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SAN JOSE'S MUNICIPAL SOLID WASTE SYSTEM: A CASE STUDY

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1973

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# SAN JOSE'S MUNICIPAL SOLID WASTE SYSTEM A Case Study

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#### **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

Office of Solid Waste Management Programs

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# 1

#### INTRODUCTION

The solid waste management system of San Jose, California, is a private sector operation which functions under contract to the city. It provides mixed refuse collection and disposal services to which all city residents must subscribe or obtain a permit to haul their own refuse. Services are provided by a prime contractor, an owned subsidiary (which also operates the major landfill), and four independent subcontractor firms. Within the city, the Department of Public Works and the Department of Housing and Community Development share the responsibility for monitoring this system. The Department of Public Works also provides street sweeping services and operates a municipal landfill for street sweeping rubbish, citizen-delivered rubbish, and rubbish from other city operations.

San Jose is undergoing rapid expansion of population and commercial/industrial growth. It is a transportation hub for the area's industry. The growth of the city closely parallels the growth of the manufacturing industry. In this environment, the problems of solid waste disposal, sewage sludge disposal, and industrial waste disposal have rapidly increased and are handled almost totally by private sector operations.

The contractor collection system, 85 percent of which has been acquired by a national solid waste services firm, requires modernization of both management and equipment. The most recent city contract called for the addition of ten larger packers and the prime contractor is instituting a computerized accounting

and billing operation. Residents are billed by the contractor on a quarterly basis.

The disposal system consists of a private site located ten miles from the city and utilized by the two firms which provide 85 percent of the city's service. The four smaller firms utilize other landfills located outside the city. The haul distances are thus relatively long, causing some system inefficiency.

The San Jose personnel responsible for the system operation are well aware of system problem areas. Extensive planning efforts have been undertaken to identify alternative collection, cost accounting, billing, disposal, and reclamation options. It is apparent that the city wishes to gain more control of the system by instituting city billing, delineating an acceptable accounting methodology for the contractor, soliciting competitive bids for collection service, and instituting its own reclamation/disposal system. Since the contractor pays a franchise fee to the city of ten percent of gross waste collection/disposal receipts and three percent of gross rubbish collection/disposal receipts, an adequate accounting and billing system is necessary for this system.

The case study of San Jose, California was performed using a carefully structured data-gathering technique. Initial contacts were made by both Office of Solid Waste Management Programs and Applied Management Sciences' personnel and interviews were scheduled to be convenient for the city and contractor personnel. During these interviews, notes were taken and tape recordings were made after obtaining the permission of the interviewees. Extensive efforts were taken 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 San Jose, the dates of these interviews, and the types of the 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 synopsizes 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.

Director, and Chief Assistant Director, Department of Public Works	16 August	Background and history of collection and disposal system, general problem areas
Civil Engineer, Hydraulic Division, Department of Public Works	16, 17 August	Detailed system discussion, information on future city system objectives, information on city/county interface and planning efforts, city landfill operation
Supervising Sanitarian, Housing, Community Development and Code Enforcement, Health Department	16 August	Detailed data on system operation, complaint calls data, background on contractor operation and history
Street Sewer and Maintenance Superintendent, General Super- visor of Street Sweeping Services, and Power Sweeping Foreman, Department of Public Works	16 August	Detailed data on city street sweeping, litter, and leaf collection operations
Equipment Maintenance Superin- tendent, Department of Public Works	17 August	Discussion of equipment maintenance and operating costs, equipment acquisition, and problem areas
President and Operating Manager of Garden City Disposal Company	17 August	Information on contractor collection and disposal activities, visit to private sector landfill

FIGURE 1: DATA SOURCES AND INFORMATION TYPES



# 2

#### SYSTEM DESCRIPTION ABSTRACT

City: San Jose, California

Chester Spurgeon

Contacts: A.R. (Tony) Turturici Director, Department of

Public Works

Richard R. Blackburn Chief Assistant Director,

Department of Public Works

Eugene R. Toschi Civil Engineer, Hydraulic

Division, Department of

Public Works

John R. Lucchesi, R.S. Supervising Sanitarian,

Housing & Community Development, and Code Enforcement

Section, Health Department

Steve Seward Street & Sewer Maintenance Superintendent, Department

of Public Works

Stan Jacklich General Supervisor, Street

Sweeping Service, Depart-

ment of Public Works

Power Sweeping Foreman, Street Sweeping Service, Department of Public Works

Edward N. Reichle Equipment Superintendent,

Department of Public Works

Paul Mandsen President, Garden City

Disposal Company

Gene Meredith Operating Manager, Garden

City Disposal Company

Date of Visit: August 16-17, 1973

Population Demography:

Category	City of San Jose	SMSA
Total (1970)	443,950	1,064,714
Male	218,117	524,,674
Female	225,833	540,040
White*	425,566	949,898
Other Races:	28,384	114 "816
Black	10,950	18,090

1973 estimated population of San Jose is 506,800

Area: 145 square miles

Density: 3,495 residents per square mile

Collection: Table 1

Miscellaneous:

Private contractor system under city contract offers basic curbside service plus higher levels of service at additional cost. Charges escalate based on number of containers and carryout versus curbside service. Stops are collected once per week by the prime contractor and five subcontractors. Refuse generation rate is lower than generally encountered. System efficiency is low, given the density and waste generation rates: long runs to disposal site, inclusion of commercial stops in residential routes, equipment age, and size of packers, contribute to this condition. Commercial/industrial accounts are based on approved rate schedule.

<sup>\*</sup>Assumed to include Mexican-Americans

TABLE 1
COLLECTION ABSTRACT

Collection Function Collection	Mixed Refuse	Street Sweeping, Leaf & Litter Collection
Variables	(City Contractor)	(City)
Number of Crews	Approximately 70	14
Crew Size	2 to 3	1
Frequency of Service	Once Per Week	Variable depending on area
Point of Collection	Basic Service:Curb- side Add'l Service:On- Premise	Curbs, litter cans
Method of Collection	Rear Loaders	Street Sweepers, Support Trucks
Stops	113,700 <sup>1</sup>	3,000 Street Miles
Service Limitations <sup>2</sup> /	Basic Service: 3-32 gallen cans (extra cans, bins at add't cost)	<b></b>
Incentive System	Task System	
Fund Source	Service Charge	General Fund + EEA funds
Tonnage (Annual)	175,000	21,500 <u>3</u> /
Wage Scales (Monthly)	\$4.61-4.88/hr	
Unions	Teamsters Local 350	
Annual Cost	3/	\$549,530 <sup>4</sup> /

 $<sup>\</sup>frac{1}{4}$ As of date of site visit: current # of stops has increased to 120,000

Extra cans, bins of varying sizes, special rubbish or bulky items pickups are all available at additional cost to residents

<sup>3/</sup>Insufficient data available

<sup>4/</sup>Based on budget cost of \$497,000 plus prorated share of city landfill cost: does not include equipment operating/maintenance cost

#### Disposal: Table 2

Miscellaneous:

Disposal costs are not known for the private sector landfill. Costs are included in the user service charge. Private site is huge and suffers from birds, blowing refuse, and high water table. No leachate monitoring performed. City disposal site accepts only bulky items from citizens, and wastes from city street sweeping, lot cleaning, litter control and other city operations. City site may be turned into golf course. Disposal system is primary local issue for San Jose solid waste planning efforts.

TABLE 2
DISPOSAL ABSTRACT

Site Parameters	Private Site Landfill ,	Municipal Landfill
Type/Location	Class II Sanitary Landfill/ Newby Island near Southern Tip of San Francisco Bay	Class II Sanitary Landfill, Bulky Items Only/South Central Sector of City
Total Area	342 acres	50 acres
Real Loading	105,000 yds/month	30C,000 - 350,000 yds/month
Total Lifetime		6 years
Remaining Lifetime	30 - 40 years	3 years

# 3

#### FINDINGS AND CONCLUSIONS

The San Jose solid waste management system may be characterized as cooperative contractual arrangement between the public and private sectors. By means of the city code, the city may essentially issue a monopolistic franchise for specified territories to private sector operators who collect all of the residential mixed refuse, industrial and commercial waste, and some of the bulky items. Collection services are mandatory for all residents who must subscribe and pay user charges, based on set rates, to the contractor or his subcontractors. tractor, his subcontractor, and other licensed private haulers pay to the city a license fee based on gross receipts for collection and disposal of mixed refuse and rubbish. The only collection service directly provided by the city is that of street sweeping and litter collection. The city operates a recycling system which currently handles 500 tons/year of glass, paper, aluminum, and bi-metals.

The city faces two sets of problems, one concerned with the expansion and improvement of collection and billing services, and one centered around the need for a county plan for solid waste disposal. San Jose's expanding residential population and industry, a state law calling for a state-wide solid waste management plan by 1976, and citizen pressure for recycling efforts are some of the factors behind this situation. This private sector monopoly of collection and disposal operations, the potential for better systems control, and the desire for generation of revenue

are additional factors which place pressure on the city to upgrade its current arrangements.

The city has undertaken extensive studies of collection contracting and billing alternatives, of citizen attitudes toward solid waste systems, and of waste generation rates. it is likely that private sector collection of residential and other refuse will continue, it is apparent that the system will be modified. First, open bidding based on detailed service performance specifications is likely to occur. Second, the contractor may be required to install a city-approved accounting system to insure accurate franchise fee payments to the city, or the city may institute its own billing system. Regardless of the option selected, it is apparent that the city will move rapidly towards a more controlled, higher quality of service. Mandatory rubbish and bulky items collection are not likely to be instituted, as most citizens appear to desire the option of either requesting special service or bringing their bulky wastes directly to the city or private landfills.

In the area of disposal/recycling, the city has two parallel sets of issues to consider. The first is creation of a city/county plan for solid waste disposal which is fair to all concerned and which meets both local requirements and State statutes. This issue must be resolved by 1975 when, coincidentally, the current collection/disposal contract expires. The city seems to be well ahead of the county in undertaking its planning efforts.

The second set of disposal issues relates to both the mode of disposal (extent of recycling) and the decision as to who will operate the disposal system. The city favors a public sector "environmental park" concept which will include both reclamation and landfill disposal operations run by the city. Such a system would meet the objective of governmental controls of disposal and of increased need for resource recovery. It would

also generate revenues which would help to support general city operations. Such a plan would not be appealing to the private sector, as it has a large investment in landfill property and its landfill operations seem to be quite lucrative.

System efficiency for collection operations appears to be somewhat lower than what might be expected, given the population density, terrain, curbside service, and extent of containerization for multiple dwelling unit stops. Aging equipment and long hauls to the disposal site contribute to this situation. The primary contractor seems to be making strenuous efforts to improve its system's capability within corporate resource and policy constraints.

The San Jose system is likely to undergo some significant changes in the next two to three years. The success of the city's recycling efforts and plans to gain control of the system by disposal function operation merit periodic surveillance. Also, the means by which the city resolves city/county differences as it creates the required plan should be monitored, as this is a problem common to many other areas of the country.

# 4

#### BACKGROUND OF THE SYSTEM

The San Jose area was first settled by Catholic Padres in the mid-eighteenth century. This was the first civil community in California and was established by the Spanish government as "El Pueblo de San Jose de Guadalope" on November 29, 1777. In the early 1800's the ranchos began to flourish with cattle, grain, and fruit trees and in 1849, the year of the "Gold Rush," the city became the first capital of California. Its name was shortened to San Jose in 1850 when California became a state. San Jose lost its status of capital of the State in 1851, although it was rapidly becoming a wealthy agricultural area. The 1870's saw the arrival of the canning industry, railroads from the East, daily newspapers, and a new school which later became San Jose State College. By the end of the nineteenth century San Jose had almost four and a half million trees of all kinds; prunes, apples, apricots, peaches, pears, cherries, almonds, and walnuts. These decisuous fruit crops, together with some manufacturing and light industry continued to be the economic base of the area until the post-World War II years.

The last three decades have seen a phenomenal growth and change pattern in the San Jose area. Orchards have given way to homes and industry. The city has grown from a population of

60,000 with an area of 15 square miles in 1950 to an area of 140 square miles and 471,000 people in 1971. The 1973 population has been estimated at 510,000. Detailed statistics on the city are presented below.

#### Location, Demography, Economic Base and Climate

San Jose is located at the southern end of San Francisco, 42 miles south of Oakland, and 390 miles north of Los Angeles. The city is situated in the heart of the Santa Clara Valley in Santa Clara County. The average elevation is about 80 feet in the central area of the city, although elevation varies from sea-level on the Bay to several hundred feet on the Coastal Range. The city covers an area of 145 square miles, making it the third largest city in California in land area.

The climate is mild and sunny. The area receives cooling breezes from both the adjacent Bay and the Pacific Ocean just 18 miles to the west. The area is protected from ocean storms by the Coastal Range. A climatological summary is presented in Table 3. The average low winter temperature is  $38^{\circ}F$  and the average high summer temperature is  $81^{\circ}F$ . The average rainfall is 14.87 inches, largely between November and April. The area is generally one of low humidity and cool nights.

San Jose has experienced a phenomenal population growth in the past two decades. The population more than doubled itself in each decade and is still growing rapidly. In 1950 the population of the San Jose area was 95,280; by 1960 it had risen to 204,196 and by 1970 it had jumped to 945,779. Estimates for 1973 place the city's population at over 506,000. San Jose's population comprises over 44 percent of Santa Clara County's residents.

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# TABLE 3 . CLIMATOLOGICAL SUMMARY MEANS AND EXTREMES FOR PERIOD OF RECORD 1931-1971

Latitude 37° 20' N Longitude 122° 53' W Elevation 95 Feet

Reporting Weather Station San Jose

		Тенцэел	ature (°F	)		Precipitat	tion Totals	M	ean Num	ber of Da	N.				
-	Mear	15		Extre	ernes	(In	ches)	_	Tempe	ratures	– – Î				
Month	Daily Maximum	Mean	Osity Minimum	Record Highest	Record Lowess	lAcan	Greatest Daily	Precipitation .10 inch or more	Max.	32° & below below	Average Hourly Wind Speed (MP	Prevailing Wind Direction	Sunshine (Percent)	S P.M. Relative Humidity (%)	Month
Jan April July Oct Year	57 6 69 0 81 1 74 1 70 4	49 <b>2</b> 58 0 68 2 62 4 59 4	40 7 46 9 55.4 50 7 48 4	78 92 106 96 106	22 34 46 35 20	2.70 1.06 T 0.56 13.11	2 08 1.34 0.04 1.49 2 79	6 3 0 2 32	0 4 1 16	3 0 0 0 5	5.6 6.6 6 2 5.2 6 4	SE NW NW NW	42 60 83 68 63	66 56 54 58 58	Jan. Apul July Oct. Year
Source	Envir	onrnenta	I Science	Services	Administration	T Trace	, an amoun	it too sin	ali to inc	asure					

The county itself is almost 24 percent as large as the San Francisco-Oakland S.M.S.A. The non-white population comprises 2.5 percent of the San Jose population. By 1980, the Metro-politan San Jose area is expected to have a population in excess of 1.4 million. Buying power in terms of average annual disposable income is \$12,548 per household.

San Jose is an area undergoing very rapid population and economic growth. Its ready access via modern freeways to both commerical and recreational areas (San Francisco and Oakland) contribute to its attractiveness. Its access to ports and to other western states place it at the hub of local expansion trends. Two railroads, 44 interstate freight truck carriers and 167 interstate carriers contribute to its role as a distribution center. Employment distribution and other economic data are Table 4 below presents employment data depicted in Table 5. for the six largest firms in the area. There are approximately 510 manufacturing plants in the area and leading group classes of products are: Electronic Research, Electrical Machinery, Food Processing, Printing and Publishing, Fabricated Metals, Machinery, Chemicals, Automobile Assembly, and Stone and Clay products.

Table 4: Employment Data for Six Largest Firms

EMPLOYMENT	PRODUCTS
7,500	Electronic Computer Equipment
3,500	Food Machinery and Ordnance
3,178	Electric Motors, Nuclear Power Plants
3,000	Automobile Assembly
720	Food Processing
650	Printing
	7,500 3,500 3,178 3,000 720

TABLE 5

EMPLOYMENT DISTRIBUTION AND OTHER ECONOMIC DATA FOR SAN JOSE METROPOLITAN AREA (SANTA CLARA COUNTY)

					rcent ange
					72 to
EMPLOYMENT #	May 73	Apr. 73	May 72		73
Total - All Industries	469,800	465,600	446,500	===	5.2
Agriculture	5,600	4,800	5,760	-	1.7
Contract Construction	20,800	19,600	20,400	+	2.0
Manufacturing	128,100	127,800	113,200	•	8.3
Durable Goods	106,200	105,000	96.800	•	9.7
Non-Durable Goods	21,900	22,800	21,400	•	2.3
Trans., Comm. & Utilities	18,200	18,200	17,900		1.6
Trade (Wholesale & Petail)	84,200	83,400	79,400	+	6.0
Finance, Insurance & Real Est.	17,200	17,100	15,800	•	8.8
Services	85,600	84,700	81,600	•	4.9
Government	68,700	68,600	66,100	•	3.9
Percent of Labor Force Employed	95.91	95.6%	94.68		1.4
BUILDING †	33.30	33.00	37.00	•	1.4
Valuation of Permits Issued (\$000)	42,026	94,784	44,071	_	4.6
Year to Date (\$000)	230,657	188,631	206,084	+	1.2
Number of Dwelling Units	994	2,952	1,326		25.0
Year to Date	6,767	5,773	6,365	+	6.3
Single Dwellings	668	1,885	804	-	16.9
Year to Date	3,994	5,326	3,758	<b>.</b>	6.2
Multiple Dwellings	326	1,067	522	•	37.5
Year to Date	2,773	2,447	2,607	•	6.3
FINANCE #	2,773	2,447	2,007	•	0.5
	4,028,869	3,906,686	3,435,892	+	17.2
Bank Debits (\$000) Year to Date(\$000)		14,745,461	177,627,731		6.5
Bank Deposits (§000)	877,003	881,500	764,581	+	14.6
TRANSPORTATION 9	077,003	001,300	10-34 70 7	,	14.0
Air Passengers (CN)	84,770	86,479	77,308	+	9.6
Year to Date	393,273		358,912	•	9.5
Air Passengers (OFF)	85,235		7.7.,322	+	10.2
Year to Date	396,097		364,748	+	8.5
CONSUMER PRICE INDEX 9	330,031	510,004	207,770	•	0.5
All Items (1967:100)					
U. S. City Average	131.5	130.7	124.7	φ.	5.4
San Francisco-Cakland	128.7	128.7	122.9	÷	4.7
MISCELLANEOUS	~=~.	250,7	2007	-	7.,
EIY OCHANIAIN OAD					

<sup>\*</sup> California Dept. of Employment, current month is preliminary. Previous months are revised.

<sup>+</sup> U.S. Department of Commerce, San Francisco.

<sup>1</sup> Federal Reserve Bank, San Francisco.

<sup>§</sup> Figures for San Jose Municipal Airport, Airport Manager.

<sup>¶</sup> Consumer Price Index, Monthly, U.S. Department of Commerce.

## TABLE 5 (Cont.d)

# SAN JOSE METROPOLITAN AREA (SANTA CLARA COUNTY)

			V 22	Ch -19	rcent ange 72 to
EMPLOYMENT *	June 73	May 73	June 72		75
Total - All Industries	475,100	469,800	434,100	. +	9.4
Agriculture	5,500	5,600	6,200	-	11.2
Contract Construction	21,000	20,800	19,000	+	10.5
Manufacturing	131,300	128,100	114,900	+	14.2
Durable Goods	108,500	106,200	92,000	•	17.9
Non-Durable Goods	22,800	21,900	22,900	· <b>-</b>	. 4
Trans., Comm. & Utilities	18,500	18,200	18,200	•	1.6
Trade (Wholesale & Retail)	84,900	84,200	75,700	4	12.1
Finance, Insurance & Real Est.	17,400	17,200	14,400	+	20.8
Services	86,200	85,600	78,500	•	9.8
Government	68,900	68,700	65,800	•	4.7
Percent of Labor Force Employed	95.1%	95.98	94.4%		.7
BUILDING T	•			-	
	44,733	21,629	64,193	-	30.3
Valuation of Permits Issued (\$000)	275,390	210,260	270,277	+	1.8
Year to Date (\$000)	1,530	994	2,296	•	33.3
Number of Dwelling Units	8,297	6,767	8,661	_	4.2
Year to Date	529	668	1,506	-	64.8
Single Dwellings	4,523	3,994	5,264	-:	
Year to Date	1,001	326	790	+	
Multiple Dwellings	1,772	2,773	3,397	-	47.8
Year to Date	1,776	2,773	5,557		****
FINANCE ‡	7 005 257	4,028,869	3,492,741	+	14.3
Bank Debits (\$000)	3,995,253	18,774,330	21,120,472	•	7.8
Year to Date(\$000)	22,769,583	877,003	853,382		6.1
Bank Deposits(§000)	905,466	6//,003	033,302	•	0.1
TRANSPORTATION ?	07 200	04 770	86,823	+	7.4
Air Passeng <b>ers</b> (ON)	93,298	84,770	445,735	+	9.2
Year to Date	486,571	393,273		+	6.0
Air Passengers (OFF)	92,194	85,235	86,942	+	8.1
Year to Date	488,291	396,097	451,690	•	0.1
CONSUMER PRICE INDEX Y					
All Items (1967=100)			125.0	_	e 11
U. S. City Average	132.4	131.5	125.0	*	5.9
San Francisco-Oakland	130.7	123.7	124.3	+	5.1
MISCELLANEOUS					

<sup>\*</sup> California Dept. of Employment, current month is preliminary. Previous months are revised.

<sup>†</sup> U.S. Department of Commerce, San Francisco.

Federal Reserve Bank, San Francisco.

<sup>§</sup> Figures for San Jose Municipal Airport, Airport Manager.

<sup>¶</sup> Consumer Price Index, Monthly, U.S. Department of Commerce.

The labor force in Metropolitan San Jose has expanded from 110,000 in 1950 to 428,000 in 1970. It accounted for 38% of the increase in total jobs in the San Francisco Bay area in the 1960's. This dominant share of the growth in total jobs was the result of growth in basic activities and in an increase in population serving industrial employment in the region. The prime activities are in manufacturing, particularly in electronics, instrumentation, and aerospace firms located in the area. Manufacturing employment has grown from 21,700 in 1949 to 122,619 in 1970 -- an average annual gain of over 5,500 per year. Currently almost one of every three jobs is in manufacturing.

Within the manufacturing category, a significant shift has occurred. Durable goods, with most of the emphasis from the aerospace sector, have become dominant while nondurables composed of food, canning, preserving, and processing have declined in importance. Most recent figures rank Metropolitan San Jose second in California in aerospace employment. The area is identified as one of the 5 major research and development centers in the United States.

It is projected that manufacturing employment will climb to 159,000 workers by 1980 -- 32.6% above the current level. A strong factor in this growth will continue to be the aerospace-electronics industries.

With the decline in agricultural processing, a substantial labor pool of unskilled and semiskilled male and female workers has been created. Many of these workers are being trained to meet the needs of existing and future industries. Metropolitan San Jose is particularly attractive to firms requiring a highly skilled labor force because of the concentration of electronic-aerospace and research and development firms and the relatively high educational level of personnel involved in these industries.

The majority of industrial workers who are union members are affiliated with AFL-CIO unions. Labor relations in San Jose are generally excellent.

Table 6 presents general economic data for San Jose and Santa Clara County. In general, San Jose accounts for 50 percent of new dwelling units and building permit values.

San Jose takes a positive attitude towards citizen participation in government. The City Council has created a permanent Goals Committee composed of individual citizens and representatives of groups, organizations, and industry to recommend to the City Planning Commission and the City Council citizens' goals for future city development. This is a very active group which has had accepted by the council a detailed and well-expressed set of urban development goals. San Jose also has an ombudsman who serves as a spokesman and mediator for people with grievances against the government.

#### Form of Government and Organization

#### Form of Government

San Jose's first Charter was granted by the State in 1897, allowing the City to operate under the Commission form of government. On July 1, 1916, another Charter was adopted enabling San Jose to institute the Council-Manager form of government making it one of the first cities to do so. San Jose's present Charter went into effect May 4, 1965, after being adopted in a special election and approved by the State Legislature, as an effort to update the existing form of government.

The Charter delineates the City's form of incorporation; powers of the City; form of government; powers and duties of the City Council and the Mayor; and procedures for developing City legislation.

