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OFFICIALLY APPROVED

# 1978 Budget

## Objectives and Programs



METROPOLITAN  
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CONTROL  
COMMISSION  
Twin Cities Area

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1978



METROPOLITAN COUNCIL  
Suite 300 Metro Square Building, St. Paul, Minn. 55101

RESOLUTION NO. 77- 53

RESOLUTION APPROVING SUBJECT TO CONDITIONS THE 1978 CAPITAL  
IMPROVEMENT BUDGET OF THE METROPOLITAN WASTE CONTROL COMMISSION

WHEREAS, the Metropolitan Waste Control Commission has submitted its proposed 1978 Capital Budget to the Metropolitan Council for review by the Council in accordance with Minnesota Statutes Section 473.163; and

WHEREAS, said section authorizes and requires that the Metropolitan Council approve or disapprove the proposed capital improvement budget of the Metropolitan Waste Control Commission in whole or in part; and

WHEREAS, the Metropolitan Council has reviewed the proposed 1978 Capital Improvement Budget of the Metropolitan Waste Control Commission in relation to area-wide fiscal capacity, functional system objectives, the Metropolitan Development Framework, and other applicable Metropolitan plans, policies, and programs; and

WHEREAS, the Physical Development Committee of the Metropolitan Council in discharge of the above statutory responsibility has analyzed the Commission and recommends that the Metropolitan Council act to approve, subject to compliance with conditions, the Metropolitan Waste Control Commission's proposed 1978 Capital Budget and to direct the resubmission of the same prior to December 15, 1977.


NOW THEREFORE BE IT RESOLVED:

1. That the Metropolitan Council approve, subject to compliance with the conditions and recommendations contained in Referral Report No. 77-84 of the Physical Development Committee to the Metropolitan Council.
2. That the Metropolitan Council directs the Metropolitan Waste Control Commission to resubmit the proposed 1978 Capital Budget to the Council for further review prior to December 15, 1977, containing provisions which address and comply with the above-referenced conditions and recommendations.
3. That the Metropolitan Council directs the Chairman of the Council to transmit this resolution together with the referenced report to the Metropolitan Waste Control Commission and to advise the Commission of the Council's procedure which must be followed in connection with the resubmission of the Capital Improvements Budget prior to December 15, 1977. Further, the Council directs the Chairman to take all other action necessary to discharge the Council's statutory duty and responsibility with regard to its review of the Commission's Capital Improvement Budget.


Adopted this 22nd day of September, 1977.

METROPOLITAN COUNCIL

By

  
John Boland, Chairman

By

  
Darryl Olson, Secretary

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STATE OF MINNESOTA



METROPOLITAN WASTE CONTROL COMMISSION  
350 Metro Square Building, Saint Paul, Minnesota 55101  
222-8423

RESOLUTION NO. 77- 271

RESOLUTION APPROVING AND ADOPTING  
1978 PROGRAM BUDGET

WHEREAS, the 1978 Program Budget was presented to the Commission at its regular meeting of July 19, 1977, and

WHEREAS, public hearings were held on the proposed budget on August 9, September 13, and October 11, and

WHEREAS, the Metropolitan Council has reviewed and approved, with amendments, the capital improvement portion of the budget,


NOW, THEREFORE, BE IT RESOLVED:

1. That the Metropolitan Waste Control Commission approve and adopt the 1978 Program Budget as amended by the Metropolitan Council, and
2. That the amount of \$39,295,744.76 be allocated to the various units of government for current use costs, and
3. That the amount of \$2,416,400 be allocated to industrial users for Industrial Strength Charges, and
4. That the amount of \$4,196,410.24 be allocated to various units of government for reserve capacity charges, and
5. That the SAC unit charge applicable during the 1978 budget year is \$400.00, and
6. That the Commission concur with the Metropolitan Council on the capital improvement portion of the budget requiring new funding in the amount of \$271,541 for projects summarized on Schedule 15, and
7. That the Commission concur with the Metropolitan Council on the reappropriation of \$131,609,765 for projects previously authorized as detailed on Schedule 14, and
8. That the Commission concur with the comments and recommendations approved by the Metropolitan Council relating to the capital improvement portion of the budget.

