRODUCTION

The solid waste management system in Columbus, Ohio is city operated and is administered by the Division of Sanitation of the Department of Public Services. The city collects and disposes of all residential wastes generated within Columbus. In addition, it provides refuse collection and disposal, under contract, to commercial sources that request service. The collection and disposal functions have maintained their basic character and composition over a period of many years, and only recently have plans been made to modify certain aspects of the system. Transfer stations and pulverizer units are now planned and may have a considerable effect on the current system characteristics reported in this case study. The important features of the anticipated system changes are described in this report.

The collection system utilizes conventional packer trucks and provides curb-side service to the residents of single family, detached homes. Container or "box" service is offered to multiple-family units and commercial sources requesting such service. Collection is performed on a once-a-week basis, but residents can request additional service for which an additional charge is made. Two major problems are associated with the current collection operation. First, the system has a high absenteeism rate. Second, the remote disposal site creates long

haul distances for many service areas. This latter problem will be remedied by means of transfer stations.

The disposal system has consisted of landfills, now restricted to one site located in the southwest section of the city. Antiquated equipment at this site and constant breakdowns have created some operational problems, but the topography and geology of the site appear suitable for landfill. The planned land disposal of pulverized refuse, compared to conventional loose refuse, should alleviate the operational problems and eliminate any nuisance or health hazards.

Three transfer stations, currently under construction, are strategically located in the city, and each is to be equipped with a refuse pulverizer. These facilities are certain to improve the current inefficiencies in the collection system due to the long haul distance to the disposal site. The transfer stations should also reduce collection truck maintenance costs, as the trucks must now struggle through the landfill. Finally, the pulverizers will produce shredded refuse, which is claimed to be easier and more economical to landfill than unprocessed refuse. It is possible that this system will be a forerunner to future resource recovery efforts when the city feels that recovery is economically viable.

The case study of Columbus, Ohio was performed using a carefully structured data gathering technique. Initial contacts were made by both the Office of Solid Waste Management Programs of the Environmental Protection Agency and Applied Management Sciences personnel. Interviews were scheduled to be convenient for the city personnel. During these interviews, notes were taken and tape recordings were made after obtaining the permission of the interviewees. Efforts were made to require a minimum of city personnel time and, whenever possible, existing documentation

was solicited to support the general discussions. Figure 1 presents the titles of the people interviewed in Columbus, the dates of these interviews, and the types of information obtained.

The structure of this report consists of five chapters, including the introduction, and appropriate appendices. Chapter 2 is a systems description abstract which synthesizes the characteristics of the city and the collection and disposal systems. Chapter 3 presents the findings of the case study effort and identifies potential problem areas. Chapter 4 is a description of the city in terms of those parameters which can affect solid waste management operations. Finally, Chapter 5 reports the characteristics of the solid waste system in considerable detail. All aspects of the system are discussed and appropriate tabular data are presented.

TITLE	DATE	INFORMATION
Assistant Director, Department of Public Service	May 8	General system characteristics, history, problem areas, new developments
Representative, Franklin County	May 8	County landfills, solid waste handling
Superintendent, Division of Sanitation	May 9	Details of collection, disposal of solid wastes
Refuse Collection Supervisor Division of Sanitation	May 9	Details of collection system
Landfill Operations Supervisor Division of Sanitation	May 9	Details of land disposal facilities
Business Manager, Division of Sanitation	May 9	Annual reports on Division of Sanitation
Fiscal Officer, Department of Public Service	May 9	Financial aspects of solid waste system
Administrative Analyst, Department of Finance	May 9	Financial details
Superintendent, Municipal Garage	May 10	Details of equipment maintenance
Representative, Local 53, American Federation of State, County, and Municipal Employees	May 10	Labor relations; union impact on city
Director, Department of Public Service	May 10	Planned solid waste system-transfer stations, pulverizers
Chief of Resource Recovery, Division of Waste Management and Engineering, Ohio EPA	May 10	State solid waste regulations affecting Columbus
Representative, Chamber of Commerce	May 10	General background information on Columbus
Labor Relations Manager, Department of Public Service	May 10	Labor relations; coordination with local union

FIGURE 1: DATA SOURCES AND INFORMATION TYPES

2

SYSTEM DESCRIPTION ABSTRACT

City: Columbus, Ohio

Contacts: Robert C. Parkinson - Assistant Director, Department of
Public Service

Mr. Weaver - Franklin County Health Department

Richard L. Harris - Superintendent, Division of Sanitation

Mr. Mayo - Refuse Collection Supervisor, Division
of Sanitation

Lewis Wormley - Landfill Operations Supervisor, Division
of Sanitation

Fred Glaze - Business Manager, Division of Sanitation

Robert Hunt - Fiscal officer, Department of Public
Services

Richard Meece - Administrative Analyst, Department of
Finance

James A. Matheny - Superintendent, Municipal Garage

Albert L. Beard - Local 53, AFSCME

Richard D. Jackson - Director, Department of Public Service

David Sharp - Chief of Resource Recovery, Ohio EPA

David Lieser - Chamber of Commerce
Rosemary Martin

Arthur Tisdale - Labor Relations Manager, Department
of Public Service

Dates of Visit: May 8 - May 10, 1973

Population
Demography:

Date	Total	White	Negro	Other
1980 (projected)	600,000			
1970	539,677	437,255	99,627	2,795
1960	471,361			

Area: 155.8 Square Miles

Density: 3464 Residents per Square Mile

Road Mileage: 1026^{1/}

Collection: Table 1, Collection Abstract

Miscellaneous: Mixed refuse collection service is provided, in which putrescibles and trash are simultaneously collected, along with yard waste. Service is also provided to multiple family units and those commercial sources that request the service. Only containerized pick-up is offered to these latter points. Bulky materials (white goods, furniture, etc.) are collected from all sources on an average of 4 times per year, per residence, although the extent of this service varies. Street cleaning is the only solid waste activity that is not handled by the Division

^{1/} Calculated as half the swept curb mileage.

TABLE 1: COLLECTION ABSTRACT

Collection Function Collection Variables	Single Family Residential Mixed Refuse	Multiple Family and Commercial "Box" Service	Bulky	Street Cleaning
Number of crews	86	12	6	Variable
Crew Size	3 to 4	3	3	1
Frequency of Service	1/week	1/week	4/year	-
Point of Collection	Curb-side or alley line	On premises	Curb-side or alley line	Streets
Method of Collection	Manual	Hoist on rear-loader	Manual	Street vacuum Mechanical broom Open-bed trucks
Stops	152,937	2,090	As needed	2,053 curb miles
Service Limitations	Cans up to 30 gallons capacity; or bundles up to 50 lb. and 4' x 2'	3 to 12 cubic yard "box" containers	-	-
Incentive System	Task System		-	-
Fund Source	General Fund	General Fund, rental of containers, service charge	General Fund	General Fund and Revenue Sharing
Tonnage (Annual)	205,346	28,634	12,480	N/A
Wage Scales (Hourly) (excluding fringe)	\$4.11 - \$4.47			
Unions	American Federation of State, County, and Municipal Employees			
Annual Cost	\$4,280,219.40	\$415,980.35	\$273,670.85	\$839,666

of Sanitation and is the responsibility of the Division of Engineering and Construction.

Disposal: Table 2, Disposal Abstract

Miscellaneous: Columbus has only one city-operated sanitary landfill to which all city solid wastes are taken. Its location, in one corner of the city, has reduced the efficiency of the collection system because of long haul distances. There are no significant operational difficulties at the fill, but the remaining lifetime on the site is only 3 years.

TABLE 2: DISPOSAL ABSTRACT

Type:	Sanitary landfill
Location:	Frank Road (southwest portion of city)
Total area:	97 acres
Real loading:	1000 tons/day
Total lifetime:	6 years
Expected remaining lifetime:	3 years
Operating costs:	\$339,352.32

3

FINDINGS AND CONCLUSIONS

Until recently, the solid waste management system in Columbus, Ohio had been expanding slowly and in a conventional manner. The city had historically chosen the path of least resistance to maintain the most economical (least cost) system possible at the expense of lowering the quality service to its residents. The collection and disposal equipment currently in use is antiquated and much of it needs replacement. The city has been forced to cut back its disposal options to one disposal site where operational needs are just barely being met. Absenteeism among collection workers is high.

The state of the system is now undergoing rapid change. The changes can be attributed to the infusion of new management into the Division of Sanitation and the Department of Public Services and the rapport that these personnel have with the city administration. Due to the efforts of senior management in the Department of Public Services, planning efforts were undertaken to improve efficiency and reduce some of the inequities of the current collection and disposal system. These planning efforts identified the major problems facing the system.

The most significant problem was that operational difficulties had reduced the city disposal capability to just one landfill. This situation in disposal site availability had a

corresponding effect on the collection system, as it created long haul distances for many packer truck crews. These crews already had the problem of having to start from and return to one central location (the Municipal Garage). In addition, collection time was also lost due to the morning and afternoon congestion of trucks fueling, leaving and returning at the same time.

To solve these problems, the city has planned three transfer stations, with pulverizer units to be integrated into each station. The Municipal Garage is also decentralizing its operation and packer trucks will now be stored at the transfer stations instead of at one central location. Travel distances and maintenance/operating costs for packer trucks will be substantially reduced and their usable life increased. Also, the damage incurred by packers at landfills will be eliminated.

It is expected that operational problems at the landfill (due to the use of older equipment) will also be minimized as pulverized refuse is easier to handle than loose refuse. Also pulverized waste should not have any of the more common nuisance, health, and aesthetic problems traditionally associated with untreated solid waste. The city hopes to receive state approval to permit limited landfill covering for the site so that only a final layer of cover will be required.

In terms of planned system changes, the only problems that remain unsolved are the high absenteeism rate among collection workers and the inadequate equipment replacement rate. The Department of Public Services and Division of Sanitation are acutely aware of these problems. The absenteeism problem is being addressed by assigning one more man than actually needed to each collection crew. Since there is always a shortage of men on any given work day, the correct crew size (that which the city feels is optimal - three men per truck) will operate

each truck. The city budget appears to constrain frequent equipment replacement.

The only solid waste management activity in Columbus not within the jurisdiction of the Division of Sanitation is the street cleaning function. This is the responsibility of the Division of Engineering and Construction of the Department of Public Services. This service appears to be excellent as Columbus presents a very clean appearance and has minimal street litter. This is especially surprising as observation indicated a minimal number of litter boxes in the downtown section of the city. This division has initiated a program of distributing litter containers throughout the city and is evidently receiving positive public response to its actions.

Solid waste management is not a major political issue in this city and the residents are evidently satisfied with the provided service. There appears to be no equivalent of an environmental action council in the city and public information groups (the Chamber of Commerce, League of Women Voters, etc.) were not aware of any public participation in, or objection to, any of the city's solid waste management activities. The sanitation worker's union, an AFSCME local, appears to have good relations with the city. The existence of the union is relatively new and, if the result of the last negotiation is any indicator (a phenomenal increase in wages), the city could expect problems in the future.

4

BACKGROUND OF THE SYSTEM

Columbus is located near the geographic center of Ohio, and is the nucleus of a three-county Standard Metropolitan Statistical Area having a population of nearly one million. The site was chosen as the state capital in 1812 before the city in fact existed. This selection initiated a long, steady development that saw the city develop into a major industrial, education, and commercial center for the Midwest.

4.1: Location, Geography, Climate and Demography

Columbus is located in the center of the state and in the Ohio River watershed. The ground elevation is 777 feet above sea level; the latitude is 40 deg. N. and longitude 83 deg. W.

Four nearly parallel streams run through or adjacent to the city. The Scioto River is the principal stream and flows from the northwest into the center of the city and then flows straight south toward the Ohio River. The Olentangy River runs almost due south and empties into the Scioto just west of the business district. Two minor streams, Alum and Big Walnut Creeks, run through portions of Columbus or skirt the eastern and southern fringes of the area.

Columbus is located in an area of changeable weather. Air masses from central and northwest Canada frequently invade this

region. The tropical Gulf masses often reach central Ohio during the summer and to a much lesser extent in the fall and winter. There are also occasional weather changes brought about by cool outbreaks from the Hudson Bay region of Canada, especially during the spring months. At infrequent intervals the general circulation will bring showers or snow to Columbus from the Atlantic. Although Columbus does not have a "wet" or "dry" season as such, the month of October has a higher frequency of light rainfall than any other month and comes closest to providing a normal dry period. The average annual precipitation is 36.7".

The 1970 census recorded the population of Columbus as 539,677, making it the second largest city in the state. Persons of various minority groups, chiefly blacks, constitute 19% of the total population. The population of the city rose from 471,316 in 1960, a 14.5 percent increase primarily attributable to annexations of surrounding communities. The entire Standard Metropolitan Statistical Area experienced a 21.4 percent growth rate during the same period.

As a result of the annexations, Columbus has the largest area of any city in Ohio, with 155.8 square miles as of January 1973. The population density for the city is approximately 3,464 per square mile. The projected population growth for the present decade will result in an estimated population of more than 600,000 for the city and nearly 1.2 million for the Standard Metropolitan Statistical Area by 1980.

The employment picture of Columbus shows nearly 400,000 people employed in the Standard Metropolitan Statistical Area. There are nearly 1,000 manufacturing establishments engaged in such activities as laundry products, machine shop equipment, packaging products, shoes, clothing, aircraft, printing, publishing, food products, auto parts, electrical appliances, and telephone equipment. The total payroll for the area exceeded \$3.3

billion in 1971. Recently, unemployment has been very low, with a rate of 2.7 percent in March 1973. Average weekly earnings in March 1973 for factory workers equalled \$175.56. The mean income in 1970 for the Standard Metropolitan Statistical Area was \$3,328 per capita and, for the city, it was \$3,110 per capita.

Higher education has long been a major institution in Columbus, since the establishment of Ohio State University in 1873. The university currently enrolls over 46,000 students, with an additional 11,000 students attending one of the five other institutions of higher education in the metropolitan area. Scientific research has also played an important role in the development of Columbus. Several well-known research organizations, e.g., the Battelle Memorial Institute (largest research organization of its kind in the United States), the Denison Research Foundation, and the Ohio State University Research Foundation, are based in Columbus.

As a major commercial and government center, the city is served by four major railroad systems and by eight major airlines. Additionally, 105 motor freight lines operate in Columbus and seven intercity bus lines serve the city.

The demographic data are summarized in Table 3.

4.2 Form of Government and Organization

The municipal organization of Columbus is divided into three branches - the judiciary, executive, and legislative. The governmental organization is presented in Figure 2. The legislative branch consists of the City Council whose seven members are elected by the public for a term of four years. Regular meetings a year are held on Monday nights and all actions taken by the Council are either by ordinance or resolution. Passage of legislation requires the affirmative vote of at least four Council members. Approved measures become law 30 days after

TABLE 3: DEMOGRAPHIC PROFILE OF COLUMBUS, OHIO

Population:	Columbus	SMSA
1960	471,316	754,885
1970	539,677	916,228
Non-white population 1970 -	102,422	110,220
Labor Force (SMSA) -	397,800	
Median Income:	<u>City</u>	<u>SMSA</u>
per family -	10,848	11,864
per capita -	3,110	3,328
Land area -	155.8 square miles	
Elevation -	777 feet above sea level	
Average Temperature -	51.5° F.	
Annual Precipitation -	36.7"	

being signed by the Mayor, except for emergency legislation which requires six Council votes and takes effect when signed by the Mayor as provided by law.

Council establishes the number of officers and employees of each department, determines whether an officer or employee should give bond, and sets the amount of bond. Council prepares, from the Mayor's estimate, an appropriation ordinance for needs of each department and passes said ordinance which is the sole source of money to be spent except for transfers and supplementary ordinances. Council may investigate financial transactions of any office or department and the official acts and conduct of any city official. Council approves the Mayor's appointments to Citizen Commissions.

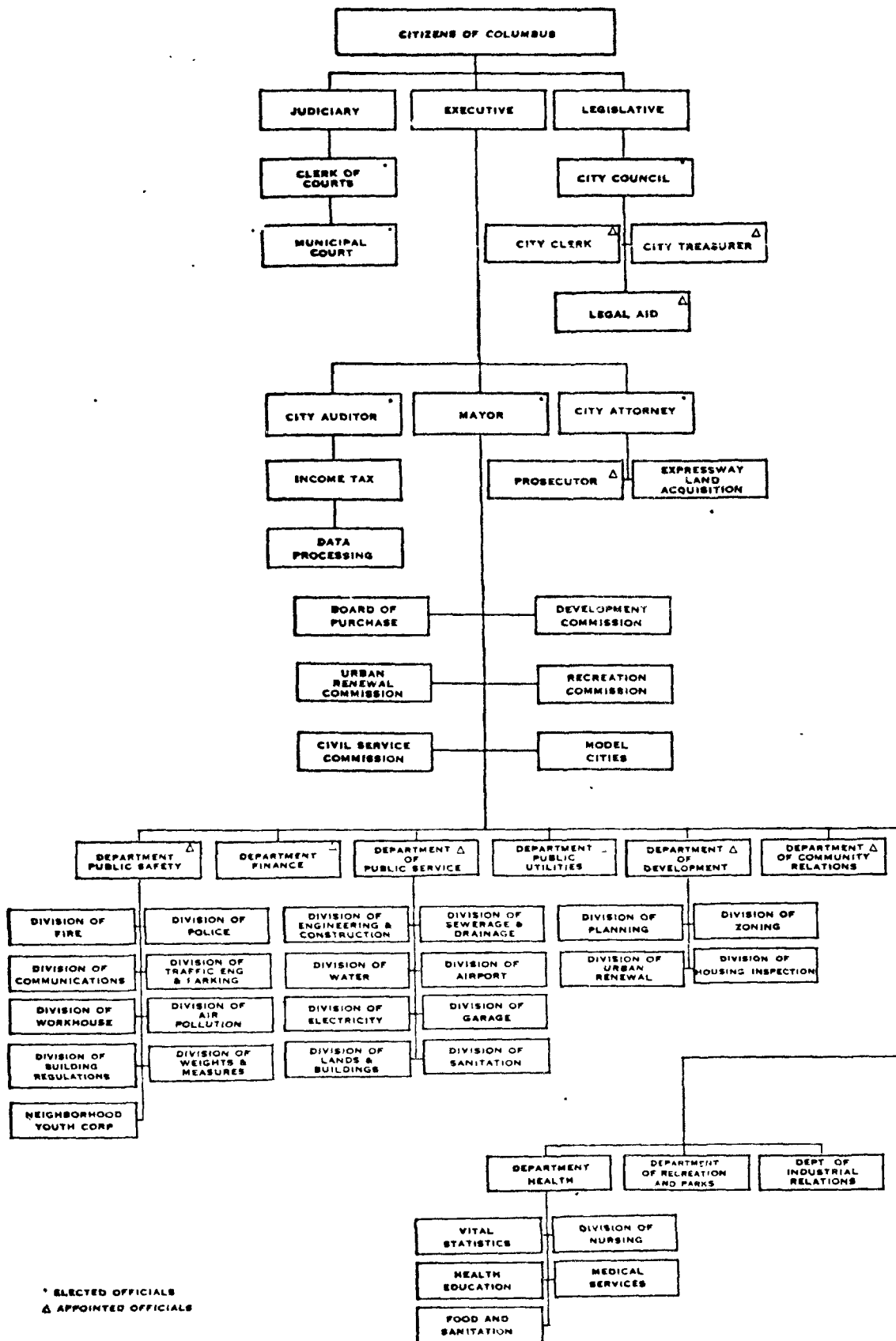


FIGURE 2: COLUMBUS GOVERNMENT ORGANIZATION

The judicial branch of the Columbus government consists of a Municipal Court which has county-wide jurisdiction and is divided into three divisions - The Civil Division, the Criminal and Traffic Court and the Traffic Violation Bureau. The twelve judges and the Clerk of the Municipal Court are elected to six year terms by all voters in Franklin County.

The Executive and Administrative powers of the city are vested in the Mayor, who is elected to a four year term. It is the duty of the Mayor to act as Chief Conservator of the peace within the city and to preside over the administration of all its affairs. He appoints the Director for the Departments of Public Safety, Public Service, Finance, Development, Utilities, Community Relations, Youth Opportunity and any other officers whose positions may be created by Council and for whose appointment no provision is made by Charter. Further, the Mayor directs the enforcing of all Ordinances; keeps the Council advised of the financial condition and needs of the city; prepares and submits reports required by that body, and recommends for adoption such measures as may be necessary or expedient.

The Director of Public Service is responsible for the construction, improvement and maintenance of all city roadways, and water, sewage and drainage and sanitation facilities. He is also accountable for the operation of the Airport, city power plant and municipal public service divisions.

4.3: Solid Waste Management System History

The solid waste management system in Columbus has expanded in proportion to the growth of the city. As Columbus grew in the 1960's, the city switched from backyard to curbside pickup. In 1954 a freeze was put on water and sewer connections outside the City. Since then a considerable amount of land has been annexed to Columbus and, as a result, there has been only nominal growth.

outside of Columbus. The heavy growth within the city limits resulted in rapid expansion of Columbus' solid waste management system. The city has kept a monopoly on residential collection, but currently services only 65 commercial customers. The commercial service is now being phased out, and most commercial generators are serviced by private haulers in the area.

Labor-management relations have not exhibited any unusual patterns. Approximately two years ago there was a strike over salaries which originated with the sewage treatment workers and spread to most city employees. The sanitation workers in Columbus were not unionized until the American Federation of State, County and Municipal Employees (AFSCME) entered the picture in 1971. However, until October 1972 the union was still uncertain of the size of its membership. At that time the union succeeded in persuading city management to sign an agreement giving the union the right to negotiate on behalf of its members and establishing wages and fringe benefits. Now most sanitation workers are members of the AFSCME.

The disposal system has been relatively slow to evolve, but will soon be undergoing change. Columbus has long used open dumps and, at the beginning of 1972, the city was operating two landfills without any fixed operational criteria. The State of Ohio then served notice on Columbus to close down these facilities by July of 1972, or upgrade them to sanitary landfills. One site was closed down and all equipment transferred to the other site because a new freeway was planned to pass through one of the sites and the city had insufficient equipment to operate two sanitary landfills. The city is currently operating this one site in the southwest section of the city and adheres to the state criteria for sanitary landfills.

The most recent development in Columbus' solid waste management system was initiated by a study undertaken one year ago. The study showed that each collection crew was spending an average of over two hours a day for hauls to the landfill. Also, collection trucks were being damaged at the landfill. The result of this study was for the city to let bids on a system of transfer stations which are now under construction. When the pulverized refuse facilities become available, the city will seek a slackening of some sanitary landfill criteria, such as daily cover requirements. The characteristics of these facilities will be discussed at length in the next chapter.

4.4: Agencies Impacting the Columbus Solid Waste Management System

4.4.1: State Level Agencies

Ohio Department of Health/Ohio Environmental Protection Agency

The State of Ohio has the authority to regulate the disposal of solid wastes within the state. Enabled by Sections 3734.01 and 3734.11 of the Ohio Revised Code, the Public Health Council of the State Board of Health has adopted regulations and minimum standards to assure that all solid waste disposal sites be "located, maintained, and operated in a manner so as not to create a nuisance, cause or contribute to water or air pollution, or create a health hazard." Subsequent to the adoption of this code, the Ohio Department of Health created a Solid Waste Section within the Division of Engineering to develop an overall solid waste program.

The established objectives of the Solid Waste Section are to:

1. Survey existing solid waste programs and practices in an effort to obtain comprehensive information from the entire state.
2. Offer program consultation and advice, and to review for approval all plans for new disposal sites and facilities.

3. Prepare and conduct orientation sessions for state and local health department personnel.
4. Prepare and conduct informational meetings with other state agencies, county and local governments and interested organizations, professional associations, and public officials.
5. Prepare educational materials for the public.
6. Promote and carry out legislation necessary for proper solid waste programs.

Following the guidelines set up by the Bureau of Solid Waste Management,^{1/} members of the Solid Waste Section conducted a detailed investigation of over 800 land disposal sites and facilities as a part of the National Solid Waste Survey. Many unsatisfactory conditions were documented and were supported by hundreds of color slides and photographs. Every county, city, and incorporated village was visited and information was obtained on the solid waste practices of each community.

Information obtained from the survey indicated that the existing conditions of many disposal sites posed potential pollution hazards to air, ground waters and surface waters, and in some areas the problems of solid waste had become critical. The survey provided a data base on the various aspects of solid waste handling and disposal and demonstrated the need for an overall planned program. Additional emphasis was indicated for the areas of legislation, financing, technical assistance and consultation, public awareness programs, and personnel training. As more data became available, it was recognized that more leadership was necessary at the state level and that good, reasonable, and enforceable state legislation was imperative.

These findings led to the creation of the Ohio Environmental Protection Agency in October 1972. The Ohio EPA consolidated the

^{1/} Now the Office of Solid Waste Management Programs

functions and powers of the old Ohio Water Pollution and Air Pollution Control Boards. The Ohio EPA director is now responsible for the administration of 60,000 to 90,000 air pollution permits and 2,000 water pollution permits. He also has authority over solid waste disposal standards.

The Ohio EPA is currently working with municipalities to find alternative methods of solid waste disposal to eliminate the practice of open burning. It has been estimated that 300,000 tons of airborne particulate matter are generated in Ohio each year from the open burning of trash and leaves. The Ohio EPA is helping to establish new refuse disposal systems including recycling, landfilling, pulverizing, and composting to alleviate this problem.

This agency will review the progress of the Columbus transfer station/pulverization experiment. The Ohio EPA will then be responsible for deciding if the methodology is satisfactory in terms of environmental and health factors. The issuance of a permit will depend on the critical question of the necessity to provide daily cover on a pulverized mixed refuse landfill. The Ohio EPA will retain the responsibility for surveillance and monitoring of Columbus's solid waste disposal practices, although the actual performance of surveillance/monitoring may be delegated to a local authority.

4.4.2: Local Level Agencies

Environmental Health Project

The Environmental Health Project, sponsored by the City of Columbus, is designed to correct or alleviate environmental blight and health problems by person-to-person contact and education. Health aides assigned to the project have gone about this task by informing residents or landlords that they are in violation of Health Codes, by seeking compliance with the codes from

the person responsible, and by counseling them in proper health methods.

At the time of the site visit, project personnel had contacted 796 persons in the area concerning environmental health problems. The aides had investigated 181 complaints and had issued 309 courtesy notices to tenants or landlords to comply with city health ordinances. The project has received compliance from 153 tenants or landlords. Aides of the project have notified the Police Department of 46 junked automobiles requiring removal from the model city area. The bulk refuse service, operating on the first and third Mondays of each month, has removed 251 truckloads of bulk refuse from 262 residences in the area.

During July, 1972, 458 families received free waste containers through the project. At the present time the container supply is exhausted but passage of an ordinance by City Council is being sought which will allow more containers to be purchased.

August 31, 1972 marked the end of the Summer Clean-Up project sponsored by the Youth Service Bureau. The clean-up crews, which worked in the model city area, were supported by the Environmental Health Project which provided the young workers with brooms, rakes, shovels, weed cutters and gloves with which to carry out their tasks.

At the present time, project management is in the process of resurveying the model city area to determine the effectiveness of the services offered during the first action year. This task will help to accurately determine the most important problems in the area and what changes in approach will have to be made to deal more effectively with these problems.

Local No. 1632, American Federation of State, County, and
Municipal Employees

The Sanitation Division workers are represented by Local 1632 of the American Federation of State, County, and Municipal Employees, AFL-CIO. The union appears to maintain good relations with the city administration. A two-year agreement was recently negotiated between the city and the union and went into effect on October 2, 1972. Among the advantages won by the union at this time was a considerable increase in wages and fringe benefits. The starting pay for new sanitation workers rose from \$1.89/hour to \$3.46/hour. The minimum wage for tenured employees was pegged at \$3.88/hour. Wages for these workers will reach a maximum of \$4.13/hour under the terms of the present agreement. Vacation leave time has been increased and varies according to tenure. Hospitalization and death benefits up to \$10,000 are also provided. A retirement system, with a pension, permits employees to retire either at age 65 or after 35 years of service. This agreement was negotiated by the City of Columbus' Labor Relations Administrator, Finance Director, and Utilities Director, and the Director of the Executive Board of Local No. 1632.

5

SOLID WASTE SYSTEM CHARACTERISTICS

The solid waste system in Columbus is currently in a period of transition. The problem of inadequate disposal facilities with its consequent burden on the collection system has resulted in the decision to implement more advanced concepts of solid waste management. These consist of a system of transfer stations which will have refuse pulverizers incorporated in them. In addition to reducing haul distances for the collection fleet, the pulverized waste output from these stations should occupy less space in a landfill and may eliminate many of the common operating difficulties associated with sanitary landfilling. Details of the present system are first presented below, followed by a description of the planned system.

The collection and disposal of solid waste for the City of Columbus is administered by the Division of Sanitation of the Department of Public Services. The division's responsibilities also include:

- Inspection of all licensed, privately operated solid waste disposal sites within the corporate limits of the city.
- Inspection of all private refuse hauler vehicles to ensure compliance with city specifications before issuance or renewal of a city license.

- Employee safety and training programs, and operation of clean-up campaigns in cooperation with various neighborhood organizations.
- Improvement of policies and procedures through constant evaluation and research.
- Public relations and litter control program (Program Against Litter or P.A.L.).
- Issuance of permits to use facilities at city landfills.

Street cleaning activities are the responsibility of the Division of Engineering and Construction of the Department of Public Service.

The collection and disposal function characteristics are first discussed in detail in this chapter, followed by a description of the personnel and equipment involved in these services. Efficiency and productivity calculations of the system are then presented. Finally, the aspects of the planned transfer station/pulverizer system are discussed.

5.1: Authorization and Regulation

Solid waste operations in the City of Columbus are performed by the Department of Public Services' Division of Sanitation under the authorization of "Title Thirteen - Garbage and Rubbish Code" of the Columbus City Codes. Article One of Title Thirteen specifies storage and collection regulations, and Article Three of Title Thirteen deals with disposal regulations.

Specifically, Article One defines:

- The terms: garbage, refuse, and rubbish;
- The containerization of solid wastes: the requirement for receptacles; the type of receptacles required; the location of receptacles; the unlawfulness of depositing the refuse elsewhere than in these receptacles;

- The responsibility of the city to collect and dispose of refuse and dead animals within the city limits;
- The requirement for businesses and other commercial sources to remove or cause to be removed waste accumulations from their premises; the charges made by the city to perform this service;
- The need to remove unsalable or condemned products;
- The manner of "bundling" uncontainerizable wastes;
- The unlawfulness of alternative storage practices;
- The handling of apartment house waste storage containers;
- The penalties imposed by violation of the city codes;
- The license requirements for buying, collecting, or transporting solid wastes in Columbus;
- The application procedure, fee, and term of duration for such licenses;
- The container and vehicle requirements for such licenses (including identification tapes, prohibition of pushcarts, and regulation of dumping);
- Penalties for private haulers in violation of the city codes.

Article Three of Title Thirteen prescribes the proper operation incinerators, landfills, and dumps. Currently, the city does not operate either incinerators or dumps. For city-controlled landfills, Article Three specifies:

- The fees charged to users of city-controlled landfills;

- Those users exempted from these fees;
- The powers of the Director of Public Service to prohibit or regulate use of these sites;
- Permits, fees, and terms of permit required of users of these sites;
- The penalties for noncompliance with the requirements of the code.

Subsequent city ordinances have made minor adjustments to the basic code. The relevant portions of the Columbus Codes and amendments are presented in full in Appendix A.

The solid waste system in Columbus also operates under the constraints imposed by the State of Ohio, specifically through the Ohio Solid Waste Disposal Law and Regulations.

The Ohio Solid Waste Disposal law specifies that the Public Health Council of the state will regulate solid waste disposal sites and facilities; inspect and issue licenses for the operation of these facilities; and ensure that these facilities are located, maintained, and operated in a sanitary manner so as not to create a nuisance, water pollution, or other health hazard. The Public Health Council is also authorized to ban open dumping and burning, conduct annual surveys of solid waste disposal in the state, and suspend or deny licenses for violations of proper operational procedures.

In addition, Chapter 343 of the Ohio Revised Code on County Garbage and Refuse Disposal Districts gives county commissioners in Ohio the right to establish refuse disposal districts within their boundaries. Jurisdiction over these districts can include the territory of Municipal Corporations. Rates and charges for the use of refuse disposal district facilities can be fixed by any Board of County Commissioners. These boards also have the right to pass improvement resolutions and prescribe financing mechanisms when required.

The Ohio State EPA is currently suggesting model regulations and ordinances for the closing of open dumps, for the storage and collection of solid waste, and for the construction and operation of transfer stations.

The Ohio Solid Waste Disposal Law and Regulations, the Ohio Revised Code, Chapter 343, and the proposed model regulations are presented in detail in Appendix B.

5.2: Collection Function

The City of Columbus offers the following solid waste collection services:

1. Collection from all residential dwellings on a once-a-week basis.
2. Collection from contracted commercial establishments and public institutions.
3. Removal of dead animals from streets, alleys, laboratories, veterinarians, and private property.
4. Collection of wastes from litter receptacles that are placed on a public right-of-way within the city.
5. Emergency collections as requested.

The Division of Sanitation has a total of 146 motorized vehicles, including 103 packer trucks. The division currently operates the 86 daily packer routes that service approximately 190,000 household units. Each packer truck hauls an average of two and one-half loads per day to the city landfills and the collection rate for all city crews is approximately 900 tons per day.

5.2.1: Residential Collection

For the purposes of conventional residential collection, the city is divided into 10 areas under the direction of two supervisors who each manage five areas. A foreman is assigned to each area and patrols his territory in a radio-equipped car. He is responsible for seven to 10 trucks, two of which are normally provided with radios. This permits the foreman to make minor alterations in routing and ensures that all residential units are serviced. Each truck is assigned to a four-man crew, but the high level of absenteeism among collection workers usually results in a three-man crew. Under this condition, a crew consists of one driver, who is in charge of the truck crew, and two collectors. Each truck and crew services between 275 to 415 houses per day depending on whether it makes two or three daily trips to the landfill. Each full load of the truck (making an average of two and one-half loads per day to the landfill) therefore consists of waste from approximately 138 houses.

Residential solid waste is stored in 30-gallon containers (usually metal) which are placed at the curbside. This must be done at least one-half hour before the scheduled time of collection. In cases where alleys accessible to Sanitation Division vehicles abut residential property, containers must be placed on the alley line in such a manner as not to obstruct traffic in the alley. There is no limit to the number of containers that may be placed outside a residence for collection. However, safety regulations require that no container may be heavier than the ability of two collectors to pick it up.

The Sanitation Division has distributed a set of refuse collection rules to the residents of Columbus. These rules include stipulations that:

- Containers must be placed at the curbside or on the alley line in a manner not to obstruct traffic or hamper the use of any through-way at least one-half hour before the scheduled time of collection. Containers placed behind any enclosure (fence, gate, or wall) will not be emptied. All empty containers must be removed from the curb or alley line before the end of the day following the collection.
- Containers must be watertight, with handles and tight-fitting lids; be not more than 30 gallons capacity; and be constructed of steel or approved plastics. Cardboard boxes are not considered acceptable containers; boxes larger than three feet by two feet must be broken down so that they can be loaded into collection trucks.
- Waste or rubble resulting from building, remodeling, repairs, or construction will not be collected by the city and must be disposed by the owner. Stumps, logs, heavy limbs, and loose brush will not be collected by the city.
- Tree limbs and shrubbery must be cut not to exceed four feet in length, and be tied securely into bundles not more than two feet in diameter.
- Old furniture must be broken down and tied into bundles not to exceed two feet in diameter and four feet in length.
- Dead animals will be picked up immediately and a special service is provided for this purpose.

