

SOLID WASTE SERVICES

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Mission

The mission of Solid Waste Services Department is to provide for the solid waste collection and disposal needs of the citizens of Anchorage. Services provided shall conform to all federal, state and local health and environmental requirements and standards pertaining to solid waste collection and disposal, and will be operated in a manner consistent with sound fiscal objectives and business practices.

Goals

- Maintain a clean and sanitary city service area by providing prompt, reliable, economically efficient and courteous service to its customers with a concern for their individual requirements.
- Professionally manage the waste discarded by Municipal citizens in an economical and efficient manner that maximizes its use as a resource and minimizes the potential adverse impact it has upon the area's environment and the health and safety of its citizens.

Factors Driving the Utility

- Anchorage's growing population.
- Anchorage's cyclical economy.
- Increasing per capita generation of solid waste.
- Changing land use patterns as it relates to the type of collection service provided.
- Limited remaining capacity of Merrill Field Landfill and limited land options available for locating new sites.
- Economic constraints imposed upon materials recovery efforts due to Anchorage "remote" location from secondary materials.
- High demand for efficient, cost-effective services.
- Federal and state solid waste regulations.
- Developing knowledge, awareness and concern over hazardous and toxic materials.

Planning Assumptions

The following growth projections and assumptions were used in developing Solid Waste Services operational and capital improvements plans for 1984-89. They are based upon the best information now available; however, as conditions change and planning improves, the assumptions too may change.

	1984	1985	1986	1987	1988	1989
• Growth Projections:						
Tons of Refuse Collected	46,160	46,640	47,150	47,660	48,160	48,670
Billed Refuse	13,650	13,800	13,950	14,100	14,250	14,400
Generation Rate #/Capita/Day	7.17	7.24	7.31	7.38	7.46	7.53
Tons Processed & Disposed	298,020	304,370	324,260	325,360	330,840	338,680

Planning Assumptions (Continued)

- Merrill Field Landfill will be filled to capacity in 1985 assuming landfill will be filled to current grading plan and a new landfill(s) will be selected, acquired and constructed.
- Total waste transport costs will not increase significantly over present day costs with the new landfill(s).
- Land disposal, air and hazardous waste regulations will become more stringent requiring stricter controls.
- Facilities Plan will show resource recovery to be viable. Operation of the resource recovery facility will begin in 1989 and be done by private enterprise.
- Energy sales from resource recovery facility will be sold at a rate equivalent to \$15 per ton of waste processed.
- Peters Creek Landfill will be filled to capacity in 1988 and a new facility will be selected, acquired and constructed.
- Population data provided by Planning Department indicates moderate growth through 1986 followed by a leveling between 1987 and 1989.
- Construction of new facilities will be financed with a combination of state grants and bonds.
- Solid Waste Disposal Service Areas will receive financial support equalling 0.18 mills.

Objectives

Solid Waste Services major objectives over the next six years will be:

- To provide for Anchorage's future waste collection and disposal, plan for future, implementable, cost-effective programs and facilities.
- To check the growth of solid wastes requiring ultimate disposal, implement major materials recycling programs and facilities designed to utilize solid waste as a resource.
- To help ensure user costs are minimized, establish programs which maximize receipt of capital funding through federal and state grants.
- To protect the area's environment and health and safety of its citizens, operate disposal facilities in accordance with regulations and initiate hazardous waste storage and export program.
- To ensure Solid Waste Services meets its goals and objectives, implement public education and information programs designed to reduce litter, increase recycling and generate public support for capital financing of major resource recovery facilities.
- To optimize the proficiency and efficiency of department personnel, provide training opportunities, the tools and the environment necessary for fostering a highly motivated work climate.
- To simplify budgeting and financial accounting efforts, consolidate waste disposal service areas which have the same level of service.

Programs

OPERATIONAL — Solid Waste Services will continue providing residential-commercial collection and processing and disposal service to its service area customers. Additionally, operational programs designed to enhance the delivery of service include:

- Develop program to secure state capital and grant funding for required solid waste processing and disposal facilities. Monitor federal legislation for same. Secure best financing method available.
- Develop public information programs to inform, encourage and involve citizens as to the benefits derived from recycling waste materials.
- Automate scalehouse operations, management information systems, inventory and other accounting and operational reporting systems to increase personnel efficiency.
- Improve appearance of Merrill Field Landfill by enclosing perimeter with berm, hydroseeding and fencing site (1984-85).
- Expand materials recovery-recycling efforts to include newspaper, ferrous materials and aluminum products. Expand existing pilot wood waste recovery program.
- Improve shredder operation and maintenance costs by constructing the following projects:
 - a. Install capacitor bank \$52,000
 - b. Resurface tipping floor \$60,000
 - c. Rehabilitate access doors \$85,000 in 1984; \$91,000 in 1985
- Implement, in association with other agencies, a hazardous waste receiving-export and waste oil recovery service.
- Expand refuse container beautification and retrofitting program by completing 400 containers each year.
- Consolidate waste disposal service areas having equal levels of service by the end of 1985.
- By the end of 1985 research, plan and implement, if necessary, operating alternatives to improving refuse collection service.