TABLE 6: GENERAL ECONOMICS DATA FOR SAN JOSE AND SANTA CLARA COUNTY

### **BUILDING PERMIT VALUE BY CITY**

	1969	1970	1971
Campbell	5,352,000	6.546,000	18,067,000
Cupertino	28,709,000	15,850,000	9,781,000
Gilroy	2,368,000	3,859,000	3,945,000
Los Altos	7,315,000	4,779,000	4,326,000
Los Altos Hills	2,893,000	1,778,000	4,265,000
Los Gatos	11,940,000	5,527,000	7,187,000
Milgitas	12,652,000	15,646,000	21,960,000
Morate Sereno	1,043,000	1,131,000	897,000
Morgan Hill	1,400,000	1,913,000	4,930,000
Mountain View	31,508,000	24,009,000	17,286,000
Pelo Alto	32,426,000	45,916,000	12,806,000
San Jose	176,7B3,000	189,386,000	225,414,000
Santa Clara	37,116,000	49,930,000	33,776,000
Saratoga	15,252,000	10,700,000	13,986,000
Sunnyvale	37,518,000	35,262,000	30,627,000
Incorporated	37,561,000	53,522,000	48,721,000
TOTAL	\$441,932,000	\$465,754,000	\$457,968,000

Source: Santa Clara County Planning Department

#### **AGRICULTURAL PRODUCTION OF SANTA CLARA COUNTY**

Year	Bearing Acres Fruits, Nuts Berries	Fruit, Nut and Berry Crops	Vegetable Acreage	Vegetable Crops	Livestock and Poultry Products	Field Crops and Apiary	Nursery Strick. Cut Flowers, and Seeds	Totals
1950	86.015	\$42,328,015	26,277	\$8,851,610	\$27,885,899	\$1,190,124	\$3,883,165.	\$84,138,813
1960	G6.453	49.451.475	14.220	8,624,480	17,050,595	3,053,975	13,122,985,	91,303,510
1965	52.419	28,749,550	13,613	12,208,800	16,378,700	1,792,495	11,465,050	70,594,595
1970	.38,614	16,060,600	15,615	18,869,700	16,281,550	2,037,300	17,287,200)	65,536,360
1971	32,766	15,160,700	13,810	14,669,000	14,884,390	2,651,815	20,036,400	67,402,305

Source. Department of Agriculture

#### **NEW DWELLING UNITS**

	1969	1970	1971
TOTAL COUNTY	18,771	17.618	19.569
Campbell	<b>6</b> 8	231	1,293
Cupertino	983	441	513
Gilroy	136	256	135
Los Altos	136	84	97
Los Altos Hills	53	31	38
Los Gatos	436	137	209
Milpitas	327	906	1,058
Monte Screno	71	25	15
Morgan Hill	61	47	214
Mountain View	1,562	1,220	720
Palo Alto	165	28	193
San Jose	9,409	9.516	10.637
Santa Clara	1.355	1.320	1,334
Saratoga	423	268	364
Sunnyvale	1,196	1,782	1.342
Unincorporated	2,440	1,326	1,407

Source: Santa Clara County Planning Department

#### TOTAL RETAIL SALES

Year	Santa Clara County
1950	302,670,000
1955	554,803,000
1960	920,862,000
1961	1,0.23,952,000
1962	1,157,390,000
1963	1,263,689,000
1964	1,348,973,000
1965	1 458,288 000
1966	1,590,887,600
1967	1,718,101,000
1968	1,898,798,000
1969	2,017,851,000
1970	2,117,192,000
1971	<b>2,3</b> 81,224,0 <b>0</b> 0

Source Sales Management "Survey of Buying Power", 1972 It also established the Administrative Organization and Boards and Commissions; designates election dates, and In addition, has various general provisions.

With San Jose's Council-Manager form of government, the citizens elect the Mayor who is the official head of the organization, charged with guiding the corporation's policy and presiding over an elected Council whose decisions determine policy. The Council chooses the City Manager, who is responsible for administering these policies, recommending procedures, and conducting day-to-day operations. Operating with an annual budget of approximately 48 million dollars, employing some 3,752 people and serving 471,000 citizens, the City of San Jose is a big business.

San Jose voters elect the Mayor and six councilmen as the policy and decision-making body of their City. The Mayor is elected at large for a term of four years and presides at Council meetings and represents the City at ceremonial occasions. As a member of the Council, the Mayor has one vote but no veto power. The six councilmen serve overlapping four year terms, and are nominated and elected at large to special seats. All official actions of the Council are taken during the Council meetings. The public is invited and encouraged to attend.

#### Organization

The city's most recent organization chart is presented in Figure 2. The manager is responsible for the administration of thirteen departments. The Department of Public Works is responsible for the administration of municipal refuse collection and disposal activities. Within the department, the Utilities Division has the responsibility for managing solid waste services (see Figure 3).

## Solid Waste Management History

Within the San Jose area, solid waste collection and disposal has always been performed by the private sector. Prior to 1951,

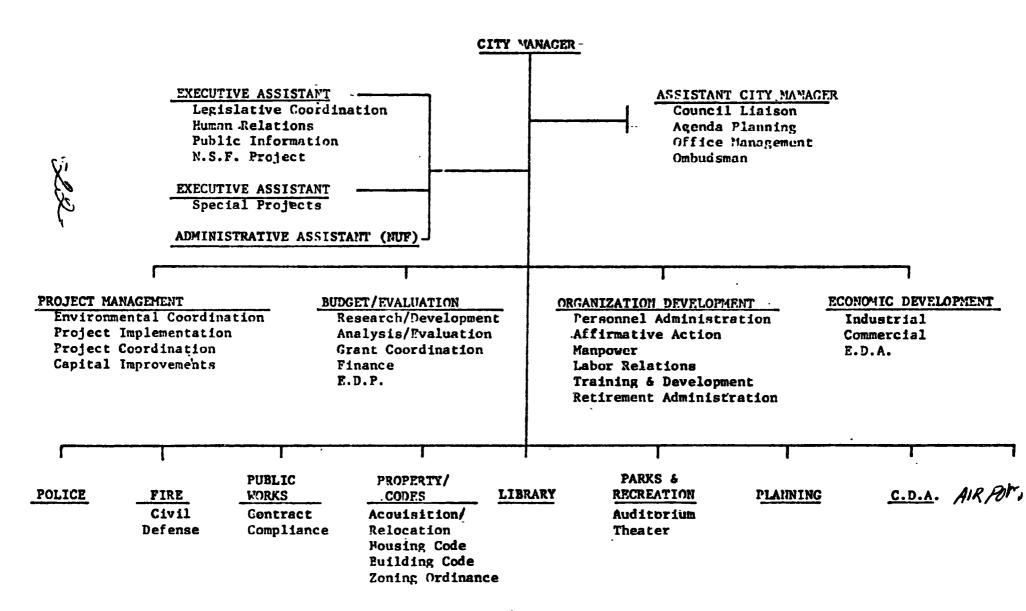


FIGURE 2: ORGANIZATION CHART FOR THE CITY OF SAN JOSE 5/4/73

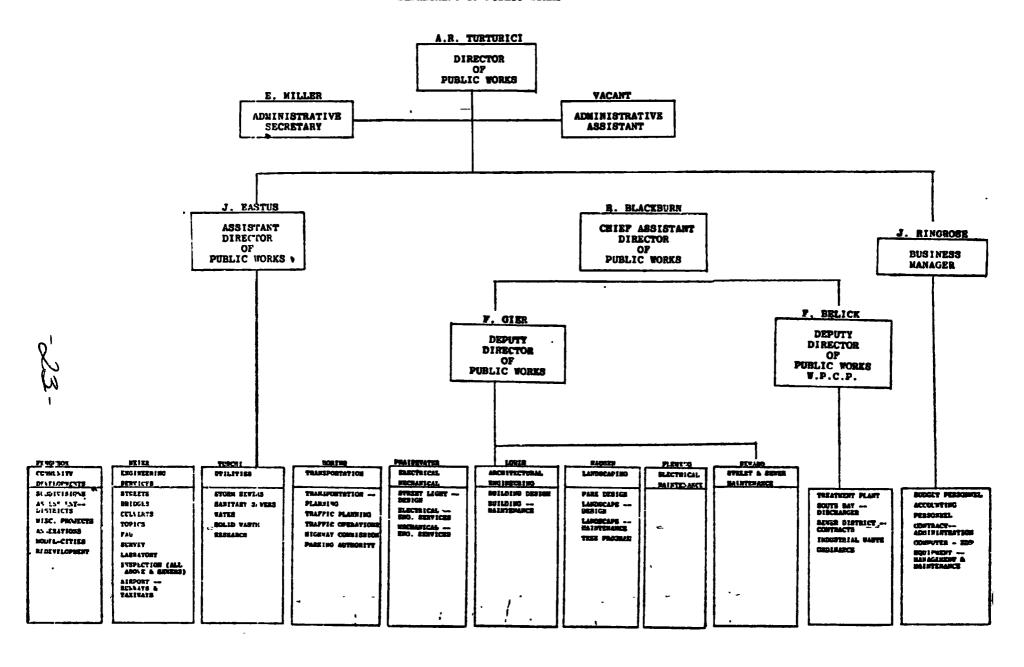


FIGURE 3: SAN JOSE DEPARTMENT OF PUBLIC WORKS ORGANIZATION CHART

residents contracted directly with private haulers for services. In 1951, the City Council solicited bids for a franchised collection service, in which the rates, frequency of service and the waste volumes to be collected would be established by the city. The billing and the disposal activities were to be the responsibility of the franchisee. The contract was awarded to the low bidder but the company failed before service could begin. The City Council asked the local collectors to put together a collection system and Garden City Disposal Company became the prime franchisee. In 1954, the city awarded an exclusive 15 year franchise to Garden City, which expired on November 30, 1969. On August 24, 1970, a new contract was signed and it expires on November 30, 1975.

As the city began its rapid growth pattern, the city boundaries expanded to include areas served by other companies. The area served by Garden City Disposal remained the same. Of the new companies then serving the newly incorporated area, San Jose Scavenger Co. was the largest.

A franchise system continues to be the mode of operation for solid waste collection and disposal. In November of 1972, Browning Ferris Industries of Southern California acquired Garden City Disposal and San Jose Scavenger (SJS), along with the Newby Island disposal site operated by S.J.S. Under the current city franchise, Garden City is the prime franchisee and collects forty-five percent of the stops. San Jose Scavenger is a "subcontractor" to Garden City and it collects another 40 percent of the stops. Four other subcontractors, not owned by Browning Ferris Industries, collect the remaining stops. The prime franchisee, Garden City, pays a 10 percent franchise fee on mixed refuse collection and 3 percent fee on gross bulky item collection revenues to the city. This amounts to about \$35,000 per month in payments to the city.

Under the previous contract, which expired in 1969, the contractor's basic service was for 2 containers at a basic service rate of \$2.25 per month per dwelling unit. Under the current contract

week and the basic service charge was increased to \$2.30. The city required the contractor to provide ten additional vehicles of 20 or more cubic yard capacity. In 1970, the city auditors who reviewed the contractor's profit and loss statement found that the 6 month profit was elightly more than 2%. By 1971, the reported profit margin had increased somewhat. By March, 1973, the city had found that the contractor's records, prepared on a modified cash basis accounting method. The franchish fee paid to the city is based on cash receipta which are subject to the errors of the billing system and lagging accounts receivable. The contractor's statements are prepared on a cash basis but modified by the accountants to restect an "account basis" used for the contractor's income tax returns.

The franchisees will collect up to three 32 gallon cans placed at curbside from single family dwellings, duplexes, fourplexes, and condominiums. Apartment buildings and commercial/industrial stops are contracted for on a free enterprise basis. Additional service for residential stops must be arranged for by the resident at additional cost.

within the total solid waste management context, there are a number of factors which will influence the future nature of the system. Some of these are related to state and county agencies and will be discussed later in this section. A major set of factors are the following:

- (1) The state will soon be adopting stringent waste disposal legislation;
- (2) The area's population and waste generation stream will continue to grow rapidly through 1990;

- (3) The disposal of sewige gludge to meet EPA receiving water requirements represents an additional total disposal problem;
- (A) Industrial toxic (liquid) wastes and wastes from the 16 large cameries represent a major area disposal problem.

To date, all disposal, except for a city disposal site which accepts only street cleaning wastes, has been handled by the private sector. State requirements for a county solid waste management plan by 1976 and the difficulties in gaining public acceptance of new landfill sites will pecessitate eventual governmental planning for and control of solid waste disposal efforts.

In March, 1973, the city's Committee on Refuse Disposal submitted the secults of a two-year stady of refuse disposal. The city's study utilized data and wastergeneration categories developed in a 196% report for San Jose by the FMC Corporation. The following recommendations are extracted from a summary of the 1973 report:

1. Collection Service

RECOMMENDATION: - It de recommended that the city of the Constact with a private constactor for the collection of municipal wantes.

ENCOMENDATION: - It is recommended that specifications be prepared detailing all.
City requirements and that competitive bids be splicited from private contractors.

2. Disposal of Solid Waste

RECOMMENDATION: - It is recommended that San Jose acquire and operate its own sanitary landfill site.

<sup>\*</sup>FMC Cornoration. Solid waste disposal demonstration project; 1966 systems analysis progress report. Status Clare, Calif., Peb. 15, 2867.

RECOMMENDATION: It is recommended hat San Jose's ultimate objective be the recovery and revee of all material within the waste etream. To accomplish this objective, it is essential that him Jose at all times incorporates within Its waste management program containing as an actions make are designed to business the recovery and recycling of recovery and recycling of recovers from the waste attems.

proposed waste management program by
Howenber 1975, and that up significant
changes be made in the present program

Sen Jose utilize a computer model such as "Vesteplan" to evaluate the present waste

It is intendeting to note that Sab Jose will likely continue to contract for collection activities but may opt to enter into recycling/disposal activities as a memor of achieving more effective control over solid waste activities. The "Wasteplan" system is a computabled means of evaluating alternative solid waste systems on the basis of costs and other criteria. This system was proposed to the city by Systems Control, Inc., of Palo Alto, California.

The city is currently planning a tertiary water treatment plant to meet EPA requirements. Construction will begin in 1975.

The plant is similar to that of lake Those, except that activated charcoal filters will be used. Also, the neighboring community

<sup>\*</sup>Systems Control. Inc. Nonthern; summary description. Pald Alto:
Calif., May 1975. 12 p. 27

of Los Gatos has a plant for garbage and sewage incineration. It is a conveyor fed, horizontal, gas fired incinerator in which shredded waste is forced along with controlled volumes of air to achieve high burning temperatures. To date, it has not met air quality requirements, nor has it attempted sewage sludge incineration. San Jose has discussed with Los Gatos the potential use of the plant for disposal of San Jose wastes.

Paper and cardboard reclamation efforts are handled by private firms in the area. Cardboard reclamation efforts use open trucks, resulting in sloppy handling of wastes and curbside litter. A BFI subsidiary, Consolidated Fibers, undertakes paper salvage by collection from Garden City commercial accounts whose volumes merit such collection. Reclaimed fibers are exported.

In December 1970, the City Council approved a joint demonstration project between the Department of Public Works and the San Jose State College (Department of Environmental Studies). A special recycling center went into operation in April 1971 Citizens bring in materials on a voluntary basis. Appendix C presents documents describing this program and its results. As of fiscal year 1973, seven satellite centers, in addition to the main San Jose Recycling Center, were in operation. Glass, bimetal, aluminum and newspaper are reclaimed. As of the end of fiscal 1973, 761,600 pounds of materials, sold for \$10,253, were handled. Net income was almost \$5,000. Expansion of this program is anticipated.

#### Agencies Impacting San Jose's Solid Waste Management System

There are four groups which have had an impact on the solid waste system in San Jose. These are discussed in the following subsections.

#### State of California

The California State Environmental Quality Act of 1970 initiated a process in which state agencies were created and assigned the responsibility for various aspects of environmental control. Subsequently, State Senate Bill 5, Solid Waste Management and Recovery Act, passed in 1972, created the State Solid Waste Management Board within the Resources Agency

The board is required to prepare by January 1, 1975, the state policy for solid waste management and the State Solid Waste Resource Recovery Program.

Within this board, a State Solid Waste Management and Resource Recover Advisory Council has been established. This council interacts with local government in the state, since the primary responsibility for adequate solid waste management and planning is to rest with local government. Under state law, each county now must prepare a comprehensive regional solid waste plan for all waste disposal within the county and for all waste originating therein which is to be disposed outside the county. Such responsibility can be transferred to a regional planning agency, although this has not yet occurred in the San Jose area. The plan must be submitted by January 1, 1976. It must receive approval by a majority of the population within each of the cities in the county.

#### Santa Clara County

Under the requirements of the State Solid Waste Management and Recovery Act of 1972, Santa Clara County must develop a comprehensive solid waste control plan in cooperation with the cities within the county. A County Planning Policy Committee (PPC), consisting of a councilman and a planning commission member from each of the fifteen cities, has been formed. As of the date of the site visit, August, 1973, the county had not yet appropriated funds for the estimated two-year planning project

required. Appendix B presents a county memorandum outlining the proposed planning approach and its objectives. The county plans to have a private consultant perform most of the planning effort under the guidance of a nine-member Technical Advisory Committee.

While the PPC gives a one-city/one-vote perspective to the planning process, the City of San Jose, which has almost 44% of the county's population, wants a larger share in the planning/decision-making process. The city fears that the smaller, more affluent communities may establish a plan that the city could not afford and might not be willing to accept their share of the disposal problem burden. Unless resource recovery becomes economically feasible, landfilling will be the ultimate disposal methodology for some time to come. In essence, the city wants the county plan to conform to the city's needs. And, the city wants to take control of the solid waste problem by becoming the disposal system operating (or contracting) agent. How this impasse will be handled remains to be seen, but it is clear that by 1976 it will be resolved.

#### Private Sector Waste Collectors

In recent years, the national pattern of agglomeration has also occurred in San Jose as the big national firms have bought out the smaller operators. By controlling the franchise and the major nearby disposal site, one company essentially monopolizes the vast majority of local residential accounts and many of the commercial accounts. Unless independent solid waste haulers can find their own acceptable and economically feasible disposal sites,

they are forced to use the BFI site and pay its disposal fees. The long-term trend is evident; one by one they are likely to either sell out or to become a merged operation so they can compete with the dominant firm.

The city is affected in that there is now only one local firm, essential BFI, which is capable of handling all city accounts. While BFI needs the city franchise to operate, the city needs BFI unless it is willing to undergo the risk of opening the bidding up to outside firms and living through the changeover should BFI lose the franchise. BFI is in the process of integrating and modernizing the local firms which comprise its operation. Accounts and billings are being computerized, equipment is being upgraded, recycling operations are being evaluated, and new management has been brought in to revitalize the local subsidiary. This can only result in better service and a better competitive position for BFI, should the franchise be offered for open bid.

#### Local Groups

In response to the pressure of local groups, the city has instituted a recycling center and associated activities. The local citizenry are active participants in goal setting efforts and desire that the city move towards resource reclamation as fast as is economically and technically feasible. This is an important factor in planning efforts, in that the city believes it can gain additional control of the solid waste system only if it has ownership and control of the disposal sites. The city believes that private industry will not incorporate any innotative or improved disposal systems unless the result is an increase in profits.

#### SOLID WASTE SYSTEM CHARACTERISTICS

The solid waste management system for the City of San Jose is described in this chapter. Data on the "efficiency and productivity" and "manpower and equipment" are presented in a limited form, as the system is a franchised private contractor with five subcontractors. The franchisee is in the process of aggregating and computerizing its data and had only limited information available at the time of the site visit.

#### Authorization and Regulations

Chapter 3, "Accumulation, Transportation, and Disposal of Waste Matter," of the San Jose Municipal Code (see Appendix C), establishes the authority and regulations for the storage, collection, transportation, and disposal of solid waste in the City of San Jose. This section of the code covers the following basic areas:

- Purpose of section and definitions of pertinent terms
- General regulations concerning who may collect and dispose of solid waste; container specifications
- Licensing of collectors
- Requirements for city contract for collectors and for license tax, annual reports, and manner of disposal.

Of special interest are the sections of this code which require that: (1) all rubbish and garbage collectors be licensed; (2) all rubbish collectors pay a three-percent license tax on total gross receipts; (3) all garbage collectors pay a ten-percent license tax on total gross receipts for garbage collection and a three-percent license tax on receipts for rubbish collection; and (4) all such collectors and disposers of garbage and rubbish must be under contract to the city for the provision of residential collection service.

#### Collection Operations

Within San Jose, all refuse collection services for single family residential, low rise condominium, and some apartment dwelling units are provided by private sector firms under direct contract or subcontract with the city (see Appendix A for copy of contract). Commercial, industrial, and high-rise apartment building wastes are directly contracted for by the facility owners with the private sector haulers. All city residents must subscribe to this contractor collection service. Within the Department of Public Works, the Utilities Division is responsible for administration of refuse collection and disposal contracts. The Housing and Community Development Division of the City Health Department monitors contractor performance and handles complaints not resolved by the city contractor. The Street Sanitation Section of the Department of Public Works performs street cleaning operations and the department provides its own equipment maintenance for the street sweeping fleet.

#### Mixed Refuse Residential Collection

#### Duties and Level of Service

As discussed, the City Code provides for the removal of solid waste by licensed haulers under contract to the city. Rules and regulations are distributed to all citizens by the Department of Public Works (Appendix 3) in both English and Spanish versions. The citizens of San Jose receive a "basic weekly service" which consists of a maximum of three, thirty-two gallon containers which must be placed at curbside and must weigh no more than 75 pounds each. Residents are specifically instructed not to separate their refuse nor to use plastic bags except as can liners. Frequency of mixed refuse service is once per week. Special pickups for bulky items, other rubbish, or for additional service may be requested by the resident, who would call the refuse collection company to arrange for such service.

Garbage cans must be lined with newspapers or lined with plastic bags. Cold ashes will be collected if they are placed in a bag or box before being placed into the can. Cans must be covered and placed at curbside the night before the day of scheduled collection. Cans may be plastic or metal.

The basic charge for curbside collection, paid directly to the contractor on a quarterly basis, is \$2.30 per month for curbside collection. Each extra container for curbside service is \$.75 per month. Figure 4 presents the collection rates for "on premise" or carry-out service, as well as for container service. Apartment buildings may receive either on premise or container service. Obviously, residents may elect to receive a higher level and volume of service at significantly higher cost. Bulky item pickups are negotiated directly between the resident and the contractor of his choice. Table 7 presents the approximate number of stops receiving curbside and on-premise service for each type

RATE SCHEDULE
MONTHLY RATES BASED ON NUMBER OF CANS COLLECTED PER WEEK

CANS (On-Premises or	Carry	Out)	Basic	_
2 or LESS \$ 3.90	A11 o	ver 40 cans - add:	Curbside Col	=
3 5.55	MIT O	ver 40 cans - aud.	curbatue (o.	LIBCCION:
4 7.20	1 -	\$ 1.35	3 Cans -	\$2.30
5 8.80	2 -	2.70	3 Cans -	\$2.3U
6 10.50	3 -	4.05	Extra Con-	
7 12,00	3 - 4 -	5.40	tainers -	\$ .75
8 13.65	5 -	6.75		•
9 15.05	6 -	8.10		
10 16.40	7 -	9.45		
10 10.40				
	•	10.80		
	9 -	12.15		
	10 -	13.50		
14 21.85				
15 23.20				
16 24.55	<b>.</b> .			
17 25.90	Conta	iner Rates (Rent In	cluded)	
18 27.25				
19 28.60		ard (6.00 Rent)	One-1 Yards	
20 29.95	1X	\$18.00	1X	\$22.40
21 31.30	2X	27.85	2X	35.95
22 32.65	3X	37.50	<b>3</b> X	49.50
23 34.05	4X	46.85	4X	63.15
24 35.40	5X	<b>5</b> 6.35	<b>5</b> X	76.65
<b>25 36</b> .75	6X	<b>65.85</b>	6X	90.15
<b>26 38.1</b> 0				
<b>27 39</b> .45				
<b>28 40</b> .85				
29 42.15				
30 43.50		ards (7.00 Rent)	Three Yards	(8.00 Rent)
31 44.95	1X	\$28.85	1X	\$39.30
32 46.30	2X	47.85	2X	67.85
<b>33 47.65</b>	3X	<b>66</b> .85	3X	96.20
34 49.00	4X	85.75	4X	124.55
<b>35 5</b> 0.35	5X	104.65	5X	152.90
<b>36 51.70</b>	6X	<b>12</b> 3.5 <b>5</b>	6X	181.25
<b>37 53</b> .05				
38 54.45				
39 55.80		Deposit -	<b>\$4</b> . 50	
40 57.15		•	•	

502-215 (Rev. 6/73)

FIGURE 4: SAN JOSE CONTRACTOR COLLECTION RATE SCHEDULE

TABLE 7: DISTRIBUTION OF LEVEL OF SERVICE BY TYPE OF DWELLING UNIT\*

Type of Dwelling Unit	Type of Service			
	Curbside	On Premise	Bin Service	
Single Family or Duplex Dwelling Units	~105,000 Few stops		, <b>-1</b>	
Condominiums (4 or more units/stop) (5,000 stops)		5,000 stops	For rubbish & Yard Waste	
Apartment Houses (39,000 units) (3,700 stops)		740 stops	2,960 stops	
Total Stops	105,000	5,740	2,960	

<sup>\*</sup>Estimates based on approximations given by city personnel. "Hard" data are not available from either the city or the contractor. Contractor data indicate service of about 120,000 "accounts" in the city, but an account for an apartment building or condominium may be either the unit dweller or the owner. Condominiums are generally townhouse or garden apartment developments.

of dwelling unit. Very few single-family or duplex units elect to receive carry-out service, while condominiums (4 or more units) and apartment buildings are essentially forced to on-premise or bin service by the need to avoid a massive curbside set-out of cans on collection days.

#### Manpower/Equipment Allocations

As discussed, the city residential collection is carried out by a prime contractor, Garden City, its subsidiary, San Jose Scavenger, and four smaller independent subcontractors. Garden City and San Jose Scavenger account for 85 percent of the total residential stops (SFD's, condominiums, and apartment buildings). Crews are currently a mix of two-man and three-man, depending on the number of stops per route. From 66 to 70 routes are served daily by Garden City and San Jose Scavenger. The average number of stops per route ranges from 350 to 400 and the average route length is 20 miles. Single-family dwellings are collected once per week at curbside, while condominiums and apartment buildings receive "on premise service" which is either carry-out or bin service. For its apartment building and condominium containerized service and its commercial service, the two firms use the following specialized equipment:

Roll Off Bodies - 130

Stationary Containers:

Rear loader - 3000 Front loader - 5700

5

Front Loader Compactor
Containers

Stationary Compactors - 10

These pieces of equipment are not listed in the Manpower and Equipment table (see Table 8) because it was not possible to allocate them to city vs. commercial collection activities. Nevertheless, it is known that over 2960 apartment houses receive "bin service," so many of the stationary containers must be used for that function.