It is estimated that to fully load a truck takes approximately one and one-half to two and one-half hours. The freeway system permits the trucks to average 45 mph on their way to the landfill. Because of the existence of only one disposal site for the entire city, the turn-around time for a truck averages one hour from being fully loaded to returning empty to its collection area. The crews work an official 6:30 A.M. to 2:30 P.M. shift, usually with no break in order to complete their work earlier than the scheduled eight hours. This practice exists in spite of the fact that the local union has fought for and won two 15-minute coffee breaks.

The driver of each vehicle is required to keep a Daily Log. Consequently, a time and motion study could be available to the city for the operation of each truck. However, these Daily Logs have not been used for purposes other than to ensure that each crew has completed its assigned task within a reasonable amount of time. All of the driver's Daily Logs are compiled into a Daily Report by each area foreman for the seven to ten trucks under his jurisdiction. Finally, a Daily Progress Report is prepared for the attention of the Superintendent and Assistant Superintendent of the Sanitation Division. This document compiles the status of the solid waste collection system for each of the 11 area foremen (10 "residential" plus 1 "box" collection).

5.2.2: Other Collection Operations

The city also operates "box collection routes." These are routes for the collection of waste from containers of three to six cubic-yard capacity and principally service apartment houses. The equipment utilized for this purpose are specially equipped packer trucks: rear loaders with cable hoist attachments. The city has nine such trucks under the supervision of one foreman. For the purposes of box collection, the city is divided up into five areas and service is rendered from one to five times a week. Each truck collects from an average of 40 boxes per day.

Apartment house dwellings which have hoist-type refuse containers receive one collection per week without charge. There are also 53 commercial customers on the box routes. These return a revenue of \$14,180.12 to the City Treasury. Commercial customers are charged at the rate of \$1.00/cubic yard for refuse removal and can request additional collections at this rate. Apartment dwellings and commercial customers may rent containers from the city at the rates indicated in Table 4.

TABLE 4
RENTAL CHARGES FOR CUBIC YARD CONTAINERS

Type of Box	Cubic Yard Size	Rate Per Month
Daybrook-Roto-Pac	3	5.75
"	4	6.50
"	5	8.00
"	6	9.66
Dempster-Dumpster	3	6.70
"	6	9.55
"	10	16.03
"	12	13.96

The Sanitation Division provides bulky item collection from each residence four times per year. The equipment used for this purpose consists of five open bed dump trucks and one old 16 cubic yard packer truck. Three men are employed per truck on a 6:30 A.M. to 2:30 P.M. shift to collect such wastes as old refrigerators, stoves, other "white goods," chairs, etc. The Sanitation Division issues a notice to residents prior to the week that bulk collection is to be performed in their area. Figure 3 is a sample of this notice.

Some problems have been encountered with the bulk pickup service in the past year. First, the notice to an area did not designate when the bulk pickup would be performed on any given day. In many cases, the public did not set the material out until late in the week, thus causing an overload. Since the routing was not planned, this condition required that the same area would have to be serviced more than once. To rectify this situation, it has been proposed that bulk pickup be modified to include the following factors:

- In all areas, one open-bed truck and crew be assigned to 30 packer trucks. Each open bed truck would cover the area collected by two mixed refuse trucks each day.
- One open bed truck and crew be assigned to alley areas continuously throughout the year. A vacuum truck would also be assigned to this crew.
- Residents to be requested to separate the bulk materials from the regular collection. The two collections to be made on the same day for appearance and scheduling reasons.
- The foreman in each area schedule the bulk pickup and each morning distribute leaflets to the appropriate crews. These crews would attach the leaflets to the cans notifying property owners as to when a bulk pickup would be made.

N O T I C E

Bulk pickups will be made in your area on your regular collection day next week _____. All material that cannot be collected with the regular collection should be set apart from the regular refuse.

Anything that can be lifted by two men will be removed, however, where possible anything to be removed should be in containers or bundled. Any articles which you do not wish to have removed should be placed a reasonable distance from either the curb line or the alley, in order to distinguish from that which is to be removed.

It is our hope that we will be able to provide this service at least 4 times per year. Thank you for your assistance in helping to keep our City clean.

FIGURE 3: BULK PICKUP NOTICE

This system would permit flexibility of the bulk pickup system, especially if large volumes accumulated in any one area. As practiced now, notices in the local newspaper would be eliminated.

The distribution of collection equipment and personnel in Columbus is shown in Table 5. A total staff of 483 men is employed by the Division of Sanitation (the street cleaning function is managed by a separate division). Of these, 453 men are assigned to the collection activity. It is somewhat difficult to designate exactly how many men are assigned to a particular collection function as Columbus employs a large number of surplus collectors and drivers because of the high absenteeism rate. As a result, in the manpower/equipment allocation chart, the number of men assigned to the bulky item collection and multiple family residential collection is the number actually needed to perform these functions. Surplus employees have been assigned to the detached single family residential column. The number of maintenance staff is low because most of the routine servicing and all the major repair work is performed by the Municipal Garage.

Collection equipment has been allocated in much the same fashion as personnel. The actual number of vehicles required for multiple family residential and bulky collection have been assigned to the single family detached residential column, although these vehicles could substitute in other collection functions in case of equipment failure. For this reason, hoisting cables will now be specified for all new packers.

5.3: Productivity/Efficiency of the System

The Columbus, Ohio solid waste management system has been profiled in terms of various quantity, time, and cost ratio parameters as presented in Table 6. The efficiency and productivity

TABLE 5: MANPOWER/EQUIPMENT ALLOCATION FOR COLUMBUS

Function Personnel	Mixed Refuse		Bulky	Street Cleaning	Disposal	Administrative	Totals
	Detached Single Family Residential	Multiple Family Residential & Commercial					
Management ^{1/}						3	3
Clerical ^{2/}						17	17
Supervisor/Foreman ^{3/}	13	1	-- ^{4/}	3 ^{5/}	2		19
Drivers ^{6/}	94	12	6	As needed ^{7/}	3		115
Laborer/Collector ^{6/}	259	21	18	As needed ^{7/}	2		300
Maintenance ^{2/}	7	1	As needed		6		14
Equipment Operator		1 ^{9/}		2	17		20
TOTALS	373	35	24	5	30	20	488
Equipment							
Packer Trucks ^{10/}	91	10	1				102
Trailer Tractor		1 ^{11/}					1
Front-end Loader		2 ^{12/}			1		3
Dump Truck			5		5		10
Sedans	13	1			2	5	21
Bulldozer					4		4
Compactor					1		1
Drag-Line					1		1
Water Truck					1		1
Scraper					1		1
TOTALS	104	14	6		16	5	145

TABLE 5 (Continued)
MANPOWER/EQUIPMENT ALLOCATION FOR COLUMBUS

- 1/ Management consists of one superintendent, one assistant superintendent, and one business manager.
- 2/ Clerical staff consists of two Clerk III's, five typist Clerk II's, one Clerk II, one Typist Clerk I, one Sanitation Safety Inspector, one Sick Leave Investigator, one Storekeeper I, one Custodial Worker, and four Radio Dispatchers.
- 3/ Supervisory staff consists of one Refuse Collection Supervisor, two Refuse Collection Assistant Supervisors, ten foremen assigned to detached single family residential collection, one foreman assigned to multiple-family residential and commercial collection, and one foreman and one supervisor assigned to the disposal site.
- 4/ Dump trucks used for bulk collection are the responsibility of the foreman in the area in which they operate.
- 5/ Street cleaning supervisory staff consists of one supervisor, one day foreman, and one night foreman.
- 6/ The actual number of drivers and collectors available on any one day is highly variable. There are 112 collection truck drivers in all, although only 86 are needed at a time because there are only 86 routes. The excess number of drivers maintained by Columbus is due to the high absenteeism rate. On this chart, six of the drivers have been allotted to the bulky goods collection, and twelve (two for Dempster-Dumpster operation; ten for operation of rear-loaders with cable hoists) to the multiple family residential-commercial collection functions because there are many trucks for those functions. The surplus drivers have all been allotted to the detached single family residential collection function. Drivers on these trucks are interchangeable, and occasionally when sufficient drivers do not show up on a particular day, a collection worker may be temporarily used in that position. The same situation as described above for collection drivers is true for collection workers. The same procedure as above has been used for allocation of these personnel.
- 7/ Street cleaning is a function of the Division of Engineering and Construction and is a part of the total street maintenance effort. Hence, the personnel assigned to this function is variable according to need.

TABLE 5 (Continued)
MANPOWER/EQUIPMENT ALLOCATION FOR COLUMBUS

- 8 Maintenance staff consists of one plant maintenance mechanic, five automotive mechanics (assigned to the landfill), seven automotive servicemen I, and one building maintenance man (assigned to the landfill).
- 9/ Operates tractor-trailer used in conjunction with two Dempster-Dumpsters.
- 10/ These are mostly 20 cubic yard rear-loading compacting trucks; four 16 cubic yard trucks are being phased out.
- 11/ This is used on the "box" collection route in conjunction with the two Dempster-Dumpsters.
- 12/ These are Dempster-Dumpsters utilized for servicing 10 or 12 cubic yard containers.

TABLE 6
PRODUCTIVITY/EFFICIENCY PARAMETERS OF COLUMBUS

Collection Function Parameter		Mixed Refuse		Bulky	Street Cleaning
		Detached Single Family Residential	Multiple Family Residential & Commercial		
Community Description	Population Served <u>1/</u>	572,543			
	No. of Resid. or Comm. Units <u>2/</u>	152,937	40,490	193,427	--
	Street Miles	NA			2,053
	Alley Miles	NA			
	Area (sq. mi.)	155.8			
	Pop. density (pc/sq. mi.)	3,674.86			
Waste Amounts	Annual Amounts Collected (tons) <u>3/</u>	289,300	28,600	12,480	NA
	Lbs. /unit/wk	91.6	600 (per box)	2.48	NA
	Lbs. /person/day	2.0	--	0.36	NA
Collection System Description (inc. Level of Service)	Point of Collection <u>4/</u>	Curbside/ alley line	On premises	Curbside/ alley line	Streets, sidewalks
	Freq. of Collection	1/week	1/week	4/year	--
	Type of Storage Container <u>4/</u>	Cans up to 30 gal; bundles up to 50 lb.	Cubic yard container	None needed	--
	Avg. Dist. to Disp. Site <u>5/</u>	16			--
	Avg. Miles Driven/truck/day	NA	NA	NA	NA
	Avg. Hours worked/day	6	6	8	8
	Direct men <u>6/</u>	375	36	24	Variable
	Crews	86	12	6	Variable
	Crew Size	3 to 4	3	3	1
Wages	Trucks <u>7/</u>	104	14	6	Variable
	Avg. wages and fringe for laborers <u>8/</u>	4.97/hr.			
	Avg. wages and fringe for drivers <u>9/</u>	5.40/hr.			
Collection Cost/Effi- ciency Figs.	Stops/Crew/Day	356 <u>10/</u>	40 <u>11/</u>	NA	--
	Tons/Crew/Day	11.8	11.7	8	--
	Coll. Cost/resid. unit/yr.	27.99	10.27	1.41	4.34
	Coll. Cost/person/yr.	9.46	--	0.48	1.47
	Coll. Cost/ton/yr.	16.27	11.42	21.93	--
	Total Coll. Cost/yr. <u>12/</u>	4,280,219.40	415,980.35	273,670.85	839,666
Total Disposal	Type & No. of Disp. Sites	Landfill - one			
	Total Disp. Cost/yr. <u>13/</u>	339,352.32			
Total Cost	Total Cost/yr.	6,148,890			
Misc. Cost Ratios	Coll. Expense as % of tot. Exp.	94% (81% collection; 13% street cleaning)			
	Coll. labor expense as % of tot. Coll.	89%			
	Coll. equip. expense as % of tot. Coll.	11%			
	Proc. & Disp. expense as % of tot. exp.	6%			
	Proc. & Disp. labor expense as % of tot. disp.	NA			

TABLE 6 (Continued)
PRODUCTIVITY/EFFICIENCY PARAMETERS OF COLUMBUS

- 1/ Population estimate has been made using a 1970 census population of 539,677 taken from "General Population Characteristics", U.S. Department of Commerce, Bureau of the Census, and assuming an average growth of 3% per year to the end of 1972.
- 2/ Number of residential units has been estimated from "Detailed Housing Characteristics", U.S. Department of Commerce, Bureau of the Census, based on 182,357 housing units in 1970 with an average of 2.96 persons per household. This figure has been updated to match growth of population and annexation by the city of surrounding areas.
- 3/ Based on city estimates that average daily intake, 5 days a week, is 900 tons/day, or 246,400 tons/year. Scales are currently being installed and will provide a more accurate estimate of the actual weights collected by the city.
Allocation of tonnages to different collection functions is based on city estimates using the following logic:

Bulky:	6 trucks/day, each collecting 2 loads/day, each load approximately 4 tons. Thus total bulk collection = $6 \times 2 \times 4 = 48$ tons/day. This collection is offered 5 days/week, 52 weeks/year. Thus annual bulk tonnage = $5 \times 52 \times 48 = 12480$ tons.
Multiple family residential and commercial:	10 rear-loaders, each collecting 2 loads/day, all loads averaging 3.5 tons. Thus total collection = 100 tons/day. This collection is offered 5 days/week, 52 weeks/year. Thus annual "box" collection = 18,200 tons/year. In addition, 2 Dempster Dumpsters collect 40 tons/day together. Annual Dempster-Dumpster collection = $40 \times 5 \times 52 = 10,400$ tons. Thus total box collection = $18,200 + 10,400 = 28,600$ tons.

TABLE 6 (Continued)
PRODUCTIVITY/EFFICIENCY PARAMETERS OF COLUMBUS

Detached single family residential: $24,380 - 28,600 - 12,480 = 205,300$ tons/year.

- 4/ By city ordinance.
- 5/ City estimate.
- 6/ Men allocated according to Manpower/Equipment Allocation Table. Surplus employees have been allocated to the mixed refuse detached single family residential column, although any deficit in personnel in the other columns would be made up by these surplus employees.
- 7/ Surplus trucks allocated to detached single family residential column.
- 8/ Base salary \$4.11/hr. + 21% fringe.
- 9/ Base salary \$4.47/hr. + 21% fringe.
- 10/ Although this figure is based on calculations derived from figures in this table, it is very close to the city estimate of an average of 345 houses/day/truck, or $2\frac{1}{2}$ loads/truck/day.
- 11/ City estimate. This figure indicates that each "box" container collected by the city serves

$$\frac{40,490}{5 \times 12 \times 40} = 16.87 \text{ units.}$$
- 12/ Collection costs based on 1973 Sanitation Division budget estimate of \$5,309,224, proportioned according to the number of men assigned to each function (including administrative personnel not included in this table).
- 13/ Proportioned according to number of men assigned to this task from Sanitation Division budget estimate for 1973.

data tabulated in this chart are based upon a number of assumptions and estimates described in the attached footnotes. The reader should note that exact data was unavailable for primary inputs such as quantities of waste generated.

Once-a-week curbside collection is provided and helps to keep collection costs at a reasonable level in a high wage area. The city is experimenting with paper and plastic bags to replace the cans now being used. This may further reduce collection costs. There will be further collection cost reductions when the three transfer/pulverizer stations are constructed in the city as it is almost certain that routes will be lengthened and crew allocation will be cut back.

5.4: Disposal Function

The City of Columbus currently operates one landfill site located on Frank Road on the city's southwest side. Another city-operated landfill, at the far east side of Columbus on Morrison Road, was shut down in early 1972 and now all city-owned refuse packer trucks, along with some private haulers, deposit solid waste at the Frank Road landfill. Private haulers are charged a fee of \$3.00 per ton, or \$0.15 per 100 lbs. However, all waste received at the city-operated sanitary landfill is restricted to waste that is collected within the city limits of Columbus. Several private landfills are also located in and around Columbus. The location of the city and private landfills is shown in Figure 4.

The sanitary landfill operated by Columbus must conform to the codes and ordinances set forth by the City of Columbus and the Ohio State Solid Waste Disposal Laws and Regulations, which are presented in Appendixes A and B of this report. In addition, Franklin County has established Incinerator Districts within its boundaries and has published rules and regulations for the disposal of solid wastes in Incinerator District No. 1. This district comprises all of the lots and land in Franklin County outside of any incorporated municipality. The Franklin County Solid Waste Disposal Rules and Regulations for District No. 1 are presented in Appendix C. These regulations define:

- Categories of solid waste (non-combustible, combustible, industrial, chemical, demolition, etc.)
- Disposal methods (landfill and incineration)
- The role of private, municipal, and individual haulers
- The role of the Board of County Commissioners, the Sanitary Engineer of the county, and the Public Health Department of Franklin County

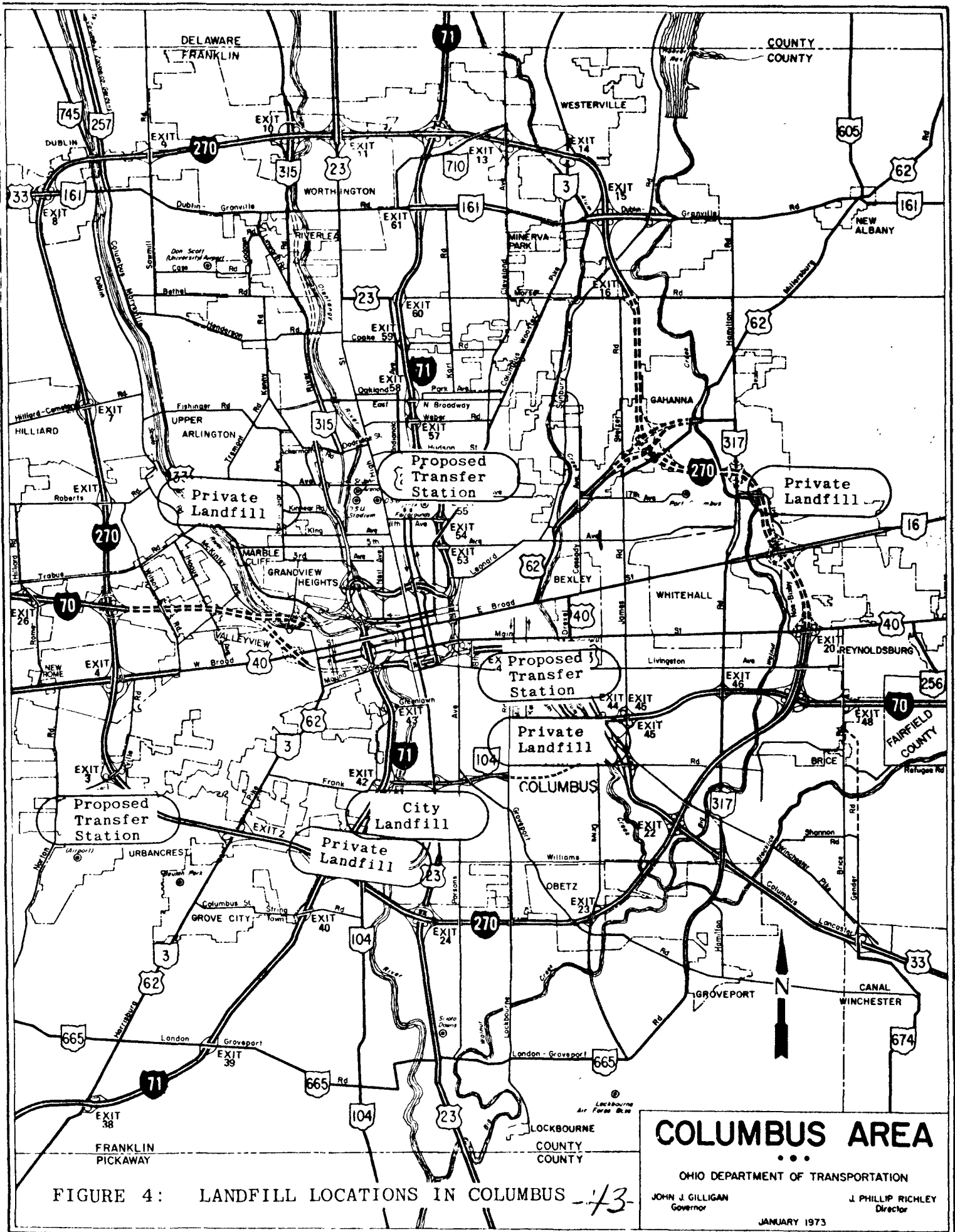


FIGURE 4: LANDFILL LOCATIONS IN COLUMBUS - 43-

- Provisions governing vehicles used for collecting and transporting solid waste
- Provision for creation of an Advisory Board
- Agreements, rates, and charges for disposal of solid waste
- Penalties for violation of the county code

The Sanitary Engineering Department of Franklin County presently operates a sanitary landfill which serves the entire unincorporated area of the county.

5.4.1: City Landfill

The Frank Road landfill operated by the city is located on Columbus' southwest side at the site of a city workhouse farm. The site covers 97 acres and was originally flat land. The top soil is a clay loam and extends to a depth of five feet, after which gravel is encountered. The water table is 30 to 40 feet below ground level. As a result, the site has been excavated for fill purposes to depths as great as 40 feet in many areas. The total life expectancy of the site is six years, of which three years have already expired.

The site is surrounded by a fence on three sides, and bounded on the fourth (the south side) by an earthen levee. The levee was originally 25 feet high but now, because of excavation on its northern face, is about 45 feet high. On the southern side of the levee is a drainage ditch and then a road. The western side of the site is also bounded by a drainage ditch and a road (Route 104) and the entrance to the landfill is from this highway. Frank Road, after which the landfill is named, runs along the northern border of the site. Located between Frank Road and the actual landfill site are a sewage treatment plant and a rendering plant. Sewage sludge from the sewage treatment plant is filtered and then incinerated. On the eastern side of the site is a river.

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An access road has been built to the site using compacted demolition debris which has been covered with gravel. This provides a stable path for refuse trucks and, as a result, the only area in which trucks get stuck is in the immediate vicinity of the dumping area. Bulldozers with cables are used to pull trucks out when they become stuck.

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The method of operation at the Frank Road site starts with the excavation of a trench. If water is found, a layer of soil is pushed over the area and filling is started on this base. The excavation depth varies, but can be as much as 40 feet. The excavation creates a ramp which is worked from back to front. An area 200 feet wide by 1,000 feet long is excavated at a time. The filling operation is performed on a face 100 feet wide by 20 to 25 feet in length, and usually 15 to 20 feet of refuse are compacted in one layer. At the end of the day's operation, two to four inches of cover is placed on the working faces and six inches cover material on top. All cover material used is excavated on the site and stockpiled for use as need arises.

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Up to ten trucks can dump simultaneously on the open face of the fill at any one time. Bulldozers push the material up the ramp and compact it. The turn-around time for a truck at the fill is estimated at 10 minutes in good weather and 20 minutes otherwise. The heaviest truck traffic at the fill occurs between 9:00 A.M. and 10:15 A.M. in the morning and 12:30 P.M. and 1:30 P.M. in the afternoon. All 96 city trucks use this fill and each make about two trips to it daily. In addition, seven trucks on the late shift also enter the fill. Commercial refuse haulers' truck arrivals appear to peak at 3:30 P.M. in the afternoon. Twenty-five commercial trucks use the fill, each entering about twice a day. Of these, 20 trucks are 20 cubic yard packers, and five trucks are one or one and one-half ton pickups.

-

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No major problems have been experienced on the fill site. Minor fires have started, but have been controlled easily. The settling on the site has been gradual. The only problem of major concern to the site managers has been the high equipment breakdown rate. This situation is attributed to the fact no piece of equipment at the site is any newer than six years old, many pieces date back to 1963, and some pieces still in use date back to the 1950's. The Sanitation Division estimates that each piece of disposal equipment that they use breaks down every day. A listing of this equipment is presented in Table 7.

Twenty men are employed at the site which is kept open from 9:00 A.M. to 9:30 P.M. on a five day/week basis. However, the site is not open to commercial traffic after 4:30 P.M. Three shifts are worked: from 7:00 A.M. to 3:30 P.M.; from 9:00 A.M. to 5:30 P.M.; and from 1:00 P.M. to 9:30 P.M. Two of the men are currently on injury leave. Table 8 is a listing of the personnel assigned to the Frank Road landfill.

Seven structures have been erected at the disposal site, including a scale-house, office, mechanics garage, equipment shelter, carpenter's shop, and two outdoor toilets. The scale-house is equipped to permit computerized billing of users of the site. The office is a one-room structure, and is equipped with a washroom. The outdoor toilets are temporary structures which are moved as the filling of the site progresses.

The city landfill is operated under a license issued by the District Board of Health for the State of Ohio. A sample application form for this license is presented in Figure 5. The Health District is responsible for inspection of the sanitary landfills, and has a standard form for this purpose as illustrated in Figure 6. This checklist is used to ensure that the sanitary

TABLE 7
EQUIPMENT AT FRANK ROAD LANDFILL

Equipment	Number
Bulldozers: Allis Chalmers 221	1
Caterpillar D-9	2
Caterpillar D-6	1
Compactor: Heister (with sheeps foot drums)	1
Drag line	1
Front-end loader	1
Dump trucks	5
Water truck	1
Rubber-tired pan scraper	1

TABLE 8
PERSONNEL AT FRANK ROAD LANDFILL

Personnel	Number	Shifts	
		Number assigned	Hours
Drag-line operator	2	1	7:30 AM-3:30 PM
		1	3:30 PM-5:30 PM ^{1/}
Bulldozer operator	5	2	7:00 AM-3:30 PM
		1	9:00 AM-5:30 PM
		1	1:00 PM-9:30 PM
		1	Injury Leave
Equipment operator I (Operate front-end loader and tandern axle dump truck)	3	1	9:00 AM-5:30 PM
		1	9:00 AM-5:30 PM
		1	Injury Leave
Mechanics	3	3	7:00 AM-3:30 PM
Weigh-master	1	1	7:00 AM-3:30 PM
Landfill foreman	1	1	9:00 AM-5:30 PM
Laborers	2	1	7:00 AM-3:30 PM
(assist weighmaster and direct traffic)		1	1:00 PM-9:00 PM
Maintenance (General work - builds sheds, replaces light bulbs, several building repairs)	1	1	7:00 AM-3:30 PM
Landfill operation supervisor	1	1	7:00 AM-3:30 PM
Truck driver	1	1	7:00 AM-3:30 PM

^{1/} Drives a truck 9:00 A.M. - 3:30 P.M.

STATE OF OHIO

DISTRICT BOARD OF HEALTH

Application for License to Operate Solid Waste Disposal Site () Facility ()
(check one)

Name of Applicant _____

Address _____

Name of Site or Facility _____

Location of Site or Facility _____

Type of Disposal _____
(Incinerator, Landfill, Composting)

Nature of Applicant - State () Other Political Subdivision () Individual ()
Corporation () Partnership () Other () Specify _____

Capacity - Incinerator _____ Landfill (Acres) _____ Composting _____

If Incinerator -
Method of Residue Disposal _____
Place of Residue Disposal _____

If Landfill -
Type of Operation _____
(Trench, etc.)

If Composting -
Method _____

General Classification of Solid Wastes to be Accepted.

Household _____ Commercial _____ Industrial _____
Agricultural _____ Incinerator Residue Only _____ Other _____

Geographic Area to be Served _____
(If Not Limited - Write Unlimited)

Fee \$ _____ included with application

The applicant agrees to operate the solid waste disposal _____
(Site or Facility)
in compliance with Sections 3734.01 to 3734.11 inclusive, of the Revised Code and Regulations
HE-24-01 to HE-24-12 of the Ohio Sanitary Code.

Approved _____
(Date) (Signature of Applicant or his Agent)

Denied _____
(Date) (Title)

Action by _____
(Health Commissioner) (Address)

Issued _____
(Date - License Number) (Date)

ODH
4945.10

FIGURE 5: LANDFILL LICENSE APPLICATION FORM

SANITARY LANDFILL INSPECTION FORM

HEALTH DISTRICT

Name of Landfill _____ Location _____
Name of Operator _____ Address _____
Method of Operation - Trench _____ Area _____ Other _____
Estimated Daily Receipts - Loads _____ Tons _____ Cubic Yards _____
Area of Landfill - Total Acres _____ Acres Filled _____ Estimated Remaining Life _____ Yrs.
General Characteristics of Site - Quarry _____ Borrow Pit _____
Gravel Pit _____ Strip Mine _____ Gully _____ Hillside _____
Level Area _____ Marsh or Flood Plain _____ Other _____
Hours of Operations _____ A.M. To _____ P.M. Days operated per week _____
Geographic Area Served _____ Population Served _____
License Number _____ Salvaging Permitted - Yes _____ No _____

Items marked by (X) are in violation.

I. SITE - HE-24-04

Ground Water Protection
Surface Runoff
Leachate Runoff
Solid Waste in Water Course
Dust Control
Odor Control
Smoke Control

IV. OPERATION - ME-24-09

- (a) Operated According to Plan
- (b) Access to Site Limited
- (c) Dumping Area Restricted
- (c) Blowing Paper & Debris
- (d) Equipment Adequate
- (d) Equipment Repair
- (e) Properly Spread
- (e) Properly Compacted
- (f) Cover Material Adequate
- (f) Covered Daily
- (f) Finished Cover Adequate
- (g) Finished Grade Adequate
- (h) Special Material Handling

(i) Vector Control
 General Operation _____
 Supplemental Control _____
 (j) Salvaging _____
 (k) Animals Excluded _____
 (l) Fire Protection _____
 (m) Hot or Burning Loads _____
 (n) Records _____
 (o) Responsible Party _____
 Present _____

II. DUMPING & BURNING - HE-24-06

Open Dumping
Open Burning

III. APPROVALS

Site - HE-24-07
Plan - HE-24-08

Sewage Solids
Sewage Liquids
Hazardous Substances

COMMENTS AND RECOMMENDATIONS

ODH - 4825. 10

Date _____

Sanitarian

FIGURE 6: SANITARY LANDFILL INSPECTION FORM

landfill is being operated in an acceptable manner and meets state standards. The city has been laying a final cover of top soil on completed portions of the fill and been landscaping this area with grass. Sewage drainage pipes, 20 to 25 feet into the fill, have been laid to intercept leachate and transfer it to the drainage ditches on two sides of the site.

5.5: Street Cleaning

In Columbus, street cleaning is performed by the Division of Engineering and Construction of the Department of Public Service. The street cleaning activity lies within the maintenance engineering portion of this division and is headed by a street cleaning supervisor. The street cleaning section is divided into leaf cleaning and collection, and snow and ice control. The personnel assigned to these tasks include a day foreman, a night foreman, an equipment operator I, an equipment operator II, truck drivers, laborers, summer workers, and seasonal snow watchmen. The number of curb miles serviced for leaf collection is estimated at 2,053, at an annual cost of \$20.42 per curb mile. It has also been estimated that 24,000 cubic yards of leaves are removed annually. A breakdown of street cleaning activities in 1972 is presented in Table 9, indicating the cost of personnel and equipment employed for each function, the volume of debris removed, the curb miles and feet cleaned, the costs per curb mile and per curb foot, and the average cost per cubic yard of collection and cleaning.

Columbus also has a litter control program, handled by the Program Against Litter (P.A.L.) Committee, in cooperation with the Division of Sanitation and numerous neighborhood councils. This committee has a two-fold purpose:

1. To coordinate the clean-up drives with all interested groups and the city.

TABLE 9: STREET CLEANING STATISTICS

1972
GENERAL ACCOUNTS TOTALS ON BASIS OF ANNUAL TOTALS
STREET CLEANING SECTION

Description	PERSONNEL		EQUIPMENT		TOTAL	Cubic Yards Debris Removed	CURB Miles Cleaned	Cost Per Curb Mile		CURB Feet Cleaned	Cost Per Curb Foot		Number of Cleanings or Catch Basins Cleared	Average Cost Per Cleaning		Average Cost Per Cubic Yard
	Cost		Cost													
Assessed Street Cleaning																
202.8 Actual Curb Miles Assessed																
Does not include: Supervision, Billing, Snow and Ice Control, Vacuum Cleaning, Catch Basin Cleaning, and Labor Fringe Benefits																
Unassessed Street Cleaning	\$126,150.43		\$114,477.90		\$240,628.33	13,134	12,322	\$19.52		63,060,160	\$0.004					\$18.31
Leaf Collection (See Detailed Report)	74,872.54		65,637.00		140,509.54	9,081	4,329	32.45		22,871,180	0.006					15.57
White King (Vacuum Cleaning)	31,358.06		69,827.16		101,185.22	9,434	8,994	11.92		47,486,320	0.002					11.26
Catch Basin Cleaning	21,920.34		18,010.75		41,931.09	24,861	2,053	20.42		16,839,840	0.004					1.69
Cleaning Bridges and Viaducts	8,802.93		1,217.00		10,019.93	38	-	-		-	-		5,358	7.85		\$83.68
	29,015.56		13,082.00		42,097.56	3,441	-	-		-	-		-	-		12.60
	2,047.66		1,306.11		3,353.77		-	-		-	-		-	-		41.92
TOTALS	\$302,117.72		\$283,557.92		\$585,675.64											

2. To instruct the citizens of Columbus in proper methods of preparation and storage of their solid waste for collection, and methods to keep the anti-litter program on a continuing basis. This effort has involved educating the public by selecting supervisors to speak before neighborhood clubs, church groups, and civic clubs.

5.6: Labor-Management Relations

The Division of Sanitation currently employs 483 personnel in a full time capacity. The breakdown of this staff is presented in Figure 7. The division is headed by a superintendent who is closely assisted by an assistant superintendent and a business manager. The remaining administrative staff is clerical and consists of typists, general clerks, a sanitation safety inspector, a sick leave investigator, a storekeeper, a custodial worker, and radio dispatchers. The collection system is managed by a refuse collection supervisor with two assistants and 11 foremen. The disposal system is managed by two men, a landfill operations supervisor with one foreman. The greatest fraction of the Sanitation Division's staff consists of refuse collectors and drivers. In addition, a maintenance staff man is attached to the Sanitation Division, although all regular servicing and major repair work on the collection fleet is performed by the Municipal Garage. The Sanitation Division maintenance staff consists of a plant maintenance mechanic who is responsible for maintenance of the division's main office building; automotive servicemen who are responsible for dispensing gasoline and performing minor repairs on trucks; a building maintenance man who does odd jobs at the landfill; and automotive mechanics who repair and service the heavy equipment on the landfill.