CAPITAL — Early in 1984 the Municipality's long-term solid waste planning effort will be concluded by adoption of the **Solid Waste Management Facilities Plan, 1985-2005**. Projects and programs anticipated and incorporated into the six-year capital improvement program include:

	*COST	YEAR
• Select, acquire, design and construct replacement landfill(s) for Merrill Field facility by mid-1985.	\$ 10,440.	1984-85
• Close and rehabilitate Merrill Field Landfill	300.	1985
• Establish large scale recycling center for ferrous, nonferrous and paper products	391.	1984
• Design and construct resource recovery facility. Contractually market steam for heating and power production.	78,435.	1985-88
• Select, design and construct replacement facility for Peters Creek Landfill. Rehabilitate current landfill site.	2,598.	1986-88
• Design and construct transfer facility to serve Girdwood and Turnagain Arm areas.	1,069.	1989
• Design and construct hazardous waste receiving and storage facility.	89.	1985

*Dollars in thousands

MANPOWER FORECAST

DIVISIONS	1983	1984	1985	1986	1987	1988	1989
Administration	9	9	11	11	11	13	13
Anchorage Processing & Disposal	24+2PT	24+2PT	25+2PT	25+3PT	25+3PT	26+3PT	26+3PT
Eagle River/Chugiak Disposal	0	0	1	1	1	1	1
Vehicle Maintenance	4	6	6	6	6	6	6
Refuse Collection	28+2PT	28+2PT	28+2PT	28+2PT	28+2PT	28+2PT	28+2PT
TOTAL	65+4PT	67+4PT	71+4PT	71+5PT	71+5PT	74+5PT	74+5PT

SOLID WASTE ADMINISTRATION

Resources

1983

1984

Direct Costs	\$	802,770	\$	1,028,860
Program Revenues	\$	-0-	\$	-0-
Personnel		4		6

VEHICLE MAINTENANCE

Resources

1983

1984

Direct Costs	\$	445,350	\$	569,890
Program Revenues	\$	-0-	\$	-0-
Personnel		9		9

**RESOURCE IMPACTS
REFUSE COLLECTION**

	1984	1985	1986	1987	1988	1989
Growth Factors						
Tons Collected	46,160	46,640	47,150	47,660	48,160	48,670
Billed Customers	13,650	13,800	13,950	14,100	14,250	14,400
Bond Sales	-0-	-0-	-0-	-0-	-0-	-0-
Grants Anticipated	-0-	-0-	-0-	-0-	-0-	-0-
Personnel Increases	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	28+2PT	28+2PT	28+2PT	28+2PT	28+2PT	28+2PT
Revenue (thousands)	\$ 4,675	\$ 5,274	\$ 5,360	\$ 6,123	\$ 6,189	\$ 6,678
Expense (thousands)	4,592	4,862	5,278	5,610	6,088	6,536
Net Income Regulatory (thousands)	\$ 83	\$ 412	\$ 82	\$ 513	\$ 101	\$ 142
Possible Rate Increases		12%		12%		6%

**1984 BUDGET IMPACTS
REFUSE COLLECTION**

Operational

- Overall, the budget unit expenses are projected to increase by 11% or \$473,170. The most significant expenses result from increases in the contractual roll-on/roll off containers serviced (\$49,160), Saturday overtime required for six days per week dumpster services (\$33,060) and utility costs for the Warm Storage Building (\$16,320).
- Refuse Collection will expand the container beautification and retrofitting program initiated in 1983. Four hundred containers will be painted and retrofitted with plastic lids.

Capital

- Capital purchases planned for 1984 include vehicle replacements (\$401,800), new containers and lids (\$67,900) and office equipment automation (\$14,600). These projects will be funded from operating revenues.

BUDGET SUMMARY
REFUSE COLLECTION

	1982 ACTUAL	1983 PRO-FORMA	1984 PROPOSED
OPERATING BUDGET			
Revenue	\$ 3,692,330	\$ 4,357,370	\$ 4,675,330
Expense	3,361,609	4,118,860	4,592,030
Net Income for Governmental Financial Reporting	\$ 330,721	\$ 238,510	\$ 83,300
Adjustments (Regulatory)	-0-	-0-	-0-
Net Income (Regulatory)	\$ 330,721	\$ 238,510	\$ 83,300
CAPITAL BUDGET			
Project Category			
Refuse Building	\$ 1,442,000	\$ 135,000	\$ -0-
Equipment	389,000	286,700	468,700
Other	2,000	-0-	-0-
TOTAL	\$ 1,833,000	\$ 421,700	\$ 468,700