TABLE 8: MANPOWER AND EQUIPMENT ALLOCATION

Personnel Punction	Mixed Refuse Collection 1/	Mixed Refuse Disposal Newby Island Laadfill 2/	City Street Sweeping	City Leadfill	Total
Management	3	•	1		3
Supervisor/Formes	. 4	1	4	1	10
Clerical	21	•	•		21
Sales	3	•	-		3
Maintenance	25	-	-	1	26
Brivers	es 2/	6	23	3	98
Laborers	132 V	1	19	2	153
Totale Equipment	253	7	47	- 7	314
Rear Loaders	662/	-	-	•	66
Side Loaders	• /	•	1	•	1
Scraper .	•	3	-	ŧ	21
Bulldosers	-	2	<u>-</u>	2	4
Compactor	•	1	-	1	2
Loaders	-	•	•	•	ð
Dragline	-	1	- ;	-	1
Water Truck	•	1	-	18	21
8veepars '	•	-	154/	-	15
3/4 Ton Pick-up Dump Truck	•	•	105/	-	10
12 Ton Trucks (Borrowed from Street Maintenance)	· •	-	8	-	8
Front End Loaders	-	•	6	-	6
Buck Rakes (Lenf Sweeping)	-		6	-	6
Totals	66 .	7	44	<b>5.2</b> 5	123.25

#### NOTES ON MANPOWER AND EQUIPMENT ALLOCATION TABLE

- 1/Besides Garden City and San Jose Scavenger, there are four subcontractors which service the city. Their manpower and equipment data were not available at the time of site visit.
- 2/Newby Island Landfill is operated by a Garden City subsidiary, San Jose Scavenger, and is used to accept mixed refuse and rubbish (bulky items) from city franchise collection as well as from commercial/industrial and other private collectors.
- 3/Garden City and San Jose Scavenger reportedly had 66 packers collecting on residential routes and 33 packers collecting on "commercial" routes which include apartment building and condominium stops. Thus, it is impossible to determine the total effective equivalent number of trucks used to service the city. A total of 71 routes are reported by the city for Garden City and San Jose Scavenger, who together account for 85 percent of the total stops served in the city. During the interview, the contractor claimed to have 66 trucks in operation that day. It might be assumed that a total of approximately 84 trucks are required to serve the city (71 = x(.85)) with approximately 252 drivers and laborers, assuming a three-man crew for all contractors and subcontractors. This is probably close to reality as Garden City reports 27 A.M. routes and 14 P.M. routes and San Jose reports 29 A.M. routes for a total of 70 routes.
- 4/Fourteen sweepers plus one "spare" are used. Fleet consists of: 11, 3-yard Mobil; 3, 4-yard Wayne; and 1, 3-yard Airtemp. All are 4-wheel sweepers.
- 5/These trucks are used to support hand-sweeping operations.
  There are ten crews, each with a driver and a helper.
- 6/The contractor is in the process of converting to two-man crews, Currently, three-man crews are used to collect routes with 450-500 stops and two-man crews are used to collect routes with 350-400 stops. It is expected that all routes will be converted to two-man crews by September 1973.

Crews begin at 5 A.M. and work on a task incentive system. The average number of trips to the disposal site is 1.5 per day. The average round trip distance and time for disposal activities is 20 miles and one hour, respectively. Crews may take two 15-minute breaks and a half-hour lunch at their option. On the average, routes are completed in 6½ to 7 hours. Generally, drivers do not help collect, and each stop requires about one minute to service. Men may walk or ride between stops. Only one side of a street is collected during a pass, except for cul-de-sacs. With minor exceptions, the area is relatively flat; there are, however, several outlying routes with some stops which are virtually inaccessible by the trucks due to steep dirt roads.

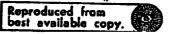
#### Efficiency/Productivity

To the extent available data permit, efficiency and productivity data are presented in Table 9. Since annual cost reports were not available from all subcontractors, the total cost of collection and disposal could not be determined. Given that there are a total of 135,778 dwelling units at a minimum, the least cost of collection on an annual basis for the basic service would be \$3,747,473. True costs are higher because of additional services (additional cans, bins, compactor) provided by the contractors. In any event, the accuracy of the contractor's financial accounting system has been called into question in a recent city study and will be discussed in the financial section of this chapter.

The total cost per unit per year and per person per year are within the usual range of costs observed in similar systems. The waste generation rate of 1.9 lbs. per person per day and 49.4 lbs. per unit per week are relatively low, slightly more than half that of Fresno, for instance. Without sufficient data to derive total collection cost and tonnage for each type of unit

TABLE 9: EFFICIENCY AND PRODUCTIVITY DATA

Collection Function	Mired Beine	Pontdonatal Ac-		
Parameter	mixed mercare medicential Contract Collection			Street Sweeping, Leaf, Litter Cullection
,				
Population Served				
	105,000 unita		1_3,700 stops	3,000 awast
			3.400 NPISE	
Area (sq. ml.)				
Pop. density (peo/sq. mi.)			3,495	
Annual Amounts Collected 3/	174,393 tons			21,500 yds <sup>3 8</sup> /
Lbs./unit/wk	49.42/	MA	KA	-
Lbs./person/day 3/		1.9		
Point of Collection	Curbaide	Carry out or on-promise bin	bia	gutter
Freq. of Collection	1/week	1/week min.	1/week min.	See Note 9
! "• <u>-</u>	32 gal plastic or metal cass	caus or bina	bins	•
Avg. Dist. to Disp. Site				25 mi tes 10/
Ave. Hours worked/day			<del></del> -	20 101 100 107
Darect men 5/		263		<u> </u>
Creus 5/				
				1)sweeper
				47 14/
3/	\$4.61/hour			
Aug. wages and fringe for drivers	\$4.88/bour			
Stops/Crew/Day	,	350 - 400		
			1	5 Yards
	327.60			\$3,6 <u>6</u> 13/
Coll. Cost/ton/vr.		WA		\$23,117903
Total Coll. Cost/yr.		NA.	NA	\$497,000 13/
Type & No. of Disp. Sites	1 Class II A Sonitary Landfill			City Landfill for sweeping and rubhish only
Total Disp. Coet/yr.	KA	MA	MA	\$52,530 <u>11</u> /
Total Coot/yr. 7/	\$2,898,900	HA	NA	\$549,530
Coll, Expense as & of tot, Exp.	NA -	NA	MA	NA
Coll. labor expense as % of tot. Coll.				NA NA
Coll. equip, expense as 7, of tot. Coll.				BA
Proc. & Disp. expense as 70 of tol. exp.	<u> </u>	NA NA	NA .	XA
tot. disp.	KA	RA	NA	MA
	Population Served No, of Resid, or Comm. Units Sirvet Aitles Aitley Mulce Area (sq. mi.) Pop. density (peo/sq.mi.) Annual Amounts Collected Lbs./unit/wk Lbs./person/day  Point of Collection  Type of Storage Container  Avg. Dist. to Disp. Site Avg. Miles Driven/truck/day Avg. Hours worked/day Daret men Crew 5/ Crew Sizu 5/ Crew Sizu 5/ Avg. wages and fringe for laborers Avg. wages and fringe for drivers  Stops/Crew/Day Tons/Crew/Day Coll, Cost/resid, unit/yr, 2/ Call, Cost/person/yr. Type & No. of Disp. Sites  Total Cost/yr.  Total Cost/yr.  Total Cost/yr.  Total Cost/yr.  Coll, Expense as f. of tot, Coll, Coll, equip, expense as f. of tot, Coll, Proc. & Disp. expense as f. of tot, Coll, Proc.	Parameter  Population Served No, of Besid, or Comm. Units 1/ 105,000 units Street Miles Alley Males Area [sq. csi.] Pop. density (peo/eq. mi.) Annual Amounts Gollected 3/ Lbs. / unit/wk 49.4=/  Lbs. / person/day 3/  Point of Collection 1/week  Type of Storage Container 32 gal plantic or ertal cass  Avg. Dist. to Disp. Site Avg. hiles Priven/trech/day 4/ Avg. liours worked/day Darect men 5/ Crew 3 Crew 3 Avg. wages and fringe for laborers  Avg. wages and fringe for drivers  Stops/Crew/Day Tons/Crew/Day	Parameter    Single Fullity   Condendition	Parameter  Single Funity   Condense Law    Population Served   Single Funity    No. of Reciels, or Comm. Unite   M    No. of Reciels, or Comm. In    No. of



#### NOTES FOR EFFICIENCY/PRODUCTIVITY TABLE

- Based on estimates provided by city. Garden City and San Jose Scavenger alone claim to have about 120,000 "accounts," but an account for a condominium or apartment house may be either the entire facility or each individual dwelling unit within the facility. The 1970 Census shows 135,778 year round housing units.
- 2/ Based on an average of four seasonal generation rates of 608 (spring), 659 (summer), 668 (fall), and 631 (winter) pounds for single-family unit per quarter.
- Based on an average of 49.4 lbs./unit/week divided by 7 days divided by 3.72 persons per unit, equals 1.89 lbs./day/person. Annual tonnage is 49.4 lbs./unit/week x 52 x 135,778 equals 174,393 tons.
- A Route length is 20 miles. Round trip to disposal site is 20 miles and 1.5 trips per day are made.
- 5/ For Garden City and San Jose Scavenger, only. They account for 85 percent of total city collection efforts; thus, these numbers are low by about 15 percent. No data were available for other four independent subcontractors.
- 6/ Assumes 105,000 SFD units with an average of 3.27 persons per unit (based on 1970 Census data for total dwelling units and total residents). These costs include both collection and disposal and are therefore high by about 5 to 10 percent.
- Assuming 105,000 dwelling units all at a basic service of \$27.60/year, the total cost would be \$2,898,000 for the single-family portion of the service. This agrees closely with revenues reported by Garden City for FY 1972: Garden City reported revenues of \$2,817,685 and they collect about 45 percent of the SFD's (see Appendix B).
- Assuming a normal daily volume of 70 cubic yards for 200 days of operation and a peak volume of 150 cubic yards during leaf season for 50 days, the annual amount would be 21,500 cubic yards.

- Ocentral Business District swept 6 days per week; 105 service routes swept once per month; 22 arterial road routes swept once per week.
- 10/ Curb miles swept for each service route.
- 11/ Costs for total site operation are \$309,000. Assuming that sweeping contributes 17 percent of volume (21,500 + 125,000 yds.3), the cost would be \$52,530.
- 12/ Based on 1970 Census data showing 135,778 year-round housing units.
- 13/ Includes costs for power sweeping (\$203,000), litter cleanup from litter cans and hand sweeping (\$182,000) and CBD sweeping, flushing, and handsweeping (\$112,000). These expenditures do not include equipment operating and maintenance costs which come from the General Fund.
- 14/ Includes street sweepers, trucks, front end loaders, and leaf rakes.

served or in total, it is impossible to derive the collection costs per ton and per year. Given that the waste generation rates are accurate, these costs are likely to be significantly higher than normal. The number of stops per crew per day is lower than expected. For example, in Fresno there are 420 stops per day made in a much hotter climate and with higher waste generation rates. In general, it would seem that the system may be relatively inefficient and costly on a per-ton basis. The age of the equipment (8 to 10 years) and the inclusion of commercial stops in residential routes may contribute to this problem.

#### Street Sweeping and Litter Control

#### Duties and Level of Service

This function is performed by the San Jose Department of Public Works, Street and Sewer Maintenance Section, Street Sanitation Services branch. It utilizes the men and equipment indicated in Table 8 to perform the following activities:

#### Power Street Sweeping

- 105 service areas (routes), each consisting of 25 gutter miles, are swept once per month
- 22 arterial sweeper routes, each consisting of 25-30 gutter miles, are swept once per week

#### • Litter Clean Up

- Solid waste from litter cans in business districts and near schools is removed as required
- Streets are handswept throughout the city as required

#### • Central Business District

- CBD is swept 6 days per week
- Streets are washed once per week
- Litter cans are emptied as required
- Handsweepers patrol the CBD 6 days per week

During normal sweeping operations, the volume of refuse collected averages 70 cubic yards per day. During leaf season.

the volume rises to over 100 cubic yards per day for sweeping and an additional 200 cubic yards per day of front end loader leaf pickup. For leaf operations, buck rakes are placed on sweepers and the leaves are piled on corners. Front end loaders pick them up on a double-shift-operation basis. Normal sweeper loads are dumped on the streets and the trucks pick them up for disposal at the municipal landfill.

#### Manpower/Equipment Allocation

A total of 47 men provide this service function. There are 11 Sweeper Operators and two Maintenance Men II's who man the sweepers. Another 10 Maintenance Men I's and 19 Laborers cover the pick-up trucks and the handsweeping operations. Front-end loaders are manned by two men, a driver (MMI) and a Laborer. During leaf season, two rubber-tired tractors with special loading buckets are utilized in addition to the equipment listed in Table 8).

All equipment is part of the Department of Public Works fleet and is maintained by the department's Equipment Management and Maintenance section (which is responsible to the department's business manager). City equipment is relatively old and funds are not readily available for replacement. Currently, the city tries to replace the equipment on a ten-year basis. The Equipment Maintenance Superintendent stated that "all maintenance costs are the same for each year, about \$3,000." Maintenance records for the sweeping equipment are kept manually and were not in a form to permit detailed analysis. Gutter brooms are usable for about 600 to 800 miles and main brooms for about 1,000 to 1,200 miles. No other equipment data were readily available.

#### Efficiency and Productivity

While the cost of street sweeping and litter control per unit and per person are average, the costs per cubic yard are high. This is due to the low volume of refuse collected. Also, sweeper routes are longer than in other cities.

### Quality of Service and Resident Survey Results

#### Complaint Calls

Currently, all complaints regarding refuse collection service are received by the Housing and Community Development section (General Services Division) of the City's Health Department. The city receives a reported average number of legitimate complaints at the rate of 80 per month, mainly for spillage/rudeness/noise (70-80%) and for missed service (10-15%). Figure 5 presents historic data for the last three years of operation. Originally, complaint calls could be received by either the contractor or the city (1969-1970). In 1970-71, the system was changed so that all complaint calls were received by the General Services Division. At this time, the level of service was also increased from two to three cans per residence for this "basic service." The division also receives about 160 calls per month from the contractor to complain about the residents' lack of cooperation.

During the year preceding the level of service changeover, the General Services Division of the City Health Department investigated 1,707 refuse-related complaints. During the first year after the institution of the new system (1970-71), the number of complaints dropped substantially. In large part, the decline in customer complaints was attributed to citizen acceptance of the new level of service; however, much has also been done to distribute refuse disposal information to new residents before they have had a chance to settle into habits that would result in problems.

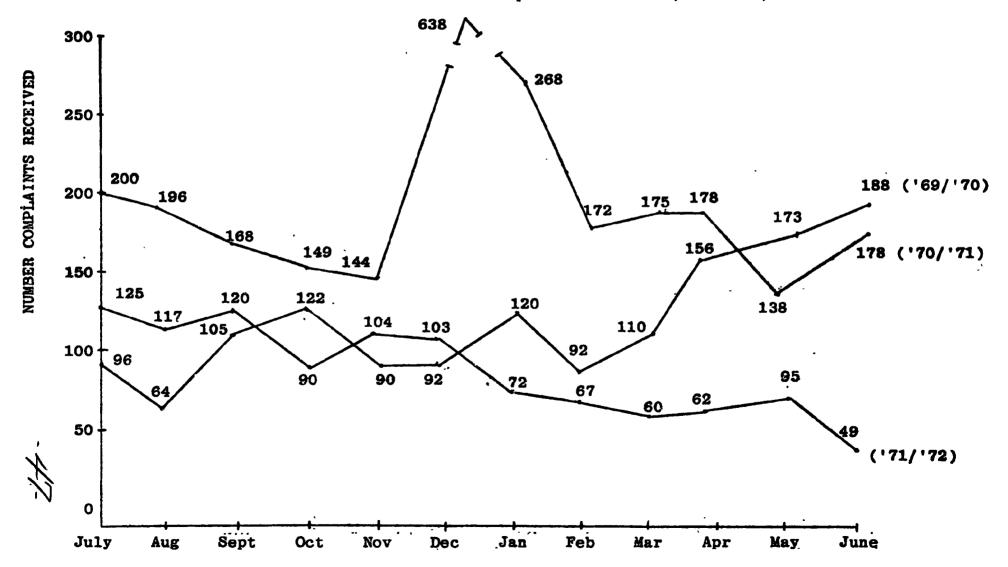
#### General Customer Satisfaction

Customer satisfaction with the solid waste collection service is directly related to the type and amount of information they receive about that service. Consequently, every means available have been used to contact both new and older residents to familiarize them with this service.

FIGURE 5: HISTORIC COMPLAINT CALL DATA

#### HOUSING AND COMMUNITY DEVELOPMENT

Number of complaints received against the Garbage Hauler by month for 3 fiscal periods: 1969-70, 1970-71, 1971-72



To measure customer acceptance to the newly instituted level of service, a 25 question Customer Attitude Study was developed to determine community preferences and attitudes regarding the collection and disposal of solid waste within the City of San Jose. The research was performed by the Diridon Research Corporation in three phases starting in late 1971 and ending in mid 1972.\* It had a total sample size of between 1,200 and 1,800 respondents per phase and was reliable at a plus or minus five percent error on a 25-percent level of confidence.

Based on the results of this study, the following observations were made:

#### 1. Customer Satisfaction

"Although subject to fluctuation between surveys, when last measured in Phase II (December 1871), "To percent of Gas Jose residents indicated satisfaction with their garbage pick-up service. This compares favorably with the systems used by other Bay Area communities."

"There is a strong correlation between the level of satisfaction and knowing the name of the disposal company to contact in the event of dissatisfaction and whether the collector issued a tag denoting the reason the collection was not made."

#### 2. Volume of Garbage

"Bearly 70 percent of the citizens of San Jose
utilize a minimum weekly collection of two or three
containers. It appears that 3 containers per week
meats the needs of most households. Only 7 percent
of the residents require 4 or 5 refuse containers
collected each week. A recent comparison of the
refuse collection agrees of 13 Bay Area cities
placed San Jose in a very favorable position in
terms of volume collected and the minimum rate
charged (see Figure 6)."

#### 3. Unlimited Garbage Collection Service

"There was strong negative response by San Jose residents to pay for unlimited refuse collection within the city. Although there was slight interest on the part of 17 percent or the residents to

<sup>\*</sup>Diridon Research Corporation. Phase I solid waste disposal; customer satisfaction study, Sept. 9-16, 1971. San Jose, Calif., 1971. 53 p. (Available through City of San Jose, Department of Housing and Community Development.)

Diridon Research Corporation. Phase II solid waste disposal; customer satisfaction study, Dec. 4-20, 1971. San Jose, Calif., 1971. 40 p. Diridon Research Corporation. Phase III solid waste disposal; customer satisfaction study, Mar. 2-20, 1972. 33 p.

FIGURE 6: GARBAGE PICKUP COMPARISON OF 13 CITIES IN THE BAY AREA BY COST AND MINIMUM SERVICE FOR PICKUP SERVICE PER WEEK

pay for more than an additional two dollars (\$2) per month for this service. Sixty-eight percent (68%) of the cities' residents expressed an unwillingness to finance such a program."

"The Diridon Study also disclosed that 68 percent of the cities' residents use the municipal disposal site less than two times a year."

"It would appear that the average homeowner is satisfied with the present level of refuse service and the realistic economic rate structure which allows him to add to his level of service on an individual basis. This procedure precludes the low volume producer from having to pay for service which he does not need, and allows each homeowner to contract for that level which would meet his own individual need."

#### 4. Annual Trash and Large Item Pick-up

"Although there was a slight variance on a district basis within the City of San Jose, the general consensus was an unwillingness to pay for an annual trash and large item pick-up. Sixty-five percent (65%) of the residents expressed a negative response to this inquiry. On a seasonal basis, there appears to be a slight preference for such a campaign during the spring of the year."

#### 5. Pick-up Times

"There is a general acceptance by San Jose residents to early morning collection of refuse. Within the geographic area of San Jose, 72 percent of the residents prefer their refuse be collected between the hours of 4 a.m. and 11 a.m."

"The following is a breakdown of starting times most preferred:

4 a.m. - 6 a.m. - 31% 6 a.m. - 8 a.m. - 25% 8 a.m. - 11 a.m. - 16%

Although there was a slight interest in later collection times, only 9 percent of the San Jose residents preferred refuse collections to be made after 11 a.m. Nineteen percent (19%) of our citizens expressed no concern to the starting time and stated "whatever is convenient for the company" is acceptable."

#### 6. Recycling of Solid Waste

"Over 80 percent of the respondents within the City of San Jose indicated an awareness and interest in recycling. Although there was a slight variance in the definition of the term "recycling" the majority of the respondents indicated it was a "reuse of waste materials" or "using things over." A fair conclusion is that the majority of the San Jose residents have a good conception of the term "recycling." A significant percentage (12%) indicated they were not interested in recycling. It should be noted that this group is not willing to participate and could develop into a highly vocal minority opposing such a program."

"Although there was a slight variance on a district basis within the City of San Jose, there appears to be a willingness to incorporate a recycling system into the present collection procedures; however, the method for financing such a program is varied. Forty percent (40%) of San Jose residents would support such a program through an increase in the garbage bill, sixteen percent (16%) would support such a program through their taxes, however, thirty-two percent (32%) rejected both methods as a means of support."

"At the present time, the garbage companies limit their recycling efforts to paper only. They have demonstrated little interest in expanding this operation to include metal, glass or other recyclable materials. The primary reason for their reluctance to become deeply involved in recycling is the inadequacy of the rate structure to absorb the cost that would make a recycling program financially feasible and the undependable financial market for the profitable disposal of such salvaged material. As a result, much material must be stockpiled in anticipation of a favorable disposal price. Such a stockpiling and delays serve to discourage the development of an aggressive recycling program by private disposal companies. Recycling efforts within the City of San Jose are presently limited to the Department of Public Works working with volunteer student groups, ecology action clubs and various service clubs. Public response and acceptance to a voluntary recycling program is good; however, all support services, the disposal site and improvements are being provided by the City of

San Jose. Under these conditions, it is difficult to ascertain if such an operation produces enough revenue to cover operation costs."

"The operation of a recycling center at the City of Palo Alto sanitary land fill resulted in substantial financial loss to the franchised collector for the year 1971."

7. Public Contact by Telephone with the Garbage Company

"Over 80 percent of the citizens of San Jose indicated there was no reason to contact the garbage company. Fifteen per cent (15%) experienced satisfactory, helpful and pleasant treatment, and two per cent (2%) indicated dissatisfaction with the manner in which they were treated."

"To improve public relations, and provide a more efficient response to customer complaints, Garden City Disposal Service increased their telephone service from 5 to 10 incoming lines. (This was a strong recommendation in the May 25, 1970 report of the CCIC Study Committee on Refuse Disposal.) This made telephone communication with the garbage company and the citizens readily available and virtually eliminated the complaint that citizens were having difficulty getting through."

"In addition, garbage company office personnel attended, at the invitation of the City Health Department, the in-service training program presented by the Pacific Telephone Company."

"To further improve customer relations, several meetings were held with Health Department personnel and garbage company supervisors to standardize procedures that would serve to further improve customer satisfaction."

#### Inner City Problems

San Jose's Model Cities program was initiated in April, 1969 and has isolated six "problem areas" on which to focus: one of these is "housing and environment". The Model Neighborhood Area is composed of four distinct districts, each requiring urgent remedial action. These area residents have lower income and educational levels and higher unemployment levels than do

residents of the areas of the city. As part of the area's environmental development, special bulky items, litter and other waste removal projects were undertaken. In the first year of this effort, over 21,000 cubic yards of these wastes were removed. Special central collection bins were put in by the Department of Public Works for the special waste collections. There are 5,000 to 6,000 dwelling units in this area, of which up to 20 percent are "problem units" from the refuse collection perspective. Absentee landlords add to the problem. As previously noted, refuse collection information brochures are printed in Spanish to help educate the area residents to the refuse collection requirements. In the Diridon studies, it was found that Mexican Americans and Blacks were the least satisfied with the refuse collection service.

#### Disposal Methods

#### City Disposal Operation

The City of San Jose operates a municipal landfill which only accepts bulky items and yard wastes from residents and city-collected refuse from street sweeping, parks, vacant lot cleanup, and other city-operated functions. Within the city, the Diridon study indicated that 29 percent of the residents never use either the city or private fills, 22 percent carry solid solid waste to the fills once a year or less, and 27 percent make two to four trips per year. Since residents have to pay extra charges to the contractor for special mixed refuse or bulky items pickups, this utilization rate is not surprising.

The Municipal Disposal Grounds is a Class II landfill which essentially accepts only bulky wastes and yard wastes in addition to city waste collections. Its total lifetime was estimated to be six years and it has a remaining life of three years. Since charges are based on cubic yards received, the total revenues indicate that the landfill receives from 300,000 to 350,000 cubic yards per year. The site is covered once per week with enough cover to prevent blowing of litter. Dust blowing is a problem.

Table 10 presents a profit and loss statement for the operation of the Municipal Disposal Grounds. Obviously, the "net profit" is declining. The Department of Public Works has proposed that the operation be modified so that the completed fill could be utilized as a golf course to optimize net cash flow for the city. (See Appendix E) This plan (Alternative 3) would include raising the current residential rate from 50¢ to 75¢ per cubic yard and the commercial rate from 75¢ to \$1.00 per cubic yard. At the date of the site visit, the plan had not yet been approved, but it is expected that the rates will be increased.

The fill covers 50 acres, approximately 1500 feet by 1500 feet, and is excavated to a depth of 50 feet. The Coyote River runs on the east side of the fill and the one other side is enclosed by "snow fencing". The west side is bordered by a prune orchard. The north side borders an expressway, and the south side borders a cherry orchard.

The site is worked by means of trenches 800 feet in length and 50 feet deep. Three to four cells are put in each trench. Each trench is "filled" to four feet over natural grade level, but the extra four feet is the final cover. The site will eventually be contoured for use as a golf course.