<u>CLASSIFICATION</u>	<u>NUMBER</u>
Superintendent.....	1
Sanitation Assistant Superintendent	1
Business Manager	1
Clerk III	2
Typist Clerk II	5
Clerk II	1
Typist Clerk I.....	1
Sanitation Safety Inspector.....	1
Sick Leave Investigator.....	1
Refuse Collection Supervisor.....	1
Landfill Operations Supervisor.....	1
Storekeeper I	1
Refuse Collection Asst. Supervisor.....	2
Refuse Foreman.....	11
Radio Dispatcher	4
Sanitation Truck Driver	112
Refuse Collector	299
Plant Maintenance Mechanic	1
Custodial Worker.....	1
Automotive Mechanic.....	5
Automotive Serviceman I	7
Laborer	2
Truck Driver.....	3
Landfill Foreman.....	1
Power Shovel Operator.....	2
Equipment Operator I	5
Equipment Operator II	9
Building Maintenance Man	1
Weighmaster	1
TOTAL NUMBER FULL TIME POSITIONS	483

FIGURE 7: DIVISION OF SANITATION PERSONNEL

The wages, fringe benefits, and other labor-management factors affecting the Sanitation Division workers has been established by a contract between the union (the American Federation of State, County, and Municipal Employees) and the city administration. This is under an agreement signed between these two parties on October 10, 1972 (Appendix D).

Among the benefits acquired by the sanitation workers at this time were:

- Collectors' wages immediately rose from \$1.89/hour to \$3.46/hour for new employees and \$3.88/hour for old employees. These wages are to rise rapidly to a base of \$4.13/hour, after which there will be no wage increases until the union renegotiates its contract with the city in October 1974. Drivers' wages rose to a base level of \$4.47/hour.
- Fringe benefits of approximately 21% over base salary have been obtained. These include fully paid hospitalization; death benefits up to \$10,000; a retirement pension after age 65 or after 35 years of service; vacation leave ranging from 12 days/year for one to eight years' service to 22 days/year for 20 or more years of service; sick leave with pay accrued according to tenure; work stoppage under hazardous weather conditions; etc.

Among other advantages gained by the Union and its members at this time was a procedure for resolving grievances and a union dues check-off process to be performed by the city.

If not satisfied by an oral explanation, employee grievances are handled in four steps. First, a Grievance Form, Figure 8, is submitted by the employee to his supervisor, with copies to the union representative and division head. If the grievance cannot be resolved at this stage, then the grievance is submitted to the Division Superintendent for discussion and adjudication.

COLUMBUS CITY EMPLOYEES UNION LOCAL 1632 - 2971 EAST FIFTH AVE. COLUMBUS, OHIO 19
AMERICAN FEDERATION OF STATE, COUNTY, & MUNICIPAL EMPLOYEES (AFL-CIO)

GRIEVANCE FORM
(STEP 1)

LOCAL NAME AND NUMBER _____ DATE _____
City Division _____ File No. _____
By Division Log _____

Employee's Name: _____

Present Working Title: _____ Dept. _____

A. Statement of Grievance clearly indicating the question raised and the
alleged violation of Agreement and Section involved:

B. Remedy or Correction Requested:

SIGNATURES:

Employee _____ Union Rep. _____

Supervisor _____ Date Received _____

City Disposition (Attachment if Necessary) _____ Date: _____

Signature of Supervisor: _____

Signature of Union Rep.: _____

Date Received by Union Representative _____

Remarks: _____

Original to Supervisor

Copies to Union Rep. and Division Head

FIGURE 8: EMPLOYEE GRIEVANCE FORM

Failing satisfaction at this stage, the grievance will be submitted to the Department Director and the Labor Relations Administrator. Formal hearings are conducted at this stage, involving the aggrieved, Department Chief Steward, and the president of the union. Failing resolution at this stage, the union may submit the matter for arbitration under the voluntary labor arbitration rules of the Federal Mediation and Conciliation Services.

There is now considerable emphasis on safety of personnel, and the city has initiated an extensive documentation program in this area. The Safety and Education Division requires an accident or damage report to be filed. A copy of this document is illustrated in Figure 9. In addition, the Sanitation Division requires a sickness and injury investigation report, as shown in Figure 10. The Department of Public Works must file a departmental report of an injury to an employee, Figure 11, with the Department of Industrial Relations within 24 hours of the injury.

The major personnel problem experienced in Columbus has been the high absenteeism rate among the collectors and drivers. This normally averages 15 percent and can rise as high as 25 percent under adverse weather conditions. This factor has made it necessary to employ a surplus number of collectors and drivers so that sufficient staff is available on any given day to meet the needs of the solid waste management system. A four-man crew is scheduled for each collection vehicle, although each truck usually has a complement of only three men. To partially remedy this situation, a sick leave investigator has been appointed but, apart from this, no other action has been taken.

SAFETY AND EDUCATION DIVISION

ACCIDENT OR DAMAGE REPORT

---Nature of Report---

Property _____, Vehicle _____, Personal _____, Date occurred _____, 197

Location _____ Time _____ P.M. / A.M.

Who was at fault? _____

Claimant _____

Address _____ City _____ State _____

Phone _____ Bus. Phone _____

Person Involved _____

Name _____ Division _____

Lic. No. _____ Vehicle No. _____ Brass Tag No. _____

Police Report: Yes _____ No _____

(If "yes" fill in remarks)

REMARKS: _____

Description of Accident: _____

Remarks: _____

Investigator _____

Date _____ 197 _____ Chief Investigator _____

FIGURE 9: ACCIDENT REPORT

DIVISION OF
SANITATION

CITY OF
COLUMBUS

SICKNESS & INJURY INVESTIGATION REPORT

NAME OF EMPLOYEE _____ ADDRESS _____
DATE REPORTED OFF _____ TIME REPORTED OFF _____ CALL RECEIVED _____
NATURE OF SICKNESS OR INJURY _____
REPORTED OFF BY _____ ADDRESS _____ RELATIONSHIP _____

IS THIS FIRST VISIT TODAY? YES ___ NO ___ (IF NOT) WHICH VISIT IS IT? _____
WAS THE EMPLOYEE FOUND AT HOME? YES ___ NO ___ IF NOT FOUND AT HOME,
WHERE DID YOU CONTACT HIM? _____ IS EMPLOYEE UNDER DOCTOR'S
CARE YES ___ NO ___ DOCTOR'S NAME _____ ADDRESS _____
IS EMPLOYEE HOSPITALIZED? YES ___ NO ___ NAME OF HOSPITAL _____
DATE ENTERED HOSPITAL _____ ROOM NUMBER _____ EXPECTED RELEASE _____
_____ WAS EMPLOYEE SENT HOME FROM THE HEALTH CENTER? YES ___ NO ___
INVESTIGATION DISCLOSES _____

ACTION TAKEN BY INVESTIGATOR _____

REMARKS _____

DATE _____ TIME _____

INVESTIGATOR _____

CHECKED BY _____

FIGURE 10: SICKNESS AND INJURY INVESTIGATION REPORT

CITY OF COLUMBUS
DEPARTMENTAL REPORT OF INJURY OF EMPLOYEE

This form must be completed, in duplicate (white and yellow), and both copies forwarded to the Department of Industrial Relations within twenty four hours following all injuries and/or occupational diseases. In every case the injured employee must report to the Employee's Clinic promptly, bearing admission notice from his immediate supervisor. When signed by the City Physician, Notice is returned by employee to his supervisor. In **LOST TIME INJURIES** the bottom portion, Section III, of this form must be detached and held by the Department or Division. This portion must be completed and returned to the Department of Industrial Relations as soon as the employee has returned to work. (Note: LOST TIME does not begin until the day following the injury.) Be sure that every part of the report is completed and every question answered.

SECTION I

1. Employee's Name _____ Title _____ Age _____
 2. Date of Injury _____ Date Reported _____ Time of Injury _____ A.M./P.M. _____
 3. Describe in detail how accident occurred giving exact location and any tools, machinery, or outside influences involved, and the part of body affected _____
 4. Extent of Injury: Abrasion _____; Amputation _____; Contusion _____; Fracture _____;
 Foreign Body _____; Hernia _____; Laceration _____; Sprain or Strain _____;
 Other (explain fully) _____
 5. Part of Body Affected: Arm(s): R _____ L _____, Back—specify exact area of back affected _____
 Chest _____, Eye(s) R _____ L _____
 Foot: R _____ L _____ Both _____; (If toes specify which) _____
 Hand(s): R _____ L _____ Both _____; (If fingers specify which) _____
 Head _____; Leg(s) R _____ L _____; Internal _____
 Other (explain fully) _____
 6. First Aid Rendered by: _____
 7. Name and Address of Physician and/or Hospital _____ (ATTENDING YOU FOR THIS INJURY)
 Witnesses to Injury, if any _____
 Signature of Injured Employee _____

SECTION II

To Be Filled in By Supervisor

8. Severity of Injury: (Check One) First Aid _____ Lost Time _____ Death _____
 9. Check the following unsafe acts and/or conditions that caused this accident.

UNSAFE ACTS	UNSAFE CONDITIONS
a. Careless or unsafe operation	a. Improper safety devices
b. Unauthorized operation	b. Improper safety equipmt.
c. Failure to use safety devices	c. Improper safety clothing
d. Failure to use safety equipmt.	d. Improper or defective tools
e. Foolish act (horseplay)	e. Improper training for job
f. Unsafe speed (too fast or slow)	f. Hazardous layout
	g. Poor ventilation

Remarks: _____

10. Why did employee perform unsafe act or why did unsafe conditions exist? _____

11. What have you done to eliminate the unsafe acts or conditions that caused this injury? _____

Signature of Supervisor _____

Signature of Division or Department Head _____

NOTE: For lost time because of injury, injury leave may be granted only upon approval of City Physician.

SECTION III—REPORT OF TIME LOST

1. Employee's name _____ Date of injury _____
 2. Date quit work _____ Date returned to work _____
 3. Did employee return to light duty? _____ regular duty? _____
 4. Total CALENDAR days lost—not counting day of injury _____

This portion must be filled out and returned to the Department of Industrial Relations just as soon as the employee returns to work.

Signature _____

Title _____

Department or Division _____

WHAT DID THIS ACCIDENT COST YOU IN TIME, SUFFERING, INCONVENIENCE, MONEY?

TO BE FILLED IN BY DEPARTMENT

Name _____
 Address: _____
 Social Security Number _____
 Date of Birth _____
 City or Town _____
 State _____
 Zip Code _____
 Department or Division _____
 Name (Last, First, Middle) _____
 Title _____

FIGURE 11: INJURY REPORT

5.7: Equipment Description

The Municipal Garage is responsible for servicing, maintaining, and housing Sanitation Division Equipment. The Municipal Garage is directed by a superintendent who is aided by an assistant superintendent, an office manager, and a service manager. The service manager has foremen in the auto shop, truck shop, body shop, and service center reporting to him. In addition, a maintenance foreman reports directly to the superintendents.

In addition to the Sanitation Division fleet, the Municipal Garage is also responsible for 350 pieces of police equipment (mostly sedans and ambulances), and 80 pieces of Health Department equipment (mostly passenger cars). The garage has a separate section for trucks; a separate area for passenger cars, cruisers, and police ambulances; two lubrication racks; and two gasoline pumps. In addition, 17 more gasoline pumps are located throughout the city and drivers are issued credit cards for refueling. The garage has 40,000 square feet of available parking space. It works on a two-shift, 7:00 A.M. to 11:00 P.M., basis, the first shift being devoted to major repair work, and the second shift to preventive maintenance.

A process of decentralization of the Municipal Garage is now under way, partly because the existing structure lacks many facilities as it dates back to the time when it was used as the city stables. The newer satellite garages, to be located at the proposed transfer stations, are expected to provide more maneuverability for vehicles and reduce the number of hostlers (men who line up and park vehicles) now required. Apart from the restructuring of the new garage buildings, these new stations will alleviate the problems currently endured in the central garage. There are no lifts in the present site and it also suffers from drainage problems and occasional flooding. Also lacking are a painting workshop and steam cleaning facilities.

The current preventive maintenance program for Sanitation Division vehicles consists of: lubricating each of the Leach packer bodies twice a week; rotating wheels; lubricating, and changing oil on five trucks a night so that each truck returns for such service every 20 days; and replacing the filter on diesel engines once in every 60 days. The preventive maintenance procedure is performed during the second shift of garage operation so that trucks do not have to be pulled off of their regular routes. Filter changes are usually performed on Saturdays.

The garage is also responsible for estimating the cost of repair to city vehicles involved in accidents. This estimate accompanies the vehicle accident report (Figure 12) submitted to the Department of Industrial Relations for each accident. The garage usually will not perform any repair work that may be covered under insurance or warranty.

The Municipal Garage is responsible for inspection of private sector refuse haulers' vehicles. The garage is required to inspect these vehicles for the following points:

- Visible structural defects (loose fenders, partially enclosed bodies, etc.)
- Vehicle does not exceed state axle limits
- Vehicle has mirrors
- Vehicle has mud flaps
- Safety defects (broken headlights, etc.)
- No leakage from the vehicle (body must be water tight)
- Tail gate is tight fitting

The Division of Sanitation then submits an approval form (Figure 13) to the city auditor's office which permits the refuse hauler to purchase a \$10.00 annual permit for the operation of his vehicle.

— IMPORTANT —

CITY OF COLUMBUS
VEHICLE ACCIDENT REPORT
 Dept. Industrial Relations
 181 S. Washington Blvd.

1. This report must be completed on the day of accident.
 2. Send complete set to Department Industrial Relations. Division copy will be returned after report has been checked.

More: Print or type. Answer all questions completely. Report must be signed by operator of City vehicle, his Supervisor and Division Head.
 Get two (2) Garage estimates on cost of repair to City vehicle and submit with report within 48 hours following accident.

DEPARTMENT		DIVISION	
ACCIDENT	Location	Date	Time
CITY-OWNED VEHICLE (Veh. No. 1)	Name	Age	Did you have your seat belt fastened? Yes <input type="checkbox"/> No <input type="checkbox"/>
	Home Address		
	Vehicle License No.	Make	Type
	Describe damages		
OTHER VEHICLE OR PROPERTY (Veh. No. 2)	Name Driver	Address	Tel. No.
	State operators No.	Type	
	Name Owner	Address	Tel. No.
	Make of Vehicle	Type	Year
WITNESSES	Other Property	License No.	
	Describe damages		
	Is owner insured? Yes <input type="checkbox"/> No <input type="checkbox"/> Name of Insurance Company		
	Name	Address	Tel. No.
PASSENGERS IN VEHICLES (Olive No.)	Name	Address	Tel. No.
	Name	Address	Tel. No.
	Name	Address	Tel. No.
	Name	Address	Tel. No.
INJURED PERSONS	Name	Address	Tel. No.
	Name	Address	Tel. No.
	Name	Address	Tel. No.
	Name	Address	Tel. No.
Were Police Called		Officer's Badge No.	
		(Over)	

FIGURE 12: VEHICLE ACCIDENT REPORT

DESCRIPTION OF ACCIDENT

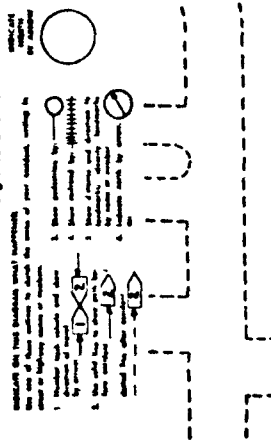
Direction City vehicle was going _____ Street _____ Speed _____
 Direction other vehicle was going _____ Street _____ Speed _____
 Did you give warning signal? _____ What kind _____ Were your lights on _____
 Did other driver give signal? _____ What kind _____ Were his lights on _____
 Weather: ☐ Clear ☐ Cloudy ☐ Raining ☐ Snowing ☐ Fog
 Traffic Control: ☐ Stop Sign ☐ Signal Light ☐ Open Intersection ☐ Other _____
 Light Conditions: ☐ Daylight ☐ Darkness with Artificial Lights ☐ Other _____
 Road Conditions: ☐ Paved ☐ Unpaved ☐ Soft shoulders ☐ Under repairs ☐ No defects ☐ Others _____
 Point of Impact (Check one for each vehicle involved):
 Vehicle 1: ☐ 1. Front ☐ 2. Right front ☐ 3. Left front ☐ 4. Right side ☐ 5. Left side ☐ 6. Rear ☐ 7. Right rear ☐ 8. Left rear
 Vehicle 2: ☐ 1. Front ☐ 2. Right front ☐ 3. Left front ☐ 4. Right side ☐ 5. Left side ☐ 6. Rear ☐ 7. Right rear ☐ 8. Left rear

Driver's description of accident - Tell exactly what happened _____

Signature of Driver _____ Date _____

Signature of Supervisor _____ Date _____

Signature of Division Head _____ Date _____



DO NOT WRITE BELOW THIS LINE - OFFICIAL USE ONLY
 Copy of Columbus Police Report received Yes ☐ No ☐ Police not called ☐

DISPOSITION

☐ City driver at fault
☐ City driver contributed
☐ City driver did not contribute
☐ Mechanical defect
☐ Unattended
☐ Other _____

☐ Provenable
☐ Not provenable
☐ Reportable
☐ Not reportable
 Remarks _____
 Date _____ Chr. ARR _____

CITY OF COLUMBUS, OHIO
DIVISION OF SANITATION
425 SHORT STREET

TO CITY AUDITOR:

RE: REFUSE HAULER'S LICENSE

WE HAVE INSPECTED AND APPROVED, FOR REFUSE HAULER'S LICENSE
THE EQUIPMENT LISTED BELOW:

NAME OF OWNER	ADDRESS
THIS EQUIPMENT HAS WATER TIGHT FULLY ENCLOSED METAL CONTAINERS OR HAS WATER TIGHT FULLY ENCLOSED BODY AND CONFORMS WITH THE REQUIREMENTS OF ORDINANCE 1307-1 1307-2, 1307-3 1307-4. and 1307-99 SECTION 19.18 PERTAINING TO VEHICLES FOR THE TRANSPORTATION OF REFUSE OVER THE STREETS OF COLUMBUS.	

RICHARD JACKSON, SERVICE DIRECT

KIND AND TYPE OF VEHICLE	CLERK
--------------------------	-------

LICENSE NUMBER	TRAILER LICENSE NUMBER	DATE
----------------	------------------------	------

RECEIPT NUMBER	REFUSE LICENSE NUMBER
----------------	-----------------------

FIGURE 13: REFUSE HAULER'S LICENSE APPLICATION

Until recently the billing procedure for the Municipal Garage was to charge the individual divisions for parts and labor, and derive its payroll and operating costs from the General Fund. However, a recent change in billing procedure, which is based on previous monthly bills for each division, now enables the Municipal Garage to derive its funds directly from the General Fund divisions. A computerized billing schedule is now available on a monthly basis for detailed garage charges. The computer printout lists for each vehicle:

- Activity Number
- Brass Tag Number (vehicle identification number)
- Ticket number (gasoline ticket, garage order, etc.)
- Date
- Item (parts, gasoline, etc.)
- Quantity (of parts)
- Unit (of parts)
- Billed (supplies)
- Unbilled (labor through General Fund Divisions)
- Total cost

The garage has the authority to make purchases of up to \$1,000.00 of its own accord. The garage advises when older trucks need to be replaced and such trucks are auctioned off under the supervision of the Board of Purchase.

5.8: Financial Aspects of the Solid Waste Management System

The solid waste system of Columbus relies entirely on the General Fund as a revenue source for the operating budget. The Sanitation Division does collect fees for various services performed, but these revenues are contributed to the General Fund,

similar to revenues collected by other municipal departments. Disbursements to the Sanitation Division are not identified by source. In addition to the General Fund, the city administers Self-Sustaining Funds for various departments such as street cleaning, sewers and drainage, and airports, and Trust Funds for sewers and sewage treatment, and water services.

The operating budget is not currently developed simultaneously with the capital budget, but plans are being considered to integrate the development of each on the same time schedule. The fiscal year in Columbus coincides with the calendar year. Preparation for the budget usually begins in June for the following year with the issuance of forms and instructions to the division heads. These forms are completed by the division heads, in consultation with departmental finance officers, and submitted to the city finance department in early September. Upon review and revision of these divisional budgets, to ensure that they meet overall city objectives, the finance director compiles the full city budget and submits it to the mayor in early October. The departmental requests are either approved or revised by the mayor and, in November, both the departmental requests and the mayor's recommendations are submitted to the City Council for consideration. Final approval for departmental appropriations resides with the City Council. The cycle for the capital budget follows the same process, except that preparation is not initiated until September.

Since the street clearing function is not included in the Sanitation Division, the budget figures for street cleaning have been added to the Sanitation Division's budget to provide a complete view of the financial aspects of the solid waste management system.

5.8.1: Sources of Revenue

The Sanitation Division is funded entirely from the General Fund. As seen in Table 10, Columbus used a wide range of revenue sources to finance its municipal operations. It is interesting to note that for 1973, over 64 percent of the General Fund revenue is derived from "transfer income," which consists almost entirely of income tax revenue.

Property taxes constitute only a small portion of total revenues in Columbus, accounting for just eight percent of total available resources. The relatively high income tax revenues allow for this low property tax burden.

Since 1970, total General Fund available resources have increased at an annual average rate of 19 percent, a growth rate that provides adequate revenues for new and expanding city services. The major source of this growth has been the income tax revenues, which have increased at an even more rapid annual rate of 26.7 percent. Other revenue sources have increased much less rapidly, e.g., taxes - 16 percent, revenues from the general city department - 15 percent, etc. Revenues collected by the Service Department (which includes the Sanitation Division) remained nearly constant from 1970 through 1972, but were projected to decline in 1973.

The Sanitation Division charges fees for various services it performs; most significantly, the \$.15 per 100 pounds disposal fee at the city landfill sites to manufacturers and private haulers. As shown in Table 11, the total revenues collected by the Sanitation Division remained fairly constant since 1970. These revenues represent only a small fraction of the total cost of operating the Sanitation Division.

TABLE 10

GENERAL FUND REVENUES BY SOURCE

FOR 1970 TO 1973

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Taxes	7,111,000	7,535,000	8,135,000	11,118,700
General City Departments	2,869,500	2,827,000	3,171,000	4,369,000
Safety Department	1,470,100	1,605,100	2,231,000	2,542,500
Recreation Department	3,500	4,000	4,000	3,000
Health Department	377,920	374,040	340,000	495,600
Service Department	216,050	217,050	222,000	193,000
Transfer ^{1/} Income	22,330,000	33,575,000	37,130,000	40,500,000
Reimbursement and other	<u>3,429,000</u>	<u>3,590,000</u>	<u>2,910,000</u>	<u>3,883,600</u>
Gross Receipts	37,807,060	49,727,190	54,143,000	63,105,400
Less: Tax Deductions	(852,000)	(809,000)	(840,000)	(1,129,000)
Add:				
Balances and Cancellations	74,940	60,000	462,000	370,000
Total Available Resources	37,030,000	48,978,190	53,765,000	62,346,400

^{1/}City Income Tax

TABLE 11
SANITATION DIVISION REVENUES BY SOURCE
1970 to 1973

	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Sanitation				
Landfill & Refuse Fees ^{1/}	\$55,000	\$75,000	\$80,000	\$60,000

^{1/} Includes

- a-Collection and rental of cubic yard refuse containers - 25%
- b- Collection of dead animals from veterinarians and laboratories - 4%
- c- Fee charged manufactures and private haulers for use of city landfill (at \$.15 per 100 lbs.) 71%

The street cleaning function is funded as a self-sustaining operation, not part of the General Fund. This function is included in the Division of Engineering and Construction, also within the Department of Public Service. This division provides the revenue to cover the cost of operating the street cleaning service.

The city has a motorized equipment fund which it utilizes for the purchase of Sanitation Division vehicles. It is currently using Federal revenue sharing funds, together with the motorized equipment funds, to purchase 15 additional packer trucks. The revenue sharing fund is the sole source for the financing of the proposed transfer/pulverizer stations mentioned in earlier sections.

5.8.2 Expenditures

The expenditures of the Sanitation Division are monitored by monthly accounting reports that detail appropriations, expenditures to date, encumbrances and unencumbered balances. This computerized procedure is currently being studied and revised to provide for more accurate assignment of costs. The monthly statement provides data by major and minor purpose, and by program for each division. Four programs are detailed for the Sanitation Division - administration, refuse collection and disposal, landfill operations, and vehicular and building maintenance. Six major purpose expenditure categories are utilized by all departments of the city: personal services, supplies and materials, services, debt service requirements, other disbursements, and outlay for fixed assets. Within each major purpose category are numerous minor purpose categories. As shown in Tables 12, 13, and 14, expenditures for solid waste management have increased steadily since 1968. The total costs for the Sanitation Division have increased more than \$2.2 million

TABLE 12

EXPENDITURES BY PURPOSE FOR SANITATION DIVISION
1968 to 1973

	<u>1968^{1/}</u>	<u>1969^{1/}</u>	<u>1970^{1/}</u>	<u>1971^{1/}</u>	<u>1972^{1/}</u>	<u>1973^{2/}</u>
Personal Services	\$2,721,079	\$3,117,329	\$3,945,448	\$4,422,674	\$4,145,671	\$4,728,701
Supplies and Materials	290,226	266,174	389,498	404,766	383,050	460,500
Services	49,343	45,819	64,303	80,019	183,789	114,869
Debt Service Requirements	0	0	0	0	0	0
Other Disbursements	4,387	7,246	7,020	2,741	2,265	3,000
Outlay for Fixed Assets	4,974	8,881	0	0	3,605	2,154
Total	\$3,070,009	\$3,445,449	\$4,406,269	\$4,910,100	\$4,718,380	\$5,309,224
1/- Actual						
2/- Recommended						

EXPENDITURES BY PURPOSE FOR STREET CLEANING
1968 TO 1973

	<u>1968^{1/}</u>	<u>1969^{1/}</u>	<u>1970^{1/}</u>	<u>1971^{1/}</u>	<u>1972^{2/}</u>	<u>1973^{3/}</u>
Personal Services	\$ 398,789	\$ 404,770	\$ 452,558	\$ 511,132	\$ 589,145	\$ 609,866
Supplies and Materials	182,653	134,762	279,340	115,479	191,944	190,600
Services	42,824	16,337	14,739	51,415	38,245	38,000
Debt Service Requirements	0	0	0	0	0	0
Other Disbursements	428	1,655	3,511	8,880	1,200	1,200
Outlay for Fixed Assets	97,531	17,741	18,353	30,975	14,000	0
Total	\$ 722,225	\$ 575,265	\$ 768,501	\$ 717,881	\$ 834,534	\$ 839,666

1/ - Actual
2/ - Estimated
3/ - Recommended

TABLE 14

EXPENDITURES BY PURPOSE FOR SOLID WASTE
MANAGEMENT SYSTEM - 1968 TO 1973

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Personal Services	\$3,119,868	\$3,522,099	\$4,398,006	\$4,993,806	\$4,734,816	\$5,338,567
Supplies and Materials	472,879	400,936	668,838	520,245	574,994	651,100
Services	92,167	62,156	79,042	131,434	222,034	152,869
Debt Service Requirements	0	0	0	0	0	0
Other Disbursements	4,815	8,901	10,531	11,621	3,465	4,200
Outlay for Fixed Assets	102,505	26,622	18,353	30,975	17,605	2,154
Total	\$3,792,234	\$4,020,714	\$5,174,770	\$5,628,081	\$5,552,914	\$6,148,890

since 1968 to \$5.3 million in 1973. Expenditures for street cleaning increased less rapidly, an increase of about \$100,000 to \$800,000 in 1973. For all solid waste activities, the increase approximated \$2.3 million since 1968, for a total of \$6.1 million for 1973.

Personal services constitute the major portion of expenditures, averaging just under 90 percent of all Sanitation Division operating expenditures since 1968 (see Table 15). This percentage has remained nearly constant during this period. Although this seems to be indicative of a highly labor intensive operation relative to other cities, it must be noted that the total costs are understated by the amounts incurred for purchase and depreciation of collection and disposal vehicles. Capital costs for the Sanitation Division's equipment costs are provided for in the budget of the municipal garage. Such costs which may be directly attributable to the Sanitation Division equipment are presently not specifically identifiable. Therefore, if these capital and depreciation costs were added to the present operating costs of the Sanitation Division, the percent of expenditures for personal services would be significantly reduced, most likely to the 70-75 percent range.

Table 16 indicates the average annual increase in expenditures for the solid waste management system as 10.2 percent. Personal services expenditures experienced an 11.4 percent average annual increase, while non-personal services expenditures increased just 3.8 percent annually. The latter is due to the actual decline of 5.2 percent annually of non-personal services expenditures for the street cleaning operations.

TABLE 15
PERCENT DISTRIBUTION OF EXPENDITURES
BY PURPOSE FOR SANITATION DIVISION
1968 to 1973

	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>
Personal Services	88.6	90.5	89.5	90.1	87.9	89.1
Supplies and Materials	9.5	7.7	8.8	8.2	8.1	8.7
Services	1.6	1.3	1.5	1.6	3.9	2.2
Debt Service Requirements	0	0	0	0	0	0
Other Disbursements	.1	.2	.2	.1	.1	.1
Outlay for Fixed Assets	.2	.3	0	0	.1	.1

TABLE 16
 AVERAGE ANNUAL PERCENT INCREASE OF
 SELECTED EXPENDITURES FOR SOLID WASTE
 MANAGEMENT SYSTEM 1968 to 1973

	Sanitation Division	Street Cleaning	Solid Waste Management System
Personal Services	+11.7	+8.9	+11.4
All Non-Personal Services Expenditures	<u>+10.7</u>	<u>-5.2</u>	<u>+3.8</u>
All Expenditures	+11.6	+3.1	+10.2

5.9: Future Developments

5.9.1: Transfer Stations

The Department of Public Service of the City of Columbus has felt for some time that its Division of Sanitation operations are antiquated. This has been due partly to the fact that all of the division's trucks are housed in the Municipal Garage near the center of the city. Since all of the employees start work at the same time there is considerable congestion in both the morning and afternoon. In addition, the trucks must drive from this central location to their routes, which are as much as 30 to 45 minutes away. Also aggravating the situation is the fact that Columbus has only one city-operated landfill located on the south side of the city, requiring a travel time of over one hour in many cases. At the end of the day, all trucks must return to the landfill to dump and then return to the storage garage. The total driving time at the end of the day could average two hours.

To alleviate these problems, in late 1972 the Department of Public Service proposed a system of transfer stations which would reduce haul distances to the landfill. The transfer stations would also permit decentralization of storage facilities, thus reducing travel distances to the different routes. Three transfer stations were proposed in the north, east, and west, respectively. These would allow the trucks to empty their loads and return to their routes in a minimum amount of time. This time savings would enable each truck to pick up an additional load each day. By eliminating many truck miles and keeping the trucks off the landfill, the life of the collection trucks would also be prolonged.

Alternative disposal systems were also considered, specifically baling and pulverization of refuse to conserve landfill space. After extensive analysis and site observation of these techniques in the United States and abroad, the Department of Public Service

concluded that pulverization would be more practical and economical for Columbus, especially as a preparatory process for possible future resource recovery.

As a result of this investigation the city let bids for three transfer stations equipped with some combination of processing equipment (compactors, pulverizers, balers). The results of the bids received are summarized in Figure 15. It was decided to accept the bid from the Jeffrey Manufacturing Company for a transfer station/pulverizer combination system. A proposed schedule for implementing these projects was then prepared. A summary of this schedule is presented in Figure 16.

As presently planned (and under construction) the new Columbus solid waste management system will have three transfer stations, the proposed sites for which are indicated in Figure 5 (Section 5.4, Disposal Function). These stations will provide for inside dumping and will be designed to be compatible with surrounding structures. The refuse will be deposited into dump areas where it will then feed a refuse pulverizer which will, in turn, feed a 75 -cubic-yard trailer. These trailers will then be taken to the landfill and emptied. The pulverized refuse will be spread continuously by two men using two medium-sized dozers. It is planned to obtain state approval for the elimination of daily covering, thus saving major landfilling costs. It is felt that the pulverized refuse landfill would provide a more aesthetic appearance and be more sanitary as demonstrated in other pulverized refuse landfills. Also, damage to landfill equipment and to trucks which must currently drive onto the fill would be reduced by this system.

A major precept in opting for the pulverizer system is its feasibility for coupling with future resource recovery systems.

January 9, 1973

TO: Richard D. Jackson, Director of Public Service
FROM: Robert C. Parkinson, Assistant Director
SUBJECT: Bids for Solid Waste Equipment

The bids for Solid Waste Equipment received December 12, 1972, have been evaluated based on the information submitted by the bidders. The bids received were as follows:

The Jeffrey Manufacturing Company

Transfer Station w/pulverizer unit - \$569,809.00 per each for less than 3 units --- \$1,424,160.00
Metal extractors -- 13,770.00 per each
3 units --- 41,310.00
Total for 3 complete units ----- \$1,465,470.00

Control Systems Inc. & Glenway Sheet Metal Inc.
(a joint venture)

Transfer Station w/compactor units - \$141,159.00
3 units --- 423,477.00
2 Baler units -- \$1,870,463.00
Total ----- \$2,293,940.00
(No bids for metal extractors)

Using only 2 transfer stations the total bid would be:

2 - transfer stations w/compactor units \$282,318.00
2 - Baler units -- \$1,870,463.00
Total ----- \$2,152,781.00

United Container Service Inc.

Transfer Station w/compactor unit (if 3 are purchased) 3 units --- \$359,151.00
Transfer Station w/compactor units (if 2 are purchased) 2 units -- \$319,112.00

No further consideration to be given to United Container Service Inc., due to unit cost.

(continued)

Bids for Solid Waste Equipment

Page 3

United Container Service Inc.

Proposal states cost to be included at a later date.

The above figures, I submitted, needed clarification in order that they could be properly compared. The estimated operating costs, submitted by Control Systems & Glenway Sheet Metal covered only the cost of the baler. Since 2/3 of the material is handled at the transfer station as well as the baler, the total operating cost per ton is considerably higher. The bidder was not able to supply these figures.

The hauling must also be taken into account since more trucks and drivers will be required with the bales due to the double haul of 2/3 of the material. The estimated hauling costs are as follows:

Labor

Jeffrey Manufacturing Company

3 drivers per station @ 5.60/hr. = \$134.40/day
@ peak capacity (400 tons/day) = \$0.336/ton

Control Systems & Glenway Sheet Metal -

At baler

6 drivers - @ 5.60/hr. = 268.40/day
@ peak capacity (1,200 tons/day) = 0.224/ton
At transfer stations (2)
3 drivers per station @ 5.60/hr. = 134.40/day
@ peak capacity (400 tons/day) = 0.336/ton
since only 2/3 of material is transferred average cost per ton = 0.224/ton

Total ----- \$0.448/ton

Fuel:

Gas, oil and Maintenance of trucks assume .50 per mile

Jeffrey Manufacturing Company

Average haul 11 miles/load with = 5.50/load & 25 tons/load = \$0.22/ton

Control Systems Inc. & Glenway Sheet Metal Inc.

Baler - average haul 10 miles/load = \$5.00
at 25 tons/load - cost per ton = 0.20
from 2 transfer stations -
average haul 12 miles/load = 6.00
average cost per ton for all stations = 0.18

Total ----- \$0.38/ton

Bids for Solid Waste Equipment

Page 2

In comparing the bids to the specifications, I find the following:

Jeffrey Manufacturing Company

3 pulverizers @ 60 ton/hr./7 hr. day = 1260 tons/7 hr. day
specifications require - 1200 ton/7 hr. day

Control Systems & Glenway Sheet Metal

2 balers @ 40 bales/hr. each = 80 bales/hr.
= 880 bales/11 hr. day
bales are 36" x 36" x 48" = 1.33 cu.yd.
average weight = 2,000 - 3,000 lb.
@ 2,000 lb/bale x 880 bales = 880 ton/11 hr. day
@ 3,000 lb/bale x 880 bales = 1,320 ton/11 hr. day
average capacity = 1100 ton/11 hr. day
specifications require 1,200 ton/11 hr. day
This then does not meet specifications
*minimum weight of bale to meet spec: 2,736 lb.