**RESOURCE IMPACTS
PROCESSING AND DISPOSAL**

	1984 ¹	1985	1986	1987	1988	1989
Growth Factors						
Population	212,264	214,226	223,771	223,874	224,526	226,741
Tons Disposed	298,020	304,370	324,260	325,360	330,840	338,680
Bonds Sales	\$5,220,000	\$ 650,000	\$ 60,000	\$ 1,287,500	\$486,000	\$ -0-
Grants Anticipated	\$5,611,000	\$3,089,200	\$495,600	\$76,287,500	\$486,000	\$ -0-
Personnel Increases						
Operations	-0-	2	1PT	-0-	1	-0-
TOTAL	24+2PT	26+2PT	26+3PT	26+3PT	27+3PT	27+3PT
Revenue (thousands)	\$ 4,936	\$ 6,397	\$ 6,955	\$ 7,423	\$ 7,776	\$12,300
Expense (thousands)	4,947	6,312	6,777	7,325	7,693	10,831
Net Income Regulatory (thousands)	\$ (11)	\$ 85	\$ 178	\$ 98	\$ 82	\$ 1,469
Possible Rate Increases		30%		4%		
User Charges (\$/Ton)	\$ 10.00	\$ 13.00	\$ 13.00	\$ 13.50	\$ 13.50	\$ 13.50

¹Anchorage and Eagle River Disposal Service Areas combined.

**1984 BUDGET IMPACTS
PROCESSING AND DISPOSAL**

Operational

1. Providing for landfill daily cover material will have a significant impact on projected operational costs. Thirty-four percent (\$235,000) of the budget increase is attributable to the purchase of cover material for the Merrill Field Landfill.
2. Repair and maintenance costs of the shredder mobile equipment is expected to increase \$218,550 over pro-forma 1983 costs. The equipment will be in its fourth year of operation and the 1983 allocation between Disposal and Collections indicates a heavier cost-burden factor to the disposal equipment.
3. A hazardous waste receiving and export program will be locally funded in 1984 (\$45,000). During a trial 1983 program funded by the State, 134 barrels of hazardous and toxic wastes were removed from the waste stream.

Capital

1. Adoption of Anchorage's 20 year **Solid Waste Facilities Plan** will occur in early 1984. The plan will identify where a new landfill site(s) to replace the Merrill Field Landfill, projected to be filled to capacity by mid-July 1985, should be located. During 1984, funds are planned for acquisition and design of the new disposal site(s) with construction occurring in the spring of 1985. (Total cost \$10,440,000.)
2. Pending approval of a State Grant (\$391,000), plans are being formulated for implementation of a major materials recycling center in Anchorage.

**BUDGET SUMMARY
PROCESSING AND DISPOSAL**

	1982 ACTUAL	1983 PRO-FORMA	1984 PROPOSED
OPERATING BUDGET			
Revenue	\$ 2,124,406	\$ 5,505,530	\$ 4,782,670
Expense	3,511,033	3,915,070	4,671,890
Net Income for Governmental Financial Reporting	\$ (1,386,627)	\$ 1,590,460	\$ 110,780
Adjustments (Regulatory)	5,000	5,000	5,000
Net Income (Regulatory)	\$ (1,381,627)	\$ 1,595,460	\$ 115,780
CAPITAL BUDGET			
Project Category			
Equipment	\$ 275,000	\$ 204,000	\$ 280,000
Improvements	-0-	75,000	197,000
New Facilities	-0-	363,000	10,440,000
Recycling	-0-	-0-	391,000
TOTAL	\$ 275,000	\$ 642,000	\$ 11,308,000

1984 BUDGET IMPACTS
EAGLE RIVER/CHUGIAK DISPOSAL

Operational

1. The major impact upon this budget unit is a 26% increase (\$43,840) in the contract operation of the Peters Creek Landfill. This anticipated increase is due to a very significant (250%) increase in the quantity of solid waste being disposed of, resulting from the very rapid development of the area.
2. Landfilling plans will be coordinated with Parks and Recreation to convert the landfill into a park upon completion of the landfill in 1987.

Capital

1. The 20 year **Solid Waste Facilities Plan** will address how the area's solid waste will be disposed of upon completion of the Peters Creek Landfill. No capital funding requirements are anticipated for 1984.

BUDGET SUMMARY
EAGLE RIVER/CHUGIAK DISPOSAL

	1982 ACTUAL	1983 PRO-FORMA	1984 PROPOSED
OPERATING BUDGET			
Revenue	\$ 98,269	\$ 137,290	\$ 153,880
Expense	200,198	266,370	326,090
Net Income for Governmental Financial Reporting	(101,929)	(129,080)	(172,210)
Adjustments (Regulatory)	45,000	45,000	45,000
Net Income (Regulatory)	\$ (56,929)	\$ (84,080)	\$(127,210)
CAPITAL BUDGET			
Project Category			
Improvements	\$ 455,000	\$ -0-	\$ -0-
Facilities Plan	-0-	25,000	-0-
TOTAL	\$ 455,000	\$ 25,000	\$ -0-