The site lies over a stratum of clay, which is at a depth of 200 feet below grade. The water table lies at a depth of fifty feet. Monitoring wells are in place and the site is monitored by the city.

#### Private Contractor Site - Newby Island Landfill

The private site is operated by San Jose Scavenger, a subsidiary of Garden City and Browning-Ferris Industries. The

#### TABLE 10: CITY DISPOSAL GROUNDS PROFIT AND LOSS STATEMENT

## SINGLETON ROAD DISPOSAL GROUNDS COMPARATIVE ESTIMATED PROFIT AND LOSS

STATEMENT YEARS ENDING JUNE 30, 1972, 1973, 1974

,	ACTUAL 1971-72	ESTIMATED	EST. ALT. NO. 3
OPERATING INCOME			
Disposal Revenue Salvage Revenue (2)	300,487 40,010	300,000 12,700	462,000 15,000
TOTAL INCOME	340,497	312,700	477,000
OPERATING EXPENSES			
Direct Costs Charged to Program Direct Costs Not Charged to Program Indirect Costs  TOTAL OPERATING EXPENSES	161,057 110,639 34,227 305,923	166,000 110,434 28,637 305,071	161,120 152,555 27,341 341,016
NET PROFIT FOR YEAR	34,574	7,629	135,984
CREDIT FOR GOLF COURSE OPERATION (3)	-0-	-0-	194,333

- (1) Assumes residential rate increase from \$0.50 to \$0.75 per cu. yd. and commercial rate increase from \$0.75 to \$1.00 per cu. yd.
- (2) Fiscal years 1971-72 and 1972-73 include loam sales and salvage. Fiscal year 1973-74 is salvage revenue only.
- (3) Estimated contractual cost of golf course grading is \$780,000 (390,000 cu. yds. at \$2.00 per yard). The City cost would be \$196,300. This is a savings of \$583,700, which is an average annual savings of \$194,333 over a three year period.

site is located on a peninsula ("island") jutting into the Bay. The site is officially run by the International Disposal Corporation, covers 342 acres, and has an estimated remaining life of 30 to 40 years. The site is worked 24 hours per day, 7 days per week, and is open to the public on weekdays from 6 A.M. to 4 P.M. and on Sundays from 9 A.M. to 4 P.M. The disposal charge for the public is 75¢ per cubic yard, and the installation of scales is being considered.

The site receives approximately 105,000 cubic yards per month and is covered daily. The detailed rate structure is:

- Minimum Charge 75¢ Trees/Stumps -\$3.00/cu. yd.
   1 Can 75¢ Auto Tires 25¢ each
   Each Add'l Can 50¢ Trucks Tires -\$1.00 each
- Rate Per Cubic Yd 75¢ Appliances/Furniture-\$1.50 up

The water table for Newby Island is 15 feet below grade and there are pockets of surface water visible. Seagulls are an enormous problem. There is no monitoring nor are there leachate drains. The site is surrounded by a levee 15 feet above sea level. The site appearance is generally sloppy, a condition contributed to by the gulls feeding on refuse, the prevailing winds which blow litter, and the enormous size of the site.

#### 5.4.3: Other Disposal Sites

Table 11 presents a list of the Santa Clara County Communities, their collectors, and their disposal sites. Apparently, only Garden City (San Jose) and San Jose Scavenger utilizes the Newby Island site. Other firms, including three who are subcontractors to Garden City for San Jose collection (Green Valley Disposal Co., South Valley Disposal Co. and Los Altos Garbage Co.), utilize other disposal sites.

#### 5.5: Future Changes

As noted in earlier discussion, the citizens of San Jose have a strong and active interest in their city's development

TABLE 11 REFUSE COLLECTION AND DISPOSAL IN SAN JOSE AREA

Government Jurisdiction	Collector	Disposal Site Utilized	Class/Type/ Ownership	Compulsory Disposal	Pranchise Agreement	Termination Date
San Jose	Garden City Disposal	Newby Island Disposal Site	II/MSL/PVT	Yes	Yes	Nov. 1975
Santa Clara	*Mission Trails Gar- bage Co.	Los Altos Ranch Site	II/MSL/PVT	Yes	Yes	Oct. 1976
	City of Santa Clara	Santa Clara Disposal	II/MSL/PUB	Yes	No	N/A
Sunnyvale	Specialty Garbage Co.	Sunnyvale Disposal Site	II/ESL/PVT	Yes	Yes	June, 1975
Milpitas	San Jose Scavenger Co.	Newby Island Disp.Site	II/MSL/PVT	Yes	Yes	Dec. 1980
Mountain View	Poothill Disposal Co.	Mt.View Disposal Site	II/MSL/PVT	Yes	Yes	Aug. 1975
Palo Alto	Palo Alto Sanitation Service	Palo Alto Disp. Site	II/MSL/PUB	Yes	Yes >	Feb. 1983
Cupertino	Los Altos Garbage Co.	Los Altos Ranch Site	II/MSL/PVT	Yes	Yes	Nov. 1975
Los Altos	Los Altos Garbage Co.	Los Altos Ranch Site	II/MSL/PVT	Yes	Yes	Nov. 1977
Los Altos Hills	Los Altos Garbáge Co.	Los Altos Ranch Site	II/MSL/PVT	Yes	. Yes	Jan. 1976
Saratoga	Green Valley Disposal Co.	Guadalupe Dump Site	II/MSL/PVT	Yes	Yes	Apr. 1979
Los Gatos	Green Valley Disposal	Guadalupe Dump Site	II/MSL/PVT	Yes	Yes	June, 1980
Campbel1	Green Valley Disposal Co.	Guadalupe Dump Site	II/MSL/PVT	Yes	Yes	June, 1981
Morgan Hill	South Valley Disposal	Morgan Hill Disposal Site	II/MSL/PVT	Yes	Yes	Oct. 1984
Gilroy	South Valley Disposal Co.	Gilroy Disposal Site	II/MSL/PVT	Yes	Yes	Jan. 1975
Santa Clara County	See Attached Map	See Attached Kap	- <	In con- jected Areas	No	N/A

Garbage conly. City provides unlimited rubbish collection service.

Source: Study of Refuse Disposal for San Jose, City of San Jose - Staff Report, March, 1973.

(Citizens' Goals Committee) and in solid waste recovery (see Quality of Service discussion). Appendix F presents a memorandum from the Director of Public Works to the City Manager outlining points for discussion in a City Council study session on waste recovery systems. This memo has three sections dealing with:

(1) overall management systems; (2) collection systems; and

(3) disposal and reclamation systems. From a review of this memo, it can be clearly seen that San Jose is moving towards a system which will provide for:

- (1) A more formal systems management structure and trained staff to develop performance standards, select and publicize desired systems options, provide for better billing (city billing) and cost control procedures, and move the system more aggressively towards waste reclamation activities.
- (2) An improved collection system operated by private contractors and based on detail performance criteria, bid specifications, and open bidding.
- (3) An improved disposal system in which:
  - private business will dispose or (or reclaim)
    liquid and semi-liquid toxic wastes
  - public sector will plan for, acquire and operate transfer stations and landfill disposal sites (Class I)
  - additional public sector waste materials reclamation activities will be financed with revenues from disposal site and current recycling operations.

The net profit projections for such a system indicate a trend towards relatively good profit levels within five years of system initiation.

As previously noted, the city is not satisfied with the contractor's cost accounting and billing procedures. Appendix J

presents a summary of the city's position in these areas and discusses a series of three alternatives to the current accounting and billing system. These alternatives are:

#### ALTERNATIVE A - CITY TAKES OVER ACCOUNTING OPERATION:

- 1) Initiates state legislation to place mixed refuse collection fees on the County tax rolls.
- 2) Contracts the company to collect mixed refuse City-wide.
- 3) Creates revolving fund to finance delinquent mixed refuse fee collections from general fund revenues of the City.
- 4) Establishes accounting system similar to weed abatement and special assessments to administer accounting operation.

# ALTERNATIVE B - CITY IMPOSES CONTRACTUAL REQUIREMENTS ON THE COMPANY WHICH CONTINUES ACCOUNTING OPERATION:

- 1) Company establishes accrual basis accounting system
- 2) Company establishes specified accounting controls
- 3) Company establishes a special accounting reporting system
- 4) Company develops a more imposing official bill accompanied with an addressed return envelope.

## ALTERNATIVE C - COMPANY OPERATION, COMPULSORY COLLECTION, CITY GUARANTEES PAYMENT

- 1) Contractual requirements as in Alternative B
- 2) Requirement of compulsory residential mixed refuse collection
- 3) Guaranty that City will reimburse contractor for uncollectable fees
- 4) City reimburses contractor for uncollectable fees and places them on tax roll in accordance with Chapter 175 of California Government Code

It is apparent that the dissatisfaction with the current contractor accounting procedures and billing inequities may force the city to take over or control these functions in some manner. At the time of the sity visit, Garden City was in the process of implementing an automated accounting and billing system to improve their management situation and billing services.

In general, because of the need for a county plan, the need for improved services and higher levels of citizen satisfaction, the city interest in recycling, and the city's desire to gain control over the system by operating the disposal and reclamation function, it is clear that the city will soon be taking action on a variety of issues relevant to solid waste management. The form the new system will take is not yet clear.

# APPENDIX A SAN JOSE RECYCLING PROGRAM INFORMATION AND DATA

#### RECYCLING PROGRAM 1972-73

The Recycling Program, to this date, consists of seven satellite centers with the San Jose Recycling Center as the main center. locations are as follows:

- 1. San Jose City College
- 2. Branham High School
- 3. Oak Grove High School
- 4. Abraham Lincoln High School
- 5. San Jose State University6. Andrew Hill High School
- 7. Fremont High School

Each of the centers is located on the school campus, with the exception of Andrew Hill High School and Fremont High School. Andrew Hill High School maintains, with a work force of 10 students. the Singleton Road site once a month. Fremont High School uses an area off campus.

The Recycling Centers have been successful in their endeavors to acquaint the public with the practice of household recycling. addition to household recycling many companies and businesses have taken advantage of this service.

The Program has been successful for many reasons. The cooperation of Industry has been unfailing since the inception of the program. The City, as well as public support has been the needed incentive to keep the program generating involvement. At this point, expansion has been beyond present means. There are three additional sites to be handled as soon as the program can accommodate them.

The centers are working on extensive educational campaigns in the form of printed literature. This literature would cover each individual center and its general public. Informative meetings with the participating centers are scheduled monthly to discuss problems or changes that might arise. The expanded program will be aimed at brining information and education to the public.

The two main objectives of the program were to provide a more ecological means of disposal and education of the public. The first of the goals has been accomplished. Now the need for education must. be filled.

## MONTHLY CUMULATIVE TOTALS FOR JULY - MARCH (1972-73)

	(1bs.)	(\$)
JULY		
Glass:	88,540	\$885.40
Bi-Metal:	19,981	199.81
Aluminum:	1,947	194.70
Newspaper:	10,460	41.84
AUGUST		
Glass:	0	0
Bi-Metal:	23,799	\$237.99
Aluminum:	(Scrap)	319.49
Newspaper:	10,320	41.28
SEPTEMBER		
Glass:	66,730	\$558.30
Bi-Metal:	14,660	146.60
Aluminum:	(Scrap)	84.56
Newspaper:	22,340	89.36
OCTOBER		
Glass:	40,220	\$402.20
Bi-Metal:	12,322	123.22
Aluminum:	1,620	162.00
Newspaper:	26,780	107.12
NOVEMBER		
Glass:	24,960	\$249.60
Bi-Mețal:	15,050	150.50
Aluminum:	1,580	158.00
Newspaper:	35,480	141.92
	63	

### Cumulative Totals - cont'd.

	(lbs.)	(\$)
DECEMBER		
Glass:	<b>O</b>	0
Bi-Metal:	0	0
Aluminum:	0	0
Newspaper:	10,280	\$ 41.12
JANUARY		
Glass:	96,040	960.40
Bi-Metal:	10,764	107.64
Aluminum:	640	64.00
Newspaper:	13,260	53.60
FEBRUARY		
Glass:	32,300	323.00
Bi-Metal:	20,505	205.05
Aluminum:	14,476	144.76
Newspaper:	26,660	106.64
MARCH		
Glass:	84,040	840.40
Bi-Metal:	8,176	81.76
Aluminum:	10,400	104.00
Newspaper:	17,270	154.86

## STATEMENT OF REVENUE FOR FISCAL YEAR 1972-1973 (JULY 1-MARCH 6) TOTAL REVENUE AND MATERIALS

Materials	<u>(\$)</u>	(lbs.)
Glass	\$ 4,328.30	432,830 @ \$20.00 per ton
Tin & Bi-Metal	1,252.57	125,257 @ \$20.00 per ton
Aluminum (cans & household aluminum)	3,066.30	30,663 @ \$200.00 per ton
Newspaper (print-out & tab cards)	777.74	172,850 @ \$8.00 per ton
Recycling Revenue (beer bottles, aluminum scrap)	828.25	<del>Cyclegges, a. group a little menture</del>
Cumulative Totals:	\$10,253.16	761,600 lbs.

#### TOTAL EXPENDITURES FOR FISCAL YEAR 1972-1973 (JULY 1-MARCH 6)

	Expenditures	<u>Total</u>
1.	Payment to workers at Singleton Road	<b>\$3,075.</b> 50
2.	Payment to Recycling Centers	1,271.71
3.	Forklift Rental	62.21
4.	Bin Construction	840.11
5.	Miscellaneous (Printing, metal work, etc.)	200.00
	Cumulative Total	\$5,449.53

Total Income	\$10,253.16		
Total Expenditures	5,449.53		
	\$ 4.803.63		

E. R. Toschi

Principal Civil Engineer

KAH:ms 4/24/73

## CITY OF SAN JOSE -- MEMORANDUM'

T. W. Fletcher, City Manager

PROM A. R. Turturici, Director of Public Works

subject Council Referral No. 10-12-71 - 31C

DATE November 1, 1971

Status Report on Demonstration Project in Recycling

APPROVED

DATE

#### BACKGROUND

The City Council, in December 1970, approved a joint demonstration project in recycling by the City of San Jose, Department of Public Works, and San Jose State College, Department of Environmental Studies. two principal goals of the project were:

- To ascertain if a significant number of householders would process and bring waste materials to a recycling center.
- To determine if recycling waste materials in this manner can be done on a self-supporting basis.

The recycling center was established on Singleton Road across from the Municipal Disposal Grounds and started operation in April 1971.

#### <u>ANALYSIS</u>

The response to the project clearly demonstrated that householders were willing to separate glass and cans from their household refuse, process and bring them to a recycling center. Not only in San Jose, but across the country, householders have demonstrated they would take the time and trouble to sort recyclables from their household refuse and transport them to a recycling center if they felt their efforts were helpful.

Initially, the center was open only on Saturdays, from 9:00 a.m. to 1:00 p.m. In July, the operating hours were extended to both Saturdays and Sundays, from 9:00 a.m. to 4:00 p.m., to better satisfy the requirements of householders bringing the material to the center. The center has been in operation for seven months and approximately 300,000 pounds of glass, and 150,000 pounds of steel, bi-metal and aluminum cans have been recycled.

The second goal of the project was to determine if the recycling of waste material at a center could be done on a self-supporting basis. Analysis of operations to date indicate that it is feasible a center could be self-supporting, provided the markets for recycled materials remain stable and effective materials handling techniques are employed.

There is reasonable assurance from industry that the market will continue at \$20.00 a ton for glass, \$20.00 a ton for steel and bi-metal, and \$200.00 a ton for aluminum. The prices quoted are for materials delivered to industry and in all cases, the delivery points are within a 50-mile radius of San Jose.

T. W. Fletcher, City Manager Page 2 November 1, 1971

The cost of loading and transporting the recycled materials from the center to the market site is by far the single most costly item. In order to reduce the excessive amount of labor and equipment being used now, it is necessary to invest in containers specifically designed to store the materials being handled and a towable forklift to load the containers.

#### DISCUSSION

The success of the demonstration project does not imply that the solid waste problem is solved or that the segregation of household refuse by the consumer is the ultimate answer. It is probably more reasonable to assume that the reclamation and recycling of waste materials will be done mechanically after collection from the consumer.

The success of the project does indicate there are a large number of persons concerned about the solid waste problem and are willing to do what they can to help alleviate it. The establishment of recycling centers not only provides a place for concerned persons to bring reclaimable materials to be re-used, but they serve as a focal point to increase public awareness of environmental problems.

Statistics developed in Eastern cities indicate that a large majority of the persons frequenting a recycling center live within a three to five-mile radius. With this in mind, it would appear that a number of small centers would be preferable to one central location.

Ideally, these centers could be located at schools throughout the area. Generally, schools have an ecology club or a group of students who are interested in developing an action program to help protect the environment. Many schools have attempted to establish recycling centers, but they have not been too successful because of the problems encountered in loading and transporting materials collected.

Through meetings with John Stanley from San Jose State, Department of Environmental Studies, and two of the local industries, Continental Can Company and Coca-Cola Bottling Company, who have actively supported this demonstration project from the start, a proposal for an expanded recycling effort has been developed.

The expanded recycling program would combine the efforts of City of San Jose, San Jose State College, and interested industries. The recycling program would consist of a central center, located at the present site on Singleton Road, and a number of satellite centers sponsored by schools or other organizations in the community. Each of these satellite centers would be equipped with containers which would be supplied and transported by the central center. The sponsors of satellite centers would also receive organizational aid and information with regard to developments in technology, equipment and other factors affecting the solid waste problem.

T. W. Fletcher, City Manager Page 3 November 1, 1971

In my opinion, the proper City commission to review and make recommendations on the recycling program would be the new Environmental Commission. However, the City of San Jose staff will provide coordination and administration. The City would establish the fiscal controls for the program and provide transportation for materials collected. San Jose State College Department of Environmental Studies would provide student help to man the central center and students to act as advisors to the satellite centers. The two industry representatives contacted to date have offered their expertise in the design of materials-handling techniques and miscellaneous equipment.

The satellite centers would be paid for the recycled materials collected at approximately 40% of the market value. The central center would retain 60% to pay for cost of containers, transportation and administration.

#### RECOMMENDATIONS

- 1. It is recommended that the City adopt a resolution authorizing the recycling program as proposed and providing that the revenues from the sale of recycled materials be utilized for purchase of equipment, supplies, and hiring of part-time help for the operation of the center.
- 2. It is recommended that the entire recycling program be under the review of the Environmental Commission. However, it is recommended that a special technical committee of the Commission be established consisting of representatives from the City of San Jose, San Jose State College Environmental Studies Department, and industry. The purpose of the committee would be to --

serve as an advisory group to the recycling program;

\*assist in planning and organizing an efficient recycling system; evaluate improvements in technology, equipment, material handling and packaging methods;

\*recommend programs and practices which will enlarge and broaden the market for reclaimed materials.

- 3. It is recommended that the sum of \$12,000 be allocated to implement the program. These funds are needed for the following items:
  - a. Towable forklift, \$7500.00.

b. Purchase of necessary containers, \$3000.00.

c. Miscellaneous improvements at existing site and contingencies, **\$1500.00.** 

#### ACTION REQUIRED FOR IMPLEMENTATION OF RECONCIENDATIONS

1. Resolution by Council authorizing program.

- Establishment of fund for revenues and expenditures of program.
- Ordinance allocating \$12,000.00 for the Recycling Program.

Respectfully submitted,

MILL TORIUNICI, Bircolor of Public Works

-68-

## CITY OF SAN JOSE -- MEMORANDUM

Turturici, Director of Public Works

suspect Personnel Requisition

FROM Hydraulics Division

DATE March 6, 1972

APPROVED

DATE

Attached is a personnel requisition for a Staff Aid (Limited). The position will assist in the operation of the new program for the San Jose Recycling Center by coordinating the activities of satellite centers, scheduling glass and bi-metal collection, keeping records of material collected from each satellite center, distributing environmental information and other miscellaneous duties.

Economic considerations of the recycling program would be improved by the hiring of a Staff Aid (Limited) as it would relieve an engineer of many of the day to day duties concerning routine operations.

Salary provisions for the position have been provided by Ordinance No. 16071.

B. R. TOSCHI

Principal Civil Engineer

ERT: KWH: ms

Attachment

### SUPPLEMENTAL INFORMATION TO MEMO DATED 3-6-72

The Staff Aide (Limited) position would be paid out of 01-726-974, and the salary would be limited to a maximum of \$300 per month.

The monthly operational budget for the recycling program has been estimated as follows:

#### MONTHLY INCOME

1.	40 tons glass @ \$20/ton		\$ 800
2.	15 tons bimetal @ \$20/ton		300
3.	1 ton aluminum @ \$200/ton	<b>304</b>	200
4.	Misc. Salvaga (iron, copper, etc.	,) =	200
	Total		\$1,500

#### MONTHLY EXPENDITURES

#### 1. Labor

San Ther Domington

	a. b.	Truck drivers Operation of center Administration (Staff Aide)	#3 C#	\$	350 400
			200		300
2.	Pay	ments to Participating Centers	23		240
3.	Equ	ipment Payments & Maintenance	<b>13</b>	-	210
		Total		\$1	,500

## THE CITY OF SAN JOSE RECYCLING PROGRAM

- I. Pick-up Procedures
- II. Calendar of Scheduled Pick-ups
- III. Proper Method of Recycling
  - IV. Newspapers, Cardboard, & Trash Pick-ups
    - V. Signs, Printed Material, Safety Equipment

#### I. PICK-UP PROCEDURES

There are a few necessary procedures which should be followed in order to have an effective as well as trouble-free Recycling Program.

1. When bins need picking up, call City Hall at 277-4000, extension 4215, on or before every Monday prior to Scheduled Pick-up (calendar enclosed). A call must be made even if no materials are available for pick-up to eliminate confusion.

Ask for Kathy Henry or Karl Hild. If neither one is reached, then leave a message with the following information:

- a. The number of glass bins and the color of each.
- b. The number of tin bins.

As an added convenience, the City is going to construct small tags of metal or another material which will be used to mark the bins to be picked up. These tags will slip over the edge of the bin and be clearly visible.

Then only the tagged bins will be picked up. This must be done in order to aid the driver in pick-up procedures.

2. The City will then be out on the scheduled Wednesday to pick up the bins and leave empty ones. A receipt will be left with someone if present; if not, it will be mailed.

We now have a towable forklift which makes it possible to weigh the materials on the spot. We will no longer need to approximate weights.

#### II. CALENDAR OF SCHEDULED PICK-UPS

#### September:

- 1. Call in on September 5
  Pick-up, September 6
- Call in on September 18
   Pick-up, September 20

#### October:

- 1. Call in on October 2 Pick-up, October 4
- 2. Call in on October 16 Pick-up, October 18

#### November:

- 1. Call in on October 30 Pick-up, November 1
- 2. Call in on November 13 Pick-up, November 15
- 3. Call in on November 27 Pick-up, November 29

#### December:

- 1. Call in on December 11 Pick-up, December 13
- 2. Call in on December 26 Pick-up, Decmeber 28

#### III. PROPER METHOD OF RECYCLING

The procedures for the proper method of recycling are outlined below. These are the same procedures followed by the individuals who use the center.

It is the responsibility of the Recycling Centers to see to it that these rules are followed correctly.

There have been problems arise with unbroken glass, metal rings, and unwashed materials from various centers in the past. It is hoped that this brief explanation will clear up such mishaps.

It is most important to remember that the white bins are to be used for glass only! Keep glass out of the green, Continental Can bins. These bins are for tim only!

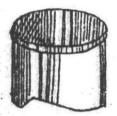
# Glass Jars and Bottles may be broken

- I wash out
- 2 remove lids
- 3 remove metal rings
- 4 separate colors



# Tin Cans do not have pop-tops

- I wash out
- 2 remove paper labels
- 3 remove ends
- 4 crush flat



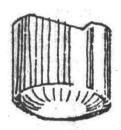
# Bimetal Cans have pop-tops and side seams

- I flatten in middle first
- 2 crush ends over



# Aluminum Cans have pop-tops; no side seams

crush; same as bimetal cans



#### IV. NEWSPAPER, CARDBOARD, & TRASH PICK-UP

#### Newspapers:

Newspapers are now being accepted at the Singleton Road Center (San Jose Recycling Center) across from the City Disposal Grounds. Inform the people who may ask, and in the event newspapers are left at your center, bring them to San Jose Recycling Center.

#### Cardboard:

Industry has now created a market for recycling corrugated cardboard.

The City is researching the possibility of having a cardboard bin located at Singleton Road. Information on this should be available by the middle of September.

Corrugated cardboard makes up the bulk of boxes used for packaging. All cardboard is acceptable only if the staples are removed and is not the type that utilizes a black tar glue tape for construction of the box.

#### Trash Pick-up:

Trash and refuse of the non-recyclable type can be hauled away from the centers on the scheduled pick-up days. Mention it when calling for a pick-up.

All trash and refuse should be stacked neatly and securely to prevent blowing away and to minimize complaints. Keep in mind, however, cleanliness is the responsibility of each center. The City is not in the garbage business. It will not be subject to clean-up procedures, only assistance.

V. SIGNS, PRINTED MATERIAL, SAFETY EQUIPMENT.

#### Signs:

It is very important to make clear to the public what must be done in order to make operations as trouble free as possible. Signs, if properly done, are a very effective means of relaying this message. The City has available facilities and materials to print such signs.

Some points to remember when designing a sign:

- 1. Signs should be precise and to the point. Read with a minimum of time and effort.
- 2. Signs should be appealing as well as functional.

#### Printed Material:

Flyers, hand-outs, etc., can be produced through the City's Duplicating Department for each Recycling Center. A flyer such as the one used by San Jose Recycling Center has proven to be effective (refer to next page). These same flyers can be altered to contain the name and location of each of the centers, if requested two weeks before needed.

On the back of these same flyers, information of each center's activities or background can also be printed. Environmental information from various industries is available upon request.