United Container Service Inc. - Information not furnished

The estimated operating costs of the various systems are as follows:

The Jeffrey Manufacturing Company

Power \$0.177 per ton
Labor 0.249 per ton
Front end loader 0.042 per ton
Plant Maintenance 0.586 per ton
Misc. (utilities etc.) 0.083 per ton

*Total ----- \$1.137 per ton

Control Systems Inc. & Glenway Sheet Metal Inc.

Power \$0.1756 per ton
Labor 0.6784 per ton
Plant Maintenance 0.1887 per ton
*Total ----- 1.0427 per ton

Front Loader & Misc. (not included in proposal, price based on above) 0.125 per ton

Labor at 2 transfer stations (estimated) 0.2714 per ton

Total ----- \$1.4391 per ton

Submitted by Bidder

Bids for Solid Waste Equipment

Page 4

Total Haul Cost

Jeffrey Manufacturing Company - \$0.336 Labor
0.22 Gas, Oil & Main.
Total \$0.556/ton
Control Systems & Glenway Sheet Metal - \$0.448 Labor
0.38 Gas, Oil & Main.
Total \$0.828/ton

There are other items which must be considered in arriving at the most economical system such as: transfer truck cost, building cost, foundation cost, landfill cost and ecology factors. Exact costs of these items are not known at this time, but I believe they can be safely compared as follows:

ITEM	MOST ECONOMICAL SYSTEM	REASONS
Truck Cost	Jeffrey	with fewer trucks and cheaper trucks, since trucks do not have to be compactor type
Building Cost	Jeffrey	same buildings except the baler building which will be larger
Foundation Cost	Jeffrey	The foundation cost of the baler should cost considerably more than a pulverizer and the pulverizer foundation should compare to the compactor
Landfill Cost	Equal	baler - .675 tons/cu. yd. Pulv. - .667 tons/cu. yd. (after 3 yrs.)
Ecology Factor	Equal	both will provide for land reclamation and should meet all state standards

Another item which must be mentioned is the metal extractors. The only one bid was for use on the pulverizer. The bidder on the baler has stated verbally that the only metal extractor they will use is the Jeffrey extractor, and therefore, they did not submit a bid since they assumed Jeffrey would be bidding that item.

FIGURE 15: TRANSFER STATION BIDS RECEIVED BY COLUMBUS

CITY OF COLUMBUS

OHIO

DEPARTMENT OF PUBLIC SERVICE

Zip Code: 43215

Tom Moody
Mayor

Jerome C. Gafford
Deputy Director

Richard D. Jackson, P.E.
Director

Robert C. Parkinson
Assistant Director

PROPOSED SCHEDULE OF PROJECTS - ENVIRONMENTAL PROTECTION

Priority 1 - Sanitation Transfer stations w/pulverizer

- A. Bids for equipment - received Dec. 12, 1972
Dec. 12, 1972

This contract should be awarded as soon as possible. The contract requires equipment delivery and in operation in 9-1/2 months. This project includes all equipment required for the transfer stations including metal extractors for recycling.

Total Bid \$1,465,470.00

- B. Land purchase for North and East sites.
Tentative sites have been selected for both the North and East transfer stations. In order to assure availability these sites should be purchased as soon as possible.

Estimated Cost \$ 100,000.00

- C. Transfer station buildings (3).
This portion of the project should be started immediately in order that the buildings can be available when the equipment is ready. An Architect should be hired now with contracts to be awarded for the building construction by June 1973.

Estimated Cost \$ 734,530.00

- D. Transfer trucks and station equipment.
This equipment will be necessary when the transfer stations are put into operation. Because of the time required for manufactures and delivering contracts should be awarded by June 1973.

Estimated Cost \$ 200,000.00

Total Estimated Cost & Priority 1 \$2,500,000.00

Priority 2 - Sanitation Truck Storage

facilities - three buildings

This project involves the de-centralization of the sanitation packer trucks. In order to get full utilization of the transfer stations, it will be necessary that these buildings are completed when the transfer stations are put into operation. The present storage building is under design to be converted to a new municipal garage and once construction begins there will be nowhere to park the trucks under cover. Contracts should be awarded on all buildings as soon as possible in order to have the facilities ready prior to cold weather, no later than April 1973.

Estimated Cost \$1,000,000.00

Priority 3 - Elimination of street cleaning assessments.

The 1973 street cleaning operations would normally be financed by revenue from the assessments for 1972 street cleanings. These have not been certified and the approval of this proposal would eliminate the certification of the 1972 assessments.

Estimated Cost \$ 300,000.00
per year

FIGURE 16: PROPOSED SOLID WASTE ACTIVITIES IN COLUMBUS

Metal and paper separation are currently viewed as the most likely candidates for this form of processing but are not yet considered an economically viable project for Columbus.

At each transfer station there will be a truck storage building 60'x225' for 32 trucks.

The Municipal Garage will decentralize its preventive maintenance program to these sites.

5.9.2: Paper Bags

The City of Columbus recently performed a pilot project on the use of paper bags to replace garbage cans. The purpose of this pilot project was to determine the economic and aesthetic advantages of the use of paper bags in lieu of conventional containers. The paper bags for the project were purchased by the City of Columbus at a cost of 8¢ each.

For the test, the city chose a specific area in which to distribute two cubic foot bags to the residents. A notice (Figure 17) was then distributed which advised the residents of the program. Subsequent to the three-week test period, a follow-up questionnaire (Figure 18) was distributed to participants in the program which solicited their views on paper bags. The city is currently evaluating this pilot program.

NOTICE

The City of Columbus will be conducting a pilot project on the use of paper bags to replace metal cans. Your area has been selected for this project for the period of April 4 thru April 22. The project will be carried out as follows:

During the period of March 27 thru April 1, there will be 6 bags distributed at each home at the regular collection time. These bags are to provide for 2 each week for a period of 3 weeks. Upon receiving the paper bags residents are requested to stop using their regular containers and use only the paper bags. Two bags are furnished for each week and in most cases with a little care in packing this will be sufficient. Should anyone require additional bags, they will be available for purchasing at 10¢ each at (TO BE DESIGNATED.) If this program were to be adopted, most residents would use a special bag holder, that would hold the bag in place and have a flip top cover. The paper bag of a design that it is free standing and can therefore be used for the short period involved without the use of the holder. The bag should only be filled to a level that leaves space to fold down and seal the top. The bags are to be set out at the curb on the regular collection day. Bulky items should be kept separately, unless they can be crushed, and set out with the bags.

Following the last collection a questionnaire will be delivered to your home in order that we may receive your comments on the test. In making this evaluation we would appreciate it if you would give us your frank and honest opinions, however, we would hope that you would take into accounts that in regular use you would have a bag holder.

We would like to thank you for your assistance in this test and through your cooperation we can gain the information necessary to determine any benefits which could be derived from the use of paper bags.

Should any problems develop during this period, please feel free to call at the office of the Division of Sanitation, telephone: 461-8250.

Richard D. Jackson, P.E.
Director,
Department of Public Service

FIGURE 17: NOTICE OF PAPER BAG PROGRAM

Q U E S T I O N N A I R E

We would like to thank you for your assistance in the test project on the use of paper bags. In order that we may make a complete evaluation of the test we would appreciate your comments on your experience during this period.

Personal evaluation of test: _____

Problems: _____

Is a bag holder necessary? : _____

Recommendations: _____

Name and Address: _____
(Leave blank if desired)

Return to: Richard D. Jackson, P.E.
Director of Public Service
90 West Broad Street
Columbus, Ohio 43215

FIGURE 18: EVALUATION QUESTIONNAIRE FOR PAPER
BAG PILOT PROGRAM

APPENDICES

APPENDIX A
COLUMBUS SOLID WASTE CODES AND ORDINANCES

COLUMBUS CITY CODES

TITLE THIRTEEN—GARBAGE AND RUBBISH CODE

ARTICLE ONE—Storage and Collection

- Chap. 1301. Definitions.
- Chap. 1303. Garbage, Waste Paper and Burnable Rubbish.
- Chap. 1305. Nonburnable Rubbish and Ashes.
- Chap. 1307. Collection and Disposal by Licensee.

ARTICLE THREE—Disposal Facilities

- Chap. 1321. City Incinerators.
- Chap. 1323. City Controlled Landfills.
- Chap. 1325. Dumps.

COLUMBUS CITY CODES

TITLE THIRTEEN—GARBAGE AND RUBBISH CODE

ARTICLE ONE—Storage and Collection

Chap. 1301. Definitions.

Chap. 1303. Garbage, Waste Paper and Burnable Rubbish.

Chap. 1305. Nonburnable Rubbish and Ashes. (Repealed)

Chap. 1307. Collection and Disposal by Licensee.

CHAPTER 1301

Definitions

1301.01 Definition of terms.

1301.02 Garbage.

1301.03 Refuse.

1301.04 Rubbish.

1301.01 Definition of terms.

For the purpose of Title Thirteen—Garbage and Rubbish Code, the following terms shall have the meanings respectively ascribed.

1301.02 Garbage.

"Garbage" is any waste collection of animal, fruit or vegetable matter, and any matter or substance or waste therefrom used in the preparation, cooking, dealing in or storage of meats and fowl, fruits and vegetables. (§ 19.1 ; Ord. 782-56.)

1301.03 Refuse.

"Refuse" is the general term encompassing garbage and rubbish. (Ord. 510-59.)

1301.04 Rubbish.

"Rubbish" means all household waste matter such as paper, straw, excelsior, rags, wearing apparel, grass, trimmings from small shrubs, tin cans, glass, metal, ashes and other waste material accumulating about dwellings or buildings, except waste materials accumulated in the construction, remodeling or repairing of buildings. (Ord. 510-59.)

CHAPTER 1303

Garbage, Waste Paper and Burnable Rubbish

- | | | | |
|---------|---|---------|--|
| 1303.01 | Receptacles required. | 1303.08 | Unsalable or condemned products to be removed. |
| 1303.02 | Type of receptacles required. | 1303.09 | Use of bundles. |
| 1303.03 | Use of receptacles. | 1303.10 | Storing refuse. |
| 1303.04 | Location of receptacles. | 1303.11 | Apartment house cubic yard containers. |
| 1303.05 | Depositing refuse. | 1303.99 | Penalty. |
| 1303.06 | Refuse and animal disposal by City. | | |
| 1303.07 | Collection from businesses; additional collections. | | |

Cross References.

Regulation of disposal by Service Director—see CHTR. § 117.
Municipality collecting and disposing of garbage and rubbish—see Ohio R. C. 715.43.
Garbage from nursing or boarding homes—see HLTH. 711.09(k).
Garbage in parks—see PUB. PROP. 919.07.
Depositing refuse in watercourses—see W. S. & E. 1111.04.
Mixing nonburnables with burnables—see GAR. & R. 1321.04.
Removing trash from market stalls—see MKTS. 1505.10.
Refuse and garbage in markets—see MKTS. 1507.06 et seq.
Placing refuse on streets—see G. OFF. 2375.09.
Littering streets—see G. OFF. 2375.14.
Garbage in dwellings—see HSE. 4521.07, 4521.08.

1303.01 Receptacles required.

It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises or place of business in the City forthwith to provide or cause to be provided, and at all times thereafter to keep or cause to be kept and provided for the exclusive use of such buildings, premises or place of business covered receptacles for receiving and holding, without leakage, all refuse that may accumulate during the interim of municipal refuse collection from such building, premises or place of business or the portion thereof of which such person may be owner, tenant, lessee or occupant in charge. (Ord. 485-59.)

1303.02 Type of receptacles required.

Each such receptacle as required by C. C. 1303.01 shall be made watertight, of galvanized iron or other suitable material, as approved by the Director of Public Service, with handles and a tight-fitting lid which shall be so maintained in position at all times as to prevent the contents of such receptacle from becoming wet, and to prevent the ingress or egress of animals and insects. Such refuse receptacles shall be of such size as to permit the holding of all refuse between collections, but shall not exceed a thirty-gallon capacity. Provided that there is nothing in this chapter to prohibit the use of large box-like metal containers as approved by the Director of Public Service. Provided further, that there is nothing in this chapter to prohibit the use of other containers that are

watertight with a tight-fitting lid and are collected and disposed of by a licensee as set forth in Chapter 1307. (Ord. 485-59.)

1303.03 Use of receptacles.

It shall be the duty of every tenant, owner, lessee or occupant of every dwelling, building, premises or place of business to deposit all refuse that is to be removed from the premises by the City collection, in receptacles provided for refuse and shall drain excess liquids from, and wrap all garbage in several thicknesses of paper. (Ord. 485-59.)

1303.04 Location of receptacles.

(a) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises or place of business in the City which does not abut on an alley, or which abuts an alley which is not accessible to the City Division of Sanitation packer trucks or which is an unimproved alley, to place all refuse that is to be collected, by the City Division of Sanitation, not more than three feet from the curb or curb line in front of any and every such building, premises or place of business in the City, at least one-half hour before the scheduled date and time of collection, but said refuse shall, in all cases, be kept outside of any fence, wall, enclosure, dwelling or building on the day of collection.

(b) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge

of any and every building, premises or place of business in the City which abuts on any alley which is accessible to the City Division of Sanitation packer trucks, and which is improved, to place all refuse that is to be collected by the City Division of Sanitation at the alley edge line or not more than three feet inside the property line abutting said alley, in the City, at least one-half hour before the scheduled date and time of collection, but in no event shall such refuse be placed inside any area enclosed by a fence, wall or other enclosure, including any dwelling or building on the scheduled collection date and time, provided, however, that at no time shall the above said refuse be placed or stored in such a manner as to obstruct or hamper the lawful use of any alley or throughway.

(c) At no time, shall any City Division of Sanitation employee go beyond any fence, wall, gate or any enclosure, or into any dwelling or building, for the purpose of removing refuse from any such premises, building or dwelling.

(d) Subsections (a) through (c) above shall not apply to any of the types of containers or situations described in Sections 1303.06, 1303.07 or 1303.11, C.C.

(e) It shall be the duty of every owner, ten-

ant, agent, lessee, occupant and person in charge of any and every building, premises or place of business in the City, whose refuse is not placed at the point or points of collection at the scheduled date and time of collection, as set forth in this chapter, to dispose of the uncollected refuse, at the sole expense of such owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises or place of business before the time of the next regular scheduled date and time of collection of said refuse shall be placed at the point or points of collection, designated in this chapter by the next regularly scheduled date and time of collection.

(f) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building or premises in the City to remove any and all empty containers from the points mentioned in subsection (a) above before the end of the next day after the day of actual collection of said refuse. (Ord. 1468-68)

1303.05 Depositing refuse.

It shall be unlawful to throw or deposit any refuse whatsoever in or upon any street, alley, public place or vacant lot. (Ord. 485-59.)

• **1303.06 Refuse and animal disposal by City.**

The Director of Public Service shall collect and dispose of, through the Department of Public Service, all dead animals and refuse within the City and he shall make rules and regulations for the collection and disposal of the aforesaid refuse and dead animals from lots, streets or premises of any kind, public or private, within the City, except as provided in C. C. 1303.08.

It shall be unlawful for any person, other than the duly authorized employees of the City, to remove any of the aforesaid refuse from lots, streets, or premises of any kind, public or private, or to transport them in any manner along the streets or highways or on public or private property within the City, except as provided for in Chapter 1307. (Ord. 485-59.)

1303.07 Collection from businesses; additional collections.

It shall be the duty of any person operating or in charge of any grocery, meat or fowl store, restaurants, clubs, hotels, institutions, associations, or any place of business having an accumulation amounting to more than one thirty-gallon receptacle of refuse as provided in Section 1303.02, during a period of one week or between the interim of the regular residential collection of such refuse by the Department of Public Service to remove or cause to be removed such accumulation to the refuse landfills of the City or any recognized disposal facility. Any such person may enter into contract with the Director of Public Service for such additional collection and disposal at a charge of one dollar (\$1.00) per cubic yard. Any person may enter into a contract with the Director of Public Service for additional collections for apartment houses in addition to the regular weekly collection and disposal at a like charge of one dollar (\$1.00) per cubic yard.

The charge for the rental of the below listed cubic yard containers owned by the City shall be as follows plus any charge of one dollar (\$1.00) per cubic yard for collection.

Type of Box	Cubic Yard Size	Rate Per Month
Daybrook — Roto-Pac	3	5.75
	4	6.50
	5	8.00
	6	9.00

Dempster-Dumpster	3	6.70
	6	9.55
	10	16.03
	12	13.96

(Ord. 701-68.)

1303.08 Unsalable or condemned products to be removed.

It shall be the duty of every person or agent in possession of offal, meats, melons, fruits or vegetables that are unsalable or which have been condemned by the Columbus Department of Health, forthwith to remove or cause to be removed the same by a license to the refuse incinerators of the City or to a recognized disposal facility. (Ord. 485-59.)

1303.09 Use of bundles.

If the refuse is of such a character that it cannot be placed in an approved receptacle, then it shall be bundled and securely tied, no bundle to exceed four feet in length, two feet in diameter and fifty pounds in weight. These bundles shall be placed at the same collection point as the refuse receptacles. (Ord. 485-59.)

1303.10 Storing refuse.

No person shall store or accumulate, or permit to be stored or accumulated, any refuse upon premises under his control, except refuse stored in containers as required and authorized by this chapter. (Ord. 386-67.)

1303.11 Apartment house cubic yard containers.

Any newly constructed apartment dwellings of five units or more shall provide cubic yard containers of no less capacity than three cubic yards and upwards at the rate of one cubic yard per every two apartment units. All such cubic yard containers and their location must be approved by the Director of Public Service through the Division of Sanitation before they are put into operation. (Ord. 701-68.)

1303.99 Penalty.

Whoever violates this chapter shall be deemed guilty of a misdemeanor and shall be fined not more than two hundred dollars (\$200.00) or imprisoned for not more than ten days, or both.

CHAPTER 1305

Nonburnable Rubbish and Ashes

(Repealed by Ordinance 486-59 passed April 6, 1959.)

CHAPTER 1307

Collection and Disposal by Licensee

1307.01	License required.	1307.05	Residential collection.
1307.02	Application; fee; term.	1307.06	Pushcarts prohibited.
1307.03	Container and vehicle requirements.	1307.07	Deposit on unlicensed dump; revocation.
1307.04	Identification tag.	1307.99	Penalty.

Cross References.

City employing scavengers—see Ohio R. C. 3707.39.
Licensing pushcarts—see B. REG. Ch. 573.

1307.01 License required.

It shall be unlawful for any person to buy, collect, transport or engage in the business of collecting or transporting through the streets or public ways any offal, garbage, rubbish, or ashes, without first obtaining a license to engage in such business. (§ 19.18; Ord. 782-56.)

1307.02 Application; fee; term.

Every person desiring a license shall make application to the City Auditor by setting forth his name, his residence if an individual, or the address and place of business if a firm or corporation, and pay a fee for such license on the basis of ten dollars (\$10.00) per year for each vehicle used for such purpose. Each license shall be issued annually by the City Auditor and shall expire on the thirty-first day of March following such date of issuance. (§ 19.18; Ord. 782-56.)

1307.03 Container and vehicle requirements.

Any person desiring to obtain a license for this purpose must provide watertight, fully enclosed metal containers, or a fully enclosed body on the vehicle in which to place such offal, garbage, rubbish or ashes while transporting same over the streets or public ways of the City. The City Auditor, before issuing such license, shall require a written approval from the Division of Sanitation Superintendent to the effect that the vehicle and equipment conforms to the requirements of this section. (Ord. 295-60.)

1307.04 Identification tag.

On the issuance of any such license the Division of Sanitation and Sanitation Superintendent shall issue a metal tag which shall be attached in a conspicuous place upon the outer left side of each vehicle used for this purpose, and in addition to the distinctive number thereon, the Division of Sanitation Superintendent shall enter upon such identification plate in the space provided for the corresponding state registration number of such vehicle, if a

motor vehicle, and if another style, the nature thereof, and such identification tag shall be used only upon such vehicle. Such identification plate shall not be obscured in any manner whatsoever. (Ord. 295-60.)

1307.05 Residential collection.

Issuance of this license shall not be construed to permit the owner of such license the right to collect or transport offal, garbage, rubbish or ashes upon the streets of the City from residential property unless special permission to do so is first obtained in writing from the Division of Sanitation Superintendent. (Ord. 295-60.)

1307.06 Pushcarts prohibited.

No person engaged in the business of collecting, hauling, or transporting through the streets or public ways of the City any rubbish, composed of ashes or tin cans, shall transport or haul such refuse through the streets and public ways of the City with a pushcart propelled by man power. (§ 19.18; Ord. 782-56.)

1307.07 Deposit on unlicensed dump; revocation.

No person engaged in the business of collecting, hauling or transporting through the streets or public ways of the City any offal, garbage, rubbish or ashes shall deposit on an unlicensed dump within the City, or transport for such deposit, any offal, garbage, rubbish or ashes.

The City Auditor shall revoke the license issued pursuant to this chapter upon written certification by the Director of Public Service that the license holder has violated the prohibition set forth in this section. (Ord. 124-67.)

1307.99 Penalty.

Whoever violates this chapter shall be deemed guilty of a misdemeanor and shall be fined not more than five hundred dollars (\$500.00) or imprisoned for not more than ten days, or both. Upon a second conviction within a period of one year, all collector's licenses owned by the violator shall be revoked by the City Auditor.

ARTICLE THREE—Disposal Facilities

Chap. 1321. City Incinerators.

Chap. 1323. City Controlled Landfills.

CHAPTER 1321

City Incinerators

- | | |
|---|---|
| <p>1321.01 Fees.</p> <p>1321.02 Collection and disposition of moneys.</p> <p>1321.03 Transporting refuse from own place of business.</p> | <p>1321.04 Mixing nonburnables with burnables. (Repealed)</p> <p>1321.99 Penalty.</p> |
|---|---|

Cross References.

Appropriating land for garbage disposal—see Ohio R. C. 719.01.
 Loads dropping or leaking—see TRAF. 2141.09.
 Garbage incinerator defined—see AIR POL. 2701.08.
 Garbage incinerators—see AIR POL. Ch. 2725.
 Incinerator chimney—see BLDG. I 4187.27.

1321.01 Fees.

The following fees shall be charged for the use of the City incinerators:

(a) Garbage or mixed garbage and burnable rubbish.

1. \$.50 for the first 100 pounds.
2. \$.25 per 100 pounds for the balance of the load.

(b) Burnable rubbish.

1. \$.25 for the first 100 pounds.
2. \$.10 per 100 pounds for the balance of the load. (§ 19.10; Ord. 782-56.)

1321.02 Collection and disposition of moneys.

All moneys payable to the City for any incineration and disposal by the City shall be collected at the office of the Division of Sanitation. All moneys so collected by the Division of Sanitation shall be turned over to the City Treasurer within twenty-four hours from the time it is received. (Ord. 295-60.)

1321.03 Transporting refuse from own place of business.

Any person or agent transporting such refuse from his own place of business to the City incinerator shall not be required to obtain a license as provided for in Chapter 1307, but shall have watertight, fully enclosed receptacles, or a watertight fully enclosed body on his vehicle in which to transport such refuse. (§ 19.10; Ord. 782-56.)

1321.04 Mixing nonburnables with burnables. (Repealed)

(Repealed by Ordinance 511-59 passed April 13, 1959.)

1321.99 Penalty.

Whoever violates this chapter shall be deemed guilty of a misdemeanor and shall be fined not more than two hundred dollars (\$200.00) or imprisoned for not more than ten days, or both.

CHAPTER 1323

City Controlled Landfills

1323.01 Fees.	1323.04 Permit required.
1323.02 Exemptions.	1323.05 Permit, fee; term of permit.
1323.03 Additional Powers of Service Director.	1323.06 Permit suspension or revocation.

Cross Reference.

Appropriating land for garbage disposal—see Ohio R. C. 719.01.

1323.01 Fees.

Providing any person, agent or licensee shall remove refuse to certain City-owned landfills, the following fees shall be charged:

(a) No charge for refuse removed to City-owned landfills hauled in privately owned automobiles.

(b) Charges for the disposal of refuse delivered to City-owned landfills by any other types of hauling equipment will be at the rate of fifteen (15) cents per one hundred (100) pounds; minimum charge one dollar fifty cents (\$1.50).

(c) The Director of Public Service may reject any materials that in his judgment are unsuitable for landfill disposal or which may endanger the public health or safety. (Ord. 449-70.)

1323.02 Exemptions.

The Volunteers of America, the Salvation Army and the Goodwill Industries shall, when removing rubbish to City controlled landfills, be specifically exempted from the charges provided in C. C. 1323.01. (§ 19 18-1; Ord 1545-57.)

1323.03 Additional Powers of Service Director.

The Director of Public Service, in his operation and control of City-owned landfills, shall have the power to:

(1) Prohibit dumping of refuse by City landfill permit holders whenever he determines that the dumping of refuse by such persons on a specific landfill will endanger the economical, sanitary and healthful operation of that landfill.

(2) Prohibit dumping of any refuse by City landfill permit holders whenever he determines

that a specific City-owned landfill is needed for the exclusive use of the City and is inadequate to serve both the City and private haulers.

(3) Require all private haulers except those hauling in privately owned automobiles to obtain a City landfill permit from the Division of Sanitation in order to remove refuse to City-owned landfills. (Ord. 144-67.)

1323.04 Permit required.

No person shall be permitted to remove refuse to City-owned landfills unless that refuse originated within the City limits of Columbus and said person possesses a valid City landfill permit. (Ord 144-67.)

1323.05 Permit, fee; term of permit.

Every person desiring a City landfill permit shall make application to the Director of Public Service through the Division of Sanitation, 425 Short Street, Columbus, Ohio, on such forms as the Director prescribes, stating the applicant's name, address, truck make and license number and such additional information as the Director may deem necessary. No charge will be made for the permit.

Every permit issued hereunder shall expire on March 31 subsequent to the date of issuance and is subject to the powers granted to the Director. (Ord. 144-67.)

1323.06 Permit suspension or revocation.

Any permit granted or issued under this chapter may be suspended or revoked at any time by the Director upon satisfactory proof of noncompliance with the provisions of this chapter (Ord 144-67)

CHAPTER 1325

Dumps

1325.01	Definitions.	1325.05	Prohibited practices.
1325.02	License required.	1325.06	Prohibition.
1325.03	Application, fee, term of license and bond.	1325.07	Inspection.
1325.04	Operational requirements.	1325.08	License suspension or revocation.
		1325.09	(Repealed by Ord. 759-66)

Cross Reference.

Dumps prohibited—see Zon. 3349.01

1325.01 Definitions.

For the purpose of this Chapter the following definitions shall apply:

(a) "Dump" shall mean any site used for the disposal of solid, semi-solid or liquid putrescible or inert wastes, whether domestic or commercial, by depositing the same thereon.

(b) "Clean-fill" shall mean earth and inert building material such as concrete, brick and tile, which may accumulate as a result of construction or demolition operations but shall not include garbage, lumber, paper, shingles or other combustible or putrescible materials.

(c) "Director" shall mean the Director of the Department of Public Service of the City of Columbus.

(d) "Person" shall mean person, firm, partnership, corporation or association. (Ord. 967-63.)

1325.02 License required.

No person shall operate, conduct or maintain a dump within the City of Columbus, unless it is a valid non-conforming use of property under the Zoning Code and said person possesses a valid license to engage in such business or operation. However, nothing in this Chapter is intended to prohibit the deposit of clean fill in a manner not prohibited by any other chapter of this Code. (Ord. 967-63)

Penalty, § 101.99

1325.03 Application, fee, term of license and bond.

Every person desiring a license shall make application to the Director on such forms as the Director prescribes, stating the location of the dump, the name and address of all owners of the property, the name and address of the applicant, the proposed method of operation, the equipment and personnel to be used and such additional information as the Director may deem necessary and each application must be accompanied by a fee of \$25.00. Every license issued hereunder shall expire one year subsequent to the date of issuance.

The application shall be accompanied by a bond given in favor of the City of Columbus, Ohio, in the amount of \$1,500.00, with surety or sureties satisfactory to the Director, which surety or sureties shall be either persons residents of Franklin County, Ohio, or a surety company authorized to do business in Ohio, said bond providing that said applicant shall operate said dump in strict compliance with the provisions of the Columbus City Codes, 1959, and that upon the cessation of operations said dump shall be restored to a clean, sanitary and safe condition. Said bond shall be for the period of time of the license issued pursuant to this Chapter, plus six (6) months thereafter. A certified check in the amount of \$1,500.00 payable to the City of Columbus, Ohio, may be accepted by the Director in lieu of the foregoing bond. The amount of the bond or check is to be paid to the City as stipulated or liquidated damages in case of the failure of licensee to perform as provided herein. (Ord. 552-64.)

1325.04 Operational requirements.

Each dump shall be operated in accordance with the following requirements:

(a) Location: The location must be such that there is no probability of the dump polluting or interfering with natural watercourses. The Director may require certification of the absence of such probability by a competent engineering firm, at the expense of the applicant.

(b) Access: Access roads shall be designed and constructed so that traffic thereon will not be interrupted by ordinary inclement weather and access shall be limited to authorized persons by effectively fencing the site. Access shall be completely restricted by closing an effective gate at the entrance, except when an attendant is on duty.

(c) Facilities: Toilet facilities and drinking water approved by the Director must be available on the site for the use of employees.

(d) Communications: Radio or telephone communication facilities must be provided at the dumping site for use in summoning aid in

an emergency.

(e) Fire protection: Fire protection shall be provided by one of the following means or an alternate method approved by the Director:

(1) An adequate supply of water under pressure available at the site together with suitable hose and nozzles

(2) A stockpile of earth maintained close enough to the working face sufficient to smother any fire that may occur at the dump.

(f) Unloading of wastes. Unloading of wastes shall be controlled by the operator to assure proper placement for required compaction and covering.

(g) Spreading and compacting: Wastes deposited at the dump shall be spread in a shallow layer which, when compacted will be approximately two (2) feet thick. No more than four (4) such compacted layers shall be deposited before an earth fill is added and a setting period of 90 days allowed.

(h) Daily cover. A layer of compacted earth covering material at least six (6) inches in thickness shall be placed over all exposed wastes by the end of each working day.

(i) Intermediate Cover: A layer of compacted earth-covering material at least one (1) foot in thickness shall be placed daily on all working surfaces of the dump, except where operations will continue on the following day.

(j) Final Cover. A layer of compacted earth-covering material of at least two (2) feet in thickness shall be placed over the entire surface of each portion of the final fill not later than one week following the final placement of wastes in that portion. The final cover shall then be graded in a manner to prevent the formation of water pockets.

(k) Blowing paper. The working area shall be sufficiently enclosed by a portable snow-fence or other barrier to prevent the blowing of paper from the working area and the entire surface of the dump site shall be cleaned of loose paper at least once a day.

(1) Dust Control: The dump site and access roads shall be watered, oiled, or otherwise treated whenever necessary to control dust.

(m) Salvaging: When salvaging is permitted, it shall be so organized as not to interfere with prompt and sanitary disposal of wastes. All salvaged materials shall be removed from the dump site by the end of each working day.

(n) Vector Control: Supplemental vector control measures such as spraying or baiting to eliminate insects and rodents shall be carried out promptly by the operator whenever the Director deems such measures necessary for the protection of the public health and safety. (Ord. 967-63.)

Penalty, § 101.99

1325.05 Prohibited practices.

No person shall cause, permit or suffer any of the following on a dump site:

(a) The deposit of sewage solids or liquids, or hazardous materials;

(b) Any fires;

(c) The presence of any domestic animals;

(d) Dumping between the hour of 6:30 P.M. and sunrise from April 1 to September 31 and between the hour of 5:00 P.M. and sunrise from October 1 to March 31 of each calendar year. (Ord. 967-63, Ord. 646-66; Ord. 759-66.)

Penalty, § 101.99

1325.06 Prohibition.

No person shall violate or fail to comply with any provision of this Chapter. (Ord. 967-63.)

Penalty, § 101.99

1325.07 Inspection.

The Director or his authorized representative shall inspect each licensed dump site as he may deem necessary, but in no case less frequent than once in each six (6) months period of operation, in order to determine compliance with the provisions of this Chapter. (Ord. 967-63.)

1325.08 License suspension or revocation.

Any license granted or issued under this Chapter may be suspended or revoked at any time by the Director upon satisfactory proof of non-compliance with the provisions of this Chapter. (Ord. 967-63.)

1325.09 (Repealed by Ord. 759-66)

CITY OF COLUMBUS

OFFICE OF THE CITY CLERK

ORD. No. 449-70—To amend section 1323.01 of the Columbus City Codes, 1959, relative to landfill dumping charges.

WHEREAS, the Department of Public Service, Division of Sanitation, recommends this change in the Columbus City Code; now, therefore, **BE IT ORDAINED BY THE COUNCIL OF THE CITY OF COLUMBUS:**

Section 1. That Section 1323.01 of the Columbus City Codes, 1959, be and the same is hereby amended to read as follows:

1323.01 Fees.

Providing any person, agent or licensee shall remove refuse to certain City owned landfills, the following fees shall be charged:

(a) No charge for refuse removed to City owned landfills hauled in privately owned automobiles.

(b) Charges for the disposal of refuse delivered to City-owned landfills by any other types of hauling equipment will be at the rate of *(1) fifteen (15) cents per one hundred (100) pounds; minimum charge *(2) one dollar fifty cents (\$1.50).

(c) The Director of Public Service may reject any materials that in his judgement are unsuitable for landfill disposal or which may endanger the public health or safety.

Section 2. That existing Section 1323.01 of the Columbus City Codes, 1959, be and the same is hereby repealed.

Section 3. That this ordinance shall take effect and be in force from and after the earliest period allowed by law.

*(1) ten (10)

*(2) one dollar (\$1.00)

Passed April 13, 1970.

WILLIAM P. HOERMLE,
President of Council.

Approved April 13, 1970.

M. E. SENSENBRENNER, Mayor.

Attest: HELEN M. VAN HEYDE, City Clerk.

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CITY OF COLUMBUS

OFFICE OF THE CITY CLERK

ORD. NO. 1468-68 — To amend Section 1303.04 of the Columbus City Codes, 1959 entitled "Location of Receptacles," and to declare an emergency.

Whereas an emergency exists in the usual daily operation of the Division of Sanitation in that it is necessary to enact this legislation in order to preserve the public peace, health, safety and welfare; and

Whereas, it is necessary to change the requirements of the location of receptacles, by the residents of this City in order to facilitate the collection of refuse by the City Division of Sanitation, and

Whereas, it is necessary to amend Section 1303.04 of the Columbus City Code, 1959, in order to achieve this purpose, now, therefore,

Be it ordained by the Council of the City of Columbus:

Section 1. That Section 1303.04 be and the same is hereby amended and enacted to read as follows:

1303.04 Location of Receptacles.

(a) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises, or place of business, in the City, which does not abut on an alley, or which abuts an alley which is not accessible to the City Division of Sanitation packer trucks or which is an unimproved alley, to place all refuse that is to be collected, by the City Division of Sanitation, not more than three (3) feet from the curb or curb line in front of any and every such building, premises, or place of business, in the City, at least one-half ($\frac{1}{2}$) hour before the scheduled date and time of collection, but, said refuse shall, in all cases, be kept outside of any fence, wall, enclosure, dwelling or building on the day of collection.