Adopted this 18th day of October, 1977

METROPOLITAN WASTE CONTROL COMMISSION

By

  
Joseph D. Strauss, Chairman

By

  
Richard J. Dougherty, Chief Administrator

RLB:jm  
10.12.77



The Honorable Joseph D. Strauss, Chairman  
Members of the Commission  
October 13, 1977  
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Some of the major categories requiring increases over the current year's Budget are as follows:

Salaries and Wages - Proposed salaries and wages for 1978 total \$9,780,417, an increase of \$1,693,166 over the prior year. This increase is attributed to 51 new positions and pay increases as provided for in labor agreements for longevity, merit and cost of living considerations.

Insurance - Proposed insurance costs for 1978 total \$617,200, an increase of \$376,700, or 156.6 percent over the prior year. This increase is primarily attributed to auto insurance which increased 212.4 percent and Workmen's Compensation insurance which increased 168.1 percent.

Utilities - Utility costs which include electricity, fuel oil, natural gas and water are estimated to cost \$7,232,214, an increase of \$1,954,068, or 37 percent over the current year's Budget. This increase is attributed to the continual rate increases for all utility costs and a change in the municipal billing procedure for a power factor charge which alone resulted in a 25% increase in electrical costs.

Chemicals - Chlorine - These costs are estimated at \$2,974,609, an increase of \$539,700, or 22.2 percent over the current year. Chlorine and other chemical costs continue to escalate beyond the normal rate of inflation.

Debt Service - Debt Service costs for 1978 total \$14,120,350, an increase of \$980,258 over the prior year. A Summary of Debt Service is indicated on Schedule 4 complete with details for debt assumed from local governments and bond issues of the Metropolitan Council for sewer capital improvements.

Personnel Summary - The personnel requirement for 1978 requires 66 new positions resulting in a total complement of 615 employees. Of these new positions, 51 are required for the administration, operation, and maintenance of the Metropolitan Disposal System as follows: One (1) for Engineering; Thirteen (13) for Quality Control (2 for the new facilities at Metro, 2 for monitoring of lakes, 5 for industrial waste monitoring due to new NPDES Report requirements and efforts to remove cadmium and other metals present in sludge and 4 for research and development); Twenty (20) in Operations for the new facilities at the Metro Plant; Seven (7) for the new interceptor facilities; Three (3) for improved plant performance; and Seven (7) for the new land disposal facility.



Personnel Summary (continued) - Fifteen (15) of the positions relate to Construction: One (1) position for Chemical Hazardous Waste; Twelve (12) at the Construction Field Offices for inspection and supervision of the many large projects that will be underway in 1978; One (1) position for supervising the Digital Acquisition and Control System at the Metro Plant; and One (1) position for the Digital System at the Lakeville-Farmington Plant.

Sewer Service Charges - Allocation of current use charges to local governments being served by the Metropolitan Disposal System is estimated to cost \$43.17 per 100,000 gallons (per family) based on flow volume of 91,015 million gallons. Schedule 6 indicates the annual estimated flow, treatment works and service area costs for each community being served by the system. Each local government is required to remit the total annual charges in 12 monthly installments due on or before the 10th day of each month.

Reserve Capacity Charges (SAC) - These charges are made to Local governments based on the Service Availability Charge (SAC) concept in accordance with policy adopted by the Commission and Metropolitan Council which became effective January 1, 1973. This policy provides for a charge of \$275.00 per SAC unit during 1973 and an annual increase of \$25.00 per SAC unit until the 1977 budget year. The continuance of this annual increase of \$25.00 is being requested through the year 1979. Thus, the SAC unit rate for 1978 will be \$400.00 and revenues are estimated at \$4,141,796. A deficit of approximately \$2,000,000 remained in the SAC reserve fund at the end of 1976. It is estimated that the \$3,000,000, transferred from the Construction Fund in 1973 to fund this deficit, can be returned to the Construction Fund in 1979 or 1980 assuming that the 14,765 SAC unit average of the years 1973 through 1977 will be maintained for the years 1978 through 1979 and the SAC unit rate will continue to increase \$25.00 per through 1979.

Industrial Strength Charges - This system anticipates revenues from approximately 144 firms located in 32 units of government with estimated revenues of \$2,416,400.