#### Safety Equipment:

If equipment such as gloves and eye goggles are not already in use, consider ordering such equipment for the safety of each worker. Safety must be the number one consideration in managing a Recycling Center.

#### SOME GOOD FACTS ABOUT RECYCLING

Dumping refuse onto the land, in the water, or in the air is not a wise use of our garbage resources. The materials used to make a product are present in our trash, but we go after new resources instead to make new products. Our object should be to begin treating garbage and trash with due respect.

Reduce the amount of waste you produce by considering what will happen to each purchase you make. Packaging will play an important role here. Things like cellophane, waxed paper, styrofoam, and plastics are not biodegradable. They are also unsuitable for recycling, and will be here many years after we are gone. Avoid them whenever possible, and recycle all things you do not need.

When considering recycling, first re-use the item in its original form (e.g. cardboard box as a box). If this is not possible, utilize it for its material content (e.g. cardboard used by wastepaper industry). An empty garbage can is a sign of ecological living. So the next time you recycle an empty beer can, don't do it with disdain--for it may become part of a surgeon's scalpel which will save your life!

#### WHAT HAPPENS TO RECYCLED MATERIALS?

It's enough to bolster belief in reincarnation when discarded tuna fish cans come back to life as steel plate to build ships or glass bottles become something you can drive on. The destination of such material is often not known. It's about time the public was aware of what can be done with their discarded garbage.

#### GLASS

The glass taken in by recycling is mixed with the natural elements which make up glass--sand, silica, & quartz. This in turn is melted and formed into new bottles. Recent experiments may have opened up a whole new field for the use of recycled glass though, research now being conducted deals with a new means for using glass salvaged from municipal refuse. The proposed use for this waste glass is as an aggregate used for urban road paving and maintenance operations.

The use of glass aggregates in asphalt concrete has been shown by both laboratory and field tests to be a viable means for using waste glass. Performance of glasphalt field installations have proven satisfactory.

Glass - cont'd.

For recycling purposes, glass is very easy to recycle. It need only to be washed out, separated by color, and all metal caps or rings removed.

#### TIN AND BI-METAL

"Tin" cans are actually tin-plated steel containers; while bi-metal is made of steel sides and bottom with an aluminum pop-top. These cans will decompose after about 25 years of exposure to the elements. The new aluminum pull tab tops will take 100 years.

For recycling purposes, the cans should be washed out, all labels removed, and crushed flat. The aluminum tab from the bi-metal, can and should be put in with your recyclable aluminum.

There are four major markets now for the recycled tin can:

- Steel Mills: Using any of the three basic processes oxygen furnaces, open hearth or electric furnaces - to produce new products made of steel.
- 2. Detinning Companies: Tin recovered from scrap is the only domestic source of this mineral, which must otherwise be imported at a cost of \$3,600 a ton. The companies have stated they will accept for remelting all the used cans they can get.
- 3. Ferroalloy Production: Iron is combined with other elements to manufacture specialty steel and foundry casting. This market has the potential of absorbing more than 3 billion cans a year.
- 4. Domestic Copper Processing: Nearly 15 per cent of domestic copper is processed by the leaching-cementation method involving a chemical exchange of the copper and iron ion. The consumption of can scrap is limited only by the economics of long-distance shipping to western mines. The potential market has been estimated at 18 billion cans. Mines can pay \$50 to \$65 a ton for the shredded cans.

#### **ALUMINUM**

Aluminum drink cans are recognized by the seamless molded bottoms. If you purchase these containers, it is your responsibility to recycle them.

For recycling purposes, wash out the can, then flatten by stepping in the center and then stepping on each end.

Aluminum - cont'd.

Although aluminum cans are worth the most money when redeemed, and although they are the easiest cans to crush, aluminum cans are the most polluting. It takes approximately 6 times more polluting energy to make an aluminum can as compared to a steel can. Also, aluminum does not rust, therefore it is not biodegradable.

#### PAPER

Most paper products can be recycled. They usually need to be separated according to categories of newspaper, cardboard, magazines and mixed paper. Companies often require they be tied into bundles. Carbon paper, paper with plastic or wax coating, cellophane, styrofoam, etc., generally cannot be recycled.

#### CLOTH

Cloth is generally recycled through charity organizations as used clothing or given to second hand stores. These small stores operate from the donations of old clothing which are then sold at a great discount. The clothing industry requires a great deal of agricultural land. The clothing purchased should be utilized to its fullest extent.

#### WHY RECYCLE?

"Nationally, each person generates 4.5 lbs. of garbage per day. But in California, the average rate is 20 lbs. per person, per day."

It costs the taxpayers of this country 2.8 billion dollars per year to throw away their garbage.

Can you really afford to throw that money away?

## CITY OF SAN JOSE -- MEMORANDUM

R. R. Blackburn, Chief Assistant
Director of Public Works

Director of Public Works

SUBJECT 1973-74 f.y. Budget for

Recycling Program

FROM E. R. Toschi, Hydraulics
Division

PATE March 6, 1973

APPROVED

DATE

Attached is the 1973-74 f.y. budget for the Recycling Program. The program requests an additional \$2,500 over last year's budget to cover additional expenses due to an anticipated 25 per cent increase in material collected.

B. R. TOSCHI

Principal Civil Engineer

ERT: KWH: ms

Attachment

#### 09715 Recycling Program

The recycling program encourages recycling of glass, bimetal, aluminum and newsprint. Non-profit recycling centers are provided collection containers and transportation for material collected.

Work Program Data	Actual 1971-72	Estimated	Program 1973-74
Tons of Material Collected		460	575
Activity Cost		•	
General Fund	\$12,000	\$ 5,000	\$ 7,500
Emergency Employment Act Fund	0-	-0-	0-
Total	\$12,000	\$ 5,000	\$ 7,500

Detail of Personal Expenses

One Staff Aide (LTD) - 840 hrs. @ \$3.56/hr = \$3,000

Department Public Works

OF :	1017	PENDITURES		ETAIL OF NON-PERSONAL EXPENSES
Obj	Prior Year	Current Year Estimated	Next Year	<u>Detail</u>
30	-0-	-0-	\$ 300	SUPPLIES, MATERIALS AND SMALL TOOLS  Lumber for signs, paint, steel strapping and hand tools
34	-0-	<b>-0-</b>	200	PRINTING AND ADVERTISING  City duplicating, reproduction of educational material and advertising flyers
52	-0-	2,000	4,000	SERVICES - Contractual and Professional  Glass and bimetal bins, miscellaneous improvements to recycling center.
·	,		\$4,500	
•				
	•			-00
:		,		Conting on Reverse

### CITY OF SAN JOSE -- MEMORANDUM

Mrs. Janet Gray Hayes City Council

SUBJECT Recycling Program in San Jose

FROM Hydraulics Division

DATE March 30, 1972

APPROVED

DATE

In January of 1971, the City of San Jose approved a joint demonstration project in recycling with the Environmental Studies Department of San Jose State College.

A recycling center was established on Singleton Road north of the Disposal Grounds. Due to the success of the project, the Council, in November, 1971, approved a new recycling program which will expand the present demonstration project.

The new program will provide containers and transportation for recyclable material, publicity, and printed educational material to any non-profit organization that wishes to participate. The participating organizations will share in the revenues derived from the sale of the recyclables collected.

On January 31, 1972, the City Council approved an ordinance that provided funds for the implementation of the program. These funds are now being utilized in setting up the program.

Plans have been drawn for needed improvements to the existing recycling center and these improvements should be completed by mid-April. Also the construction of additional containers for the recyclable material is expected to be completed by the same date.

Meetings have been held with representatives of industry, recycling centers now in operation at schools and with the San Jose Youthin Commission. In addition, a meeting has been scheduled for April 18, 1972, in which all organizations that are interested in establishing recycling centers will be invited to attend. Our plans are to have the new recycling program in operation by the date of this meeting. This will enable us to provide immediate service to those organizations that attend the meeting and wish to participate in the program.

Respectfully submitted,

E. R. TOSCHI

Principal Civil Engineer

ERT:KWH:mb

#### APPENDIX B

# SANTA CLARA COUNTY MEMO REQUESTING BOARD APPROVAL OF SOLID WASTE PLANNING EFFORT

### memorandum



Board of Supervisors

Howard W. Campen. County Executive

DEVELOPMENT OF COUNTY-WIDE SOLID WASTE

FROM

July 11, 1973

MANAGEMENT PLAN

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Attached is a proposed project description for the development of a County-wide solid waste management plan. Development of this plan is mandated by the State Solid Waste Management and Recovery Act of 1972.

The County must develop this comprehensive plan in cooperation with the cities within the County. The proposed work plan provides for city input of both a policy and technical nature via use of the Planning Policy Committee.

Because the project is expected to require at least two years to complete, timing becomes critical. Therefore, it is recommended that your Board:

- 1. Approve the attached project description for the development of a county-wide solid waste management plan.
- 2. Authorize staff to commence with initial phases of the consultant selection process.
- 3. Refer the project description to the Planning Policy Committee and request their participation in the project.
- 4. Request the PPC nominate members to the Solid Waste Management Technical Advisory Committee as described in the project work plan.
- 5. Refer the project description to the Inter-City Council and the Association of Bay Area Governments for review and comment.

#### Funding

A proposal for this project has been submitted for Entitlement Period IV General Revenue Sharing funds, however, the Board may wish to resolve the funding Issue during the current 1973-74 Budget Hearings. We would not anticipate the execution of a contract for consultant services prior to September 15, 1973, when these Revenue Sharing funds would be available, however, immediate resolution of funding of this project would allow County departments and the PPC to move definitively toward forming the planning organization and selection of the consultant.

le Attachment

cc: Public Works
Planning
Public Health

#### Project Description - Development of County-wide Solid Waste Management Plan

#### Background -

The Solid Waste Management and Recovery Act of 1972 requires the County to submit to the State Solid Waste Management Board by January 1, 1976, a comprehensive coordinated solid waste plan. This plan must be prepared in accordance with established state policy and guidelines to handle all solid waste disposal within the County and all solid waste disposal destined without the County.

The plan must be approved by a majority of the cities within the County which contain a majority of the population of the incorporated area of the County. This Act establishes solid waste management and planning as a primary responsibility of local government (counties).

#### Plan Development -

Whereas Solid Waste Management shall be included as an element in the County General Plan and since the study is to be undertaken cooperatively with the cities, the primary responsibility for plan development will rest with the County Planning Department.

An itemized list of steps necessary to develop the comprehensive plan is shown as Appendix A. The major alements of the plan development are:

- A. Formulating solid waste management goals.
- B. Data gathering, inventory, and analysis
- C. Establish criteria for punsuing components of solid waste management.
- D. Examine alternatives.
- E. Establish management alternatives.
- F. Establish economic feasibility.
- G. Make final recommendations on plan to Board of Supervisors and cities for adoption and submittal to the State Solid Waste Management Board.

Due to the specialized nature and complexity of the problem, a private consultant will be hired to perform the major study elements. The Planning Department will have the responsibility of administering the consultant contract. Planning will also act as liaison with appropriate city, State, and Association of Bay Area Government (ABAG) officials.

#### City Participation -

The Planning Policy Committee (PPC) will act as the city-county, multi-jurisdictional coordinating body for development of the County-wide Solid Waste Management Plan. A nine member Technical Advisory Committee (TAC) will monitor the progress of the consultant and provide much of the local knowledge and expertise necessary for development of the plan.

This nine member TAC will be composed of: .

- 1 member representing County Planning
- 1 member representing County Public Works
- 1 member representing County Public Health
- 2 members representing City Management\*
- 2 members representing City Plannings
- 2 members representing City Public Works\*

#### \*membership selection by PPC

ABAG staff associated with solid waste planning will be requested to serve as ex-officio, non-voting members of the TAC.

In addition to the TAC, the PPC may wish to establish a sub-committee for the purpose of reviewing and commenting on the final draft of the plan. It is expected that this sub-committee would address itself to the policy decisions inherent in the management alternatives posed in the plan.

The Inter-City Council will also be contacted to review and comment on the project description and the final draft of the plan.

Final adoption of the plan will be requested from each city council via a communication from the Board of Supervisors. A majority of the cities within the County which contain a majority of the population of the incorporated area of the County must adopt the plan prior to submittal to the State Solid Waste Management Board for approval.

#### Consultant Selection -

The County Planning Department, with assistance from the County Public Works and Public Health Departments, will be responsible for developing a draft request for consultant proposals (RFP). ABAG and State Solid Waste Management Board staff will be asked to review and comment on the draft RFP. The TAC will finalize the RFP and the County Planning Department will then solicit consultant proposals.

The TAC, or a designated sub-committee of the TAC, will review all project proposals and invite those firms with the best proposals and the most qualified personnel to conduct the study to an oral interview. Final selection of the consultant will be based on the oral proposal presentations. One staff member each from ABAG and the State Solid Waste Management Board will be requested to review all written proposals and assist the TAC in the ultimate selection of a consultant.

Once the selection is made, the County Planning Department will be responsible for negotiating and administering the consultant contract. The Planning Department will also act as liaison with ABAG for regional plan development and for coordination necessitated by the Bay Delta Resource Recovery Demonstration Project.

#### Project Costs -

Costs for consultant services to develop the County-wide Solid Waste Management Plan are estimated to be \$100,000. (The method of financing this project has not yet been determined--a General Revenue Sharing

proposal has been submitted for Entitlement Period IV funds.)
Whereas this project is a state mandated County responsibility, all costs for consultant services will be borne by the County. The consultant contract will be for approximately 18 months.

#### Project Timetable -

The County must submit a Solid Waste Management Plan to the State Solid Waste Management Board by January 1, 1976. The following timetable has been established to meet this deadline and still provide sufficient time for plan development, review and approval.

	ACTIVITY	TIME PERIOD (weeks)
١.	Draft RFP, Form Committees	1 to 3
	Solicit Consultant Proposals	4 to 6
3.	Select Consultant, negotiate contract	7 to 9
4.	Develop Draft Plan	10 to 88
	Review Draft - PPC, ICC, ABAG, State	89 to 92
	Finalize Plan	93 to 102
		103 to 110
	Submit Plan to State	111

#### APPENDIX A

## SCHEDULE FOR DEVELOPMENT OF COMPREHENSIVE PLAN OF SOLID WASTE MANAGEMENT FOR SANTA CLARA COUNTY

#### WORK ITEM

- 1. Submit work program to Board of Supervisors and the Planning Policy Committee.
- 2. Formulate solid waste management goals for Santa Clara County. Forward to ABAG Solid Waste Committee for review and comment.
- 3. Refer solid waste management goals to the Board of Supervisors and the Planning Policy Committee.
- 4. Collect and map basic county data related to solid waste: land use, population distribution, social and economic factors, physical factors (soils, geology, hydrology, climate).
- 5. Describe present conditions in SCC related to solid waste collection and disposal; identify problems to be addressed.
- 6. Calculate quantities of (solid, liquid, toxic) in terms of tons, cubic yards and land fill acres required (total of per capita) project solid waste quantities to 1990 in five year increments.
- Inventory and map sites now in use for solid waste disposal; calculate remaining capacity of site and time it will remain in use.
- 8. Establish criteria for location of transfer stations, solid waste disposal sites and toxic waste disposal sites: Establish financial criteria to be used in evaluating the location of such facilities.

- 9. Establish the financial criteria and impact on separation, recovery and recycling of waste; Determine the extent of these methods that would be desirable, within the financial parameters, for the short range future (10 yrs) and the middle range future (20 years).
- 10. Analyze the County's geography, its road network and population distribution to determine feasible haul distances at reasonable cost for the purpose of locating solid waste and toxic waste transfer stations and disposal areas within the criteria of "8" above.
- 11. Identify and map broad general areas of County suitable for transfer station sites and solid waste disposal sites meeting criteria in "8" and "10" above, including an assessment of the social and environmental impact of solid waste disposal operations on the population and environment of these areas.
- 12. Examine alternate future uses of solid waste disposal sites based on relationship of solid waste sites to other countywide planning programs and adopted plans. Develop standards for rehabilitation of sites for future use. Relate these criteria and standards to "6" and "7" above as well as to future sites.
- 13. Examine the impact of regional planning (ABAG Solid Waste Committee) preparatory to preparing a sketch plan for Santa Clara County to enhance compatibility and coordination with the regional plan.
- 14. Examine solid waste management alternatives, with consideration for private and governmental structure and financial arrangements inherent in these alternatives.
- 15. Submit progress report to the Board of Supervisors and establish a P.P.C. solid waste subcommittee to review, in detail, the progress to date and participate in preparation of sketch plans.

- 16. Prepare sketch plans of transfer stations and solid and toxic waste site or sites, based on general areas identified in "10" and "11" above and fulfilling reuse functions of sites identified in "12" above.
- 17. Submit recommended sketch plan to cities.

  A3AG and other appropriate government agencies for review and comment.
- 18. Adjust sketch plan and prepare additional social and environmental statements as required.
- 19. Recommend the most favorable of the solid waste management alternatives examined in "14" above. Present the most attractive overall arrangement for implementing the plan in light of this management alternative.
- 20. Hold public meetings on plan and alternate means of implementation.
- 21. Make final recommendations of plan and implementation program to the Board of Supervisors for adoption.
- 22. Submit report to the Board of Supervisors, Planning Policy Committee and City Councils for adoption of the plan and necessary implementation measures.

# APPENDIX. C MUNICIPAL CODE FOR WASTE MATTER MANAGEMENT

5212.12. Prophylactic Goods. No person other than a duly registered pharmacist, shall sell or give away, through the medium of vending machines, or in any other manner any prophylactic rubber goods, or any other articles for the prevention of venereal or other diseases or infections in the City: provided, however that the provisions of this Section shall not apply to wholesale druggists. jobbers and manufacturers selling the foregoing articles to retail drug stores.

5212.13. Advertising of Nestrums Prohibited. No person shall exhibit or distribute, in any public toilet, urinel or invatory, or in any toilet, urinal or lavatory in any saloon, pool or billiard room, or hotel, or at any other place within the City, any written or printed matter, or any form of advertising, which either directly or indirectly, by statement or implication, advertises that any person, whether a licensed physician or not, offers to treat, or does treat, venereal diseases, or diseases or weaknesses of the genito-urinary system in man or woman; or which either directly or indirectly, by statement or implication, advertises that any drug store or medicine, compounded, or uncompounded, for external or internal use, is a cure for. or will alleviate or be in any manner beneficial for any venereal diseases or any disease or weakness of the genitourinary system in man or woman.

No person owning or in charge of any promises specified in this Section, shall permit any written or printed matter or advertising prohibited in this Section, to be posted in any public toilet, urinal or lavatory, or in any toilet, urinal or lavatory in any saloon, pool or billiard room, or hotel, or any other place within the City which is owned, leased or in charge of such person.

5212.14. Privies and Cesspools Prohibited. No privy vault, cesspool, or reservoir into which any privy, water closet, toilet, stable, sink or other receptacle of sewage or liquid refuse is drained, shall be maintained upon any premises within the City where connection to the street sewer is practicable. except as heremafter provided.

5212.15. Centractors' Privles. Adequate sanitary toilet facilities shall be made available for workers on all construction onbrations. Whenever privies must necessarily be installed to comply with the provisions of this Section. they shall be constructed in accordance with specifications of the Health Officer, and shall be maintained at all times in a sanitary condition and fly-proofed. Upon fallure to comply with this Section. the Superintendent of the Building Department is empowered to require discontinuance of all construction operations.

5212.16. Vehicle Lots. Every operator 6212.16 of any lot used to park, store, maintain or load and unload vehicles shall keep such lot in a clean and sanitary condition at all times and shall so treat the surface of the ground upon which the lot is located, as to effectively prevent the blowing or drifting of dust and the tracking of material by vehicles therefront

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#### Chapter 3—ACCUMULATION, TRANSPORTATION AND DISPOSAL OF WASTE MATTER

#### PART 1. PURPOSE AND DEFINITION

5301.1. Purpose. This Chapter is determined and declared to be a health. sanitary and safety measure necessary for the promotion, protection and preservation of the health, safety and general welfare of the people of the City of San Jose.

5301.2. "Refuse" Defined. The word "refuse" as used in this Chapter means and includes any and all garbage, swill, rubbish and stable matter.

5301.3. "Garbage" Defined. The word "carbage" as used in this Chapter means

and includes any and all dead animals of less than ten pounds in weight, except those slaughtered for human consumption; every accumulation of waste animal, vegetable and/or other matter that results from the preparation, processing, consumption, dealing in, handling, packing, canning, storage, transportation, decay or decomposition of meats, fish, fowl, birds, fruits, grains or other animal or vegetable matter including, but not by way of limitation, used tin cans and other food containers; and all putrefactive or easily decomposable waste animal or vegetable matter which is

likely to attract flies or rodents; except any matter hereinafter included in the definition of "swill" or "rubbish" or "stable matter."

6301.4. "Swill" Defined. The word "swill" as used in this Chapter means and includes any animal or vegetable waste resulting from the handling, packing, canning, cooking, preparing or processing of food, which (a) is fit for consumption by, and may lawfully be fed to, animals or which will be made fit by heat or other treatment for consumption by animals and may thereafter be

6801.4 Amended Ord. #8977 lawfully fed to animals, and (b) has been segregated from other refuse and kept and accumulated in separate containers by the producer thereof for the purpose of feeding it or having it fed to animals, and (c) is actually and lawfully fed to animals.

6301.5 Amender Ord. #16300

5301.5. "Rubbish" Defined. The word "rubbish" as used in this Chapter means and includes all waste wood, wood products, tree trimmings, grass cuttings, dead plants, weeds, leaves, dead trees or branches thereof, chips, shavings, sawdust, printed matter, paper, pasteboard, rage, straw, used and discarded mattresses, used and discarded clothing, used and discarded shoes and boots, combustible waste pulp and other products such as are used for packaging, or wrapping crockery and glass, ashes, cinders, floor sweepings, glass, mineral or metallic substances, earth, rock, used, demolished or discarded building materials, and other waste material not included in the definitions of garbage, swill or stable matter.

5301.6. "Stable Matter" Defined. The words "stable matter" as used in this Chapter mean and include all manure and other waste matter normally accumulated in and about stable or any animal, livestock or poultry enclosure and resulting from the keeping of animals, poultry or livestock.

5301.7. "Swill Collector" Defined. The words "swill collector" as used in this Chapter mean and include any person who possesses a valid swill collector's license issued in accordance with the previsions of Part 5 of this Chapter.

\$301,8 • \$301.9 Amenda Ord. #4**\$**4\$

5301.8. "Rubbish Collector" Defined. and The words "rubbish collector" as used in this Chapter mean and include any person who possesses a valid rubbish collector's license issued in accordance with the provisions of Part 5 of this Chapter.

5301.9. "Garbage Collector" Defined. The words "garbage collector" as used in this Chapter mean and include any person who is authorized by contract existing between him and the City to collect, transport and/or dispose of any

garbage or of any rubbish, stable matter and garbage produced, kept and accumulated in the City, in accordance with the provisions of Part 6 of this Chapter.

5301.10. "Premises" Defined. The word "premises" as used in this Chapter means and includes any land, building and/or structure in the City where any refuse is produced, kept, deposited, placed or accumulated.

5301.11. "Health Officer" Defined. The words "health efficer" as used in this Chapter mean and include the head of the Department of Health of the City and/or his duly authorized agents and/or representatives.

5301.12. "Demelition Materials Collector" Defined. The words "demolition materials collector" as used in this Chapter shall mean and include any person who engages in the business of collecting, transporting and/or disposing of demolished building materials, earth, rock and other materials or residue remaining after the demolition of any structure and the grading of the land after said demolition.

### PART 2. GENERAL REGULATIONS

5302.1. Refuse From Outside City. Except as otherwise authorized by other ordinances, no person other than the City shall transport or permit to be transported into the City any refuse of any kind produced, kept or accumulated outside the City, for the purpose of keeping, accumulating or disposing of it in the City; and no person other than the City shall keep, accumulate or dispose of in the City any refuse transported or brought into the City from outside the City.

\$302.2. Private Property. No person shall throw, drop, leave, dump, bury, burn, place, keep, accumulate or otherwise dispose of any refuse upon another person's private property, either with or without intent to later remove the same from such property, without the consent of such other person. The burden of proving such consent shall be on the person doing any of such things.

6301.18 Added Ord. #16301

PART 2 6102.1 -6302.16 Added Ord. #4481

5302.3. Public Property. No person shall throw, drop, leave, dump, bury, burn, place, keep or accumulate any refuse upon, on, into or in any street. way, sidewalk, gutter, stream or creek or the banks thereof, or any public place or public property, nor sweep, gather or take any refuse from any such place or property or portion thereof and throw, drop, place, deposit, dump, leave or accumulate it in any other such place or property or portion thereof, either with or without intent to later remove the same, except and to the extent that such is authorized by other ordinance of San Jose or by other action of the Council of the City of San Jose.

5802.4. Dangerous Accumulations, ste.

No person shall keep or accumulate, or permit to be kept or accumulated, any refuse in or upon any premises or place in the City owned, leased or rented by him or in his possession or control, in such manner that the same shall become a fire hazard dangerous to persons or property, or become unreasonably offensive or dangerous to the public peace, health or safety, or become a public or private nuisance.

8302.5. No Refuse on Premises, etc. Except That Produced Thereas. Except as otherwise expressly authorized by the provisions of this Chapter, no person other than the City shall place, keep, accumulate or dispose of any refuse of any kind in or upon any prem-

#### SAN JOSE MUNICIPAL CODE

5302.3. <u>Public Property.</u> No person shall throw, drop, leave, dump, bury, burn, place, keep or accumulate any refuse upon, on, into or in any street, way, sidewalk, gutter, stream or creek or banks thereof, or any public place or public property, nor sweep, gather or take any refuse from any such place or property or portion thereof and throw, drop, place, deposit, dump, leave or accumulate it in any other such place or property or portion thereof, either with or without intent to later remove the same except and to the extent that such is authorized by other ordinance of San Jose or by other action of the Council of the City of San Jose.