(b) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises or place of business, in the City, which abuts on any alley which is accessible to the City Division of Sanitation packer trucks, and which is improved, to place all refuse that is to be collected, by the City Division of Sanitation, at the alley edge line, or, not more than three (3) feet inside the property line abutting said alley, in the City, at least one-half ($\frac{1}{2}$) hour before the scheduled date and time of collection, but, in no event shall such refuse be placed inside any area, enclosed by a fence, wall, or other en-

closure, including any dwelling or building on the scheduled collection date and time, provided, however, that at no time shall the above said refuse be placed or stored, in such a manner, as to obstruct or hamper the lawful use of any alley or thoroughway.

(c) At no time, shall any City Division of Sanitation employee go beyond any fence, wall, gate, or any enclosure or into any dwelling or building, for the purpose of removing refuse from any such premises, building or dwelling.

(d) Paragraphs (a) through (c), above, shall not apply to any of the types of containers or situations described in Sections 1303.06, 1303.07 or 1303.11, Columbus City Codes, 1959.

(e) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises, or place of business, in the City, whose refuse is not placed at the point or points of collection, at the scheduled date and time of collection, as set forth in Chapter 1303, Columbus City Codes, 1959, to dispose of the uncollected refuse, at the sole expense of such owner, tenant, agent, lessee, occupant and person in charge of any and every building, premises, or place of business before the time of the next regular scheduled date and time of collection or said refuse shall be placed at the point or points of collection, designated in Chapter 1303, Columbus City Codes, 1959, by the next regularly scheduled date and time of collection.

(f) It shall be the duty of every owner, tenant, agent, lessee, occupant and person in charge of any and every building or premises, in the City to remove any and all empty containers, from the points mentioned in paragraph (a) above, before the end of the next day after the day of actual collection of said refuse.

Sec. 2. That existing Section 1303.04, Columbus City Codes, 1959, be and the same is hereby repealed.

Sec. 3. That for the reasons stated in the preamble hereto, which is hereby made a part hereof, this Ordinance is declared to be an emergency measure and shall take effect and be in force from and after its passage and approval by the Mayor.

Passed November 25, 1968,

WILLIAM P. HOERMLE,

President of Council.

Approved November 25, 1968.

M. E. SENSENBRENNER, Mayor.

Attest: HELEN M. VAN HEYDE, City Clerk.

CITY OF COLUMBUS

OFFICE OF THE CITY CLERK

ORD. No. 701-68—To amend Section 1303.07 and enact Section 1303.11 of Columbus City Codes, 1959, re: establishing fee to be charged for collection and rental of cubic yard refuse containers.

Whereas, there has never been established by ordinance the rate to be charged for the collection of cubic yard refuse containers and the rental of city-owned cubic yard refuse containers, and

Whereas, it has been determined that newly constructed apartment house dwellings of five units or more shall provide cubic yard containers of no less capacity than 3 cubic yards and apartment house dwellings of more than five units shall provide cubic yard containers at the rate of one cubic yard per two units, and said cubic yard containers must be approved by the Director of the Department of Public Service before they may be put into operation, now, therefore,

Be it ordained by the Council of the City of Columbus:

Section 1. That Section 1303.07 be and it is hereby amended and Section 1303.11 of Columbus City Codes, 1959, is hereby enacted to read as follows:

1303.07 Collection From Businesses: Additional Collections.

It shall be the duty of any person operating or in charge of any grocery, meat or fowl store, restaurants, clubs, hotels, institutions, associations, or any place of business having an accumulation amounting to more than one thirty-gallon receptacle of refuse as provided in C.C. 1303.02 during a period of one week or between the interim of the regular residential collection of such refuse by the Department of Public Service to remove or cause to be removed such accumulation to the refuse landfills of the City or any recognized disposal facility. Any such person may enter into contract with the Director of Public Service for such additional collection

and disposal at a charge of: One Dollar (\$1.00) per cubic yard. Any person may enter into a contract with the Director of Public Service for additional collections for apartment houses in addition to the regular weekly collection and disposal at a like charge of One Dollar (\$1.00) per cubic yard.

The charge for the rental of the below listed cubic yard containers owned by the City, shall be as follows plus any charge of \$1.00 per cubic yard for collection.

Type of Box	Cubic Yard Size	Rate Per Month
Daybrook — Roto-Pac	3	5.75
	4	6.50
	5	8.00
	6	9.66
Dempster-Dumpster	3	6.70
	6	9.55
	10	16.03
	12	13.96

1303.11 Apartment House Cubic Yard Containers

Any newly constructed apartment dwellings of five units or more shall provide cubic yard containers of no less capacity than 3 cubic yards and upwards at the rate of one cubic yard per every two apartment units. All such cubic yard containers and their location must be approved by the Director of Public Service through the Division of Sanitation before they are put into operation.

Sec. 2. That existing Section 1303.07, Columbus City Codes, 1959, be and is hereby repealed.

Sec. 3. That this ordinance shall take effect and be in force from and after the earliest period allowed by law.

Passed June 3, 1968.

WILLIAM P. HOERMLE,

President of Council.

Approved June 3, 1968.

M. E. SENSENBRENNER, Mayor.

Attest: HELEN M. VAN HEYDE, City Clerk.

APPENDIX B

OHIO SOLID WASTE DISPOSAL LAWS, REGULATIONS, CODES, AND SUGGESTED MODEL ORDINANCES

**OHIO
SOLID WASTE
DISPOSAL
LAW AND
REGULATIONS**



1970

**OHIO DEPARTMENT OF HEALTH
450 EAST TOWN STREET
COLUMBUS, OHIO**

FOREWORD

The Ohio Department of Health has prepared this booklet for the convenience of those concerned with or interested in the statutory law and regulations which govern and regulate the disposal of solid wastes.

The Solid Wastes Disposal Act was passed by the 107th Ohio General Assembly in 1967. The Regulations, required by the Act, were adopted by the Public Health Council in May, 1968.

Portions of the law and regulations pertaining to plans for new sites and facilities became effective July 1, 1968. Licensing requirements became effective January 1, 1969 and limitations on open burning and open dumping carried an effective date of July 1, 1969.

Enforcement of the law, including licensing and inspecting, is a function of the local health department. Site investigation, plan approvals, surveys of local health department programs and technological consultation are responsibilities of the Ohio Department of Health.

OHIO SOLID WASTE DISPOSAL LAW

Section 3734.01 Definitions.

As used in sections 3734.01 to 3734.11, inclusive, of the Revised Code:

(A) "Board of health" means the board of health of a city or general health district, or the authority having the duties of a board of health in any city as authorized by section 3709.05 of the Revised Code.

(B) "Director" means the director of the department of health.

(C) "Health district" means a city or general health district as created by or under authority of Chapter 3709. of the Revised Code.

(D) "Public health council" means the public health council as created by section 3701.33 of the Revised Code.

(E) "Solid wastes" means such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations and slag and other substances which are not harmful or inimical to public health, and includes garbage, combustible and noncombustible material, street dirt, and debris.

(F) "Solid waste disposal" means final disposition of solid wastes by means acceptable under regulations adopted by the public health council under section 3734.02 of the Revised Code.

(G) "Person" means the state, any political subdivision, public or private corporation, individual, partnership, or other entity.

(H) "Open burning" means the burning of solid wastes in an open area or burning of solid wastes in a type of chamber or vessel which is not approved in regulations adopted by the public health council.

(I) "Open dumping" means the depositing of solid wastes into a body or stream of water or onto the surface of the ground without compacting the wastes and covering with suitable material to adapt as prescribed by regulations adopted by the public health council under section 3734.02 of the Revised Code.

Section 3734.02 Public health council regulations.

(A) The public health council, subject to sections 119.01 to 119.13, inclusive, of the Revised Code, shall adopt regulations having uniform application throughout the state governing solid waste disposal sites and facilities and the inspections and issuance of licenses for all solid waste disposal sites and facilities, in order to assure that such sites and facilities will be located, maintained, and operated in a sanitary manner so as not to create a nuisance, cause or contribute to water pollution, or create a health hazard. Such regulations shall not concern or relate to personnel policies, salaries, wages, fringe benefits, or other conditions of employment of employees of persons owning or operating solid waste disposal sites and facilities.

(B) The director shall prescribe and furnish the application for license, inspection record, and other forms necessary to administer and enforce sections 3734.01 to 3734.11, inclusive, of

the Revised Code.

(C) No person shall establish a solid waste disposal site or facility after the effective date of the regulations adopted by the public health council under section 3734.02 of the Revised Code without first submitting to and having approved by the director detail plans of the site, facility, and method of operation.

(D) Sections 3734.01 to 3734.11, inclusive, of the Revised Code and regulations adopted pursuant thereto are not applicable to single family residential premises or to the temporary storage of solid wastes prior to their collection for disposal or to the collection of solid wastes by a political subdivision or a person holding a franchise or license from a political subdivision of the state.

Section 3734.03 Open dumping and open burning.

One year following the effective date of regulations initially adopted by the public health council under section 3734.02 of the Revised Code, all open dumping and open burning shall be conducted only under such conditions as prescribed by such regulations.

Section 3734.04 Inspection, licensing, and enforcement.

The board of health of each district shall provide for the inspection, licensing, and enforcement of sanitary standards for solid waste disposal facilities and sites in conformity with sections 3734.01 to 3734.11, inclusive, of the Revised Code.

Section 3734.05 License required; transfer; approval of plans.

(A) No person shall operate or maintain a solid waste disposal site or facility after January 1, 1969, without a license issued by the board of health of the health district in which such site or facility is located.

(B) During the month of December, but before the first of January of the next year, every person proposing to continue to operate an existing solid waste disposal site or facility shall procure a license to operate such site or facility for such year from the board of health of the health district in which the site or facility is located. A person who has received a license, upon sale or disposition of a solid waste disposal site or facility may, upon consent of the board of health and the director, have the license transferred to another person.

(C) Each person proposing to open a new solid waste disposal site or facility shall submit plans and specifications to the department of health for required approval under the regulations adopted by the public health council pursuant to section 3734.02 of the Revised Code at least sixty days before proposed operation of the site or facility and concurrently make application for a license with the board of health of the health district in which the proposed site or facility is to be located.

Section 3734.06 Fee; special fund.

(A) The annual fee for the license required by section 3734.05 of the Revised Code shall not exceed five hundred dollars and shall be paid at the time application is made for a license. Such fee includes the cost of licensing and all inspections. The board of health may exempt the state and any political subdivision of the state from the payment of the annual license fee.

(B) The license fees shall be paid into a special fund which is hereby created in each health district and shall be used only by the board of health for the purpose of administering and enforcing sections 3734.01 to 3734.11, inclusive, of the Revised Code and the regulations adopted thereunder.

Section 3734.07 Inspection; certification; right of entry.

(A) Before a license is initially issued and annually thereafter, or more often if necessary, the board of health shall cause each solid waste disposal facility and site to be inspected and a record to be made of each such inspection, and require each solid waste disposal facility and site in the health district to satisfactorily comply with sections 3734.01 to 3734.11, inclusive, of the Revised Code.

(B) Within thirty days after the issuance of a license, the board of health shall certify to the director that the solid waste facility or site has been inspected and is in satisfactory compliance with sections 3734.01 to 3734.11, inclusive, of the Revised Code. Each board of health shall provide the director with such other information as he may require from time to time.

(C) The board of health or its authorized representative and the director or his authorized representative, upon proper identification and upon stating the purpose and necessity of an inspection, may enter any solid waste disposal site or facility at any reasonable time for the purpose of making inspections required by division (A) of this section.

Section 3734.08 Annual survey; approved list; administrated by director.

(A) The director shall survey annually each health district licensing solid waste disposal sites and facilities as provided by section 3734.05 of the Revised Code to determine whether there is substantial compliance with sections 3734.01 to 3734.11, inclusive, of the Revised Code, and upon determining that there is substantial compliance, shall place such health district upon an approved list. The director shall make a resurvey when in his opinion such is necessary, and shall remove from the approved list any health district not substantially complying with sections 3734.01 to 3734.11, inclusive, of the Revised Code.

(B) If after a survey or resurvey is made as provided by this section, the director determines that a health district is not eligible to be placed on the approved list or to continue on such list, he shall certify such fact to the board of health of the health district and the director shall administer and enforce sections 3734.01 to 3734.11, inclusive, of the Revised Code, in such health district until such time as the health district is placed on the approved list. Whenever the director is so required to administer and enforce sections 3734.01 to 3734.11, inclusive, of the Revised Code, in any health district, he is hereby vested with all the authority and all the duties granted to or imposed upon a board of health by sections 3734.01 to 3734.11, inclusive, of the Revised Code, in such health district. All fees required to be paid to a board of health by section 2734.06 of the Revised Code and all previous fees paid to the board which have not been expended or encumbered shall be paid to the director and by him deposited in the state treasury to the credit of a special fund to be used by him for the purpose of administering and enforcing sections 3734.01 to 3734.11, inclusive, of the Revised Code.

Section 3734.09 Suspension, revocation, denial of license; hearing, appeal.

The board of health of a health district in which a solid waste disposal facility or site is located may suspend, revoke, or deny a license for violation of sections 3734.01 to 3734.11, inclusive, of the Revised Code. Unless there is an immediate serious public health hazard, no suspension, revocation, or denial of a license shall be made effective until the operator of the solid waste disposal facility has been given notice in writing of the specific violations and a reasonable time to make corrections.

Before the board of health may suspend, revoke, or deny a license to a political subdivision, it shall afford the political subdivision a hearing to which time the political subdivision may present evidence concerning its financial ability to comply with the regulations adopted by the public health council pursuant to section 3734.02 of the Revised Code. Such evidence may include and the board of health shall consider the existing limitations on the taxing power and debt limitations of the political subdivision, the extent to which the political subdivision is levying taxes and has incurred debt, and the other governmental and proprietary needs of the political subdivision as such needs affect its remaining authority to levy taxes and incur debt to comply with the regulations adopted by the public health council. After considering the evidence the board of health may grant the political subdivision a conditional license to operate a solid waste disposal site or facility, without full compliance with the regulations adopted by the public health council and establish a reasonable time for full compliance by said political subdivision, which time may be extended by the board of health from time to time for good cause. Appeal from any suspension, revocation, or denial of a license shall be made in accordance with sections 119.01 to 119.13, inclusive, of the Revised Code, where such action is proposed by the director, and in accordance with Chapter 2506, of the Revised Code when such action is taken by

a board of health.

Section 3734.10 Prosecution; injunction.

The prosecuting attorney of the county or the city solicitor or attorney of the city, upon complaint of the respective board of health of the health district or the director, shall prosecute to termination or bring an action for injunction against any person violating sections 3734.01 to 3734.11, inclusive, of the Revised Code. The common pleas court in which an action for injunction is filed has the jurisdiction to grant injunctive relief upon a showing that the respondent named in the petition is operating a solid waste disposal site or facility in violation of sections 3734.01 to 3734.11, inclusive, of the Revised Code.

Section 3734.11 Prohibition; willfully hindering.

(A) No person shall violate sections 3734.01 to 3734.11, inclusive, of the Revised Code, or the regulations adopted thereunder.

(B) No person shall refuse entry to a board of health or its authorized representatives or the director or his authorized representatives, as authorized by section 3734.07 of the Revised Code, or otherwise willfully hinder or thwart the board or its authorized representatives or the director or his authorized representatives in the exercise of any authority, or performance of any duty under sections 3734.01 to 3734.11, inclusive, of the Revised Code.

Section 3734.99 Penalty.

Whoever violates section 3734.01, 3734.02, 3734.03, 3734.04, 3734.05, 3734.06, 3734.07, 3734.08, 3734.09, 3734.10 or 3734.11 of the Revised Code shall be fined not more than one hundred dollars for each day that such violation is continued.

OHIO SOLID WASTE DISPOSAL REGULATIONS

CHAPTER HE-24

Regulations HE-24-01 to HE-24-12, inclusive, of the Ohio Sanitary Code, relative to the disposal of solid wastes.

Authority: Sections 3734.01 to 3734.11, inclusive, of the Revised Code.

HE-24-01. Definitions.

As used in regulations HE-24-01 to HE-24-12, inclusive, of the Ohio Sanitary Code:

(A) "Board of Health" means the board of health of a city or general health district, or the authority having the duties of a board of health in any city as authorized by section 3709.05 of the Revised Code.

(B) "Composting" is the controlled biological decomposition of solid organic waste material under aerobic conditions.

(C) "Director" means the director of the Ohio Department of Health.

(D) "Facility" means any device, mechanism, or equipment used for conversion, or incineration of solid wastes other than solid wastes produced on the premises on which the facility is located.

(E) "Health Commissioner" means the person occupying the office created by section 3709.11 and section 3709.14 of the Revised Code, or his authorized representative.

(F) "Health district" means a city or general health district as created by or under authority of Chapter 3709. of the Revised Code.

(G) "Incinerator" is a chamber, vessel, device, apparatus, or structure designed to burn solid wastes under controlled, nuisance-free conditions and at a relatively high temperature for the purpose of reducing the combustible components to an inert residue reasonably free of organic material and which can be readily disposed of.

(H) "Open burning" means the burning of solid wastes in an open area or burning of solid wastes in a type of chamber or vessel which is not approved in regulations adopted by the public health council.

(I) "Open dumping" means the depositing of solid wastes into a body or stream of water or onto the surface of the ground without compacting the wastes and covering with suitable material

to a depth as prescribed by regulations adopted by the public health council under section 3734.02 of the Revised Code.

(J) "Person" means the state, any political subdivision, public or private corporation, individual, partnership, or other entity.

(K) "Sanitary landfill" is a method of disposing of solid wastes on land without creating nuisances or hazards to public health by utilizing the principles of engineering to confine the solid wastes to the smallest practical area, to reduce the solid wastes to the smallest practical volume and to cover such wastes.

(L) "Site" means any location, place, or tract of land used for stabilization, conversion, utilization, incineration, or burial of solid wastes other than those solid wastes produced on the premises.

(M) "Solid wastes" means such unwanted residual solid or semisolid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining, or demolition operations and slag and other substances which are not harmful or inimical to public health, and includes garbage, combustible and noncombustible material, street dirt, and debris.

(N) "Solid waste disposal" means final disposition of solid wastes by means acceptable under regulations adopted by the public health council under section 3734.02 of the Revised Code.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-02. Interpretation of adjectives and adverbs.

For the purpose of determining the adequacy of city and general health districts, which procedure is provided for by section 3734.08 of the Revised Code, all adjectives and adverbs such as acceptable, accessible, adequate, detrimental, hazardous, operational, practicable, satisfactorily, thoroughly, or suitable, used in Chapter HE-24 of the Ohio Sanitary Code, to qualify a person, site, facility, device, mechanism, equipment, or structure, shall be as determined by the director.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-03. License required.

Application for a license to operate a solid waste disposal site or facility after January 1, 1969 shall be made and the license issued in accordance with sections 3734.01 to 3734.11, inclusive, of the Revised Code.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-04. Location of sites and facilities -- general.

(A) Solid waste disposal sites and facilities shall not be located in areas where they constitute a hazard to the quality of the ground water or surface water resources or create a health hazard.

(B) No person shall place or dispose of solid wastes in any ditch, stream, river, lake, pond, or other watercourse, except those waters which do not combine or effect a junction with natural surface or underground waters, or upon the banks thereof where the same is liable to be washed into the water by ordinary flow or annual floods. This division does not apply to the placing of any substance under authority of a permit issued by the water pollution control board.

(C) A solid waste disposal site or facility shall not be located in an area where operation would result in pollution of the air in excess of the air quality standards established for that area by the air pollution control board pursuant to section 3704.03 of the Revised Code. This division does not apply to operations conducted under the authority of a permit issued by the air pollution control board.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-05. Disposal methods.

Methods for the disposal, destruction, stabilization, conversion, or utilization of solid wastes shall be by the following approved methods or any combination thereof:

(A) Sanitary landfill

(B) Use of an incinerator

(C) Composting

(D) Garbage feeding to swine and poultry

(E) Other methods not covered by Chapter HE-24 of the Ohio Sanitary Code, and which may be developed and demonstrated to be capable of fulfilling the basic requirements for minimizing potential for pollution of surface water or ground water, or creation of a nuisance or health hazard, and which have been approved by the director after having been thoroughly investigated by the department of health. Plans for any such methods shall be submitted to the department of health for approval as required by division (C) of section 3734.05 of the Revised Code.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-06. Limited and prohibited disposal methods.

(A) One year following the effective date of Chapter HE-24 of the Ohio Sanitary Code, all open dumping is prohibited except when specifically approved by and under conditions acceptable to the board of health and conducted in accordance with plans approved by the director. Limiting conditions under which open dumping may be permitted shall be clearly stated on the license required by Chapter 3734. of the Revised Code.

(B) One year following the effective date of Chapter HE-24 of the Ohio Sanitary Code, all open burning is prohibited except when specifically approved by and under conditions acceptable to the board of health and conducted in accordance with plans approved by the director. Limiting conditions under which open burning may be permitted shall be clearly stated on the license required by Chapter 3734. of the Revised Code.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-07. Sanitary landfill site approval.

A person planning to establish, expand, or significantly alter a sanitary landfill or convert an open dump operation to a sanitary landfill shall submit plans, information, and specification relative to the site to the director for approval. Such plans, information, and specifications shall be prepared in a manner acceptable to the director in detail sufficient to assure that a sanitary landfill operated at such site will not create a nuisance or health hazard, or cause or contribute to pollution of the surface water or ground water.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-08. Sanitary landfill planning.

Information, plans and specifications pertinent to the design, operation, maintenance, expansion, or significant alteration of a sanitary landfill or conversion of an open dump to a sanitary landfill, shall be submitted to the director for approval at least sixty (60) days before proposed operation of the site, and shall be commensurate with the scope of the operation, location, physical and health hazards involved, and shall be prepared in a manner satisfactory to the director.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-09. Sanitary landfill operation.

(A) All operations of the sanitary landfill shall be in accordance with the approved plans and specifications.

(B) The operator shall not permit access to the sanitary landfill site except when operating personnel are on the site, and shall not permit loitering at any time.

(C) Unloading of solid wastes on the site shall be confined to the smallest practical area and shall be under the supervision of competent operating personnel. Portable fences shall be used when necessary to prevent litter blowing from the unloading area.

The operational portion of the sanitary landfill and the surrounding area shall be policed as necessary to collect all scattered litter.

(D) Equipment adequate in size and quantity, and in operational condition, shall be available at the site at all times to operate the sanitary landfill according to the approved plan. Adequate provisions shall be made by the operator for servicing, maintaining, and repairing

equipment.

(E) As solid waste is admitted to the site, it shall be spread as soon as practicable and compacted in layers the depth of which depends on the type of solid wastes and the compaction equipment. The layers shall be well compacted.

(F) Cover material shall be of earth or other material acceptable to the health commissioner and shall be applied at the end of each day's operation or more frequently when necessary, unless otherwise provided in the plan approved by the director, and at a compacted depth so as to prevent insect and rodent attraction, breeding, and emergence; blowing litter; release of offensive odors; fire hazards; unsightly appearance and which will permit minimal percolation of surface water.

(G) The completed sanitary landfill shall be graded to serve its intended purpose and completed in accordance with the approved plans and specifications.

(H) Sewage solids and liquids, and other liquid or hazardous substances in quantities considered by the supervisor of the operation of the sanitary landfill to be detrimental to the normal operation of the sanitary landfill shall not be deposited in that portion of a sanitary landfill used principally for the disposal of solid wastes resulting from community operations. Such substances and similar industrial wastes may be deposited on a separate area of a solid waste disposal site in a manner described in plans approved by the director.

(I) All necessary operations of the sanitary landfill shall be carried out promptly in a systematic manner so conditions are unfavorable for the harborage and production of insects and rodents. Supplemental effective vector control measures shall be initiated immediately by the operator when deemed necessary by the health commissioner.

(J) Salvaging shall not be conducted except with the written approval of and in a manner acceptable to the health commissioner and approved in plans submitted to the director.

(K) The operator shall exclude live domestic and farm animals from the operating area of the sanitary landfill site.

(L) Arrangements shall be made for adequate fire protection.

(M) Solid wastes which are burning or are at a temperature likely to cause fire or are of a highly flammable or explosive nature shall not be deposited in the operating area of the sanitary landfill. Such material shall be deposited in a separate location at a sufficient distance from the operating face of the sanitary landfill to prevent fires from spreading to the normal fill area and shall be immediately covered with a sufficient amount of earth or other material necessary to prevent explosion and to extinguish or prevent fire.

(N) The operator shall maintain a daily log of information pertinent to the operation of the sanitary landfill. A copy of the plans and specifications as approved by the director, the log, and a plan of the completed sanitary landfill shall be on file and shall be available to the director and the health commissioner upon request.

(O) A sanitary landfill shall be operated under the close supervision of responsible individuals who are thoroughly familiar with the approved plans, specifications, and operational procedures for that sanitary landfill.

(Adopted May 18, 1968, effective July 1, 1968.)

HE-24-10. Incineration.

(A) Information, plans, and specifications pertinent to the design, operation, and maintenance of an incinerator to be constructed and operated after the effective date of Chapter HE-24 of the Ohio Sanitary Code, shall be submitted to the director for approval at least sixty (60) days prior to the construction and operation of the facility, and shall be commensurate with the scope of the operation, location, physical and health hazards involved, and shall be prepared in a manner satisfactory to the director.

(B) An incinerator shall be operated under the close supervision of responsible individuals who are thoroughly familiar with the approved plans, specifications, and the operating instructions of the designer.

(C) An incinerator shall be operated so that the resulting residue will be substantially free of organic and putrescible material and that pollution of the air will not exceed the air quality standards established for the area by the air pollution control board pursuant to sec-

tion 3704.03 of the Revised Code. This division does not apply to operations conducted under the authority of a permit issued by the air pollution control board.

(D) The site for and method of incinerator residue disposal shall be approved by the director in order to assure that the method of disposal will not create a nuisance, cause or contribute to water pollution, or create a health hazard.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-11. Composting.

(A) Information, plans, and specifications pertinent to the design, maintenance, and operation of a composting facility to be constructed and operated after the effective date of Chapter HE-24 of the Ohio Sanitary Code, shall be submitted to the director for approval at least sixty (60) days prior to the construction and operation of the facility, and shall be commensurate with the scope of operation, location, physical, and health hazards involved and shall be prepared in a manner satisfactory to the director.

(B) A composting facility shall be operated under the close supervision of responsible individuals who are thoroughly familiar with the approved plans, specifications, and operational procedures.

(C) Solid wastes intended for composting shall be maintained in a condition free of nuisance, insects, and rodents prior to, during, and after the composting operation.

(Adopted May 18, 1968; effective July 1, 1968.)

HE-24-12. Garbage feeding to swine and poultry.

(A) Sites and facilities for feeding garbage to swine and poultry shall be constructed and operated in accordance with sections 942.01 to 942.13, inclusive, of the Revised Code and the regulations adopted pursuant thereto.

(B) Such sites and facilities are exempt from sections 3734.01 to 3734.11, inclusive, of the Revised Code and the regulations adopted pursuant thereto.

(Adopted May 18, 1968; effective July 1, 1968.)

OHIO REVISED CODE

CHAPTER 343

COUNTY GARBAGE AND REFUSE DISPOSAL DISTRICTS

- 343.01 Garbage and refuse disposal districts and systems; engineers; bonds and notes; regulations; prohibitions.
- 343.02 Jurisdiction over garbage and refuse disposal district.
- 343.03 Garbage and refuse disposal districts which include territory of municipal corporations.
- 343.04 General plan for garbage and refuse disposal district.
- 343.05 Adoption of improvement resolution.
- 343.06 Improvement to begin after lapse of ten days of disposition by court.
- 343.07 Payment of cost of improvement.
- 343.08 Rates and charges; contract with municipal corporation.
- 343.99 Penalty.

343.01 Garbage and refuse disposal districts and systems; engineers; bonds and notes; regulations; prohibitions.

(A) Any board of county commissioners may, by resolution, lay out, establish and maintain one or more garbage and refuse disposal districts within its respective county, and may cause such surveys as are necessary to be made by a competent sanitary engineer, for the determination of the proper boundaries of such districts. The boundaries of any such district may include the entire county, may be revised from time to time, and may include a part or all of the territory within a municipal corporation when authorized by ordinance of the legislative authority of such municipal corporation. Each such district shall be designated by an appropriate name or number. The board may acquire, by purchase or lease, construct, improve, enlarge, replace, maintain, and operate such garbage and refuse collection systems within any such district and such garbage and refuse disposal plants and facilities within or without any such district as are necessary for the protection of the public health.

The sanitary engineer or sanitary engineering department of such county shall, in addition to other duties assigned to such engineer or department, assist the board in the performance of its duties under sections 343.01 to 343.08, inclusive, of the Revised Code, and shall be charged with such other duties and services in relation thereto as the board prescribes. The board may employ registered professional engineers to assist the sanitary engineer in such duties and the board may also employ financial advisers and such other professional services as it deems necessary to assist it in the construction, financing, and maintenance of garbage and refuse collection or disposal facilities. Such contracts of employment shall not require the certificate provided in section 5705.41 of the Revised Code. Payment for such services may be made from the general fund or any other fund legally available for such use at such times as are agreed upon or as determined by the board, which funds may be reimbursed from the proceeds of bonds or notes issued to pay the cost of any improvement to which such services related.

The board may issue bonds or bond anticipation notes of the county to pay the cost of preparing general and detailed plans and other data required for the construction of garbage and refuse disposal facilities. Such bonds and notes shall be issued in accordance with sections 133.01 to 133.65, inclusive, of the Revised Code, except that the maximum maturity of bonds issued for such purpose shall not exceed ten years. Bond anticipation notes may be paid from the proceeds of bonds issued either to pay the cost of such garbage and refuse disposal facilities or to pay the cost of such plans and other data.

The board may make, publish, and enforce rules and regulations for the construction, maintenance, protection, and use of garbage and refuse collection and disposal facilities. Such rules and regulations shall not be inconsistent with the rules and regulations of the department of health. No garbage and refuse disposal system plant or facilities shall be constructed in any county outside municipal corporations by any person, firm, or corporation until the plans

and specifications for such plant or facilities have been approved by the board. Such construction shall be done under the supervision of the county sanitary engineer, and any person, firm, or corporation, proposing or constructing such improvements, shall pay to the county all expenses incurred by the board in connection therewith. The sanitary engineer may enter upon any public or private property for the purpose of making surveys or examinations necessary for the laying out of garbage and refuse disposal districts or for designing disposal plants or facilities. No person, firm, or corporation shall forbid or interfere with the sanitary engineer or his authorized assistants entering upon such property for such purpose. The board shall, if actual damage is done to property by the making of such surveys and examinations, pay the reasonable value of such damage to the owner of the property damaged, and such cost shall be included in the financing of the improvement for which such surveys and examinations are made.

The board may enter into a contract with any individual, partnership, or private corporation for the operation and maintenance of any such facilities, regardless of whether such facilities are owned or leased by the county or the contractor.

(B) No person shall tamper with or damage any garbage and refuse disposal plant or facilities constructed under sections 343.01 to 343.03, inclusive, of the Revised Code, or any apparatus or accessory connected therewith or pertaining thereto, or fail or refuse to comply with the rules and regulations prescribed by such board, or refuse to permit the inspection or examination by the sanitary engineer. All fines imposed and collected shall be paid into the county treasury and credited to the improvement or maintenance fund of such district as the board directs.

(1969 S 314. Eff. 7-23-69. 131 v H 161)

343.01 former GC 6600.

Penalty for (B), 343.99 (A).

343.02 (6600-1). Jurisdiction over garbage and refuse disposal district.

Whenever any portion of a garbage and refuse disposal district is incorporated as or annexed to a municipal corporation, the area so incorporated or annexed shall remain under the jurisdiction of the board of county commissioners for garbage and refuse disposal purposes, until such disposal facilities for the area, for which detailed plans have been prepared and the resolution declaring the necessity thereof has been adopted by the board, are completed and the principal of an interest on any bonds issued to finance such improvement are paid in full, or until the board abandons such projects.

Such incorporation or annexation of any part of a garbage and refuse disposal district shall not interfere with or render illegal any issue of bonds made by the board under section 343.07 of the Revised Code to provide payment for the cost of construction and maintenance of any such facilities for the area. The board may contract with any municipal corporation located within or outside the district for the furnishing of the garbage and refuse disposal services of such district, but contracts with municipal corporations for territory outside the county shall be limited to surplus capacity of the garbage and refuse disposal facilities of the county remaining after the needs of the county have been met, and any municipal corporation so contracting shall act by ordinance or resolution of its legislative authority and without the necessity of competitive bidding.

The board of county commissioners may contract with any board of township trustees which has availed itself of sections 505.27 to 505.33, inclusive, of the Revised Code, and with boards of education, for the furnishing of garbage and refuse disposal services to said townships and boards of education. Any board of education availing itself of such service shall act by resolution of its board. (131 v H 161. Eff. 9-22-65)

343.03 (6600-2). Garbage and refuse disposal districts which include territory of municipal corporations.

The authority of the board of county commissioners to provide garbage and refuse disposal facilities and maintain and operate them within garbage and refuse disposal districts

which include any part of the territory within one or more municipal corporations shall be the same as provided by law within garbage and refuse disposal districts wholly outside municipal corporations, provided the plans and specifications and the estimated cost to be borne by such municipal corporation or its inhabitants shall be approved by the legislative authority of the municipal corporation prior to the letting of any contract for the construction thereof.

At any time after a garbage and refuse disposal district is established comprising or including any part of the territory within any municipal corporation, its legislative authority may, by ordinance or resolution, authorize the board to proceed with the construction or the maintenance, repair, and operation of such improvement in the same manner as provided by law for improvements in garbage and refuse disposal districts wholly outside municipal corporations.

343.04 (6600-3). General plan for garbage and refuse disposal district.

The board of county commissioners may, after the establishment of any garbage and refuse disposal district, have a general plan of garbage and refuse disposal facilities for such district prepared by the county sanitary engineer. After such general plan has been approved by the board, it shall have the engineer prepare detailed plans, specifications, and estimates of the cost of such improvement, which, upon approval by the board, shall be carefully preserved in the office of the board or the engineer, and shall be open to inspection by all persons interested in such improvement. After approval of the detailed plans, specifications, and estimates of cost, the board shall adopt a resolution declaring that such improvement is necessary for the preservation and promotion of public health and welfare, designating the character of the improvement referring to the plans, specifications, and estimates of cost, stating the place where such plans, specifications, and estimates are on file and may be examined, and stating what part of the costs of such improvement shall be paid by the county at large and what part shall be paid by the issuance of bonds payable from the revenues of the improvement as provided by section 343.07 of the Revised Code.

Such resolution shall contain a description of the boundaries of the garbage and refuse disposal district and shall designate when and where objections to the improvement or the boundaries of the district will be heard by the board. The date of such hearing shall not be less than twenty-four days after the date of the first publication of such resolution. The board shall cause such resolution to be published once a week, for two consecutive weeks, in a newspaper of general circulation within the county. Notice of such hearing shall be mailed to the clerk of any municipal corporation any part of which lies within such district. A hearing shall be granted by the board to all parties interested at the time and place fixed by such resolution and notice. Written objections to or indorsements of the proposed improvement or the boundaries of the district shall be received by the board for a period of five days after the hearing, and no action shall be taken by the board until after such period has elapsed. The minutes of the hearing, showing the persons who appear in person or by attorney and all written objections, shall be entered on the journal of the board and shall be preserved and filed in its offices. (128 v 773. Eff. 10-12-59.)

If the boundaries of the district are amended so as to include any property not included in the district as originally established, notice and hearing shall be given to the owners of such property in the same manner as for the original hearing under section 343.04 of the Revised Code. If the owners of all property added to the district by amendment to the original boundaries thereof waive objection to such amendment, in writing, no further notice or hearing shall be given. After the board ratifies the plans for the improvement and the boundaries of the district as originally presented or as amended, and if it decides to proceed therewith, a resolution, to be known as the improvement resolution, shall be adopted by the board. Such resolution shall declare the determination of the board to proceed with the construction of the improvement provided for in the resolution of necessity, in accordance with the plans and specifications as ratified or amended, and whether bonds shall be issued as provided by section 343.07 of the Revised Code to pay the cost of said improvement.

343.06 (6600-5). Improvement to begin after lapse of ten days or disposition by court.

After the passage of an improvement resolution under section 343.05 of the Revised Code no further action shall be taken or work done in connection therewith until ten days have elapsed. If at the expiration of such period no appeal has been effected by any property owner as provided in sections 6117.09 to 6117.24, inclusive, of the Revised Code, the board of county commissioners may proceed to issue and sell bonds to construct such improvement. If at the end of ten days any owner of property to be charged for garbage or refuse disposal service has effected such an appeal, such work shall not proceed until the matters appealed from are disposed of by the probate court.

343.07 (6600-6). Payment of cost of improvement.

The board of county commissioners may issue bonds of the county for the purpose of paying a part or the whole cost of the acquisition, construction, or repair of any improvement provided for in sections 343.01 to 343.08, inclusive, of the Revised Code, including the expenses of the sanitary engineer and all other expenses necessary and incidental thereto. The cost of any such improvement shall include, without limiting such cost, the cost of acquiring any necessary real estate, and any trucks, rolling stock, or equipment necessary for the proper operation of the improvement. Such bonds shall state the particular improvement on account of which they are issued and the date of the resolution of the board authorizing their issuance. Such bonds shall be of such denominations and shall mature as provided in the improvement resolution, but shall mature no later than forty years from the date thereof, and shall be payable in annual or semiannual installments, beginning not later than five years from the date thereof, in such principal amounts that the total principal and interest payments in each year shall be substantially equal.

The board shall, in the legislation authorizing the issuance of such bonds, provide that they shall not constitute general obligations of the county or be secured by the general credit and taxing power of the county, but shall be payable solely, as to principal and interest, from the revenues of the improvement, constructed with the proceeds of the sale of the bonds, as derived from the rates or charges established for such services under section 343.08 of the Revised Code, in which event the board shall covenant to fix rates or charges sufficient to provide adequate funds for such purpose, after payment of the cost of management, maintenance, and operation of such garbage and refuse collection and disposal plant and facilities.

The surplus net revenues in any year, over and above the amount of principal and interest payable in that year and such additional amount as is provided in the resolution authorizing said bonds to be held as a reserve for debt service, may be used for the enlargement and replacement of such garbage and refuse collection and disposal facilities.

In addition to the power to issue such bonds, the board may issue bonds of the county, in compliance with sections 133.01 to 133.65, inclusive, of the Revised Code, to pay for that part of the cost of such improvement which is to be borne by the county at large, and may provide that such bonds shall be general obligations of the county payable from taxes to be levied upon all the taxable property therein, provided that such general obligation bonds may also be made payable primarily from the net revenues derived from such improvement and such net revenues may be pledged for the payment of the interest and principal thereof. (128 v 773. Eff. 10-12-59.)

343.08 Rates and charges; contract with municipal corporation.

The board of county commissioners may fix reasonable rates or charges to be paid by every person, firm, corporation, board of township trustees, or board of education which is the owner of premises to which the collection or disposal of garbage and refuse or both is made available, and may change such rates or charges whenever it deems it advisable. Charges for collection or disposal or both shall be made only against lots or parcels which are improved, or in the process of being improved, with at least one permanent, portable, or temporary building. When any such charges are not paid, the board shall certify them to the county auditor, who shall place them upon the real property duplicate against the property served by such collection or disposal, or both, and such charges shall be a lien on such property from the date they are placed

upon the real property duplicate by the auditor, and shall be collected in the same manner as other taxes. The county need not fix a rate or charge against property if it operates no collection system.

Where a county owns a garbage and refuse disposal plant or facility, either without a county collection system or in conjunction therewith, the board of county commissioners may fix reasonable rates or charges for the use of such plant or facility by political subdivisions, corporations, private collectors and other users and may contract with any public authority or with independent contractors for the collection of garbage and refuse in any part of any district for disposal in any plant or facility. The cost of collection or disposal or both under such contracts may be paid by rates or charges fixed and collected under this section or by rates and charges fixed under such contracts and collected by the contractors.

All moneys collected by the county as rates or charges for garbage and refuse collection or disposal or both in any district shall be paid to the county treasurer and kept in a separate and distinct fund to the credit of such district. Such fund shall be used for the payment of the cost of the management, maintenance, and operation of the garbage and refuse collection and disposal facilities of such district, and any surplus may be used for the enlargement or replacement of such facilities, and for the payment of the interest and principal on bonds and bond anticipation notes issued pursuant to section 343.07 of the Revised Code, but in no case shall money so collected be expended otherwise than for the use and benefit of such district.

The board may, in lieu of operating and maintaining garbage and refuse collection or disposal facilities of the district with county personnel, enter into a contract with a municipal corporation having territory within the district pursuant to which the operation and maintenance of such facilities would be performed by such municipal corporation.

(131 v H 161. Eff. 9-22-65. 130 v H 425; 128 v 773)

343.08 former GC 6600-7.

343.99 Penalty.

(A) Whoever violates division (B) of section 343.01 of the Revised Code shall be fined not more than one hundred dollars.

SUGGESTED PROCEDURE WHEN A SOLID WASTE DUMP IS CLOSED OR DISCONTINUED

General

A satisfactory solid waste disposal site or facility should be available before a dump is closed or its use is discontinued.

Further, once the use of the dump is discontinued, definite action should be taken to prevent this discontinued dump from continuing to be a problem.

Recommended Procedure to Abandon a Dump

1. Determine the exact date that all dumping will cease.
2. Make arrangements to dump refuse elsewhere.
3. Newspaper release in a local newspaper pointing out:
 - a. The date of closing.
 - b. That baiting will take place and the date.
 - c. A warning to keep all children and pets out of dump.
 - d. Where people can dump.
4. A sign should also be posted at the date warning of poison being used.
5. Baiting for rodents.
 - a. Wait about 3-5 days after the last load of solid waste has been deposited at dump.
 - b. Bait heavily with a single dose poison (example: Zinc phosphide).
 - c. If needed, continue baiting dump by establishing a number of anticoagulant bait stations and service until all signs of feeding cease.
6. Level dump and cover with two (2) feet of earth.
7. Plant suitable vegetation.

How to Estimate Bait for Dumps

To estimate the area of the dump face, pace across its upper edge and multiply the number of paces by an estimated average height in yards. Assume 1 pace = 1 yard. $\frac{1}{4}$ pound of bait per square yard of area to be treated.

Who Does Rodent Control?

Local government or private operators should seek aid through their local health departments. Local health departments may seek technical aid from the Ohio Department of Health, United States Public Health Service, or the private Pest Control Operator.

SUGGESTED REGULATION OR ORDINANCE

A REGULATION (ORDINANCE) FOR THE STORAGE AND COLLECTION OF SOLID WASTE AND FOR THE CONSTRUCTION AND OPERATION OF SOLID WASTE TRANSFER STATIONS IN THE _____ HEALTH DISTRICT.

A regulation (ordinance) establishing standards for the handling of solid waste on premises; the collection of solid waste; requiring registration certificates to operate solid waste collection equipment; the construction and operation of solid waste transfer stations; requiring plans for solid waste transfer stations; and requiring registration certificates to operate solid waste transfer stations in order to protect the public health and welfare and prevent insanitary conditions and nuisances.

Authority Section 3709.20 (for City Health District adoption)

3709.20 (for General Health District Adoption) of the Revised Code.

SECTION 1 - DEFINITIONS

As used in this regulation (ordinance):

- 1.1 "Board of Health" means the board of health of a city or general health district, or the authority having the duties of a board of health in any city as authorized by section 3709.05 of the Revised Code.
- 1.2 "Health Commissioner" means the person occupying the office created by section 3709.11 and section 3709.14 of the Revised Code, or his authorized representative.
- 1.3 Person means the state, any political subdivision, public or private corporation, individual, partnership, or other entity.
- 1.4 Premises means any land, buildings, or structures upon or in which solid waste may be temporarily stored, placed, or accumulated.
- 1.5 Solid Waste means such unwanted residual solid or semi-solid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining or demolition operations and slag and other substances which are not harmful or inimical to public health, and includes garbage, combustible and non-combustible material, street dirt and debris.
- 1.6 Solid Waste Transfer Station means a location, not at the point of solid waste generation, in the solid waste handling system that is used to facilitate the transfer of waste from locally operated collection vehicles to those intended to convey the material to the solid waste disposal site or facility; the transfer of such wastes being from vehicle to vehicle or from vehicle to location to vehicle.

SECTION 2 - PREMISE MAINTENANCE

- 2.2 No person shall store, place, burn or dispose on his premises or the premises of another or permit to accumulate on his premises, any solid waste in such a manner whereby it will become a rodent or insect harborage or breeding place, or create a health menace, insanitary condition, or nuisance.

SECTION 3 - REGISTRATION CERTIFICATE REQUIRED

- 3.1 No person shall engage in the business of solid waste collection or operate a solid waste transfer station unless he possesses a registration certificate issued by the Board of Health of the _____ Health District.
- 3.2 The Board of Health shall issue registration certificates to collect solid waste or to operate solid waste transfer stations only to persons having proper equipment, as required by this regulation and personnel for collecting of solid waste or for operating solid waste transfer stations, and agreeing to comply with all conditions of issuance or possession of the registration certificate and otherwise complying with the requirements of this regulation.
- 3.3 (a) Any person intending to collect solid waste or to operate a solid waste transfer station shall make written application for a registration certificate to the board of health on a form provided by the board of health.
(b) For a registration certificate to collect solid waste, such application shall contain the name and address of such person, a description of the equipment to be used in the collection of such solid waste, the area where solid waste collections are to be made, and such other information as the board of health determines will reasonably aid in the administration and enforcement of this regulation.
(c) For a registration certificate to operate a solid waste transfer station, such application shall contain the name and address of such person, the location of the transfer station, the point of final disposition of the solid waste, and such other information as the board of health determines will reasonably aid in the administration and enforcement of this regulation.
- 3.4 Upon approval of such application and determination that the applicant has the proper equipment in good condition, and personnel to meet the requirements of this regulation, the board of health shall issue a registration certificate to the applicant. The board of health may state on the registration certificate or by a writing attached to the registration certificate the conditions under which it is issued to insure the proper collection of all refuse.

and the proper operation of all solid waste transfer stations in accordance with regulation.

- 3.5 The Board of Health may revoke or suspend the registration certificate of any person who collect solid waste or to operate a solid waste transfer station who has demonstrated inability or unwillingness to comply with this regulation.
- 3.6 Any person whose application for a registration certificate has been denied, suspended, or revoked may make written request for a hearing before the Board of Health of the _____ Health District within 30 days. The Board of Health shall grant such hearing within a reasonable time after request is made therefor.
- 3.7 All registration certificates issued under this regulation shall expire one year from date of issuance.

SECTION 4 - SOLID WASTE COLLECTION

- 4.1 All vehicles used for the collection and transportation of solid waste unless all the waste is kept in watertight covered containers, shall have enclosed bodies or suitable provisions for covering the body of the vehicle. All vehicles shall be leakproof, of easy cleanable construction, shall be cleaned at sufficient frequency to prevent odor, nuisance or insect breeding, and shall be maintained in good repair.
- 4.2 Any person making application for a registration certificate to collect solid waste shall present his equipment for inspection by the health commissioner of _____ Health District, or his authorized representative, to determine if applicant is in compliance with Section 3.4 and 4.1 of this regulation.
- 4.3 Any person making application for a registration certificate to collect solid waste shall have equipment to satisfactorily clean all vehicles or containers used in the conduct of his business.

SECTION 5 - PLANS REQUIRED FOR SOLID WASTE TRANSFER STATIONS

- 5.1 Each person proposing to place in use or to construct a new solid waste transfer station shall submit plans and specifications to the board of health for approval at least sixty days before the proposed operation of the transfer station.
The plans and specifications shall include.
 - a. Specific location of the transfer station and indication of same on a vicinity map.
 - b. Location of public roadways, communities, habitable structures or places of public use on subject and adjoining properties.
 - c. Clear indication of the entire property owned or leased by the person proposing the transfer station.
 - d. The means of limiting access including fencing, gates, natural barriers or other methods.
 - e. Details of method of treating or disposing of the liquid wastes resulting from operation of the transfer station.
 - f. Detailed drawings and specifications of all structures and equipment.
 - g. General layout of equipment and flow pattern.
 - h. Detailed description of appurtenances and procedures intended to handle heavy or bulky items, for storage of solid wastes beyond the end of the working day, control dust and odors, and to handle hot or burning loads of solid waste and fire control.
 - i. Statements from zoning board, planning commission and other agencies having interest or jurisdiction over the proposed transfer station indicating that the proposed transfer station is in conformance with policies, regulations and land use plans.
 - j. Location of existing and proposed utilities.
 - k. Indicated place and method of final disposition of solid waste method of volume reduction - compacting, grinding, compression or tamping equipment.

SECTION 6 - SOLID WASTE TRANSFER STATION OPERATION

- 6.1 All solid waste shall be confined to the unloading, loading and handling area. The transfer station and the adjacent area shall be kept clean and free of litter.

- 6.2 Access to the transfer station shall be limited to those times when operational employees are on duty or definite control rules shall be established in the instance of unmanned transfer stations.
- 6.3 Special provision shall be maintained for the transfer of large, heavy or bulky items at the transfer station or the large heavy or bulky items shall be excluded from the transfer station.
- 6.4 Sewage solids or liquids and other liquid or hazardous substances in quantities considered to be detrimental to the normal operation of the transfer station shall be excluded from the transfer station, except in those instances where in the nature of the material and the equipment and method of handling has received written approval from the health commissioner.
- 6.5 All liquid wastes shall be disposed of in municipal sewage treatment system or in sewage treatment devices constructed and maintained in accordance with the standards of the Ohio Department of Health.
- 6.6 Salvaging shall not be conducted except with the written approval of and in a manner acceptable to the health commissioner. Scavenging shall not be permitted.
- 6.7 No putrescible solid waste shall remain in the transfer station for more than twenty four hours. In the event that putrescible solid waste is to remain at the transfer station beyond the end of the working day, the solid waste shall be stored in a leak-proof, fly and rodent-proof structure, bin or container.
- 6.8 Equipment adequate in size and quantity and in operational condition, shall be available at all times to operate the transfer station. If for any reason the transfer station is rendered inoperable for more than twenty four hours an alternate method shall be available to transport the solid waste to the disposal site or facility.
- 6.9 Adequate provisions shall be made for the routine operational maintenance of the transfer station and all appurtenances.
- 6.10 Dust generated by the unloading of the solid waste and the operation of the transfer station shall be controlled at all times.
- 6.11 Odor resulting from the unloading of the solid waste and the operation of the transfer station shall be controlled at all times.
- 6.12 No solid waste shall be burned at the transfer station.
- 6.13 All necessary operations of the transfer station shall be carried out promptly in a systematic manner so conditions are unfavorable for the harborage and production of insects and rodents. Supplemental effective vector control shall be initiated immediately by the operator when deemed necessary by the health commissioner.
- 6.14 Live domestic and farm animals shall be excluded from the transfer station.
- 6.15 The operator shall maintain a daily log of operations of the transfer station. A copy of the daily log shall be on file and available to the health commissioner upon request.
- 6.16 Arrangements shall be made for adequate fire protection.
- 6.17 Employees shall receive initial and periodic safety and procedure training to prevent accidents. All hazardous machinery shall be equipped with appropriate safety devices. Employees shall be instructed in the principles of first aid and an adequate stock of first aid supplies shall be maintained at the site.
- 6.18 Solid wastes which are burning or are at a temperature likely to cause fire or are of a highly flammable or explosive nature shall not be accepted in the transfer station.
- 6.19 A transfer station shall be operated under close supervision of responsible individuals who are thoroughly familiar with the requirements and the operational procedures of the transfer station.

SECTION 7 - PENALTIES

- 7.1 Any person who violates any provision of this regulation is subject to the penalties provided by Sections 3709.99 of the Ohio Revised Code.

SECTION 8 - EFFECT OF PARTIAL INVALIDITY

- 8.1 Should any part of this regulation be declared unconstitutional for any reason, the remainder of the regulation shall not be affected thereby.

SECTION 9 - EFFECTIVE DATE

9.1 This regulation shall be effective on and after the _____ day of _____, 19____.

SUGGESTED REGULATION OR ORDINANCE

A REGULATION (ORDINANCE) FOR THE CONSTRUCTION AND OPERATION OF SOLID WASTE TRANSFER STATIONS IN THE _____ HEALTH DISTRICT.

A regulation (ordinance) establishing standards for the construction and operation of solid waste transfer stations; requiring plans for solid waste transfer stations; requiring registration certificates to operate solid waste transfer stations in order to protect the public health and welfare and prevent insanitary conditions and nuisances.

Authority Section 3709.20 (for City Health District adoption) 3709.20 (for General Health District Adoption) of the Revised Code.

SECTION 1 - DEFINITIONS

As used in this regulation (ordinance):

- 1.1 "Board of Health" means the board of health of a city or general health district, or the authority having the duties of a board of health in any city as authorized by section 3709.01 of the Revised Code.
- 1.2 "Health Commissioner" means the person occupying the office created by section 3709.11 and section 3709.14 of the Revised Code, or his authorized representative.
- 1.3 Person means the state, any political subdivision, public or private corporation, individual, partnership, or other entity.
- 1.4 Premises means any land, buildings, or structures upon or in which solid waste may be temporarily stored, placed, or accumulated.
- 1.5 Solid Waste means such unwanted residual solid or semi-solid material as results from industrial, commercial, agricultural, and community operations, excluding earth or material from construction, mining or demolition operations and slag and other substances which are not harmful or inimical to public health, and includes garbage, combustible and non-combustible material, street dirt and debris.
- 1.6 Solid Waste Transfer Station means a location, not at the point of solid waste generation, in the solid waste handling system that is used to facilitate the transfer of waste from locally operated collection vehicles to those intended to convey the material to the solid waste disposal site or facility; the transfer of such wastes being from vehicle to vehicle or from vehicle to location to vehicle.

SECTION 2 - PLANS REQUIRED

- 2.1 Each person proposing to open a new solid waste transfer station shall submit plans and specifications to the board of health for approval at least sixty days before the proposed operation of the transfer station.

The plans and specifications shall include.

- a. Specific location of the transfer station and indication of same on a vicinity map.
- b. Location of public roadways, communities, habitable structures or places of public use on subject and adjoining properties.
- c. Clear indication of the entire property owned or leased by the person proposing the transfer station.
- d. The means of limiting access including fencing, gates, natural barriers or other methods.
- e. Indicate method of treating or disposing of the liquid wastes resulting from operation of the transfer station.
- f. Detailed drawings and specifications of all structures and equipment.

- g. General layout of equipment and flow pattern.
- h. Detailed description of appurtenances and procedures intended to handle heavy or bulky items, for storage of solid wastes beyond the end of the working day, control dust and odors, and to handle hot or burning loads of solid waste.
- i. Statements from zoning board, planning commission and other agencies having interest or jurisdiction over the proposed transfer station indicating that the proposed transfer station is in conformance with policies, regulations and land use plans.
- j. Location of existing and proposed utilities.
- k. Indicate place and method of final disposition of solid waste, method of volume reduction - compaction, grinding, compression or tamping equipment.

SECTION 3 - REGISTRATION CERTIFICATES REQUIRED

- 3.1 No person shall operate a solid waste transfer station unless he possesses a registration certificate issued by the Board of Health of the _____ Health District.
- 3.2 The Board of Health shall issue registration certificates to operate solid waste transfer stations only to persons having proper equipment, as required by this regulation and personnel for operating of solid waste transfer stations and agreeing to comply with all conditions of issuance or possession of the registration certificate and otherwise complying with the requirements of this regulation.
- 3.3 Any person intending to operate solid waste transfer station shall make written application for a registration certificate to the board of health on a form provided by the board of health. Such application shall contain the name and address of such person, the location of the transfer station, the point of final disposition of the solid waste, and such other information as the board of health determines will reasonably aid in the administration and enforcement of this regulation.
- 3.4 Upon approval of such application and the determination that the applicant has the proper equipment in good condition, and personnel to meet the requirements of this regulation, the board of health shall issue a registration certificate to the applicant. The board of health may state on the registration certificate or by a writing attached to the registration certificate the conditions under which it is issued to insure the proper operation of all solid waste transfer stations in accordance with this regulation.
- 3.5 The Board of Health may revoke or suspend the registration certificate of any person to operate a solid waste transfer station who has demonstrated inability or unwillingness to comply with this regulation.
- 3.6 Any person whose application for a registration certificate has been denied, suspended, or revoked may make written request for a hearing before the Board of Health of the _____ Health District. The Board of Health shall grant such hearing within a reasonable time after request is made therefor.
- 3.7 All registration certificates issued under this regulation shall expire one year from the date of issuance.

SECTION 4 - SOLID WASTE TRANSFER STATION OPERATION

- 4.1 All solid waste shall be confined to the unloading, loading and handling area. The transfer station and the adjacent area shall be clean and free of litter.
- 4.2 Access to the transfer station shall be limited to those times when operational employees are on duty or definite control rules shall be established in the instance of unmanned transfer stations.
- 4.3 Special provisions shall be maintained for the transfer of large, heavy or bulky items at the transfer station or the large heavy or bulky items shall be excluded from the transfer station.
- 4.4 Sewage solids or liquids and other liquid or hazardous substances in quantities considered to be detrimental to the normal operation of the transfer station shall be excluded from the transfer station, except in those instances wherein the nature of the material and the equipment and method of handling has received written approval from the health commissioner.

- 4.5 All liquid wastes shall be disposed of in municipal sewage treatment system or in sewage treatment devices constructed and maintained in accordance with the standards of the Ohio Department of Health.
- 4.6 Salvaging shall not be conducted except with the written approval of and in a manner acceptable to the health commissioner. Scavenging shall not be permitted.
- 4.7 No putrescible solid waste shall remain in the transfer station for more than twenty four hours. In the event that putrescible solid waste is to remain at the transfer station beyond the end of the working day, the solid waste shall be stored in a leak-proof, fly and rodent-proof structure, bin or container.
- 4.8 Equipment adequate in size and quantity and in operational condition, shall be available at all times to operate the transfer station. If for any reason the transfer station is rendered inoperable for more than twenty four hours an alternate method shall be available to transport the solid waste to the disposal site or facility.
- 4.9 Adequate provisions shall be made for the routine operational maintenance of the transfer station and all appurtenances.
- 4.10 Dust generated by the unloading of the solid waste and the operation of the transfer station shall be controlled at all times.
- 4.11 Odor resulting from the unloading of the solid waste and the operation of the transfer station shall be controlled at all times.
- 4.12 No solid waste shall be burned at the transfer station.
- 4.13 All necessary operations of the transfer station shall be carried out promptly in a systematic manner so conditions are unfavorable for the harborage and production of insects and rodents. Supplemental effective vector control shall be initiated immediately by the operator when deemed necessary by the health commissioner.
- 4.14 Live domestic and farm animals shall be excluded from the transfer station.
- 4.15 The operator shall maintain a daily log of operations of the transfer station. A copy of the daily log shall be on file and available to the health commissioner upon request.
- 4.16 Arrangements shall be made for adequate fire protection.
- 4.17 Employees shall receive initial and periodic safety and procedure training to prevent accidents. All hazardous machinery shall be equipped with appropriate safety devices. Employees shall be instructed in the principles of first aid and an adequate stock of first aid supplies shall be maintained at the site.
- 4.18 Solid wastes which are burning or are at a temperature likely to cause fire or are of a highly flammable or explosive nature shall not be accepted in the transfer station.
- 4.19 A transfer station shall be operated under close supervision of responsible individuals who are thoroughly familiar with the requirements and the operational procedures of the transfer station.

SECTION 5 - PENALTIES

- 5.1 Any person who violates any provision of this regulation is subject to the penalties provided by Sections 3709.99 of the Ohio Revised Code.

SECTION 6 - EFFECT OF PARTIAL INVALIDITY

- 6.1 Should any part of this regulation be declared unconstitutional for any reason, the remainder of the regulation shall not be affected thereby.

SECTION 7 - EFFECTIVE DATE

- 7.1 This regulation shall be effective on and after the _____ day of _____ 19 ____.

APPENDIX C

FRANKLIN COUNTY RULES AND REGULATIONS FOR
SOLID WASTE DISPOSAL IN INCINERATOR DISTRICT NO. 1

Amended
Rules and Regulations
For Disposal of Solid Waste In
Franklin County Incinerator District No. 1

GENERAL:

DEFINITIONS:

District
Solid Waste
 Non Combustible Waste
 Combustible Waste
 Special Industrial Waste
 Chemical Waste
 Demolition Waste

Landfills

 Dumps
 Sanitary Landfills
 Incinerator Landfills

Incinerators
Collection
Private Haulers
Municipal Haulers
Individual Haulers
Board
Sanitary Engineer
Public Health Department
Advisory Board

PROVISIONS GOVERNING VEHICLES USED FOR COLLECTING
AND TRANSPORTING SOLID WASTE:

DISPOSAL WITHIN THE DISTRICT:

 By Landfill Method
 By Incineration

PROVISIONS FOR ADVISORY BOARD:

AGREEMENTS FOR DISPOSAL OF SOLID WASTE:

PAYMENT OF RATES AND CHARGES:

BASIS OF CHARGES FOR DISPOSAL:

PENALTIES:

GENERAL:

The disposal of all solid wastes originating within or outside of Franklin County Incinerator District No. 1, but disposed of within the boundaries of this district shall be performed in accordance with these rules and regulations adopted in conformance with Sec. 343.01 of the Ohio Revised Code.

DEFINITIONS:

As used herein the following terms shall have the meaning ascribed to them as herein set forth.

DISTRICT:

The term district shall mean the Franklin County Incinerator District No. 1 which comprises all of the lots and land in Franklin County, Ohio, outside of any incorporated municipality and all of the lots and land within an incorporated municipality whenever the boundaries of the district are amended following receipt of a request of an incorporated municipality by its legislative authority to be included in the district.

Boundries of the district as amended from time to time are as shown in "Appendix A" attached hereto.

SOLID WASTE:

All material other than liquids which has been discarded by its owner for disposal, such as but not limited to, garbage, wrappings, newsprint, household articles, clipping from trees or shrubs, cans, bottles, boxes, by products of industry or commerce, demolition wastes, ashes and so forth.

NON COMBUSTIBLE WASTE:

Material which can not be reduced to ash when exposed to temperatures of 2000°F for a period of 15 minutes or less in the presence of oxygen sufficient to support normal combustion.

COMBUSTIBLE WASTE:

Material which can be reduced to ash or reduced in volume by 90% when exposed to temperatures of 2000°F for a period of 15 minutes or less in the presence of oxygen sufficient to support normal combustion.

SPECIAL INDUSTRIAL WASTE:

Any by-product of industry of a homogeneous character which is non-combustible and which its owner can dispose of in such a manner as to not create any nuisance either during or following such disposal.

CHEMICAL WASTE:

Any by product of industry which may be toxic, explosive or otherwise dangerous which requires knowledgeable treatment for its disposal.

DEMOLITION WASTE:

Material produced in the razing or extensive remodeling of buildings, pavements or other structures, a part of which may be combustible.

LANDFILLS:

Open areas of ground used for the deposition of solid wastes fitting one of the following descriptions.

DUMPS:

An open area of ground used for the deposition of solid waste by miscellaneous dumping.

SANITARY LANDFILL:

An open area of ground used for the deposition of solid waste where material is deposited under controlled conditions.

INCINERATOR LANDFILL:

An open area of ground used for the deposition of sterile ash from an incinerator and for the deposition of non combustible waste, containing no putrescible material, which cannot be reduced in volume by incineration.

INCINERATORS:

Structures built for and containing furnaces, machinery and equipment for the destruction by burning of solid waste with the maximum reduction of volume and a minimum of air pollution.

COLLECTION:

The process of picking up and transporting solid waste from the point of deposition to the point of its ultimate disposal.

PRIVATE HAULERS:

Persons, Firms or Corporations engaged in the business collecting and transporting solid wastes to disposal sites.

MUNICIPAL HAULERS:

Hauling equipment for the collection and disposal of solid waste owned by a municipality and operated by employees of the owning municipality. Private Haulers having contracts with municipalities or operating under franchise agreements with municipalities shall be considered as Private Haulers.

INDIVIDUAL HAULERS:

Either Persons, Firms or Corporations, using vehicles either owned by

them, rented or leased by them either with drivers or for their use by themselves or by their employees on an occasional basis for the purpose of transporting solid waste produced by them to a point of disposal off their own premises.

BOARD:

The Board of County Commissioners of Franklin County, Ohio consisting of three members chosen as provided in Sec. 305.01 or Sec. 305.02 of the Ohio Revised Code.

SANITARY ENGINEER:

The Sanitary Engineer of Franklin County, Ohio appointed by the Board or his duly appointed Assistants acting in his behalf or stead.

PUBLIC HEALTH DEPARTMENT

Where ever the term Public Health Department is used herein it shall mean the Public Health Department having jurisdiction in the geographic area appropriate to the rule under discussion.

ADVISORY BOARD:

An Advisory Board selected to periodically review the operation of the District.

PROVISIONS COVERING VEHICLES USED FOR COLLECTING AND TRANSPORTING SOLID WASTE:

Private Haulers shall obtain a permit for each vehicle used for the collection, transporting and disposal of solid waste beginning within 60 days of the effective date of these regulations and shall renew such permit by the 1st day of January of each succeeding year.

Permit applications are to be obtained from the office of the Sanitary Engineer, 40 E. Fulton Street, Columbus, Ohio, 43215.

Applications will show the type of vehicle to be used and will contain an Affidavit certifying that such vehicle complies with the requirements of these regulations.

Permit applications must also be accompanied by a Certificate of Insurance of an approved insurance carrier showing that the Private Hauler requesting the permit is insured against liability for personal injury and property damage for not less than \$100,000.00 for each person and not less than \$300,000.00 for each accident. One Insurance Certificate only need be furnished by a Private Hauler even though he or it may operate more than one vehicle, however, failure to supply a new Certificate on or before the anniversary date of the policy will automatically revoke all permits held by such hauler.

Upon approval of application for permit, Private Hauler will receive an emblem to be prominently displayed on each vehicle used for collecting, trans-

porting and disposal of solid waste.

Vehicles for which permits are to be issued shall have tight bodies and shall be either packer type bodies or dump truck fitted with tight covers to prevent the escape of any portion of the load being transported no matter how minute. Inspection of vehicles may be made from time to time during the life of a permit and any defect found which in the opinion of the Sanitary Engineer or any Public Health Department makes the vehicle unsatisfactory for the purpose of transporting solid waste must be corrected immediately.

Failure on the part of Private Hauler to make such correction will be considered grounds for revocation of permit.

Repeated violations of this provision or evidence of other careless operations which might endanger the safety, health or general welfare of the citizens of the community will be considered justification for the revocation of all permits held by a Private Hauler. Non compliance with regulations regarding disposal sites shall be considered careless operation for this purpose.

Permit fees must accompany each application in the amount of \$15.00 for each vehicle for which the original permit is sought. Renewal fees for each vehicle will be \$5.00. In the event a permit is not granted, fees will be refunded.

Municipal Haulers will be subject to the same regulations as Private Haulers except that no charge will be made for permits. Violations of any of the above will be reported to the municipal official in responsible charge of vehicle maintenance and operations for appropriate action. If prompt action is not taken to correct the reported violation the permit for the offending vehicle will be revoked.

Individual Haulers will not be required to obtain permits. However, haulers employed on a regular or stand-by-basis by a person, firm or corporation shall be considered a Private Hauler within the meaning of these regulations.

DISPOSAL WITHIN THE DISTRICT:

Disposal of solid waste collected and transported by Private Haulers, Municipal Haulers or Individual Haulers shall be made only at approved sites and in conformance with these regulations.

BY LANDFILL METHOD:

All existing privately owned or operated Sanitary Landfills, dumps ~~or~~ incinerators shall cease and desist immediately.

No privately owned or operated sanitary landfills, dumps or incinerators shall hereafter be permitted within the boundaries of the Franklin County Incinerator District No. 1, as amended from time to time.

Except landfills operated in connection with District incinerators, only sanitary landfills established, maintained, or operated under the direct control and jurisdiction of the Board of County Commissioners shall be permitted within the boundaries of the said District, as amended from time to time, provided publically operated municipal landfills in operation as of the effective date of these regulations may continue to operate in accordance with the District Rules and Regulations.

Feb. 21, 1967

No new publically operated municipal landfills shall be permitted without the express written consent of the Board of County Commissioners.

Wherever a landfill operation other than in connection with an incinerator is permitted, procedures shall be as follows:

Sanitary Landfills will be permitted only until such time as the District has provided and placed in operation suitable incinerators.

Minimum Requirements For Operations. All publically operated sanitary landfills authorized shall comply with the minimum requirements for operation set forth herein, or any other applicable local laws or ordinances. Such minimum requirements will consist of a method of operation whereby sufficient quantities of earth or other acceptable material are available to cover compacted layers of deposited solid waste not exceeding 30" in thickness after compaction, with 6 inches of well compacted cover. Deposition of solid waste may be in trenches previously dug with excavated earth for cover stock-piled adjacent thereto or may be on grade if sufficient earth borrow or suitable material is available nearby and adequate hauling equipment is maintained at the site to cover the compacted solid waste at frequent intervals with the required amount of cover. No deposited solid waste shall remain uncompacted for a period of over two hours nor shall it remain uncovered at the end of a days operation.

At the cessation of operations of a sanitary landfill for any reason an additional layer of earth at least 24" in thickness shall be spread over the final 6" layer of compacted earth. This operation shall be performed within six months after landfilling has been terminated.

A sanitary landfill must be surrounded by a suitable enclosure such as an earth levee and/or fence of sufficient height to prevent lighter materials such as paper or plastics from being carried off the property by wind.