5302.4. <u>Dangerous Accumulations</u>. etc. No person shall keep or accumulate, or permit to be kept or accumulated, any refuse in or upon any premises or place in the City owned, leased or rented by him or in his possession or control, in such manner that the same shall become a fire hazard dangerous to persons or property, or become unreasonably offensive or dangerous to the public peace, health or safety, or become a public or private nuisance.

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ises, land or place in the City other than the premises wherein such refuse is produced unless so authorized by resolution or ordinance of the City Council; and no person other than the City shall establish, maintain or operate any dump or disposal grounds in the City for the keeping, accumulation or disposal of any refuse of any kind unless so authorized by resolution or ordinance of the City Council; and no person shall permit any premises, land or place in the City owned, leased or rented by him or in his possession or control to be used for the keeping, accumulation or disposal of any refuse of any kind other than refuse produced thereon, unless so authorized by resolution or ordinance of the City Council.

5302.6 Amended by Ord. #4510 Adopted 19-25-64 5302.6. Serting Refuse on Streets. No person shall sort, separate or segregate any refuse of any kind within or upon any public street or place, unless so authorized by the Health Officer or the City Council, and then only in the manner, place and time and subject to such restrictions as may be imposed by said Health Officer or the City Council,

5302.7. Collection and Transportation. No person shall collect and/or transport any refuse within or upon any public streets in the City, or anywhere in the City, except in leak-proof containers or vehicles so constructed that no refuse can leak or sift through, or fall out, or be blown from, such container or vehicle. Vehicles or containers used to collect or transport garbage, stable matter or swill shall be completely covered and shall be kept covered at all times except when garbage, stable matter or swill is being actually loaded or unloaded and except when said vehicles are moving along a collection route in the course of collection. Collection and transportation of any and all refuse shall be so conducted that no refuse will fall, drain or spill out of the collecting or transporting container or vehicle. Any person collecting or transporting any refuse shall immediately pick up all refuse which drops, spills, leaks or is blown from the collecting or transporting container or vehicle, and shall otherwise clean the place onto which any such refuse was so dropped, spilled, blown or leaked.

5302.8. Interference with Collectors. No person shall interfere with or obstruct the authorized activities of a garbage collector, swill collector or rubbish collector, in the collection, transportation and disposal of refuse.

5302.9. Responsibility for Compliance, Etc. The primary responsibility for proper keeping, accumulation and dis-

posal of refuse in accordance and compliance with the provisions of this C hapter shall be on the producer thereof. Should such producer refuse, neglect or fail to provide for such proper keeping, accumulation and disposal of refuse, the owner of the premises within or upon which the same has been produced shall keep, accumulate and dispose of it in accordance and compliance with the provisions of this Chapter.

5302.10. Communicable Diseases. Any and all refuse which the Health Officer may find and declare to be contaminated in that it carries or may carry communicable germs and/or diseases shall be taken by the collector thereof, to the place of permanent disposal, on the calendar day of its collection and no later. The collector of such, refuse shall not place, retain, store or keep any such refuse, either temporarily or otherwise, in any barn, garage or any building or place other than the regular disposal grounds, pending its delivery to and permanent disposal at the disposal grounds.

5302.11. Epidemics. In the event the Health Officer should find and declare the existence of an epidemic, or should find and declare that an epidemic is threatened, all refuse collected by any collector, which the Health Officer should find and declare to be dangerous to the public health in that it contains or carries or may contain or carry germs, diseases or disease-bearing agents, shall be taken by the collector immediately to the disposal grounds and be disposed of in such manner as the Health Officer may direct.

5302.12. Health Officer's Power. The Health Officer shall have power to establish rules and regulations consistent with the provisions of this Chapter, such rules and regulations to have as their purpose the enforcement of the provisions of this Chapter and the health and sanitary laws and ordinances of the City subject to approval of the same by the City Council; and upon their approval by the City Council, such rules and regulations shall have the effect of law.

5302.13. Enforcement. All members of the Police Department and the Department of Health of the City are hereby specifically authorized and required to enforce the provisions of this Chapter, and shall have the right to enter any and all premises or places in the City to determine the sanitary condition thereof. No person shall deny or obstruct any such entry by any such persons for such purpose.

provisions of this Part and of Part 4 of this Chapter. Each such container shall:

- (a) be constructed of metal, plastic or other substantial material;
- (b) be of sufficient strength and rigidity to hold without collapse all garbage and/or other refuse deposited and kept therein;
- (c) be of sufficient strength and rigidity to prevent it from being broken or crushed under ordinary conditions of use:
  - (d) have close fitting cover;
- (e) be equipped with two attached handles or bales, one on each side of the container, of sufficient strength and size and so located to facilitate the lifting and handling of the container;
- ->(f) be leaf-proof and fly-proof;
  - (g) be free of sharp, rough or jagged surfaces or edges likely to cause injury to persons lifting or handling the container;
  - (h) he of such shape that it can be lifted and handled without unreasonable strain:
  - (i) not exceed 32 gallons in capacity. 5303.3. Garbage Containers, Location. Each and every garbage container shall be placed, kept and maintained within the side or rear yard of, the premises wherein its contents are produced, provided and excepting however, that, except as otherwise provided in this Chapter, such container shall be placed upon the public parkway in front of said premises for collection of its contents. No such container shall be kept or permitted to remain at the last mentioned location except for not more than 12 hours immediately preceding the scheduled time of collection by said collector.

5303.4. Garbage Containers, Use and Maintenance. Each and every garbage container shall be kept scaled with a light-fitting cover so as to prevent the scape or leakage from the container of any garbage or other refuse or of any

and no such container shall otherwise

be placed, kept or maintained within or

upon any public sidewalk, parkway, curb,

gutter or street.

offensive vapors, gases or odors, except when garbage or other refuse is being placed into or removed from the container. No such container shall be so filled as to cause matter to overflow therefrom; and the gross weight of garbage or refuse placed or kept therein, including the weight of the container, shall not at any time exceed 75 pounds. Such container shall at all times be kept clean and sanitary, treated in such manner and to such extent and with such substance as may be necessary to repel and keep away flies and rodents, and render the container odor-proof.

5303.5. Swill Containers Required, Description. Any and all swill produced, kept or accumulated within or upon any premises or place in the City shall be placed without delay in separate, swill containers kept and maintained within and upon such premises or place, and shall be kept and accumulated in such containers within or upon such premises or place until disposed of in accordance with the provisions of this Part and of Part 4 of this Chapter. Such swill containers shall meet all specifications and requirements applicable to garbage containers as herein set forth in Section 5303 9

5303.6. Swill Containers, Location. Each and every swill container shall be placed, kept and maintained, at all times in the rear of the premises wherein its contents are produced, at a place reasonably accessible and convenient for collection of its contents.

5303.7. Swill Containers, Use and Maintenance. Each and every swill container shall be kept scaled with a tight-fitting metal cover so as to prevent the escape or leakage from the container of any swill, or of any offensive vapors, gases or odors, except when swill is being placed into or removed from the container. Nothing but swill shall be placed into or kept in a swill container. No swill container shall be so filled, as to cause matter to overflow therefrom, and its gross weight including the weight of swill kept therein shall not ever exceed 75 pounds. Each container shall at

\$303.5 -\$303.7 Added Ord. all times be kept clean and sanitary, and shall be sprayed and otherwise treated in such manner and to such extent and with such substance as may be necessary to repel and keep away flies and rodents and to keep the container odor-proof.

5393.8 -5393.10 Amende Urd. #18514 5303.8. Rubbish, Accumulation Of. Any and all rubbish produced, kept or accumulated within or upon any premises in the City which is to be collected, removed or disposed of by a garbage collector, shall be placed, prior to its collection and removal by said garbage collector, in garbage containers of the type specified in Section 5303.2 of this Part, either alone or intermixed with garbage or stable matter or a mixture of any or all of such substances. Rubbish containers shall not exceed with contents 75 pounds in weight.

5303.9. Rubbish Containers. Location. Each and every rubbish container shall be placed, kept and maintained within the side or rear yard of the premises wherein its contents are produced, provided and excepting however, that, except as otherwise provided in this Chapter, such container shall be placed upon the public parkway in front of said premises for collection of its contents. No such container shall be kept or permitted to remain at the last mentioned location except for not more than 12 hours immediately preceding the scheduled time of collection by said collector. and no such container shall otherwise be placed, kept or maintained within or upon any public sidewalk, parkway, curb, gutter or street.

5303.10. Rubbish Containers, Use and Maintenance. No rubbish shall be so compacted or otherwise so placed or kept or accumulated in any such container that all the contents of the container will not fall out of their own weight upon the container being lifted and turned upside down.

5303.11. Stable Matter Containers Required. Any and all stable matter produced, kept or accumulated within or upon any premises or place in the City shall be placed without delay either in

(a) containers meeting and complying with all specifications and requirements applicable to garbage containers as hereinabove set forth, or

(b) a box, bin or other receptacle equipped with a substantial lid or cover adequate to keep any and all flies from the interior of said box, bin or receptacle. No stable matter container shall exceed 72 cubic feet in capacity. All stable matter containers shall be kept closed at all times excepting when stable matter is being placed into or taken out of said receptacle; and shall be kept at all times in the rear of the premises where such stable matter is produced. Stable matter may be mixed with garbage in the same garbage container when it is to be disposed of with and in the same manner and at the same time as garbage, but in such case each container so used, including its contents, shall not exceed 75 pounds in weight

5303.12. Weekly Disposal of Garbage and Rubbish. No more than one week's accumulation of garbage and rubbish shall be kept or be permitted to remain upon any premises in the City. At least once each week all garbage and rubbish produced, kept or accumulated within any premises in the City shall be disposed of in accordance with the provisions of Part 4 of this Chapter.

6303.13. Daily Disposal of Swill. No more than one day's accumulation of swill shall be kept or be permitted to remain upon any premises in the City. At least once each day all swill produced, kept or accumulated within any premises in the City shall be disposed of in accordance with the provisions of Part 4 of this Chapter.

5803.14. Ashes, Stable Matter, Contaminated Matter, Etc. No hot ashes, hot cinders or any burning matter shall be placed or kept in any garbage container or rubbish container. No other ashes or cinders, and no stable matter, and no refuse mentioned in Section 5302.10 of this Code, shall be placed or kept in any garbage container or rub-

except in an incincrator approved in writing by the Chief of the Bureau of Fire Prevention of the Fire Department. Said officer shall grant such approval if he finds that the design and construction of any incinerator proposed to be used for the above purposes meets the Emission Control Standards established by Regulation 2 of the Buy Area Air Pollution Control District, a copy of which is on file in the office of the City Clerk. available for public inspection, reference to which is hereby made, which is hereby adopted and incorporated herein by reference the same as if fully set forth herein. Such approval shall be revocable at any time upon a finding by said officer that any such incinerator does not meet said standards:

- (c) No person shall create or cause to any unreasonable extent the omission of noxious or offensive odors, dense smoke, or any private or public nulsance by burning any garbage or rubbish;
- (d) No fire shall be kindled or maintained by any person within or upon any public street, way, road, alley, water way, or other public property or place, except by a member of the Fire Department;
- (e) No person shall burn rubbish on any premises within the City, except in a waste burner or incinerator so constructed and operated as to insure complete and rapid combustion and incineration of all rubbish burned therein, and no such waste burner or incinerator shall be kocated closer than fifteen feet to any structure;
- (f) No person shall burn any garbage or rubbish within or upon any premises excepting garbage or rubbish produced within or upon such premises;
- (g) Notwithstanding any other provision of this Section the Chief of the Burcau of Fire Prevention may authorize in writing any person to burn grass, stubble, leaves, trees, branches, tree trimmings and clippings, weeds, vines and bushes, or portions thereof, providing the same may be kindled without causing any fire hazard or other hazard or nuisance to any persons or property.

5304.7. Burying. Except as otherwise authorized by provisions of this Part, no refuse of any kind shall be buried anywhere in the City.

5304.8. Filling of Low Areas. No refuse of any kind shall be used to fill low areas in the City; provided and excepting that rubbish may be used to fill such areas where prior written approval is first procured from the Health Officer and City Engineer. The Health Officer shall grant such approval, subject to such conditions and restrictions as he may find necessary to protect the public health and safety. if he finds that the proposed place and manner of disposal will not endanger the public health; otherwise, he shall refuse approval. The City Engineer shall grant such approval if he finds that the proposed fill will be sufficiently compacted, covered and leveled and otherwise accomplished without endangering the public safety, subject to such conditions and restrictions as he may find necessary to protect the public safety; otherwise, he shall refuse such approval. Any such approval may at any time be revoked by the granter thereof or by the City Council.

5804.9. Prevention of Erosion. No refuse of any kind shall be used to prevent erosion in the City; provided and excepting that where written permission therefor is first procured from the Health Officer and from the City Engineer, rubbish may be placed and deposited upon the banks of a stream or waterway in the City in order to prevent erosion of such banks, subject to such conditions and restrictions as the Health Officer and/or City Engineer may find necessary to protect the public health and safety. The Health Officer shall grant such permission where he finds that the place and manner of disposal will not endanger the public health and safety; the City Engineer shall grant such permission where he finds that the place and manner of disposal will in fact deter or prevent crosion and will not obstruct or hinder the free flow of water in a stream or waterway and will not cause such rubbish to be carried away by flood waters; otherwise, they shall refuse such permission. Any such permission may be revoked at any time by the grantor thereof or by the City Council.

6304.10. Fertilization of Land. Stable matter may be used to fertilize land, subject to such regulations as the Health Officer may impose to protect the sublic health and safety. No other

refuse may be used for such purpose.

5304.11. Feeding Swill To Animals. No refuse shall be fed to any animals or livestock in the City; provided and excepting that, where written permission is first procured from the Health Officer, swill produced and accumulated within any premises in the City may be fed to animals or livestock lawfully maintained and kept within such premises where such swill is produced. The

Health Officer shall grant such permission, subject to such conditions and restrictions as he may find necessary to protect the public health and safety, if he finds the proposed place and manner of disposal will not endanger the public health and safety, otherwise, he shall refuse permission. Any such permission is reweable at any time by the Health Officer or City Council.

/ 5304.12. Special Refuse Disposal License Fee. No person shall dispose of any refuse in any manner for which prior approval or prior written permission by the Health Officer or any other department head of the City is required unless he shall have first procured from the License Collector of the City a Special Refuse Disposal License and shall have paid therefore in advance a Special Refuse Disposal License Fee equal to \$6.00 per each fiscal year of the City during which he so disposes of any such refuse, plus an additional \$6.00 per such year if he disposes of more than 8 cubic feet, 150 pounds or 32 gallons of such refuse in such manner in any calendar week in such year.

5304.13. Exceptions. The provisions of this Part do not apply to the disposal of any refuse by the City; nor to the disposal by a garbage collector, swill collector or tubbish, collector of any refuse collected by such collector.

PART 5 5305.1 -5305.10 Added Ord. #4481

### PART 5. SWILL COLLECTORS AND BUBBISH COLLECTORS

5305.1. License Required. No person shall engage in the business of collecting or transporting any swill produced, kept or accumulated within the City, nor of disposing of any such swill either by feeding it to animals or otherwise, unless he has a valid and subsisting "swill collector's license" issued to him by the City pursuant to the provisions of this Chapter; and no person shall engage in the business of collecting or transporting any rubbish produced, kept or accumulated within the City, nor of disposing of any such rubbish, unless he has a valid and subsisting "rubbish collector's license" issued to him by the City pursuant to the provisions of this Chapter

5305.2 Rep**eole**c Ord. #5977

**SECTION 5305.2.** 

5305.2(a) = 5305.2(b) Added Ord. #5977

5305.2(a). Issuance of Licenses to Rubbish Collectors. Except as herein in this Chapter otherwise provided, any person desiring to engage in the business of collecting or transporting any rubbish

produced, kept or accumulated within the City, or of disposing of any such rubbish, shall apply to the License Collector of the City for the necessary license or licenses in accordance and compliance with and in the manner provided and subject to all the provisions of "Chapter 1—License Procedure" of "Article VI—Business, Professions, Trades and Miscellaneous Revenue" of the San Jose Municipal Code. Any and all licenses issued under the provisions of this Part shall be subject to any and all terms, conditions, limitations, restrictions and other provisions set forth in said Chapter 1 of Article VI of the San Jose Municipal Code.

5305.2(b). Issuance of Licenses to Swill Collectors. From and after the effective date of this Section no license to engage in the business of collecting or transporting swill produced, kept or accumulated in the City, or of disposing of any swill, shall be issued except by the City Council. Any person desiring any such license shall file with the City Council a written application requesting the same, setting forth the name and address of the applicant, the proposed principal place of business, the area proposed to be served, the kind and quantity and quality of all equipment and property and facilities proposed to be used by the applicant in said business, the proposed place and manner of disposing of swill, and all other relevant and material information respecting the proposed operations of the applicant

A filing fee of \$75.00 per each application shall be paid to the City; said filing fee shall be paid to the City Clerk at the time of filing said application.

Upon receipt of any such application, the City Council shall call a public hearing thereon, setting a time and place for hearing. Notice of said hearing shall be published in a newspaper of general circulation published in the City, not later than ten (10) days immediately preceding the day of hearing. At such hearing the Council shall consider whether the present or future public interest, convenience and necessity require or will require the issuance of said license to the applicant. No license shall be issued to the applicant unless the City Council finds, upon the conclusion of said hearing, that the public interest. convenience and necessity require the issuance of said license to the applicant. Nothing herein contained shall be deemed to rescind or otherwise adversely affect any swill collector's license heretofore issued, nor apply to the extension

of any such license heretofore issued.

5306.3. Swill Collector's License Tax. Each and every person who engages in the business of collecting or transporting any swill produced, kept or accumulated in the City, or of disposing of any such swill either by feeding it to animals or otherwise, shall pay to the City, for the privilege of engaging in such business, a monthly license tax equal to \$50.00 times the number of vehicles used by such person in such business, said amount to be payable in advance at the beginning of each and every calendar month, or at the time a swill collector's license is applied for, whichever is the earlier.

5305.4. Rubbish Collector's Tax. Each and every person who engages in the business of collecting or transporting any rubbish produced, kept or accumulated within the City, or of disposing of any such rubbish, shall pay to the City, for the privilege of engaging in such business, a license tax equal to three per cent (3%) of the total gross receipts actually collected by himself and/ or by his sub-contractor or sub-contractors, for the collection, transportstion and/or disposal, by himself and/or by his sub-contractor or sub-contractors, of any and all rubbish produced, kept or accumulated in the City.

Each and every person who engages in any such business shall fike with the Director of Finance of the City, for each calendar month during which he engages in such business and for each calendar month during which he and/or his subcontractor or sub-contractors collect any receipts, revenues or compensation for the collection, transportation and/or disposal of rubbish produced, kept or accumulated in the City, a written statement of the total gross receipts collected or received by him and his sub-contractor or sub-contractors during the calendar month for which such statement is rendered and filed. Each such statement shall also separately state the total gross receipts collected or received by him and those received by each of his sub-contractors during said calendar month.

Each such statement shall include a certificate in substance as follows: "I declare under penalty of perjury that this return is made by me, that I am authorized to make such return, and that to the best of my knowledge and belief it is a true, correct and complete return made in good faith for the month stated, pursuant to the provisions of Article V, Chapter 3, Part 6 of the San Jose Municipal Code."

No statement filed hereunder shall be conclusive as to the matters set forth therein, nor shall the filing of the same preclude the City of San Jose from collecting by appropriate action such sum as is actually due and payable hereunder. The statement and each of the several items therein contained shall be subject to audit and verification by the City Auditor who is hereby authorized to examine, audit and inspect such books and records of any person who engages in the business of collecting, transporting and/or disposing of any rubbish produced, kept or accumulated in the City, and of any of his sub-contractors as may be necessary in his judgment to ascertain the correct amount of the license tax due. All persons engaged in said business, and their subcontractors, are hereby required to permit an examination of such books and records for the purposes aforesaid.

Each of the above mentioned written statements shall be filed as aforesaid within two (2) months from and after the calendar month for which such statement is rendered and filed. The above mentioned license tax shall be due and payable, for teach calendar month for which a written statement is above required, within two (2) months from and after each calendar month; and such tax for each of said calendar months shall be delinquent on the first day of the third month following each such calendar month. Delinquent taxes shall bear interest from date of delinquency at the rate of ten per cent (10%) per annum.

5305.5. Books, Records, Reports. Each 5305.5 and every person engaged in any business above mentioned in Section 5305.4

or rubbish by the City; nor to the collection, transportation or disposal of rubbish by a garbage collector.

5305.]] Adried Ord. #4510 5305.11. Gross Receipts. The words "gross receipts" as used in Section 5305.4 of this Code shall not include or be-deemed to include the value, if any. of any rubbish collected, transported or disposed of by a rubbish collector; nor shall such words include or be deemed to include whatever consideration the rubbish collector may receive in selling such rubbish as the sales price thereof.

PART 6 5306.1 -5306.8 Added Ord. #4481

### PART 6. GARBAGE COLLECTORS

5306.1. Contract Required. No person shall engage in the business of collecting, transporting and/or disposing of any garbage or of any garbage and rubbish or of any garbage, rubbish and stable matter, produced, kept or accumulated in the City unless he is authorized and licensed to so do under and by virtue of a contract then existing between him and the City. City may in its discretion enter into a contract with any person or persons authorizing and licensing such person or persons to engage in the business of collecting, transporting and/ or disposing of garbage, or of garbage and rubbish, or of garbage, rubbish and stable matter, produced, kept or accumulated in the City. Each and every such contract shall contain and be subject to any and all terms, conditions, covenants and/or provisions which the Council of the City may deem or find necessary or convenient for the preservation, protection and/or enhancement of the public peace, health, safety and/ or general welfare.

6306 2 Amended Ord #15574 \* 5306.2. License Tax. Each and every person who engages in the business of collecting, transporting or disposing of any garbage, or garbage and rubbish, or garbage and rubbish and stable matter, which is produced or kept or accumulated in the City, shall pay to the City for the privilege of engaging in such business a license tax equal to (a) ten per cent (10%) of the total gross re-

ceipts actually collected or received by himself and of the total gross receipts netually collected or received by his subcontractor or sub-contractors for the collection, for the removal, for the transportation and for the disposal of any and all garbage produced, kept or accumulated in the City, of any and all stable matter produced, kept or accumulated in the City, and of the following amounts of rubbish produced, kept or accumulated in the City, to wit: All rubbish collected or removed from any container at any single or other premises in the City in any calendar week wherein such rubbish is intermixed with garbage or stable matter, or both garbage or stable matter, plus all rubbish contained in not more than three (3) garbage containers and collected from any single premises in the City in any calendar week when no garbage is collected from such single premises in such week, excepting, however, all rubbish collected or removed in any calendar month from any commercial establishment wherein no garbage or stable matter is produced, kept or accumulated during said calendar month and from which collector or any of his sub-contractors does not collect or remove and is not required by any contract to collect and remove, any garbage or stable matter during said calendar month; and (b) three per cent (3%) of the total gross receipts actually collected or received by himself and of the total gross receipts actually collected or received by his sub-contractor or subcontractors for the collection, for the removal, for the transportation: and for the disposal of any and all rubbish produced, kept or accumulated in the City other than the rubbish or quantity of rubbish which is hereinabove included under the ten per cent license fee.

Each and every person who engages in any such business shall file with the Director of Finance of the City, for each calendar month during which he engages in such business and for each calendar month during which he or his sub-contractor or sub-contractors collect any receipts, revenues or compensation

Manager or other authorized City Official.

Amender Ord, 414310

5306.4. Annual Report, Each and every person engaged in any business above mentioned in Section 5306.1 shall file, for each year during which he engages in such business, an annual report with the City Manager of the City showing (1) the total gross receipts actually collected or received by him and his subcontractors during said year, (2) a breakdown of such total gross receipts showing the amounts received or collected by himself and by each of his subcontractors. (3) annual balance sheets for himself showing his fixed assets, current assets, notes receivable, accounts receivable, liabilities, notes and accounts payable, and all other information customarily included in balance sheets, and (4) annual profit and loss statements for himself showing his gross receipts, expenditures and expenses and all other information customarily included in profit and loss statements. Such report shall be filed with the City Manager within ninety (90) days from and after the end of the calendar year for which such report is made.

Each such person shall also, for each calendar year, file with the City Manager an annual report for each of his subcontractors. Each of such annual reports shall be made by an independent Certified Public Accountant and shall set forth a breakdown of the revenues and the related expenses of each subcontractor attributable to business done in the City of San Jose as a subcontractor under the collection contract. Each of such annual reports shall be based upon an examination made by the Certified Public Accountant making such report, and said Certified Public Accountant shall certify that he has examined the books of account and other records of the subcontractor relating to revenues derived in the City of San Jose for the calendar year for which such report is made and shall further certify that the portion of revenues shown in his report as being attribu-

table to business done in the City by the subcontractor during such calendar year fairly reflects the revenues for such calendar year. Each such report shall also state the expenses allocable to collections done within the City of San Jose and shall disclose the methods of allocation thereof. The City Auditor shall have the right to examine the records of each subcontractor to verify the fairness of any or all statements submitted. Each of such annual reports shall be filed with the City Manager within ninety (90) days from and after . the end of the calendar year for which such report is made provided, however, that such annual reports for calendar year 1968 shall be filed with the City Manager on or before August 81, 1969.

5806.5. Place and Manner of Disposal. No person engaged or proposing to engage in any business hereinabove mentioned in Section 5306.1 shall dispose of anywhere in the City of San Jose any garbage or rubbish or stable matter which has been produced, kept or accumulated in the City, unless and until the manner and place of disposal within the City has been authorized or approved by the City Council either by contract, resolution or ordinance, nor dispose of anywhere within one mile outside the City limits of the City any such garbage or rubbish or stable matter unless and until the manner and place of disposal outside the City shall have been first approved in writing by the Health Officer. The Health Officer may approve the place and manner of disposal outside the City, subject to such conditions and restrictions as he may find necessary to protect the public health and safety in the City, if he finds that the proposed manner and place of disposal will not endanger the public health and safety in the City. Any approval given by the Health Officer may be revoked at any time by the City Council or by the Health Officer if it or he finds such action necessary to protect the public health and safety; and any authorization or approval given by the City Council may be revoked by

5306.5, 5306.6 Added Ord. it at any time if it finds such action necessary to protect the public health and safety.

\$306.6. Paithful Performance Bond. Each and every person who is authorized, pursuant to the provisions of this Part, to engage in the business of collecting, transporting and/or disposing of any garbage, rubbish and/or stable matter produced, kept or accumulated in the City shall, at the time of execution of the contract licensing or authorizing him to engage in such business, furnish to the City and file with the City Clerk of the City a corporate surety bond, approved by the Council of the City of San Jose and approved as to form by the City Attorney of said City, executed by the Collector as principal and by a corporate surety as surety, in the sum of Fifty Thousand Dollars (\$50,000), conditioned upon the faithful performance, by Collector and his subcontractors of said contract and of all provisions and requirements of "Chapter 8. Accumulation, Transportation and Disposal of Waste Matter" of "Article V - Sanitation and Health" of the San Jose Municipal Code.

5306.6a Added Ord. #4688

**53**06.7, **53**06.8

Added Ord. #4481 5306.6a. Security in Lieu of Faithful Performance Bond. The Council of the City of San Jose may require or accept, at any time, in lieu of the faithful performance bond required by Section 5306.6 of this Code, any other security which it considers adequate or sufficient to protect the City of San Jose.

5306.7. General Requirement. No person authorized to engage in the business of collecting, transporting or disposing of any garbage, or garbage and rubbish, or garbage, rubbish and stable matter, produced, kept or accumulated

in the City shall collect, transport or dispose of any such garbage, rubbish and/or stable matter except in full accordance and compliance with the provisions of the contract existing between him and the City authorizing and licensing such business. Any license, privilege or authorization granted in any such contract to any person or persons to engage in the business of collecting, transporting and/or disposing of any garbage, rubbish and/or stable matter produced, kept or accumulated in the City shall be conditional upon the faithful performance by such person or persons and by his or their subcontractors, if any, of any and all terms, covenants, conditions and provisions in or of said contract.

6306.8. Renegotiation, Etc. Any contract entered into between the City and any garbage collector shall be subject to renegotiation, alteration and/or amendment by mutual consent of all parties to said contract; and all rates or charges, established by any such contract, for the collection, transportation and/or disposal of garbage and/or rubbish, shall be subject to renegotiation, alteration, change or amendment by mutual consent of all parties to said contract.

5306.9. Gross Receipts. The words "gross receipts" as used in Section 5306.2 of this Code shall not include or be deemed to include the value, if any, of any garbage collected, transported or disposed of by a garbage collector nor shall such words include or be deemed to include whatever consideration the garbage collector may receive in selling such garbage as the sales price thereof.

6306!9 Added Ord. #4510 5306.16 Added Ord. #4518 5306.10. Exception. None of the previsions of this Part, excepting Section 5306.5 relative to the place and manner of disposal, and also excepting Section 5306.7 relating to general requirements, shall apply to any person who receives in return for his services in collecting, transporting and disposing of any such garbage nothing more than the garbage itself which is so collected, transported and/or disposed of by him.

6307.5 6207.5 Amended Ord. #16202

5307.1. Rubbish Vehicles, Initial Inspection of. No rubbish collector, garbage or demolition materials collector shall use, in his business, for the purpose of collecting or transporting any rubbish within the City of San Jose, any motor vehicle or any motor vehicle and trailer. or any motor vehicle carrying a dropoff box thereon, unless said vehicle, vehicle and trailer or vehicle and drop-off box have each been inspected and approved by the City Health Officer or his authorized representative as complying with the provisions of this Code, and unless such vehicle, vehicle and trailer, or vehicle and drop-off box have affixed to each vehicle, or to each vehicle and each trailer, or to each vehicle and each drop-off box, a license tag issued by the License Collector showing that it has been inspected and approved as aforesaid.

5807.2. Issuance of License Tag or Sticker. Upon application therefor, and upon payment of the license fee hereinafter specified in Section 5307.5, the License Collector shall issue a license tng or sticker for each vehicle, each trailer and each drop-off box which has been inspected and approved, pursuant to the provisions of Section 5807.1, for rubbish collection and transportation purposes provided that no such license tak or sticker shall be issued to any rubbish collector who is in default in the payment of the license tax specified in Section 5305.4 of this Code, and no such tag or sticker shall be issued to any garbage collector who is in default in the payment of the license tax specified in Section 5306.2 of this Gode; and provided, further, that no such license tag or sticker shall be issued to any person who is not complying with all applicable provisions of this Chapter.

6807.3. Rubbish Vehicles, Additional Inspection. Each motor vehicle or trailer or drop-off box for which a license tag or sticker has been issued pursuant to the provisions of Section 5807.2, shall be subject to inspection at any and all times by the City Health Officer, or his authorized representative; and the City Health Officer shall cause each such vehicle, trailer or drop-off box to be inspected from time to time to insure that the provisions of Section 5302.7 are complied with.

5807.4. Revocation of License Tag or Sticker. Any license tag or sticker issued for any motor vehicle or trailer or dropoff box pursuant to the provisions of this Part may be revoked or suspended, at any time by the License Collector for failure of such vehicle, trailer or dropoff box to comply with the requirements of Section 5302.7 of this Code or for failure of the licensee to comply with other applicable provisions of this Chapter, including payment of all applicable license fees or taxes.

5307.5. Licenso Fee. Each and every rubbish collector, garbage collector or demolition materials collector who uses any motor vehicle or motor vehicle and trailer or motor vehicle carrying a dropoff box in his business for the purpose of collecting or transporting any rubbish within the City of San Jose, shall pay to the City for the privilege of using said vehicle, vehicle and trailer, or vehicle and drop-off box in his business for said purpose, and in order to reimburse the City for its costs and expenses in inspecting such equipment and otherwise carrying out the provisions of this Part, the following license fees, to wit: Twenty-five Dollars (\$25) per each motor vehicle used in the above mentioned business for the above mentioned purpose per each quarter year, plus Five Dollars (\$5) per each trailer used in said business for said purpose per each quarter year, plus Ten Dollars (\$10) per year for each drop-off box used in

said business. Said fees shall be payable in advance at the time any license tag or sticker is issued, renewed or extended, for the term not to exceed one year, for which such tag or sticker is issued. The above foes are and shall be in addition to any and all other applicable fees or taxes levied in this Chapter.

### Chapter 4—SANITARY SEWER SYSTEM

### PART 1. PURPOSE AND DEFINITIONS

8401.1 Amended Ord. #7308

- 5401.1. Purpose. The purpose of this chapter is to:
- (a) Provide for and regulate the disposal of sanitary sewage into the sanitary sewer system of the City in such manner and to such extent as is reasonably necessary to maintain and increase the ability of such system to handle and dispose of sanitary sewage.
- (b) Provide for and regulate the disposal of industrial wastes into the sanitary sewer system of the City in such manner and to such extent as may be reasonably necessary to maintain and increase the ability of such system to handle and dispose of industrial waste without decreasing the ability of said system to handle and dispose of all sanitary sewage.
- (c) Protect the physical structures of said sewer system and the efficient func-

# APPENDIX D CITIZEN INSTRUCTION FOR SOLID WASTE COLLECTION

The Garden City Disposal Company, Inc. collects refute under a franchise granted by the City of San Jose. To start service, call the company at 295-6518. The company will tell you the bay of collection scheduled for your residential of \$4.00 from new subscribers who are renting.

"The primary responsibility for proper keering, accumulation and disposal of refuse shall be on the producer thereof."

(San Jose Municipal Code, Section 5302.9)

"At least once a week all refuse kept or accumulated within any premises in the City shall be disposed of." (San Jose Municipal Code, Section 5303.12)

Although you may have a garbage disposal unit in your sink, tin cans, bottles, paper containers and food wrappers and miscellaneous garbage must still be removed each week.

# NO BURNING

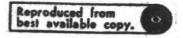
As of January 1, 1970, all open outdoor ourning is illegal according to the regulation of the Ray Area Air Foliution Control District.

AVOID THE FOLLOWING COMDITIONS TO ASSURE FICK-UP ON YOUR SCHEDULED DAY:

- . container too heavy remember 75 pound limit
- . container packed too tightly
- defective container such as broken handles, bottom rusted out
- . container obstructed by auto or other barrier
- hard to reach or to see
- . menacing dog
- . overflowing container
- loose ashes
- . improper container

Call the Can Jose "Lity Health Department, General Services Division, at 277-4000, extension 4527, or GARDEN CITY DISPOSAL SERVICE, INC. at 294-6818 for assistance with any problems concerning refuse disposal.





### COSTS

### BASIC WEEKLY SURVICE



3 Thirty-Two 3 lion Refuse Containers

Rethre will be jokel up in front of your property, at the such. Have note you make it share the picture are essentily less and reach it.

WO NO. TENNA WAYE YOUR REFUJE.

## ADDITIONAL TOTAL

and on the section is a first of reluse

GARDAL CITY DISPOSAL COMPANY, INC. 20%-68%

THE ARTITY CONTAINTS MICT:

- . be placed at each night before
- . Ye at the curb
- .c. egulation metal or plastic with two antachel modles, one
   .c. equipment of the ecutablish
- . 60, 600 Title 1.01
- . A postice 30 gallions in size
- . ... exceed 75 points men full
- . ... exceed high water mark

### DETUSI:

Good a dily Elaphoot Comp my, Inc. Will request a deposite of \$1.60 from an autoribers who are rest; g.

### BILLING PERIOD:

The normal billing period is once every three months; bills are sent to you by the Disposal Commany.

### MISSED PICK-UP:

If a pick-up is missed, call GARDEN CITY DISPOSAL COMPANY, INC. 294-6819.

### SPECIAL PICK-UPS:

May be requested for any extra refuse in addition to the basic weedly service. Call the company for information and charges about special services.

### HELPFUL HINTS

- . Remove container from parkstrip
- . Acop can covered; this will reduce fly breeding and in rainy season prevent contents from becomin; overweight with water.
- Put cold ashes only in box or heavy bag and tic securely -BEFORE PLACIES INTO REFUSE CONTAINER.
- . Wrap garbage this will help reduce moisture, mess and odors.
- Line garbage cans with newspaper; this will help keep can clean.
- . Rinse can after pick-up, this helps to prolong life of can.

### CARRAGE MAY NOT BE HAULED TO LOCAL RUBBISH DUMPS FOR DISPOSAL:

- No tree stumps or limbs over 12 inches in disacter.
- At times you may need to dispose of extra rubbish, not carbase. Or clear away dirt, rocks or building materials. This material may be taken to the City dump located on Singleton Reid about one-half mile south of Capital Expressivay. Trare is a fee (minimum 0.30) for the use of this facility.

Hours: 8:00 - 4:30 7 days a week Telephone: 277-1000 extension 4386

IT IS RECOMMENDED THAT NO ROCKS OR DIRT TO PLACED IN YOUR REGULAR REFUSE CONTAINERS.

REPUSE SERVICE INFORMATION:

Obtain from Garden City Disposal Company, Inc. at 294-6818.

### COMPLATINGS:

FIRST directed to Garden City Disposal Company, Inc.

If your problem is not handled in a satisfactory manner by the company, phone the Clay health Department, Ceneral Services Division, 277-4000, extension 4527.

502-218 (Rev 7/71)

La Garden City Disposal Company, Inc., levanta basura bajo un privilegio concedido por la Ciudad de San Jose. Para empesar su servicio llame la compania al 291-6818. La compania le dira cual dia pasan a recojer en su recindad y le pediran un deposito de 34.60 a los clientes nuevos que renten.

"La responsablidad primaria para mentenimiento propio, accumulacio, y disposicion de basura quili en el productor." (Re la Municipal de la Ciulad de Can Joss, Seccion 5700.9)

"Cuendo menos una vez por semens toda la bastra acumulada en cualquier propieded sera desechada." (Regla Municipal de la Civial de San Jose, Seccion 5303.12)

Au que usuel tenta un disposicion de les predictes en su cocina los botes, botellas, pan les, envolveduras de comida, y desperdictos mindelaneos deben ser eliminados en il sonana.

# NO SE PERMITE QUEMAR

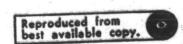
Desde Encro 1, 1970, el quemar al aire libre es ilegal en acuerdo con la regulación del Bay Area Air Pollution Control District, o sea el Districto de Control de Aire Contaminado del area de la Bahia.

EVITEN LAS SIGUIENTES CONDICIONES PARA ASEGURAR QUE LEVANTEN LA BA-SURA EN EL DIA FIJADO:

- . Bote muy pesado recuerden que el limite es 75 lbs
- . Bote empacado muy apretado
- . Bote defectivo, como agarraderas quebradas, o el fondo roto
- . Bote que no se ve porque hay un auto u otras cores enfrente
- . Bote puesto en una parte que sea dificil de mirarse o alcansar. Un perro que amenace.
- . Bote que este lleno demasiado
- . Cenisas sueltas
- . Bote que sea impropio.

Llame al Departamento de Salubridad, Division de Servicios Generales, al telefono 292-3141, extencion 4527, o al Carden City Disposal Company, Inc., al 294-6818 ai necesita asistencia de problemas tocante a la dispocision de basura.





### SERVICIO BASICO SEMANAL



2 30 por/mes

SERVICIO BÁSICO SEMANAL 3 totes de basura por semana

La basura sera levantada en frente de su propiedad, esté seguro de localizar los botes donde los vean los que levantan la basura.

NO SEPARE LA BASURA.

SERVICIOS SEMANALES ADDICIONALES

y coleccion de basura en su propiedad pueden ser obtenidos llamando a:

GARDEN CITY DISPOSAL COMPANY, INC.

294-6818

#### LOS BOTES DE BASURA DEBEN:

- En cuanto los recogedores hayan hecho su trabajo, por favor levante los botes vacíos
- . Inctalen convenientemente en la orilla de la calle los botes destinados a los desperdicios, la noche anterior al día en que estos desperdicios deban ser recogidos
- Ser de metal de regulacion o plastico con dos agarraderas, una en cada lado
- . Tener tapaderas que queden bien
- . No sobrepasar 32 galones en tamaño
- . No sobrepasar 75 lbs. cuando llenos
- . No sobrepasar la marca de arriba del bote

#### DEPOSITO:

Garden City Disposal Company, Inc., pide un deposito de \$4.60 de los nuevos clientes que estan rentando.

### PERIODO DE COBRAR:

El periodo normal de cobrar es cada tres meses; el cobro sera mandado a usted por la compania.

#### CUANDO NO LEVANTAN SU BASURA:

Si fallan de levantar la basura llame a GARDEN CITY DISPOSAL SERVICE COMPANY, INC. 294-6818.

#### LEVANTADAS ESPECIALES:

Pueden ser pedidas para basura extra en addicion al basico servicio semanal. Ilame a la compania para informacion y cobros addicionales de servicios especiales.

### NOTAS DE INTERES:

- Mantenga el bote cerrado para que no se junten las moscas, y en tiempo de lluvia no se moje la basura y sea mas liviano.
- Ponga cenizas <u>frias</u> en una caja o paquete y amarrelo antes de poner las en el tote de la basura.
- Envuelva desperdicios; para no tener olores ofersivos y no ensuciar.
- Aforren los botes con papel; Esto ayudara a mantener los botes limpios.
- Enjuague el bote despues de la levantada de basura, asi le duraran mas los botes.

DESPERDICIOS NO PUEDEN SER LLETA-DOS AL PASURERO:

- de arbol al basurero ni ramas de mas de 12 pulgadas de ancho.
- . No se pueden llevar productos quimicos ni aceites al basurero.

Si necesita tirar basura, no desperdicios, extras, piedras, tierra, o materiales de construccion pueden llevarse al basurero de la ciudad que esta localizada en la calle Singleton media milla al sur del Capitol Expressway. (El cobro minimo para usar esta facilidad es \$.506).

Horas: 8:00 - 4:30 7 diss por semana Telefono: 2;2-3141 extencion 4388

ES RECOMENDADO QUE NO PONGA PIEDRAS NI TIERRA EN LOS BOTES DE BASURA.

INFORMACION PARA SERVICIO DE BASURA:

Obtengase de Garden City Disposal Company, Inc., al telefono 294-5818

#### QUEJAS:

PRIMERO dirijase al Garden City Disposal Company, Inc.

Si la compania no resuelve su problema para su satisfaccion llame al Dipartamento de Salubridad, Division de Servicios General, 292-3141, extencion 4527.

# APPENDIX E PROPOSING CONVERSION OF CITY DISPOSAL GROUNDS TO GOLF COURSE

### CITY OF SAN JOSE -- MEMORANDUM

TO R. R. Blackburn, Chief Assistant
Director of Public Works

SUBJECT Disposal Grounds Operating
Budget for 1973-74 f.y.

PROM E. R. Toschi, Hydraulice Division DATE April 25, 1973

APPROVED

DATE

Please refer to the attached memo dated March 5, 1973, for detailed background information. The memo outlines three alternative methods for operating the disposal grounds. Alternate Three, which incorporated the golf course filling and grading with the disposal grounds operation, was recommended as the most economical operation.

Since the golf course planning would be administered by the Farks and Recreation Department, several conferences were held with them. The concept of Alternate Three was agreed upon with the exception that Personal Services costs were felt to be too low, fringe benefits and indirect costs should be included, and an estimated salvage revenue should be added. The attached Singleton Road Disposal Grounds Profit and Loss Statements were prepared to reflect these items. The costs include an additional \$15,000 for Personal Services. Fringe benefits and indirect costs were added at the rates recommended by the Finance Pepartment. An estimated salvage revenue of \$15,000 for 1973-74 fiscal year was also included in the Statement.

We recommend that our department and Parks and Recreation finalize the operating costs of Alternate Three and pursue its implementation as soon as possible.

B. R. Toschi

Principal Civil Engineer

BRT: KWH: MS

Attachments

Reproduced from best available copy.

# SINGLETON ROAD DISPOSAL GROUNDS COMPARATIVE ESTIMATED PROFIT AND LOSS STATEMENT YEARS ENDING JUNE 30, 1972, 1973, 1974

	ACTUAL 1971-72	ESTIMATED 1972-73	EST. ALT. NO. 3 1973-74 (1)
OPERATING INCOME			
Disposal Revenue Salvage Revenue (2)	300,487 40,010	300,000 12,700	462,000 15,000
TOTAL INCOME	340,497	312,700	477,000
OPERATING EXPENSES			
Direct Costs Charged to Program Direct Costs Not Charged to Program Indirect Costs  TOTAL OPERATING EXPENSES	161,057 110,639 34,227	166,000 110,434 28,637	161,120 152,555 27,341
NET PROFIT FOR YEAR	305,923 34,574	305,071 	341,016 135,984
CREDIT FOR GOLF COURSE OPERATION (3)	-0-	-0-	194,333

- (1) Assumes residential rate increase from \$0.50 to \$0.75 per cu. yd. and commercial rate increase from \$0.75 to \$1.00 per cu. yd.
- (2) Fiscal years 1971-72 and 1972-73 include loam sales and salvage. Fiscal year 1973-74 is salvage revenue only.
- (3) Estimated contractual cost of golf course grading is \$780,000 (390,000 cu. yds. at \$2.00 per yard). The City cost would be \$196,300. This is a savings of \$583,700, which is an average annual savings of \$194,333 over a three year period.

### SINGLETON ROAD DISPOSAL GROUNDS PROFIT AND LOSS STATEMENT YEAR ENDED JUNE 30, 1972

### **OPERATING INCOME**

	posal Revenue (1) n and Salvage Revenue	\$300,487 40,010	
	TOTAL INCOME ·		340,497
OPERATING	S EXPENSES		
Pers	Costs Charged to Program sonal Services Personal Services	141,902 19,155	
	TOTAL DIRECT CHARGES	161,057	
Ma ir Depr	Costs Not Charged to Program ntenance of Equipment reciation of Equipment roll Fringe Benefits (2) (22.79)		
Di	irect Costs Not Charged to Prog	ram 110,639	
Indire	et Costs (3) (24.12%)	34,227	
TOTAL C	PERATING EXPENSES		305,923
NET PROFI	TT 1971-72		34,574
(1)	Residential Rate \$0.50 cu. yd	., Commercial Rate \$0	.75 cu. yd.
(2)	Workman's Comp. Health, Life and Dental OASDI Retirement	2.10 - 3.49 5.20 12.00	
(3)	Indirect Labor and Fringe Staff Support Non Department	6.80 13.95 <u>3.37</u>	
		24.12	

### SINGLETON ROAD DISPOSAL GROUNDS PROFIT AND LOSS STATEMENT YEAR ENDING JUNE 30, 1973

### OPERATING INCOME

	osal Revenue (1) a and Salvage Revenue	\$300,000 12,700	
	TOTAL INCOME		312,700
OPERATING	EXPENSES		
Pers	Costs Charged to Program onal Services Personal Services	141,000 25,000	
	TOTAL DIRECT CHARGES	166,000	
Main Depr	Costs Not Charged to Program tenance of Equipment eciation of Equipment coll Fringe Benefits (2) (22.79%	51,300 27,000 32,134	
Di	rect Costs Not Charged to Progr	am 110,434	
Indirec	t Costs (3) (20.31%)	28,637	
TOTAL C	PERATING EXPENSES		305,071
NET PROFI	T 1972+73		7,629
(1)	Residential Rate \$0.50 cu. yd.	. Commerical Rate \$0	.75 cu. yd.
(2)	Workman's Comp. Health, Life and Dental CASDI Retirement	2.10 3.49 5.85 12.00	
		23.44	
(3)	Indirect Labor and Fringe Staff Support Non Department	5.87 12.03 2.41	
		20.31	

### SINGLETON ROAD DISPOSAL GROUNDS PROFIT AND LOSS STATEMENT YEAR ENDING JUNE 30, 1974

## ALTERNATE THREE

AD	EDI	TING	INCOME
UE			

	oosal Revenue (1) vage Revenue	\$462,000 15,000	
	TOTAL OPERATING INCOME		477,000
OPERATING	EXPENSES		
Pers	Costs Charged to Program sonal Services Personal Services	134,620 26,500	
	TOTAL DIRECT CHARGES	161,120	
' Mair Depr Gasc	Costs Not Charged to Program tenance of Equipment eciation of Equipment oline coll Fringe Benefits (2) (23.44%)	63,100 55,300 2,600 31,555	
Di	rect Costs Not Charged to Progra	am 152,555	
Indirec	et Costs (3) (20.31%)	27,341	
TOTAL C	PERATING EXPENSES		341,016
NET PROF	T		135,984
CREDIT FO	OR GOLF COURSE OPERATION		194,333
(1)	Residential Rate \$0.75 cu. yd.	Commercial Rate	\$1.00 cu. yd.
(2)	Workman's Comp. Health, Life and Dental OASDI Retirement	2.10 3.49 5.85 12.00	
		23.44	
(3)	Indirect Labor and Fringe Staff Support Non Department	5.87 12.03 <u>2.41</u>	
		20.31	

## 110-40

# CITY OF SAN JOSE -- MEMORANDUM

P. R. Blackburn, Chief Assistant
Director of Public Works
Disposal Grounds Operating Budget
for 1973-74 f.y.

FROM E. R. Toschi, Hydraulics Division

DATE March 5, 1973

APPROVED

DATE

The attached 1973-74 f.y. operating budget for the disposal grounds is divided into three alternates. Each alternate reflects a different operation with different equipment and personnel requirements.

Alternate one revises existing staffing to meet present operational needs by the addition of personnel and replacing equipment. Alternate two revises the operational method to increase efficiency by adding personnel, new equipment and replacing equipment. Alternate three is an expanded operation which includes filling and grading of the golf course in addition to the disposal grounds operation.

The estimated life of the disposal grounds is three years. In all alternatives, it is assumed that any personnel or equipment acquired will be utilized at a new disposal site.

Total costs, which include maintenance and depreciation, are shown for comparison purposes.

We recommend the selection of alternate three for the operation of the disposal grounds and grading the golf course. The combination of the two operations results in a lower total cost for each operation. This is clearly shown in the attached report.

E. R. TOSCHI

Principal Civil Engineer

· ERT: KWH: ms

**Attachments** 

cc: J. S. Ringrose

# SUMMARY OF PROPOSED ALTERNATES for the OPERATION OF DISPOSAL GROUNDS

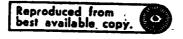
Attached are chart summaries of the existing operational system of the disposal grounds and three alternatives. The charts show annual revenues and operating costs, alternate equipment needs and alternate personnel needs.

Also attached is a budget for each of the alternates. Each budget contains an expenditure summary, equipment and staff schedule, cost summary of new positions requested, summary of new equipment requested, new position request forms and new equipment request forms.