Storage of gasoline, fuel oil, lubricating oil, or any inflammable material will meet the rules and regulations of the Fire Prevention Bureau of the City of Columbus and/or State Fire Marshal.

A sufficient number of fire extinguishers will be maintained in working condition at proper locations.

Access roads will be constructed so that traffic thereon will not be interrupted by ordinary inclement weather. Access will be completely restricted by closing an effective gate at the entrance except when an attendant is on duty.

Fire protection will be provided by one of the following means or an alternate method approved by the Commissioners.

1. An adequate supply of water under pressure available at the site together with suitable hose and nozzles.
2. Stockpile of earth maintained close enough to the working face sufficient to smother any fire that may occur at the site.

The landfill site and the access roads will be watered, oiled or otherwise treated whenever necessary to control dust.

Periodic inspection and necessary treatment by a qualified Exterminator shall be done in such a manner as to eliminate any possibility of rodent infestation of the area being landfilled.

When salvaging is permitted, it will be so organized as not to interfere with prompt and sanitary disposal of waste.

Landfills for the Deposition of Demolition Waste: which contains no putrescible material will be permitted only upon approval of the Sanitary Engineer. Operations of such a landfill must be conducted in such a manner as not to create a nuisance and any evidence of improper use of such a landfill will result in its immediate closing.

Incinerator Landfills will be maintained at incinerator sites for the deposition of incinerator ash and non combustible material which has been collected separately or otherwise separated from all combustible waste. Any non combustible waste brought to an incinerator site must be weighed and disposal charged for at rates set forth in these regulations.

Special Industrial Waste and Chemical Waste May Be Landfilled. Regulations pertaining to creating a nuisance however, will apply to such operations and will be under the control of Public Health Department.

Dumps for deposition of solid waste will not be permitted.

Open Burning. Open burning of solid waste will not be permitted.

BY INCINERATION:

It is proposed by the Board that incinerators of suitable size be built at several locations within the County to provide for the convenient and efficient disposal of solid wastes. These incinerators will be placed in operation at the earliest possible date. All solid waste not in one of the special classifications referred to as special industrial waste, chemical waste or demolition waste shall be disposed of at one of these ~~several~~ incinerators except as here noted. Privately operated incinerators meeting approved standards will be permitted.

PROVISIONS FOR ADVISORY BOARD:

There is hereby created an Advisory Board consisting of seven (7) members to be appointed as follows:

By the City of Columbus

1 member for a term of 1 year.

1 member for a term of 3 years.

By the Franklin County Council of Mayors

1 member for a term of 2 years.

By the Columbus Area Chamber of Commerce

1 member for a term of 2 years.

By the City of Upper Arlington

1 member for a term of 3 years.

By the recognized association of Private Haulers
for Franklin County.

1 member for a term of 3 years.

By the Franklin County Township Trustees and
Clerks Association.

1 member for a term of 1 year.

Upon expiration of the first term appointment as prescribed above each subsequent appointment shall be for a term of three years.

The Advisory Board shall adopt its own regulations for its own rules of procedure.

The purpose of the Advisory Board is to make recommendations to the Board relative to the administration of the facilities of the District, adjustment in rates and charges for their use and other pertinent matters in the best interest of the health and welfare of the Franklin County Community relative to and resulting from the operation of the District.

The Board shall make the services of an official of the District available, upon request of the Advisory Board, to furnish information regarding operations of District.

AGREEMENTS FOR DISPOSAL OF SOLID WASTE:

Immediately following the adoption of these regulations all municipalities within the district shall enter into an Agreement with the Board relative to the disposal of solid waste.

The Agreement will contain the schedule of rates charged for disposal of solid waste and other details pertinent to the operation of the facilities of the district.

PAYMENT OF RATES AND CHARGES:

Rates and charges for use of any facilities operated by the Board shall be as set forth in Appendix B of these regulations.

At the beginning of each month the amount due for the previous month for disposal of solid waste at the rates and charges so set forth will be invoiced by the Board to each municipality having an agreement with the Board. Payment shall be made within 15 days from receipt of invoice.

Private Haulers will pay such rates and charges at the time disposal is made. Payment may be in cash or may be deducted from an escrow account deposited with the Sanitary Engineer for this purpose. Deposits in such an escrow account may be made at the convenience of the Private Hauler but no overdrafts will be permitted.

Individual Hauler will pay cash at the time of disposal.

BASIS OF CHARGES FOR DISPOSAL:

Charges for disposal at any facility operated by the Board shall be determined by the Board and shall be calculated to be sufficient to meet all costs of

operation maintenance, depreciation, obsolescence, debt service and administration of the facilities of the District.

The unit of measure upon which rates are to be fixed is one (1) U.S. Ton (2000 pounds).

Weight of each load shall be determined by means of scales installed at each of the disposal sites.

PENALTIES:

1. Violation of Rules and Regulations

(A) No person, firm or corporation shall tamper with or damage any garbage and refuse disposal plant or facilities constructed under Sections 343.01 to 343.08, inclusive, of the Revised Code, or any apparatus or accessory connected therewith or pertaining thereto, or fail or refuse to comply with the rules or regulations prescribed by such board, or refuse to permit the inspection or examination by the sanitary engineer.

(B) Whoever violates division (A) of this provision shall be fined not more than one hundred dollars (\$100.00).

(C) In case any person, firm or corporation violates any provision of the above rules or regulations or any amendment or supplement thereto, the Board of County Commissioners, in addition to other remedies provided by Law, may institute injunction, mandamus, abatement, or any other appropriate actions or proceedings to prevent, enjoin, abate, or remove such unlawful violation.

Signed:

Glenn L. Myers

Henry A. Koontz

Robert T. Southwick

BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, OHIO

Effective Date of
These Regulations

January 18, 1967

Signed:

Glenn L. Myers

Henry A. Koontz

Effective Date of
These Amended Regulations

February 21, 1967

BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, OHIO

APPENDIX D

AGREEMENT BETWEEN THE CITY OF COLUMBUS, OHIO,
AND LOCAL NO. 1621, AMERICAN FEDERATION OF
STATE, COUNTY, AND MUNICIPAL EMPLOYEES, AFL-CIO

AGREEMENT

Between

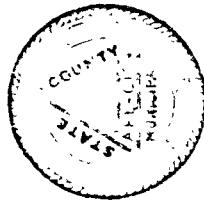
The City of Columbus, Ohio

and

Local No. 1682

**American Federation of State,
County and Municipal Employees**

AFL-CIO



Dated: October 10, 1972

Article I

PURPOSE

The objectives of this Agreement are as follows:

- (1) To achieve and maintain a satisfactory and stabilized employer-employee relationship and improve work performance;
- (2) To provide for the peaceful adjustment of differences which may arise;
- (3) To attract and retain qualified employees by providing those benefits usually attainable in non-governmental employer-employee relationship;
- (4) To assure the effectiveness of service by providing an opportunity for employees to meet with the "Administration" through their representatives to exchange views and opinions on policies and procedures affecting the conditions of their employment, subject to the Ohio Constitution, State and Federal Laws, Columbus City Charter, Ordinance, Resolutions and Civil Service Regulations;
- (5) To insure the right of every Union Member to fair and impartial treatment;
- (6) To provide an opportunity for the "Union" and the "Administration" to negotiate as to wages, hours, and conditions of employment. It being understood that this Agreement pertains to all employees within the bargainin unit defined hereunder, except those specifically exempted.

Article II

MANAGEMENT RESPONSIBILITIES

Section 1. Nothing contained in this Agreement shall alter the authority conferred by State and Federal Laws, Columbus City Charter, Ordinances, Resolutions, and Civil Service Regulations upon any City Official or to in any way abridge or reduce such authority. This Agreement shall be construed as requiring City Officials to follow the procedures, agreements and policies prescribed herein, to the extent they are applicable in the exercise of the authority conferred upon them by law.

Section 2. The management and direction of work forces in the interest of maintaining and improving efficiency in all municipal operations is reserved to management.

Section 3. Management retains the right to: (a) direct the work of their employees; (b) to hire, promote, demote, transfer, assign and retain employees in positions within the public agency; (c) to suspend or discharge employees for proper and just cause; (d) to maintain the efficiency of governmental operations; (e) to relieve employees from duties because of lack of work; (f) to take actions as may be necessary to carry out the mission of the agency in emergencies; and (g) to determine the methods, means and personnel by which operations are to be carried on. Subject to the provisions as are expressly provided herein.

Section 4. The City will erect bulletin boards for exclusive use by the Union and place them in appropriate locations. Such bulletin boards will be used by the Union for posting notices approved by the Union and the Division Head or his designated representative. Notices shall be restricted to:

- (a) Notices of Union elections
- (b) Notices of Union meetings
- (c) Notices of Union appointments and results of Union elections
- (d) Notices of Union recreational and social affairs
- (e) Such other notices as may be mutually agreed to

Any change in the location of such bulletin boards shall be decided by the Administration and the duly authorized officer of the Union.

Any change in the location of such bulletin boards shall be decided by the Administration and the duly authorized officer of the Union.

There shall be no other posting by employees of notices, pamphlets, advertising, or political matter or any kind of literature upon City property other than as herein provided.

Article III UNION—RESPONSIBILITIES

Section 1. Recognition: The "Administration" hereby agrees to recognize Local #1632, American Federation of State, County and Municipal Employees, AFL-CIO as the sole and exclusive bargaining agent, for the purpose of collective bargaining in any and all matters relating to wages, hours and working conditions of all employees in the Class Titles in Appendix A attached hereto; secondly, the Union shall be the sole and exclusive bargaining agent for all Union members not included in the Class Titles outlined in Appendix A.

(a) In this agreement wherever the word "Union" appears reference is being made to Local #1632, American Federation of State, County and Municipal Employees, AFL-CIO.

(b) The Union shall provide to the Administration an official roster of its officers and representatives which is to be kept current at all times and to include the following:

- 1. Name
- 2. Address
- 3. Home phone number
- 4. Department
- 5. Immediate supervisor
- 6. Union office held

Section 2. Bargaining Unit: The appropriate bargaining unit is composed of:

(1) Those employees in the class titles outlined in Appendix A attached hereto subject to the following conditions; that additional class titles will be added to Appendix A when the Union obtains the membership of at least 30% of the employees in a class not presently included in Appendix A.

(2) Those Union members who are in classifications not included in the class titles outlined in Appendix A.

A. Excluded from the bargaining unit are:

1. Supervisory employees beginning with the level of Foreman I and employees in the unclassified service, except supervisory employees who are presently members of the bargaining unit.
2. Uniformed employees of the Police and Fire Divisions.
3. Department of Personnel employees and Civil Service Commission employees, and confidential secretaries to department and division heads.
4. New employees still within their probationary periods; temporary and seasonal employees.
5. The following professional classes: licensed engineers, and architects.

Section 3. Representation: The "Union's" duly constituted representative shall have the right and duty as to employees in the appropriate bargaining unit, to:

- A. Represent said employees in conferences with the "Administration", or its duly authorized representative.
- B. Represent said employees, when requested by such employees, in grievance procedure set out in Article XIV hereunder.

The "Union" representative is required to maintain a record of time spent on "Union" matters and must maintain and submit monthly to the division or department head, a detailed type of record for time spent on "Union" matters (day, time, subject matters, etc.) No "Union" matter of an internal nature shall be conducted during duty hours or overtime work, excepting only such matters as may involve extreme emergencies to the health or safety of an employee. The "Union" representative shall notify the division or department head prior to contacting any employee on City time.

Section 4. Solicitation of Membership: Solicitation of membership, or other internal "Union" business shall be conducted during the non-duty hours of all employees concerned.

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**Article IV
UNION SECURITY**

Section 1. All employees who are members of the Union and in good standing as of the date of this Agreement and those employees who became members of the Union during the term of this Agreement shall be included and covered by the provisions of this Agreement. All employees who are or become members of the Union shall have their membership in the Union determined by the rules and regulations of the Union's Constitution and By-Laws.

Section 2. It is understood by the parties hereto that the Agreement of membership between the Union and the members should determine the manner in which Union dues shall be deducted from the payroll; but it is clearly understood that the authorization for checkoff on dues is revocable pursuant to the employee's request, provided the employee gives written notification by Certified Mail to the Department of Personnel and the Local Union twenty (20) calendar days prior to the effective date of the revocation.

**Article V
CHECKOFF**

Section 1. The Administration agrees to deduct the Union Membership dues once each month from the pay of any employee requesting same. If a deduction is desired, the employee shall sign a payroll deduction form which shall be furnished by the Union and presented to the appropriate payroll clerk.

Section 2. The amount to be deducted shall be certified to each payroll clerk by the Treasurer of the Union. One month advance notice must be given each payroll clerk prior to making any changes in an individual's dues deduction. The employer agrees to furnish the Treasurer of the Union a warrant in the aggregate amount of the deduction, with a listing of the employees for which deductions were made.

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Section 3. Authorization for payroll deductions is not compulsory and employees who voluntarily sign such authorization cards do so with full and complete knowledge that what they are doing is only one method of their dues being paid and with the realization that they have the obligation pursuant to their union contract to pay union dues, whether their dues are deducted by the city or paid by them directly to the union treasurer. It is understood and agreed that the city shall in no way influence or attempt to influence members of the union in their payment of dues by the checkoff method. Withdrawals from the method of payroll deduction shall be made in accordance with Section (2) above.

Section 4. Deductions under Section One (1) above subject to the approval of the City Auditor shall be made during one pay period each month but if any employee's pay for the period is insufficient to cover Union dues, the City will make a deduction from the pay earned during the next pay period. In the event a deduction is not made for any member during any particular month, the City, upon verification from the Union, will make the appropriate deduction from the following pay period if so approved by the City Auditor.

Section 5. All deductions under Section One (1) above, accompanied by an alphabetical list of all employees, shall be transmitted to the Union no later than the tenth (10th) day following the end of the pay period in which the deduction is made, if so approved by the City Auditor.

Section 6. When an employee is transferred from one job location to another job location within a department or division, or from one department to another department, or from one division to another division, his payroll dues deduction form submitted by the Union shall accompany the Personnel Action form forwarded to the payroll officer in the new department, division, or job location. Such deduction of dues shall continue in effect.

Article VI SHIFT DIFFERENTIAL PAY

(A) The early morning shift shall be known as the First Shift; the late afternoon shift shall be known as the Second

Shift; and the late evening shift shall be known as the Third Shift. The appointing authority shall designate on the basis of seniority the applicable shift for each employee. The starting time shall determine the shift differential for the entire shift.

(B) A differential in pay of twelve cents (12¢) per hour shall be paid to employees who are assigned to work eight (8) hours on the second shift; and a differential of fifteen (15¢) cents per hour shall be paid to employees who are assigned to work eight (8) hours on the third shift.

(C) For purposes of computing leave with pay, shift differential shall not be paid in addition to regular pay.

(D) The shift differential shall not be treated as part of the basic rate for the computation of overtime.

(E) In those divisions, departments and offices where only one shift prevails, no differential shall be paid regardless of the hours of the day that are worked.

Article VII REPORTING PAY

Section 1. Call-In Time: If a person is scheduled to work and does report for work and no work or less than four hours is available, he shall be granted a minimum of four hours pay within his regular eight hour work day.

Section 2. Failure of any employee to report or to cause himself to be reported late and/or off duty in a twenty-four hour operation, at least one-half hour before his scheduled starting time, shall constitute and be reported as an absence without leave. All other employees shall report or cause themselves to be reported late and/or off duty at their regularly scheduled starting time.

Section 3. The provisions above will not apply where it is impossible for the employee to comply with the above provisions, provided that the employee will then report or cause himself to be reported at the earliest opportunity.

Section 4. To be eligible for holiday pay an employee must have worked or been on vacation the day before and

the day after the holiday within the calendar week in which the holiday falls. (The day before refers to the employee's last regularly scheduled work day.)

The above shall apply and, in addition, an employee must work or be on vacation for four hours on a half-holiday to receive pay for the half-holiday.

Article VIII CENTRAL WORK RULES

Section 1. Establishing: The Administration agrees to negotiate changes in existing work rules or the establishment of new work rules with the Union.

Section 2. In addition, when existing rules are changed or new rules are established, they shall be posted prominently on all bulletin boards for a period of five (5) consecutive work days before becoming effective.

Section 3. Informing Employees: The Administration further agrees to furnish each employee in the bargaining unit with a copy of all existing work rules thirty (30) days after they become effective. New employees shall be provided with a copy of the rules at the time of hire.

Section 4. Enforcing: Employees shall comply with all existing rules that are not in conflict with the terms of this Agreement, provided the rules are uniformly applied and uniformly enforced.

Section 5. Any unresolved complaint as to the reasonableness of any new or existing rule, or any complaint involving discrimination in the application of new or existing rules shall be resolved through the Grievance Procedure.

Article IX SENIORITY

Section 1. Seniority shall be an employees uninterrupted length of continuous service with the City, Department, Division, or Job Classification, depending on the question involved.

All new hires shall have no seniority during their probationary period of employment, but after completion of their probationary period their seniority date shall be the date of hire which was used to compute their probationary period. The probationary period shall be ninety (90) days.

Section 2. An employee who volunteers or is called into the military or naval service of the United States, subsequent to December 8, 1941, and who has held his position for a period of ninety (90) days of more shall, within thirty (30) days after making application therefore, be restored to the office or position held by him immediately prior to his entering into the armed services of the United States, provided, such person is at such time physically able to perform the duties of such office or position. Such application for restoration shall be made to the appointing officer of such person within a period of ninety (90) days after receipt of an honorable discharge or certificate or other evidence showing satisfactory completion of his period of service. In the event any person entitled to the benefits of this Section shall by reason of temporary physical disability be unable to perform the duties of such office or position at the expiration of (30) days from the date of his application for restoration thereto, he shall be restored to such office or position when such physical disability is removed, if such physical disability is removed within one year from the date of his application.

Provided, however, that a person who at the time of entering the armed services was holding a position in the classified service pursuant to provisional appointment thereto, shall not be entitled to restoration to such position is an eligible list from which appointments to such position may be made has been established prior to his application for restoration to such position.

Whenever the time or period of employment in the classified service affects the status, rank, rating increments or qualifications in any States as contemplated by this Section, such person shall be given credit for the period in which he served in such armed services as though such time were served in the course of his regular employment.

The term "armed services" of the United States, as used in this Section shall be deemed to include the following: army, navy, marine corps, coast guard, auxiliary corps as established by Congress, army nurse corps, navy nurse corps, Red Cross nurse serving with the armed services, or hospital service of the United States, active duty with the civil air patrol-coastal patrol, and such other service as may now or hereafter be designated by the Congress of the United States as included therein.

An appointment made to fill a vacancy due to a city employee entering military or naval service shall be temporary and only for the period of time during which said employee is in the military or naval service. A person employed to fill such vacancy or to fill a vacancy caused by promotion of another employee as the result of absence in military service, shall hold his position only until the return of the regular employee from military service, at which time such temporary appointee shall revert to his previous permanent status, if any. In the event the regular occupant of a position fails to return to the City service such position shall be filled in the regular manner as provided by these Rules.

Section 3. An employee who is unable to work because of industrial (service connected) disability shall accumulate seniority during this period of sickness or disability not to exceed one (1) year's duration, unless by mutual agreement this period is extended in writing.

Section 4. In filling job vacancies the Administration agrees that wherein a certified list of three (3) or more employees has been properly certified by the Civil Service Commission; the inherent rights of such eligible employees will not be abrogated by compulsion or acts of intimidation respecting waiver. The Administration further agrees that any Union member appearing on such list shall not be discriminated against as a result of such Union affiliation, which might preclude him from just consideration.

Section 5. Operating unit seniority shall mean, seniority in a classification within the operating unit, and shall be used

for the purpose of preference of vacations, shift assignments and overtime rotating lists.

Section 6. An employee may exercise his job classification seniority within his own department for the purpose of changing shifts on work weeks when an opening occurs within his classification or another shift or work week. All such openings shall be posted on bulletin boards within the department for three (3) consecutive working days. Any employee desiring a change in his shift or work week shall make application to his immediate supervisor. At the end of the posting period the employee with the most seniority shall be given the shift or work week involved.

Section 7. The City will provide the Union with a seniority list of all employees within the bargaining unit within sixty (60) calendar days after the signing of this working agreement. Seniority lists shall contain the name, job classification, department, and date of classification entry of all employees in the bargaining unit. Thereafter, the City will provide the Union with an accurate up-to-date seniority list every six (6) months.

Article X HOURS OF WORK

Section 1. (A) The normal schedule of hours shall consist of eight (8) consecutive hours per day, five (5) consecutive days per week. Monday through Friday, except where there is a continuous twenty-four (24) hours per day operation or where there is a continuous seven (7) day a week operation made necessary because of the nature of the work.

(B) It is further provided that time and one-half as a regular hourly rate shall be paid for hours in excess of eight hours in one day and time and one-half regular hourly rate shall be paid for all hours in excess of 40 hours in one work week; and double time shall be paid for all hours in excess of 48 hours in one work week.

(C) It is further provided that in the event a member has contemplated change in his regular work schedule where-

by it appears to the Union said change is unfair or discriminatory, or where a member is presently assigned to a work schedule which the Union deems to be unfair or discriminatory; that in either event the Union has the right to request that said contemplated change, or work schedule is presently in effect as to said member, be reviewed by the supervisor requesting said change, or the supervisor who has already ordered a change in the work schedule under which said member is presently on and that said review be made in conference with a Union Official. If said matter is not resolved to the satisfaction of the Administration and the Union, and the change is made or the member is continued in the work schedule on which he is presently working, then said matter may be submitted as a grievance and resolved pursuant to the provisions of Article XIV—Grievance Procedure.

Section 2. Distribution of Overtime (A) Employees within the same classification and with the same work assignment shall have an equal opportunity to earn overtime pay. The opportunity for overtime work shall be computed by totaling overtime earned plus overtime offered but declined. The distribution of overtime shall be equalized over each six month period beginning on the first day of the calendar month following the effective date of this Agreement, or on the first day of any calendar month this Agreement becomes effective.

(B) On each occasion, the opportunity to work scheduled overtime shall be offered to the employee within the job classification who has the least number of overtime hours to his credit at that time, which shall include emergency overtime. If this employee does not accept the assignment, the employee with the next fewest number of overtime hours to his credit shall be offered the assignment. This procedure shall be followed until the required employees have been selected for the overtime work. If an employee turns down overtime, the number of hours offered to him shall be credited to his overtime hours.

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(C) A record of the overtime hours worked by each employee shall be posted on a bulletin board within the employee's general work area, and kept up to date.

Section 3. In cases where practical overtime shall be administered on a voluntary basis otherwise it shall be mandatory that each such employee scheduled to work overtime must perform the job assignment within his given classification.

Exception to the application of mandatory overtime scheduling shall be permissible wherein a valid reasonable request is made by an employee.

Pursuant to overtime scheduled as a result of holidays or extreme emergency cases involving a departmental operation, it shall be the established procedure of the Department Head to confer with the employee's Union Representative regarding a mutually acceptable work schedule.

Section 4. All employees' work schedules shall provide for a 15 minute rest period during each one-half shift. The rest period shall be scheduled at the middle of each one-half shift whenever this is feasible.

Employees who for any reason work beyond their regular quitting time the next shift shall receive a 15 minute rest before they start to work on such next shift. In addition, they shall be granted the regular rest periods that occur during the shift.

Section 5. All employees shall be granted a lunch period during each work shift. Whenever possible, the lunch period shall be scheduled at the middle of each shift.

Article XI

MAINTENANCE OF STANDARDS

Section 1. Protection of Conditions: The Administration agrees that all conditions of employment in his individual operation relating to hours of work, overtime differentials and general working conditions shall be maintained at not less than the highest minimum standards in effect at the

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time of the signing of this Agreement, and the conditions of employment shall be improved wherever specific provisions for improvement are made elsewhere in this Agreement. It is further understood and agreed that any wages agreed to that are in excess of those established herein shall not be reduced during the life of this contract.

Section 2. The Administration agrees not to enter into any Agreement or contract with his employees, covered by this Agreement, individually or collectively, which in any way conflicts with the terms and provisions of this Agreement. Any such agreements shall be null and void.

Section 3. No Ordinance dealing with salary matters shall be submitted to City Council until negotiated and approved by the Administration and the Union, with the exception of those classifications in a federally funded program.

Article XII

OFFICERS AND STEWARDS REPRESENTATION

Section 1. The Union may select one steward for each twenty-five (25) employees of the bargaining unit at each division or fraction thereof in each division; except in divisions that are separated in locations. Where this exists they may select one steward for each twenty-five (25) employees or fraction thereof of the bargaining unit at each division.

The division in which they work shall be their area of permissive activity. The stewards' names and divisions shall be furnished the City Personnel Office by the Union, this list shall be kept current by the Union at all times. If a stewards name is not listed, he will not be granted time away from his job. Stewards involved will be permitted to leave or be present at a grievance presentation. In such instances stewards will be permitted reasonable time to investigate and process grievances. The grievred employee may request a steward and the steward requested must inform supervision of the grievance name and locations.

Union business other than that listed above shall not be conducted by a union steward on city time nor shall it in fact interfere with the work assignment of the steward involved or the city work assignment of any other employee.

Union Representatives designated by the Union to participate in Negotiation Meetings with the Administration shall be paid for time lost during regular working hours for attending such meetings.

Section 2. The Union may select one Chief Steward for each division of reporting location. Chief Stewards will have the same privileges as a steward with the added responsibility for stewards assigned in a specific area.

Section 3. The Union Staff Representative may consult with employees in the assembly area before the start of and at the completion of the day's work and he shall be permitted access to work areas at all reasonable times only for the purpose of adjusting grievances, assisting in the settlement of disputes, and for the purpose of carrying into effect the provisions and aims of the Agreement. This privilege is extended subject to the understanding that work assignments are not, in fact, interfered with.

Section 4. The president and vice-president of the Union shall have the privileges accorded to a steward or Union Staff Representative by this Agreement.

Section 5. It is understood that the privileges listed above do not authorize Union Officials to be absent from their jobs without authorization granted pursuant to the terms of this Article.

Section 6. It is understood that Union Stewards and Union Officers shall not be assigned or transferred to a new location until after an agreement is reached between the Union and the Labor Relations Administrator that suitable and satisfactory reasons exist, to warrant such an assignment or transfer. If, however, a satisfactory agreement cannot be reached between the parties regarding said transfer or assignment, then said matter shall be resolved by submitting it to

arbitration as provided in Step 4 of Article XIV of this agreement.

Section 7. Administrative leave with pay shall be granted for up to three delegates from Local 1632 to attend union seminars, union conventions or educational seminars. Such leave shall not exceed ten (10) days per delegate per calendar year and shall be permitted with the prior approval of the Labor Relations Administrator.

Section 8. The City of Columbus will join with Local No. 1632 to request the Civil Service Commission that the probationary period for all city employees be fixed at ninety days.

Acceptance of this proposal will permit more rapid eligibility for membership in the bargaining unit.

The City of Columbus will not include part-time or seasonal employees in the bargaining unit.

Section 9. The City of Columbus will place up to two full-time Union representatives on administrative leave without pay for periods not to exceed one year.

Article XIII

PRELIMINARY HEARING

Section 1. No member of the Bargaining Unit shall be discharged, suspended or taken out of service of the employer unless a preliminary hearing was held. A preliminary hearing shall be held prior to a hearing on the merits of the alleged charges, brought against the member by the supervisor, who is making said charges.

Section 2. The preliminary hearing shall consist of an oral explanation being given by the supervisor as to the grounds or reasons for said charges; and said oral explanation shall be made in the presence of a Union Steward; the employee must be furnished by the supervisor, with a written statement as to the grounds or reasons for said charges being brought against said employee. In the event a Union

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Steward is not available a copy of the statement will be given to the Union within 24 hours.

It is further provided that said preliminary hearing shall be held or written statement furnished to the employee, prior to the employee leaving the premises or work area where the employee is assigned for duty, when said charges are made against the employee.

Article XIV

GRIEVANCE PROCEDURE

Definitions: A Grievance is any unresolved question or dispute regarding the conditions of employment and or concerning the interpretation or application of this agreement between the City and the Union or between the City and an Employee but excluding those matters which are controlled by the provisions of the Columbus City Charter governing the enactment of ordinances and resolutions and pertaining to Civil Service; by Federal and State Laws and by the United States and Ohio Constitutions.

Qualifications: (A) Origination of Grievances can be initiated by the City, the Union or an aggrieved employee. A grievance of an individual nature must be processed through an oral confrontation between the aggrieved and the immediate supervisor. A grievance by either the City or the Union must be processed by having the matter submitted in writing by the initiating party to the other party through its duly authorized representative.

(B) A grievance must be presented within ten (10) work days after occurrence of the grievance, unless the party having the grievance can positively establish, in writing, that the grievant by reasons of circumstances beyond his control of knowledge, could not have presented the grievance within a ten (10) day period from the date of its occurrence. If a grievance is not presented within ten (10) days after the occurrence of the event, it will be considered not to have existed.

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(C) If the City does not process the grievance in the time authorized by the steps as outlined, it will be deemed that the City has considered the grievance to be in favor of the grievant and shall resolve the matter accordingly.

(D) It is understood that the time limits prescribed in the following steps in this Article may be extended at any step by mutual consent of the parties so involved. Likewise, any step in the grievance procedure may be eliminated by mutual consent. Mutual consent must be indicated in writing and signed by both parties involved. "Days" as specified herein shall be work days.

(E) The Union shall maintain a current list of Union officers and stewards listed by division; which list must be furnished to the office of the Personnel Director. Persons whose names are not on this list shall not be recognized as officials of the Union for the purposes of this section. It is further agreed that the City shall furnish the Union with a list of the first line supervisors who will have the responsibility for adjudicating the grievances as submitted pursuant to the provisions of this Section.

The following steps shall be followed in the processing of a grievance:

Step I. In event the oral explanation does not satisfy the grievant, it is reduced to writing by the steward and presented to the supervisor for written disposition. The supervisor shall have five (5) working days thereafter to give his answer in writing, to the employee with a copy to the Division Head, setting out his solution of the grievance. If the grievance is not resolved satisfactorily, it shall, within five (5) days be advanced to step two (2) of the procedure. If the aggrieved employee does not refer his grievance to the second step of the procedure within five (5) days after the receipt of the decision rendered in this step, it shall be considered to be satisfactorily resolved.

Step II. The grievance, in writing, shall be submitted to the Division Superintendent for discussion and adjudication. The Division Superintendent shall within five (5) working days reply, in writing, to the employee(s) with a copy to the

Department head giving his decision. If the grievance is not resolved satisfactorily, it shall go to the third step of this procedure within five (5) days. If the aggrieved employee does not refer his grievance to the third step of the procedure within five (5) days after receipt of the decision rendered in this step, it shall be considered to be satisfactorily resolved. Formal hearings shall be conducted at Step 2 of the grievance procedure. Union participation shall involve the grievant, the Union Steward and/or the President of the Union. Said hearings are to be held prior to management's disposition of the grievance.

Step III. The grievance, along with all correspondence, shall be submitted to the Department Director and the Personnel Administrator. The Department Director, with the assistance of the Labor Relations Administrator or his representative, shall within five (5) working days, reply in writing to the employee, with a copy to their division, giving their decision. If the aggrieved employee does not refer his grievance to the fourth step of the procedure within twenty (20) days after receipt of the decision rendered in this step, it shall be considered to be satisfactorily resolved. Formal hearings shall be conducted at Step 3 of the grievance procedure. Union participation shall involve the grievant, the Department Chief Steward and the President of the Union and/or representation from the staff of Council 53. Said hearings are to be held prior to management's disposition of the grievance.

Step IV. In the event the employee is not satisfied with the adjustment made at this level or if no answer has been received within fifteen (15) working days the grievance may be submitted by the Union for arbitration. The decision of the arbitrator shall be final and binding on both parties. The matter to be arbitrated shall be conducted under the voluntary labor arbitration rules of the Federal Mediation and Conciliation Services. The decision of the arbitrator shall be final and binding on both parties.

Delivery of Demand for Arbitration. Should the Union demand arbitration it shall give written notice to the author-

ized representative of the City of Columbus. Such demand shall be signed by the authorized representative of the Union. Should the City of Columbus demand arbitration, it shall give written notice to the authorized representative of the Union. Such demand shall be signed by the authorized representative of the City of Columbus. The written notice shall in all cases contain the following information.

- (A) The provision of the agreement in dispute
- (B) The nature of the grievance
- (C) The employee(s) involved
- (D) The Department or Division involved

Parties Must Follow Procedures. If the employee fails to exhaust its remedies under the grievance procedure or to abide by the time limits with respect to each step, the grievance shall be presumed to be abandoned unless a written waiver is signed by the other party. Provided, however, if the City fails to respond to the procedures in Article XIV, Section 1, and 2 and 3 and 4, the grievance's stipulated request.

Time Off For Presenting Grievances. An employee and his steward or other representative shall be allowed time off from regular duties with pay for attendance at scheduled meetings under the grievance procedure with proper notification to their respective supervisors.

The steward or other representative shall have adequate time with pay for a proper investigation of each grievance.

Grievance Activity Forms. Grievance Forms (Step 1), Division Grievance Logs, Union Check-in, Check-out Log are being furnished to Supervision and the Union.

Selecting the Arbitrator. A joint written request shall be made to the Federal Mediation and Conciliation Services to submit the names of seven (7) qualified arbitrators including personal history and arbitration experience of each. Upon receipt of such list of arbitrators, the parties shall meet and upon failure to agree on the arbitrator, the parties shall alternately strike names each from the list. The person whose

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name remains on the list after all others have been stricken shall be the arbitrator. The Federal Mediation and Conciliation Services shall be advised of the choice of the parties and request that such arbitrator be assigned to the grievance.

Submission Agreement. The Union and the City shall agree in writing upon the precise issue to be decided, and submit the statement to the arbitrator. If the parties cannot agree on the issue to be decided, each party shall state in writing the issue as he sees it, and submit it to the arbitrator. Included in its statement of issues the appealing party shall cite the section or sections of the agreement it claims have been violated and the redress it expects from arbitration.

Cost Sharing. All expenses which may be involved in the arbitration proceedings shall be borne by the parties equally. However, expenses relating to the calling of witnesses or the obtaining of depositions or any other similar expense associated with such proceedings shall be borne by the party at whose request such witnesses or depositions are required except an employee who is paid for lost time shall be paid as a witness.

Payment for Time Lost Attending Arbitration Hearing. The grieving employees, steward, and witnesses shall be paid for time lost during regular working hours for attending arbitration hearings.

Arbitrator Shall Arrange Hearings. The arbitrator shall arrange for any hearings or investigations he deems necessary, as soon as possible after he is notified of his selection.

Arbitrator Reduce Award to Writing. The arbitrator shall reduce his award to writing and state his reasons for reaching the award unless both parties agree in writing that this is not necessary. Said award shall be reduced to writing 30 days after submission. Copies of the award shall be forwarded to both parties.

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Article XV
GENERAL PROVISIONS
PLEDGE AGAINST DISCRIMINATION
AND COERCION

Section 1. The provisions of this Agreement shall be applied equally to all employees of the bargaining unit without discrimination as to age, sex, marital status, race, color, creed, national origin, or political affiliation. The Union shall share equally with the Administration the responsibility for applying this provision of the Agreement.