# SUMPARY of Armual Revenues and Operating Costs for Singleton R: 2d Disposal Grounds

TUPE OF	GROSS KEVENUE		44	BUDGET OPERATING COSTS		EQUIPMENT	GROSS OPERATING	ARNUAL (1)	PTT Derector
operation	Present Pates	inc. Easid Rates			(NOT INCL. WITH NOW- PERSCNAL)	CHARGE (3)	CUST	POI: CTILR OPERATION:	COST
. ACTUAL 1971-72 DISCAL YE	\$300,437	-0-	\$141,902	\$19,155	·-o-	ç78 <b>,</b> 300	\$239,357	-0	\$239,357
ESTIMATED 1972-73 FISCAL YEL	321,200	-0-	141,000	25,000	-0-	70,300	244,300	-0-	244,300
Alternate One Existing System	321,000	\$462,000	144,180	19,800	5,930	81,100	251,010	0-	251,010
Alcernate Two New System	321,000	462,000	122,670	22,700	2,540	87,800	235,710	-0-	235,71
Alternate Three Golf Course	321,000	462,000	134,620	26,500	2,600	118,400	282,120	\$194,333	87,7s

- (1) Does not include fringe benefits and indirect overhead costs.
- (2) All non-personal costs including diesel fuel.
- (3) Based on monthly rental rates taken from the "Building Construction Data 1972" manual which includes maintenance and depréciation.
- (4) Estimated contractual cost of golf course grading is \$780,000. The City cost would be \$196,300. This is a savings of \$583,700 which is spread over three years for an annual savings of \$194,333. See breakdown of golf course and disposal grounds operation costs on the following page.



# ALTERNATE THREE Comparison of Operating Costs for Golf Course and Disposal Crounds

### Annual Golf Course Operating Costs

<u>Item</u>	Personnel	<u>Fuel</u>	Equipment Charge	<u>Total</u>
0.8 Scraper	\$7,670	\$2,080	\$23,040	\$32,790
0.5 Crawler Tractor	5,980	1,460	11,400	18,840
0.5 Motor Grader	1,200	730	5,700	7,630
0.25 Water Truck	2,530	370	1,500	4,400
0.15 Supervision	1,760	-0-	-0-	1,760
	Total	Annual Ope	erating Cost	\$65,420
	Total Cost	For Three	Year Period	\$196,300

### Annual Disposal Grounds Operating Costs

<u>Item</u>	<u>Personnel</u>	<u>Fuel</u>	Equipment Charge	<u>Total</u>
0.2 Scraper	\$ 1,790	<b>\$ 520</b>	\$ 5,760	\$ 8,070
1.9 Crawler Tractor	17,930	5,550	43,300	66,780
0.5 Motor Grader	1,200	730	5,700	7,630
0.75 Water Truck	11,720	1,100	4,500	17,320
1.0 Compactor	16,730	2,630	11,760	31,120
1.0 Pickup	-0-	730	2,160	2,890
Misc. Equipment	25,000	370	3,600	28,970
0.85 Supervision	9,980	-0-	-0-	9,980
1.4 Collectors	14,180	-0-	-0-	14,180
1.8 Directors	16,930	-0-	-0-	16,930
Misc. Non-Personal	(Printing, uti	lities, etc	z.)	12,830

Total Annual Operating Costs \$216,700

Total annual operating cost for golf course and disposal grounds

\$282,120

SUMMARY CF Alternate Équipment Needs

				•	7	TYPE OF C	PERATION					
EQUIPMENT	Ex. 19	72-73 S	vstem	Alt	ternate	One,	Alt	ernate	Two	Alternate Three		
	Exist	Add	Delete	Exist.	Add	Delete	Exist.	Add	Delete	Exist.	Add	Dele
Compactor	1			1		•	1			1		
Crawler Tractor	1.4			1.4		÷	1.4			1.4	1	·
Scraper ·						·		1.	•		1	,
Motor Grader	. 4		-	.4			.4			.4	.6	
750 gal. Water Truck	1			1		1	1		1	1		·i
3,500 gal. Water Truck		•			1			1.			1	
Loader	· .4	•	2	.4		4	.4"	4)	.4	.4		.4
Dump Truck	1.8	)		1.8			1.8		1.8	1.8	**	1.8
3/4 T. Fuel Truck	ì			1 .			1		. 1	1	-	1
ት T. Pickup	1		•	1			1			1	٠	

SUMMARY
OF
Alternate Personnel Needs

		TYPE OF OPERATION											
Personnel	Ex. 19	972-73 \$	vstem	Alt	Alternate One		Alternate Two			Alternate Three			
,	Exist.	Ađđ	Delete	Exist.	Add	Delete	Exist.	Add	Delete	Exist.	Add	Delet	
MM III	1			1			1			1			
EO II	4.8			4.8	1	.6	4.8	1	2.4	4.8	2	2.4	
MM I	2.8			2.8			. 2.8	٠		2.8			
2 Laborer	1			1	.8	•	1	8	•	1	8		
		٠٠.								_			
					_		•						
			·								•		

### APPENDIX & F

# MEMO OUTLINE FOR CITY COUNCIL STUDY SESSION ON WASTE RECOVERY SYSTEMS

## CITY OF SAN JOSE -- MEMORANDUM

Ted Tedesco, City Manager

of Public Works

Waste Recovery Systems

DATE June 6, 1973

APPROVED

DATE

sesteric by

On June 7, 1973, the Council has scheduled a Study Session on Waste Recovery Systems. Attached is an outline of the material that we intend to present to the Council at that session.

Please let me know if this meets with your approval. Gene Toschi will be making the presentation and has additional information on the subject.

Respectfully submitted,

A. R. Turturici

Director of Public Works

ERT: ms

Attachment

### CITY OF SAN JOSE -- MEMORANDUM

A. R. Turturici, Director of Public Works

FROM B. R. Toschi, Hydraulics

Division

SUBJECT

June 7 Council Study Session on Waste Recovery

DATE May 25, 1973

APPROVED

J-F. Fastur

DATE

5-29-73

On June 7, 1973, the Council has scheduled a study session on waste recovery. I would like at that time to introduce to them the City of San Jose Waste Management System which is scheduled to be funded in 1973-74.

The attached outline briefly describes the objectives of the system and the attachments to the outline describe the implementation schedule and projected revenues and costs.

I anticipate having additional information upon my return from the Solid Waste Management Conference on May 31, 1973.

Please let me know if you want this information presented to the Council at the June 7 meeting.

Lencor Civil Engineer for E. R. Toschi Principal Civil Engineer

ERT:ms

Attachments

### CITY OF SAN JOSE WASTE MANAGEMENT SYSTEM

The Waste Management System is composed of three system categories which are:

- 1. Overall Management Systems
- 2. Collection System
- 3. Disposal and Reclamation System

The general steps for implementing the above three systems are outlined below, following a short statement of system of objectives.

### 1.00 Management System

The objective of System Management is to develop a comprehensive plan for managing the waste collection, disposal and reclamation systems, including organizational structure, staffing, cost control and operations.

1.10 Hire Waste Management Staff including a Senior Sanitary Engineer, Associate Civil Engineer, Engineering Technician III, Supervisory Sanitarian, Sanitarian.

Begin a public relations program to publicize the need for improving waste disposal and reclaiming waste materials.

- 1.20 Identify combination of waste transportation, processing, and disposal. Select most feasible economic solution.
- 1.30 Develop proposals for Regional Authority.
- 1.40 Develop methods and procedures for billing and collection, and cost control. Set fee rate schedule.
- 1.50 Develop financing arrangements such as capital expenditures and budgetary procedures.
- 1.60 Sell Revenue Bonds.
- 1.70 Develop information, training, and research programs.

  This item includes public relations, keeping employee skills and systems levels up-to-date, and investigation of promising systems components for collection, disposal, and waste recovery.
- 1.80 Develop performance standards and operations procedures.
- 1.90 Implement information, training and research programs.

- 1.100 Review, hold hearings, and adopt standards and regulations along with schedule for enforcement.
- 1.110 Conduct continual monitoring of all systems for evaluation and optimization.

### 2.00 Collection System

The objective of the Collection System is to provide for collection of residential, commercial and industrial refuse. The City will develop collection procedures and specifications contract with private business for the collection of waste materials, and monitor the operation for conformance to specifications and procedures, and system optimization. Under overall Systems Management, the City will establish an accounting system for billing and collection of fees.

- 2.10 Develop collection system criteria including environmental considerations, compulsory collection policies, fee collection policies (considering inclusion on tax rolls), equipment requirements, collection schedules and methods, and working conditions.
- 2.20 Prepare specifications and a request for proposals detailing all City requirements for waste collection.
- 2.30 Contract with private business for collection of wastes.

  Approximately one year must be allowed for purchase of equipment and construction of needed facilities.
- 2.40 Contractor begins collection. City monitors contractor for conformance to specifications and procedures, and to obtain operational data.

### 3.00 Waste Disposal and Reclamation System

The objective of the Waste Disposal and Reclamation System is to take waste materials collected to an Environmental Facilities Park which is a system of operations for the total disposal of wastes including toxic materials and reclamation of waste resources. The park will be developed for regional service. Initially the park will be a Class I sanitary landfill facility with a pilot recycling operation. With revenues from the disposal and recycling operations, additional reclamation systems will be financed, developed and implemented.

3.10 Contract with private business to dispose of liquid and semi-liquid toxic wastes. Negotiations are currently in progress.

- 3.20 Determine Environmental Facilities Park needs.
  - 3.21 Define Service Area
  - 3.22 Define service area characteristics such as population, land use, waste composition and quantity, service requirements, etc.
- 3.30 Make preliminary investigations for possible Environmental Facilities Park and transfer station site(s).
- 3.40 Evaluate and select disposal and transfer station site(s).
- 3.50 Prepare master plan for development and future use of disposal sites and designate first site to be used. A completed landfill site may be developed for future uses such as golf courses, play fields and botanical gardens.
- 3.60 Acquire disposal and transfer station sites. During property acquisition an on-going public relations program will be in effect to inform and educate the people as to the character of the waste facilities.
- 3.70 Design first sanitary landfill site including Class I facilities, transfer stations and appurtenant facilities. Prepare plan for site operation.
- 3.80 Construct landfill, transfer station and maintenance facilities and access roads.
- 3.90 Purchase capital equipment such as crawler tractors, scrapers, graders, water trucks, structures, etc.
- 3.100 Begin operation. Continually monitor and control vectors, leachates, gas, safe operation, records, air quality, site aesthetics, etc.

### PROPOSED WASTE MANAGEMENT STAFF

	Class Title		A	nnual Salary
1.	Senior Sanitary Engineer	r		\$17,050
2.	Associate Civil Enginee	r		14,750
3.	Engineering Technician	III		13,900
4.	Supervisory Sanitarian			14,250
5.	Sanitarian			12,300
		Total Annual Salary		<b>\$72,250</b>
PAY	ROLL FRINGE BEFEFIT			
	Workman's Compensation	2.10		
	Health, Life & Dental	3.49		
	OASDI	5.20		
	Retirement	12.00		
		22.79%		\$16,465
IND	IRECT COSTS			
	Indirect Labor and Fri	nge 6.80		
	Staff Support	13.95		
	Non-Department	3.37		
		24.12%		\$17,427
				\$106,142
		s	ay	\$106,000

### CITY OF SAN JOSE WASTE HANAGEMENT SYSTEMS SUMMARY OF RESOURTES AND EXPENSES

### SUMMARY OF R SOURCES

		TEM	1972-1973	<u>1973-1974</u>	1974-1975	1975-1976	1976-1977	1977-1978	Tota:
	1.	CSJ Disposal Grounds @ Ringleton Road	\$17,825	\$135,000	\$ 135,000	\$ 135,000	-0-	-0-	\$ 402, <b>82</b> 5
	2.	Waste Collection and Disposal Fees	-0-	-0-	-0-	13,302,819	\$22,817,872	\$22,817,872	58,938,563
	3.	Revenue Ecnds	-0-	-0-	1,250,000	3,600,000	-0-	-0-	4,8 10,000
		Total Rescurces	\$17,825	\$135,000	\$1,385,000	\$17,037,819	. \$22,817,872	\$22,817,872	\$64.2:1,368
				<b>.</b>	JOHARY OF EXPE	nses			
		ITEM	1972-1973	1973-1974	<u> 1974-1975</u>	1975-1976	1976-1977	<u> 1977-1978</u>	Tota.
	1.	Waste Management Staff a. Salary b. Fringe c. Indirect	\$17,825 12,133 2,765 2,927	\$106,950 72,800 16,591 17,559	\$ 106.950 72,800 16,591 17,559	\$ 150,000	\$ 200;000	\$ 200,000	\$ 781,725
4	2.	<pre>Gperation a. Collection b. Disposal</pre>	-0- -0- -0-	-0- -0- -0-	-0- -0- -0-	12,291,988 9,288,553 3,003,435	21,072,100 15,923,325 5,148,775	21,072,100 15,923,325 5,148,775	54,4:6.188
	3	Average Debt Service a. \$1,250,000 @ 7% for 20 years b. \$3,600,000 @ 7% for 20 years	-0- -0-	-0- -0- -0-	116,295 116,295 -0-	451,225 116,295 334,930	451,225 116,295 334,930	451,223 116,295 334,930	1,4119,970

	ITEM	1972-1973	1973-1974	1974-1975	1975-1976	1976-1977	1977-1978	<u>Total</u>
4.	Land Acquisition	-0-	-0-	\$1,000.000	-0-	-0-	\$1,000,000	\$2,000,000
5.	Site Development	-0-	30,000	150,000	\$1,390,000	-0-	-0-	1,570,000
6.	Equipment	-0-	-0-	-0-	1,610,000/	-0-	-0-	1,610,000
7.	Reclamation Pilot Plant	-0-	-0-	-0-	-0-	\$1,000,000	-0-	1,000,000
	Total Expenses	\$62,352	\$136,950	\$1,373,245	\$15,893,213	·\$22,723,325	\$2,723,325	<b>\$62,8</b> 67,883
Net	: Profit	-0-	<b>♦</b> 1,95 <b>♦</b>	\$11.755	\$1,144,606	\$94,547	\$94.547	\$1.343.505

### APPENDIX G

CITY REPORT ON ALTERNATIVE REFUSE COLLECTION ACCOUNTING, BILLING AND PAYMENT PLANS

### I. THE PROBLEM

Garden City Disposal Service, Inc., operates a presumedly minimum cost billing operation which provides no financial information other than monthly cash receipts. It is a system below the minimum standard acceptable for an operation of this size and character. Customer account cards are maintained in a "spindle" system (Customer cards are spun around for recording amounts received by the company.) No attempt is made to record amounts due the company, consequently it is impossible to ascertain an accurate delinquency rate. Control is weak, perhaps nonexistent. It is possible for cards to become lost and it is easy for collections to be posted to the wrong cards. It is difficult to determine the true income of the company, since receipt figures depend upon such biasing circumstances as the number of customer accounts serviced during a particular period. No regular billing cycles are used. Customers are sometimes mailed bills at irregular intervals. No delinquent account collection follow-up is practiced.

The records prepared on the Company's modified cash basis accounting method do not properly disclose the real earnings for the period; the franchise paid to the City is based on cash receipts subject to the inexactitudes of the system. (The City obtains from the Prime Contractor annual statements examined by a Certified Public Accountant. The statements are prepared on the "Modified cash basis", however the C.P.A. firm furnishes "adjustments" to reflect "accrual basis" used for the Company's income tax returns).

It is probable that customer service is deficient, perhaps causing undue hardship: Customers could be conceivably billed five times a year

(instead of four); their service could be cut off four months after billing (instead of six). In short, the high rate of non-subscription to the collection service may be attributed, in part, to the unsatisfactory billing operation.

### II. Discussion

Even though the City is not in the garbage business, it is nevertheless responsible to insure that garbage collection is achieved efficiently and at the lowest cost possible without compromising the service provided San Jose residents. The billing operation is an integral part of the garbage collection effort. Lack of sufficient accounting control and management information in the billing system casts doubt on accounting and operational efficiency elsewhere (for example, the expense of company operations, the validity of the amount collected on the franchise by the City, the equity of rates charged San Jose customers).

As a minimum the company should establish an accounting system which will achieve the following:

- 1. An accrual basis accounting system. This provides for accounts receivable to insure that income is not based on unequal cash flow. (This, incidentally, is required to be in conformance with generally accepted accounting principles as stipulated by the AICPA in order to reduce inequities which arise in a strictly cash-basis system.)
- 2. A system of accounting controls. This provides for regular billing cycles, more efficient accounting data inputs, better internal control on cash handling, billing cycle reconciliation, and the recording of accounting data in the company's general ledger.

### II. DISCUSSION (Continued)

3. A set of accounting reports. This provides for a comparative monthly report on amounts due, amounts actually collected, delinquencies due, franchise payable to the City and number of customers for current month, year-to-date and previous year-to-date.

The City may also impose other requirements on the garbage company to provide for a better analysis of the needs of various sectors of the City residents, to provide the development of a more equitable rate structure, to reduce the delinquency rate, and to reduce (or eliminate) the rate of non-subscribers for garbage collection. Examples:

- 1. Compulsory billing of all San Jose non-commercial residents.

  This reduces (or eliminates) the non-subscription rate. (Note: It may be possible to bill all owners which would eliminate the problem of tenants moving, etc.—see Attorney's opinion elsewhere in the report.)
- 2. Compulsory garbage pickup regardless of the status of bill collection. This reduces the incidence of garbage accumulating on the premises of San Jose residences, a purported significant health problem.
- 3. Use of a flexible account code structure and a more comprehensive management report. This provides for a more comprehensive analysis of customer problems as to customer type, geographical location, more detailed delinquency evaluation, a more equitable rate structure.
- 4. Use of a more imposing, official bill, accommanied with an 'addressed return envelope. This would provide greater inducement for customer compliance, better cash flow and a lower delinquency rate.

### III. ALTERNATIVES

- 1. No change in billing policy: franchise contract is silent in method of billing and changes in accounting system.
- 2. Impose certain contractual requirements on the company, such as:
  - A. Accural basis accounting system
  - B. Specified accounting controls
  - C. Specified accounting reports
  - D. Delinquent account followup
  - E. Better billing medium
  - F. Compulsory billing of non-commercial residents

- G. Comprehensive management report
- H. Compulsory garbage pickup
- I. Compulsory billing of non-cormercial owners
- 3. Igreement with company that City Provides:
  - A. Complete billing operation
  - B. Delinquent account followup
  - C. Revolving fund and City subsidy for delinquent accounts
  - D. Complete subsidy for all garbage collection service provided City residents
- 4. Initiate state legislative action to allow garbage collection shatement to be added to the County tax rolls. (now in process)

After a thorough analysis of the various choices, we concluded that the City should consider three alternative systems:

### ALTERNATIVE A - CITY TAKES OVER ACCOUNTING OPERATION:

- 1) Initiates state legislation to place garbage fees on the County tax rolls.
- 2) Contracts the company to collect garbage City-wide.
- 3) Creates revolving fund to finance delinquent garbage fee collections from general fund revenues of the City.
- 4) Establishes accounting system similar to weed abatement and special assessments to administer accounting operation.

## ALTERNATIVE B - CITY IMPOSES CONTRACTUAL REQUIREMENTS ON THE COMPANY WHICH CONTINUES ACCOUNTING OPERATION:

- 1) Company establishes accural basis accounting system
- 2) Company establishes specified accounting controls
- 3) Company establishes a specified accounting reporting system
- 4) Company developes a more imposing, official bill accompanied with an addressed return envelope

### ALTERNATIVE C - COMPANY OPERATION, COMPULSORY COLLECTION, CITY GUARANTEES PAYMENT

- 1) Contractual requirements as in Alternative B
- 2) Requirement of compulsory residential refuse collection
- 3) Guaranty that City will reimburse contractor for uncollectable fees
- 4) City reimburses contractor for uncollectable fees and places them on tax roll in accordance with Chapter 175 of California Government Code

### V. BENEFITS ACHIEVED BY ALTERNATIVE SYSTEMS

Alternative A - City takes over accounting for receipts; initiates State legislation to place garbage fees on County tax rolls; contracts company to collect garbage City-wide; creates revolving fund to finance delinquent garbage fee collections; establishes accounting system similar to special assessments.

- 1. Greatly simplifies billing operation; reduces costs accordingly.
- 2. Reduces incidence of garbage accumulating on residential property . within the City limits.
- 3. Probably reduces rate of delinquency from about 5% to about 1% since fee is added to tax bills.
- 4. More dependable accounting records are achieved since City operates a better accounting system.
- 5. Simplifies arrangement made with company since no franchise fee would be collected; the company would merely be reimbursed for expense of garbage operations incurred; City could charge whatever rates desired to make up for the franchise, or reduce garbage rates accordingly.

Alternative B - City imposes contractual requirements on the company to include a better accounting and reporting system and an adequate billing function.

- 1. Reduces rate of delinquency, and increases cash flow since a better billing medium is used (Note: rate is not likely to be reduced to as low as in the case of Alternative A).
- 2. Provides better customer service and a higher potential for proper analysis of customer problems through better accounting controls.
- 3. More dependable accounting records are achieved.
- 4. Increase franchise fee collected by the City since accrual basis accounting is required.

Alternative C - Same as Alternative B with requirement of compulsory collection. City would guarantee payment of fee end would place uncollected garbage fee on the tax rolls as in A above.

- 1. This method achieves all the advantages of Alternative B plus the benefits listed under Alternative A 2 and 3.
- 2. Chapter 175 of the Government Code provides that cities collecting garbage fees may collect fees which have been delinquent for 60 or more days as a special assessment against respective parcels of land and are a lien on the property for the amount of such delinquent fees. Chapter 175 was approved by the Governor and filed with the Secretary of State on June 23, 1972.

### V. ALTERNATIVE SYSTEM IMPLEMENTATION CONSIDERATIONS

### Alternative A (City bill collection)

This alternative will require rather extensive legal action since the State Legislature must pass a bill authorizing the City to impose a garbage collection fee on taxpayers. (The City Attorney has initiated action to obtain this legislation.) Further, the imposition of a garbage fee on owners (in lieu of residents) is a matter which might have to be tested in court. (See December 1, 1972 memo on refuse disposal from Gow to Lucchesi.)

From a technical accounting point of view it appears that no special problems exist which would preclude the system from efficiently operating since the City is already operating similar activities. The development effort is within our current systems capability and can probably be accomplished with six months to a year of lead time. The cost of development does not appear to be prohibitively high. The system could operate efficiently within our current EDP system, or in an upgraded system.

No bid or contract problems are anticipated since this alternative does not impose any special requirements on the contractor other than to pick up solid waste from all residents, and to document the basis of reimbursement. The contractor could be paid on a) cost plus, b) fee per cans collected, or c) fixed fee basis.

### Alternative B (City imposed upgraded billing system by company)

This alternative presents no special legal problem since the City can currently impose specific operational and fiscal requirements on the contracting company.

The billing and accounting operation proposed might be somewhat costlier than the present totally inadequate system; however, refuse collection in San Jose is a more than \$5,000,000 operation; the added costs would probably amount to a fraction of 1% of revenues and more than pay off in better collections. (The company could contract with a computer service for billing, accounting and reporting services. Also the City's Accounting Systems Development Section could assist the company in developing a suitable system.)

### Alternative C (Company operation, compulsory collection)

It appears that this alternative does not require legal action, since Chapter 175 of the Government Code (quoted above) provides authority for placing delinquent collection fees on the tax rolls.

### APPENDIX

D

LEGAL OPINION

KEITH GOW

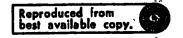
The Courts have held consistently that municipal regulation of refuse, including garbage and rubbish, is a proper exercise of the police power having a substantial relation to the protection and preservation of the public health, so long as such exercise (and the costs thereof) are not excessive or discriminatory. (City of Glendale v. Trondsen, 48 Cal 2nd 93; Cases cited at 101). Such regulations may include prohibitions against unreasonable accumulations of refuse upon private premises, frequency of collection and segregation of materials, (Silver v. City of Los Angeles 217 Cal App 2d 134). A city nev impose a rubbish tax or charge to nev for the costs of collection, notwithstanding a charter limit upon real property taxes and a charter requirement that the question of autitional levies be approved by vote of the people (Charter 8 1219), so long as the tax or charge bears a reasonable relationship to the cost of collection, is imposed upon the producer of the refuse, and is not an ad valoren levy (City of Glendale v. Trondsen, supra).

There is, therefore, no legal objection to the present Municipal Code provisions prohibiting dangerous accumulations of refuse (§§ 5302.4 and 5303.1), requiring at least weekly disposal of refuse (§ 5303.12), or the provisions respecting refuse disposal contained in Part 4 of Chapter 3 of Article V of the San Jose Municipal Code (§§ 5304.1, et seq.).

Upon the basis of Trondsen, it is clear that an ordinance which imposes a tax or charge upon the producer is constitutional. The Court found authority for such tax or charge by analogy to those ordinances that impose sever service and use charges upon all households within a city, notwithstanding that some such households may not be connected to the sewer facilities. In that case, the City of Glendale had charter limitations quite similar to those contained in Section 1219 of San Jose's Charter, and the Court held that so long as the tax or charge was not an ad valorem tax, the charter tax limit and the requirement for approval by the voters, if that limit is to be exceeded, are not applicable.

It thus appears clear that a city procedure for billing and collecting fees from producers based upon the cost to the City of providing refuse collection service may be initiated without legal hinderance. Whether or not such taxes may be imposed upon owners of property who are not themselves producers (i.e., from landlords), in the alternative, if the acqual producers fail or refuse to pay such fees or taxes, is less certain. We believe that the imposition of such taxes or fees upon owners would be sustained by the Courts, notwithstending that they may not themselves be producers, upon the theory that their use of the property indirectly makes them producers through the activities of their tenants. Such a position may have to be tested by litigation, however.

It must be apparent, however, that any attempt by the City to collect refuse collection fees or taxes would produce a substantial amount of



work over and above the routine billing and collection that would necessarily have to be put into effect. For example, a substantial amount of effort would have to be devoted to locating delinquent producers, collecting from them, suing them in Small Claims Court, and attempting to collect upon judgements that may be obtained. It is also apparent that a certain percentage of the bills would be uncollectible and would have to be written off. We believe that provision for uncollectible bills may legally be built into any rate structure that is designed to reimburse the City for the cost of refuse collection, but we caution that the City should make provision for reasonable collection efforts so as to avoid the possibility of rates that contain provisions for uncollectible debts being held discriminatory or excessive.

KEITH L. GOW Division Chief Attorney

APPROVED:"

P. P. PALLA, City Attorney

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