Section 2. All reference to employees in this Agreement designate both sexes; and wherever the male gender is used it shall be construed to include male and female employees.

Section 3. The City recognizes the right of all eligible employees to be free to join the Union and to participate in lawful concerted Union activities. Therefore, the City agrees that there shall be no discrimination, interference, restraint, coercion, or reprisal by the City against any employee because of Union membership or because of lawful activity of any member acting in an official capacity on behalf of the Union.

Section 4. The Union recognizes its responsibility as bargaining agent and agrees to represent all employees in the bargaining unit without discrimination, interference, restraint, or coercion. The Union agrees not to intimidate or coerce any employee in an effort to recruit membership in the Union.

Article XVI
NO STRIKE OR LOCKOUT

During the life of this Agreement so long as the Administration and so long as the Union shall live up to this Agreement:

Section 1. It is understood and agreed that the services performed by City Employees included in this Agreement are essential to the public health, safety and welfare. The

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Union, therefore, agrees that there shall be no interruption to the work for any cause whatsoever, nor shall there be any work slowdown or other interference with these services. The Administration agrees that it will not lockout or prevent employees from performing their regularly assigned duties.

Section 2. It shall not be a violation of this Memorandum and it shall not be a cause for discharge or disciplinary action if any employee refuses to enter upon any property involved in a primary labor dispute, refuses to go through or work behind any lawful primary picket line, or refuses to do work normally done by primary striking members of another union, except that the City shall not be required to pay the wages of any such employees. It is further provided, that in no case shall any employees refuse to do any work, regardless of the existence of a lawful primary labor dispute, if, in the City's judgment, such refusal would be detrimental to the public health or safety unless the City cannot reasonably provide for the personal safety of the employees.

Section 3. Any alleged violation of Union rights is subject to immediate review at the third step of the grievance procedure as provided herein.

Article XVII
SPECIAL ASSIGNMENT CLASSIFICATIONS

Section 1. In the interest of fairness to faithful employees of the City of Columbus and as a means of retaining faithful employees temporarily disabled through accident or illness, the Administration agrees to work toward a Special Classification Plan in accord with the following guidelines:

1. The agreed on classification or classifications will require an employee to perform duties of a lesser physical nature than his full-time duties with the city.

2. The classification or classifications will be assigned to an employee with his approval on a temporary thirty day assignment and may be renewed but not to exceed ninety days.

3. If any employee is to qualify to a temporary assignment he must be examined by a physician from the Colum-

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bus City Health Department and the physician must recommend a lighter nature of work.

4. Any classification or classifications, wage or wages assigned to this department shall be negotiated and agreed on between the Union and the Administration. This section is not to be construed as meaning filling any vacancy or present classifications presently in effect.

5. Temporary transfers is herein defined as any given situation wherein an employee is required to perform work outside his regular job duties above or below his normal duties in making transfers, the following factors shall be controlling:

- a. Seniority
- b. Ability
- c. Physical Fitness

Employees who are transferred for the convenience of management, temporarily to a lower pay classification, shall retain the rate of pay at the higher rate of the job in their permanent classification.

Employees who are temporarily transferred for the convenience of management to a higher pay classification, shall receive payment consistent with the higher pay scale for the job to which transfer occurs.

Transfers of this nature shall have no diverse effect upon accrual of seniority within an employee's permanent classification.

Such transfers are not to exceed ten (10) working days.

This article shall be effective if the appropriate ruling is approved by the Civil Service Commission.

Article XVIII SPECIAL LEAVE WITH PAY

Section 1. (A) Military Leave—That City employees who are members of the Ohio National Guard, U.S. Air Force Reserves, U.S. Army Reserves, U.S. Marine Corps Reserves, U.S. Coast Guard Reserves, or the U.S. Naval Reserves be granted military leave of absence with pay, in

addition to vacation leave when ordered to temporary active duty or when ordered to military training exercises conducted in the field for a period of not less than 15 consecutive calendar days nor more than 21 consecutive calendar days during each calendar year. Excepting and providing that when the chief executive officer of the State of Ohio or the chief executive officer of the United States declares that a state of emergency exists then, in that event, the employee if ordered to active duty for purposes of that emergency shall be paid pursuant to this section for a period, or periods whether or not consecutive, not to exceed 21 days during each calendar year. That such military leave of absence shall not be granted to persons employed by the City of Columbus, Ohio, on a seasonal, temporary, or part-time basis. An employee shall be paid his regular salary for the period of time so served less whatever amount such employee may receive as military base pay. Where it is to the advantage of the City and on the approval of the appointing authority and the Civil Service Commission, military leave of less than 15 calendar days may be granted.

(B) Jury Duty Leave—That City employees, while serving upon a jury in any court of record in Franklin County, Ohio, or adjoining counties, shall be paid his regular salary for the period of time so served less whatever amount such employee may receive as compensation for his services as a juror. Time so served upon a jury shall be deemed active service with the City for all purposes.

(C) Examination Leave—That time off with pay shall be allowed city employees participating in city civil service tests, or taking a required examination pertinent to their city employment before a State or Federal licensing board.

(D) Court Leave—That time off with pay shall be allowed city employees who are required to attend any court of record in the case of a witness appearance on behalf of the City of Columbus or other governmental bodies or sub-divisions thereof.

Section 2. Vacation Leave. (A) That the vacation year shall be January 1st through December 31st, inclusive, of each year.

(B) That each full-time employee, regularly working an average forty (40), forty-four (44), or forty-eight (48) hour work week during six or more calendar months per year, and with less than eight years of continuous service, shall earn vacation at the rate of one work day with pay for each completed calendar month of service. Any vacation balance in excess of twelve (12) work days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph except as provided in paragraph (f) of this section.

(C) That each full-time employee, regularly working an average fifty-six (56) hour work week under the "three platoon system" during six or more calendar months per year, and with less than eight years of continuous service, shall earn vacation at the rate of one and one-fourth (1¼) calendar days for each completed calendar month of service. Any vacation balance in excess of fifteen (15) calendar days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph, except as provided in paragraph (j) of this section.

(D) That each full-time non-seasonal employee working an average 40, 44, or 48 hour work week during six or more calendar months per year, and with eight (8) years but less than fourteen (14) years of continuous service working full-time shall earn vacation at the rate of one and one-half (1½) work days for each complete calendar month of service through December of any year, beginning with the month in which eight year of continuous service is completed. Any vacation balance in excess of eighteen (18) work days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph, except as provided in paragraph (i) of this section.

(E) That each full-time non-seasonal employee working an average 40, 44, or 48 hour work week during six or more calendar months per year, and with fourteen (14) years but less than twenty (20) years of continuous service working full-time shall earn vacation at the rate of one and

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two-thirds (1⅔) work days for each complete calendar month of service through December of any year, beginning with the month in which fourteen (14) years of continuous service is completed. Any vacation balance in excess of twenty (20) work days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph, except as provided in paragraph (i) of this section.

(F) That each full-time non-seasonal employee working an average 40, 44, or 48 hour work week during six or more calendar months per year, and with twenty (20) or more years of continuous service working full-time shall earn vacation at the rate of one and five-sixths (1⅕) work days for each complete calendar month of service through December of any year, beginning with the month in which twenty years of continuous service is completed. Any vacation balance in excess of twenty two (22) work days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph, except as provided in paragraph (i) of this section.

(G) That each full-time non-seasonal employee working an average 56 hour work week during six or more calendar months per year, and with fourteen (14) but less than twenty (20) year of continuous service, shall earn vacation at the rate of two (2) calendar days for each completed calendar month of service, beginning with the month in which eight years of continuous service is completed. Any vacation balance in excess of twenty-four (24) calendar days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph except as provided in paragraph (i) of this section.

(H) That each full-time non-seasonal employee working an average 56 hour work week during six or more calendar months per year, and with twenty (20) or more years of continuous service working fulltime shall earn vacation at the rate of two and one-half (2½) calendar days for each complete calendar month of service through December of

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any year, beginning with the month in which twenty years of continuous service is completed. Any vacation balance in excess of thirty (30) work days shall become void as of December 31, close of business, each calendar year, for employees governed by provisions of this paragraph, except as provided in paragraph (I) of this section.

(I) That, at the end of each calendar year, employees shall be paid for any vacation balances in excess of the maximums fixed by this section accruing after January 1, 1964, upon certification by the appointing authority to the City Auditor and the Civil Service Commission and the approval by City Council that due to emergency work requirements, it is not in the best interests of the city to permit an employee to take vacation leave which would otherwise be forfeited as provided in paragraphs (B), (C), (D), and (E).

(J) That no vacation credit shall be allowed for any employee working an average forty (40), forty-four (44), or forty-eight (48) hour work week, for any calendar month in which such employee is off duty and not in paid status for more than sixteen hours of regularly scheduled work; and no vacation credit shall be allowed an employee working an average fifty-six (56) hour work week under the "three platoon system" for any calendar month in which such employee is off duty and not in paid status for more than six calendar days of regularly scheduled work, except that when an employee is required to report for work and does so report and is denied work because of circumstances beyond his control, absence from work for the balance of that day shall not be construed as unpaid work status.

(K) That an employee who is about to be separated from the service through discharge, resignation, retirement, or layoff, and who has unused vacation leave to his credit, shall be paid in a lump sum for such unused vacation leave in lieu of granting such employee a vacation leave after his last day of active service with the city provided, however, that employees working a forty (40) hour work week with less than eight (8) years of service shall be paid for not to exceed twenty-four (24) work days, that employees with eight

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(8) years but less than fourteen (14) years of service shall be paid for not to exceed thirty-six (36) work days, that employees with fourteen (14) years but less than twenty (20) years of service shall be paid for not to exceed forty (40) work days and that employees with twenty (20) or more years of service shall be paid not to exceed forty-four (44) work days. Employees working a fifty-six (56) hour work week under the three platoon system with less than eight years of service shall be paid for not to exceed thirty (30) calendar days; that employees with eight (8) years but less than fourteen (14) years of service shall be paid for not to exceed forty-two (42) calendar days; that employees with fourteen (14) years but less than twenty (20) years of service shall be paid for not to exceed forty-eight (48) days; and that employees with twenty (20) or more years of service shall be paid not to exceed sixty (60) calendar days.

(L) That when an employee dies while in paid status in the city service, any unused vacation leave to his credit shall be paid in a lump sum to the surviving spouse, or to the estate of the deceased.

(M) That all vacation leaves shall be taken at such time as may be approved by appointing authorities. Vacations should be scheduled as a normal procedure each year for not less than the vacation earned in the previous year, preferably at one time and considering the maximum vacation time which may be accumulated. That accumulated vacation credit as of January 1, 1964, shall be granted or compensated at such time or times as approved by the appointing authority, except that upon separation from the service of the city such accumulated vacation credit shall be paid in a lump sum for any unused balance.

(N) Notwithstanding the other provisions of this section, that department heads appointed by the Mayor, the Executive Assistant to the Mayor, the Deputy Public Service Director, the Public Safety Assistant Director and the City Purchasing Officer, they may be granted vacation leave at the discretion of the Mayor without regard to service or any other consideration except the needs of the city, but may not be compensated for any vacation leave not taken.

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That the City Clerk and the City Treasurer be exempt from the provisions of this section, be granted vacation leave at the discretion of the President of City Council without regard to service or any other consideration except the needs of the city, but may not be compensated for any vacation leave not taken.

(O) That no employee shall receive or be paid for a vacation until after such employee has worked six (6) calendar months for which he has earned vacation credit.

(P) That vacation balances, if any, shall be certified for all employees to the Civil Service Commission, City Auditor, and Finance Director, as of the first day of the month following the effective day of this Ordinance.

(Q) That any vacation balance to the credit of an employee, as of January 1, 1964, shall be retained and taken at such time, or times as approved by appointing authorities, or compensated for at time of separation in addition to vacation leave pay as provided in paragraph (H) of this section.

(R) No vacation shall be allowed for less than four (4) hours accumulated time.

(S) That the Civil Service Commission shall administer the provisions of this section, make necessary rules, approve forms, keep records, investigate cases, and unless otherwise specifically provided, make final decisions on allowance of pay for time off duty as provided by this section.

Effective January 1, 1973:

1 to 8 years	12 days
8 to 14 years	18 days
14 to 20 years	20 days
20 or more	22 days

a. The City of Columbus agrees that employees who resign or are terminated shall not forfeit vacation credits. The City of Columbus further agrees all vacation credits shall be payable upon receipt of final pay check.

Section 3. Injury Leave With Pay. (A) That all city employees shall be allowed injury leave with pay not to ex-

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ceed six (6) calendar months for each service connected injury provided such injury is reported to the employee's immediate supervisor subject to the provision of this section.

(B) That injury leave with pay shall be granted to any such employee only for injuries or other disabilities determined by the Chief City Physician as caused or induced by the actual performance of the duties of his or her position.

(C) That a report of the cause of all injuries signed by the immediate supervisor, the division head, and the appointing authority shall be submitted to the Chief City Physician within two (2) work days of the date of the injury on forms designed and furnished by the Industrial Relations Commission. The Chief City Physician shall be required to submit a report to the Industrial Relations Commission, following each accident, indicating what steps have been taken to remove or correct the cause of the disability, and such report shall be prepared and submitted within ten work days of the date on which the report of the accident was received by him.

(D) That no employee be granted injury leave with pay unless the appointing authority has in his possession written authorization, signed by the Chief City Physician. Such authorization shall indicate the approximate length of the leave, and no injured employee on leave shall be returned to work without the written approval of the Chief City Physician. If in the judgment of the Chief City Physician, the injury is such that the employee is capable of performing his regular duties or light duties during the period of convalescence, he shall notify the appointing authority in writing and deny injury leave with pay. Whenever an employee is required to stop working because of an injury or other service-connected disability, he shall be paid for the remaining hours of that day, or shift, at his regular rate and such time shall not be charged to leave of any kind.

(E) That any injured employee may appeal the decision of the Chief City Physician to the Industrial Relations Commission within five calendar days of notification that injury leave has been denied.

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(F) That pending a decision by the Chief City Physician, an injured employee may be carried on personal sick leave with pay which shall be restored to his credit upon certification by the Chief City Physician that injury leave has been approved.

(G) Time off for the purpose of medical examinations and/or treatments resulting from injury on the job shall be charged to injury leave.

Section. 4 Sick Leave With Pay. (A) That each full time officer or employee regularly working an average forty (40), forty-four (44), or forty-eight (48) hour work week during six or more calendar months per year shall be allowed sick leave with pay of one and one-fourth (1 1/4) work days for each completed calendar month of service; provided, however, that no sick leave credit shall be allowed for any such calendar month in which such employee is off duty and not in paid status more than sixteen (16) hours of regularly scheduled work, except that when an employee is required to report for work and does so report and is denied work because of circumstances beyond their control, absence from work for the balance of that day shall not be construed as unpaid work status.

(B) That each full-time officer or employee, regularly working an average fifty-six (56) hour work week under the "three platoon system" during six or more calendar months per year, shall be allowed sick leave with pay or one and three-fourth (1 3/4) calendar days for each completed calendar month of service; provided, however, that no sick leave credit shall be allowed for any such calendar month in which such employee is off duty and not in paid status more than six (6) calendar days.

(C) That sick leave with pay shall be cumulative and any officer or employee having unused sick leave prior to the effective date of this ordinance shall be credited with such unused sick leave for the purpose of this ordinance.

(D) That sick leave with pay may be granted upon the recommendation of the appointing authority only for the following reasons:

- (1) Sickness of the employee himself.
- (2) Injury to the employee himself except where such injury is incurred in the performance of employment other than his or her employment with the City.
- (3) Medical, dental, or optical consultation or treatment of employee.
- (4) Sickness of a member of the immediate family living in the employees household. Employees working an average 40, 44, and 48-hour work week in six (6) or more calendar months per year shall be granted not more than five (5) work days in any calendar year for sickness in the immediate family requiring the presence at home of the employee, except that no sick leave shall be granted under this paragraph for illness due to pregnancy or for the care of children during the pregnancy of the mother. Department heads shall require a certificate of the attending physician before paying any employee under this paragraph. In special cases where the department head deems that more than five work days are necessary, the appointing authority shall first submit such recommendation in writing to City Council and City Council's approval shall be obtained in advance of granting such leave. Employees working an average 56 hour week in six (6) or more calendar months per year shall be granted not more than six (6) calendar days in any calendar year for sickness of a member of the immediate family living in the employee's household requiring the presence at home of the employee, except that no sick leave shall be granted under this paragraph for illness due to pregnancy or for the care of children during the pregnancy of the mother. Department heads shall require a certificate of the attending physician before paying any employee under this paragraph. In special cases where the department head deems that more than six calendar days are necessary, the appointing authority shall first submit such recommendation in writing to City Council and City Council's approval shall be obtained in advance of granting such leave.

(5) Quarantine because of contagious disease. Department heads shall require a certificate of the attending physician before paying any employee under this paragraph.

(6) Any employee scheduled to work on a holiday as designated in Section II of this Ordinance, who reports sick shall be charged sick leave with pay for the number of hours that comprise the holiday.

(7) In the event an employee who is entitled to injury leave used up all his injury leave time, and is still unable to return to active duty, he may, with the approval of his appointing authority, use any unused sick leave, compensatory time and vacation time to which he is otherwise entitled.

(8) That when an employee is absent because of illness on the work day before and on the work day after a full holiday, or the work day after a half-holiday and the holiday is celebrated on a regularly scheduled work day, he shall be charged for four to eight hours sick leave for the holiday as the case may be, except no charge will be made for sick leave on a holiday when the absence is due to death in the immediate family.

(9) Death in the immediate family. That each full-time officer or employee regularly working an average forty (40), forty-four (44), or forty-eight (48) hour work week during six or more calendar months per year shall be entitled to three (3) work days for a funeral service and/or interment occurring in the State of Ohio or in a state adjoining Ohio, or five work days if either occurs elsewhere, except that all officers and employees shall be granted five (5) work days for the funeral of a spouse, mother, stepmother, mother-in-law, father, stepfather, father-in-law, son, daughter, stepson, or stepdaughter regardless of where the funeral or interment occurs.

Employees working an average fifty-six (56) hour work week under the "three platoon system" during six or more calendar months per year shall be entitled to three (3) calendar days for a funeral service and/or

an interment occurring in the State of Ohio or in a state adjoining Ohio, or six (6) calendar days for the funeral of a spouse, mother, stepmother, mother-in-law, father, stepfather, father-in-law, son, daughter, stepson, or stepdaughter regardless of where the funeral or interment occurs.

(E) That beginning with the seventh time and each time thereafter, an employee working an average forty (40), forty-four (44), or forty-eight (48) hour work week is granted sick leave with pay in any calendar year, the first two work days of each such leave shall be without pay, except that such absence may, with the approval of the appointing authority, be charged to compensatory time credit or to vacation time, and except further that intermittent period of sick leave for the same illness or injury, certified to by the City Physician as necessary, shall be counted as one absence if they occur during a period not to exceed thirty (30) calendar days from the date the employee returns to work.

(F) That beginning with the seventh time and each time thereafter an employee working an average fifty-six (56) hour work week under the "three platoon system" is granted six calendar days of each such leave shall be without pay, except that such absence may, with the approval of the appointing authority, be charged to compensatory time credit or to vacation time and except further that intermittent periods of sick leave for the same illness or injury, certified to by the City Physician as necessary, shall be counted as one absence if they occur during a period not to exceed thirty (30) calendar days from the date the employee returns to work.

(G) That a division or department head or the Civil Service Commission may require evidence as to the adequacy of the reason for any employee's absence during the time for which sick leave is requested.

(H) That sick leave with pay shall be charged at the rate of one work day for each eight (8) hours of regularly scheduled work from which an employee is absent, when sick leave is chargeable to such absence under the provisions

of this section provided, however, that employees working an average fifty-six (56) hour work week under the "three platoon system" shall be charged at the rate of one work day for each twelve (12) hours such employee is absent from regularly scheduled work, and sick leave with pay is chargeable therefore.

(I) That an employee who is about to be separated from the service through discharge, resignation, retirement, or lay-off, may, if he so desires, be paid in lump sum eight (8) hours pay for each eight (8) work days of unused sick leave to his credit for total accumulations of less than forty-one (41) work days and eight (8) hours pay for each four (4) work days of unused sick leave to his credit for all accumulations in excess of forty (40) work days and less than three hundred and one (301) work days and eight (8) hours pay for each work day for all accumulations in excess of three hundred (300) work days. No reimbursement shall be made to any employee with less than twenty-four (24) work days accumulated sick leave credit. When an employee becomes deceased while in paid status in city employment, compensation for any such unused sick leave to his credit shall be paid in a lump sum to the surviving spouse or to the estate of the deceased at the rates provided in this paragraph.

(J) That no sick leave with pay shall be accredited or allowed except that accredited for service as an employee of the City of Columbus.

(K) That eligibility for sick leave allowance shall begin after the completion of the first calendar month of service. No unearned sick leave may be granted to any employee. No charge for sick leave shall be made for less than four (4) hours accumulated time.

(L) That any sick leave balance to the credit of an employee as of the effective day of this section shall be retained.

(M) Pregnant employees are required to take a leave of absence without pay upon reaching the end of the eighth (8th) month of pregnancy. The appointing authority shall prepare the leave of absence without pay on a Personnel Action Form no less than ten (10) days prior to the employee

reaching the end of the eighth (8th) month of pregnancy.

The time that the leave of absence is to begin shall be determined by the City Health Commissioner upon receipt of a statement from the employee's attending physician or upon the commissioner's independent judgment.

The City Health Commissioner shall submit his findings in writing forthwith to the appointing authority and the Civil Service Commission of the date on which the employee will no longer be permitted to work in a paid status which shall not be later than specified in this section.

The employee shall return to a paid status to her previous held classification, if it still exists, providing the employee has more seniority than those employees currently within the classification upon receipt by the City Health Commissioner of a statement from the employee's attending physician certifying her capacity to return to full-time employment and upon the concurrence of the said commissioner.

The Commissioner upon receipt of such statement and upon his concurrence shall forthwith notify in writing the Civil Service Commission and the appointing authority of the employee's capacity to return to full-time employment.

Section 5. Sick Leave Without Pay—After an employee has exhausted his sick leave with pay, he shall be granted a leave of absence without pay for a period not to exceed 60 days, because of personal illness or injury with possible extensions up to one year upon request supported by medical evidence submitted to the City. If the illness or injury continues beyond one year, the City may grant additional sick leave at 90 day intervals with such extensions up to one year under this Paragraph upon request.

Section 6. Leave of Absence. (A) Personal Leave—Regular employees, who have completed their probationary period may be granted personal leave of absence without pay by the appointing authority, subject to the approval of the Civil Service Commission for good cause, but other employment will not be considered grounds for such leave. Such leave may not exceed 60 days, however, extensions

may be granted under the Civil Service rules if such need arises.

(B) **Education Leave**—Regular employees may be granted a leave of absence without pay by the appointing authority, subject to approval by the Civil Service Commission, for educational purposes. Such leave shall initially be limited to 60 days with possible extensions up to one year provided further such educational pursuits are related to the operations of the City.

(C) **Union Leave (Long Term)**—At the request of the Union, a leave of absence without pay shall be granted to any classified employee who is selected for a Union office or employed by a Union for a fixed term of office (subject to the approval of the appointing authority and the Civil Service Commission). Such leave shall initially be limited to 60 days with possible extension to one year. Such service will not constitute a break in service for seniority rights or promotional examination announced by the Commission.

(D) **Union Leave (Short Term)**—At the request of the Union a leave of absence without pay shall be granted to any classified employee who is a member of the Union to attend a convention or other similar functions of short duration. (subject to the approval of the appointing authority and the Commission). Such leave of absence will not affect his sick leave and vacation leave accruals, anniversary date for increases, seniority dates; nor will it constitute a break in service for computing service credits for Civil Service examinations.

Article XIX

LEGAL HOLIDAYS

(A) The legal holidays observed by the City shall be as follows: New Year's Day, January 1; Washington's Birthday, the Third Monday in February; Primary Election Day, One-Half Day; Memorial Day, the Last Monday in May; Independence Day, July 4; Labor Day, the First Monday in September; Columbus Day, the Second Monday in Oc-

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tober; Veteran's Day, the Fourth Monday in October; General Election Day; Thanksgiving Day, the Fourth Thursday in November; Christmas Day, December 25; Employee's Birthday. (If the employee's birthday falls on an above named holiday, the employee shall be granted one additional holiday) and any other holidays proclaimed by the Mayor.

When a holiday falls on the first day of an employee's regularly scheduled "weekend", it shall be celebrated on the following day except that at the time of a shift change which necessitates more than a two-day weekend, a holiday which falls on either of the first two days shall be celebrated on the last previous work day and a holiday which falls on any other day of such weekend shall be celebrated on the next subsequent work day.

(B) That for each holiday observed on an employee's work day, said employee will be excused from work on such day at the discretion of the appointing authority. If one of the holidays mentioned in (A) above occurs while an employee is on vacation leave, such day shall not be charged against vacation leave. Part-time and seasonal employees shall not be compensated for time not worked on holidays.

(C) That for the purpose of administering the provisions of Sections 10 and 11, holiday time shall apply to the tour of duty beginning on the day which is celebrated as a holiday, except that employees working an average fifty-six (56) hour work week in the "three platoon system" shall be compensated for holiday time on the day the holiday occurs.

Article XX LAY-OFFS

Section 1. Whenever it is necessary because of lack of work (including displacement because of discontinuance of operations and/or Sub-Contracting) or funds, abolition of position, or other causes outside the workers control, employees within a classification shall be laid-off in the following manner:

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- (A) Emergency Employees
- (B) Provisional Employees
- (C) Seasonal Employees

(D) Permanent employees who have not completed their probation period.

(E) Permanent employees who have completed their probation period.

Section 2. When a lay-off is necessary, employees shall be laid-off in inverse order of seniority, the last person appointed to the classification, the first to be laid-off. Employees shall be laid-off within a classification, first, by Division, second by Department, and thirdly, city-wide, with bumping rights against all other employees with less seniority in the same classification, in accordance with the order as provided above. Those employees affected by the bumping shall have bumping rights against lesser seniority employees in a lower-rated classification, at his option.

Section 3. Before any bargaining unit employee is actually laid off under sections 1 and/or 2, the city and the Union will meet immediately for the purpose of attempting to find an available job with the City, in or out of the bargaining unit, which the affected employee is qualified to perform, and if any such job is available the employee will be given the option of accepting it rather than being laid off.

Section 4. Employees shall be recalled in the reverse order of lay-off as provided in section 2 above. An employee on lay-off will be given ten (10) working days notice of recall from the date on which the City sends the recall notice to the employee by certified mail to his last known address (as shown on the City's records). A laid off employee will be recalled to the first available job position when it becomes available within in accordance with his seniority. It will be the responsibility of the laid off employee to keep the Civil Service Commission informed by certified mail of any change of address.

Section 5. When reasonably possible, regular full-time employees shall be given a minimum of fourteen (14) calendar days advance written notice of lay-off indicating the circumstances which make the lay-off necessary, and the Union shall receive a copy of all such lay-off notice.

Section 6. In the event an employee is laid off, he shall receive payment for earned but unused vacation with his final check.

Article XXI HOSPITALIZATION, MEDICAL AND LIFE INSURANCE

The city shall enter into contractual agreements for the purpose of providing hospitalization, surgical, and major medical insurance for all full-time employees, as is now in effect and pay all premiums for both the employee and family coverage. The City shall also enter into contractual agreements for term life insurance in order to provide \$10,000 of term life insurance for all full-time employees less than 65 years of age, and \$2,000 for all full-time employees 65 to 70 years of age. Employees shall not be eligible for this term life insurance after reaching age 70. Eligibility for enrolling new employees for the health insurance and term life insurance shall be in accordance with the terms of the said contracts. For the purpose of this section "full-time employees" is defined as including all employees who perform prescribed duties on an established schedule of forty hours or more per week. Employees working less than a forty hour per calendar week schedule are to be considered a part-time employee and shall be excluded from such insurance programs. Employees working forty hours or more a week, but in a position which is intended to exist and continue for only a portion of a calendar year (known as seasonal employee) shall not be considered full-time employees and shall be excluded from such insurance program.

Article XXII
MISCELLANEOUS

Section 1. Every six (6) months the City agrees to provide the Union with a list of all employees within the bargaining unit containing the current status of accumulated paid sick leave.

Section 2. It shall be understood that when an employee reports to his supervisor or his designated representative that he is unable to report for work or complete a full days' work, that he shall be permitted to credit the time off to any accumulated time that he may have to his credit, which is applicable or, if the affected employee has no such time credited to him, he shall be designated as excused absence without pay, providing that the employee furnishes the city with a reasonable excuse for his absence.

Section 3. All regular employees of the City whose salaries are provided by the master ordinance shall be paid on a bi-weekly basis.

Section 4. Worker's Security Trust Fund. The City of Columbus agrees to enter into the unemployment compensation program available to municipal governments in Ohio. Said program to be established by January 1, 1973 or as soon thereafter as feasible under the statutory provisions and procedural requirements of state law. The City of Columbus pledges to move immediately upon agreement with Local No. 1632 to implement this agreement.

Section 5. Uniforms. Uniforms for all service employees in the Divisions of Water and Sewers and Drains will be provided by the City of Columbus. Meter readers in the Division of Electricity will be provided uniforms by the City of Columbus. Additional review of the uniform requirements in other areas of city government is continuing and an attempt will be made by the City of Columbus to resolve specific problems involving Communications and Police employees as quickly as possible.

Section 6. Suggestion Awards. The City of Columbus

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will establish after January 1, 1973, a program of suggestion awards for improved efficiency of governmental operations.

Section 7. Standby Pay. The City of Columbus will eliminate home standby service for all city employees as soon as practical after October 1, 1972.

Section 8. Career Training Programs. The City of Columbus will initiate new career training programs for city employees in 1973 in conjunction with the Ohio State University and possibly other area educational institutions. Federal funding will be sought through the federal programs grant coordinator to expand these educational opportunities and to promote and improve the skill of all city employees especially recognizing those represented by Local No. 1632. Suitable recognition for completion of these programs will be an integral part of this endeavor.

Section 9. Money Shortages. The City of Columbus agrees to diligently pursue an administrative policy of eliminating, insofar as possible, the necessity for city employees to handle cash monies. Concentration of money deposits or payments for all purposes within the Treasurer's Office is strongly recommended. Individual cash drawers and receipt boxes shall be established wherever possible to facilitate establishment of individual responsibility for the handling of funds.

Section 10. Provisional Employee Credits. The City of Columbus pledges to pursue a policy of regular testing of all provisional employee positions.

Section 11. Allowance. The City of Columbus pledges a new and realistic program of car fleet management to be implemented during calendar year 1973.

Article XXIII
SAVINGS CLAUSE

If any Article or Section of this Agreement or of any rider thereto should be held invalid by operation of law or by any tribunal of competent jurisdiction, or if compliance with or enforcement of any Article or Section should be

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restrained by such tribunal pending a final determination as to its validity, the remainder of this Agreement and of any rider thereto, or the application of such Article or Sections to persons or circumstances other than these as to which it has been held invalid or as to which compliance with or enforcement of has been restrained, shall not be affected thereby. It is understood by and between the parties hereto that nothing in this Agreement shall be deemed to conflict with any provisions of the Charter of the City of Columbus, existing State Laws, Ordinances and Resolutions of the City of Columbus, or Civil Service Rules and Regulations.

Article XXIV

CONTRACT REOPENER WAGES, SALARIES & ECONOMIC BENEFITS

No other matters shall be negotiated during said period unless there is a written agreement by the parties and said agreement shall contain a list of those matters to be the subject of negotiation.

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Article XXV

CONTRACT REOPENER COLLECTIVE BARGAINING LEGISLATION

It is further agreed that in the event the Ohio General Assembly passed legislation which affects municipal subdivisions or labor organizations having agreements or contracts with them; that under these circumstances, there can be a reopening of this agreement for purposes of amending said agreement to conform to the changes in the laws. Either party hereto shall have the right to call for a reopening of the Agreement under said circumstances, by giving notice to the other party in writing, said notice to be given at any time after such legislation is signed into law and prior to the effective date of the law or laws. Such negotiations shall commence within ten days after notification.

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Article XXVI

DURATION OF AGREEMENT

This agreement shall be effective as of October 10, 1972, and shall remain in full force and effect through September 30, 1974, and thereafter from year to year unless at least (90) days prior to said expiration date, or any anniversary thereof, either party gives timely written notice to the other of an intent to negotiate on any or all of its provisions. If such written notice is given, negotiations shall commence within ten (10) days immediately thereafter. If either party intends to terminate this agreement after September 30, 1974, it must give at least five (5) days written notice to the other party of its intention to terminate.

MEMORANDUM OF UNDERSTANDING

Hazardous Weather Conditions

Humanitarian guidelines respecting the responsibilities of the parties in case of adverse or extreme weather conditions that affect the health and personal safety of all employees shall be of prime consideration.

In cases of severe degrees, wind, rain or electrical storms, subzero temperatures ranging from 3 degrees and below, severe snow storms and ice blanketing, no employees shall be unnecessarily compelled to work under such conditions which involve a physical risk to their health and personal safety. Examples specified therein shall be related to the official weather reports as predetermined by the United States Weather Bureau located at Port Columbus in this area. The parties further agree for purposes of administering and implementing provisions of this memorandum that in cases involving a question as to whether or not Sanitation Division employees will perform regular work assignments, the decision will be made by the following:

Superintendent—Division of Sanitation

Labor Relations Administrator

In all other areas of the city, where essential, such decisions

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shall be made by the division head or his designated representative.

On behalf of the Union—Local #1632

Warren H. Jennings

Albert L. Beard

C. D. Miller

On behalf of the City of Columbus

Alvin K. Peterjohn

Arthur G. Tisdale

Donald E. Britton

MEMORANDUM

The balance of this document contains the provisions of the second year of our contract as agreed upon and signed by the City's and Union's negotiators.

The amounts of the second year raises are subject to the approval of the Pay Board under the Economic Stabilization Act, if said Act is still in effect at the time of presentation by the City to the Federal Government.

The rejection of this agreement by Pay Board would necessitate reopening of negotiations between the City and Local 1632 on economic matters as mentioned above.

Agreement Between The City of Columbus ,Ohio and Local No. 1632 American Federation of State, County and Municipal Employees AFL-CIO

This Agreement is made between the City of Columbus, hereinafter referred to as the Administration and Local No. 1632, American Federation of State, County and Municipal Employees, AFL-CIO, hereinafter referred to as the Union. This Agreement is intended to implement and to formalize the Agreement approved by the negotiating committees representing the Administration and the Union, and executed on the 10th day of October, 1972.

IN WITNESS WHEREOF, THE PARTIES HERETO
HAVE SET THEIR HANDS THIS 10th DAY OF OC-
TOBER, 1972.

CITY OF COLUMBUS:

Tom Moody
Alvin K. Peterjohn
Donald E. Britton
Arthur G. Tisdale

LOCAL NO. 1632 AFSCME--AFL-CIO:

Warren H. Jennings
Albert L. Beard
C. D. Miller
Paul Heller
Charles Wiley
Herman Thornton
Phil Chevallard
Themestocles Cody
Benny Edmondson
James L. Kopp
Marie Clarke
George Monroe
R. C. Anthony, Sr.