In summary, the 17.3 percent increase in the total Budget is derived from the following:

Increase in the 1978 Budget due to normal Budget increases including wage increases, price increases on materials and supplies, contracted services, etc.	8.00%
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Increase in 1978 Budget related to new facilities at the Metropolitan Wastewater Treatment Plant	2.33%
Increase in 1978 Budget due to abnormal electricity and fuel oil costs	2.18%
Increase in 1978 Budget due to land disposal of sludge	1.92%
Increase in 1978 Budget due to interceptor acquisitions scheduled for 1978	1.87%
Increase in 1978 Budget due to abnormal increase in insurance premiums	.50%
Increase in 1978 Budget due to inclusion of a reserve for major repairs	<u>.50%</u>
Total Budget Increase	17.30%

This Budget document is prepared in two sections. The first section relates to operating the system which has been discussed above. The second section deals with the Capital Improvements Program which requires review and approval by the Metropolitan Council. Funding request for 1978 includes one (1) planning study with the estimated cost of \$271,541. A summary schedule of this program is indicated on Schedule 15, and program descriptions, resources required and annual expenditures are detailed on Schedule 8. In addition, previously approved projects require additional appropriations in the amount of \$18,104,932 and are detailed and described in Schedules 14-6 through 14-8.

Revenue requirements to finance the proposed projects and those previously approved and authorized total \$251,710,073. These revenues include Certified Federal Grants of \$108,525,712, Certified State Grants of \$24,866,051, anticipated future Federal and State Grants of \$99,030,089, and investment earnings of \$4,095,000. A complete financial review, analysis and update of the Capital Improvements Program indicates a fund balance on April 30, 1977 in the amount of \$26,966,806; estimated total revenues in the amount of \$236,526,852; expenditures for previously funded programs totaling \$251,438,532 and the 1978 funding request totaling \$271,541, resulting in a fund balance at completion of the current program in the amount of \$11,783,585.



The Honorable Joseph D. Strauss, Chairman  
Members of the Commission  
October 13, 1977  
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Since the amount of monies to be received as a result of the new Industrial Cost Recovery Program have not been determined as yet, no income is included for this program. This financial analysis indicates that the program fund balance of \$11,783,585 is available to fund future projects entirely with local funds and/or for providing funds for the local share when federal and state funding is available. A summary statement of the fund balance, revenues and expenditures is indicated on Schedule 7. It is anticipated that the sale of bonds will not be required within the next three (3) years.

Included in this Budget document is an update status report summary of all current Capital Improvements Projects previously approved and authorized and indicated on Schedule 14. Status reports of Certified Federal and State grants, anticipated Federal and State grants and anticipated investment earnings are indicated on Schedules 10, 11, 12 and 13.

In submitting this 1978 Program Budget to the Commission, I wish to point out that many members of the staff have contributed significantly to the preparation of this Budget. Their expertise, experience and judgment have been exceedingly valuable to me. The task, at this point, is for the Commission to carefully review the objectives and programs contained in this Budget with the Department Directors and the Administrative staff, thereafter in subsequent public meetings to hear and consider input from the Council, local government officials and other interested parties.

The staff, as usual, will provide to you our complete cooperation and assistance in the review process.

Very truly yours,

  
RICHARD J. DOUGHERTY  
Chief Administrator

RJD:RLB:jm



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# GOALS AND OBJECTIVES

## **General Goal**

It is the goal of the Metropolitan Waste Control Commission of the Twin Cities Area to continue refinement of the overall management and operation of the Metropolitan Disposal System and accelerate pollution abatement programs; thereby fulfilling all statutory responsibilities in an environmentally sensitive and economically sound manner that will continue to enhance water quality and benefit both area and downstream citizens.

## **Objectives**

Administration: To ensure overall administrative management of Commission affairs including legal and legislative matters; policy formulation and implementation; all programs related to Federal, State and local agencies; competitive and equal opportunities for employees; a positive affirmative action program; employee career development programs; ongoing information and communication programs with all levels of government and citizens; a safety program complying fully with the Occupational Safety and Health Act (OSHA); and special projects.

Engineering: To provide a variety of engineering and technical services for the Commission encompassing facility design, consulting engineer liaison, comprehensive sewer plan review, cost allocation and technical data production, planning coordination and capital project implementation.

Quality Control: To supply a total quality control program for the Commission through sampling and laboratory services, water quality monitoring systems, process evaluation programs, industrial waste surveillance, research and development projects and requested technical services.



Construction: To manage all proposed and authorized capital improvement projects and existing facility inspection programs for the Commission through project review, inspection services, testing, surveys, change orders, cost and payment estimates, and report preparation.

Operations: To maintain the operational efficiency of all Commission water pollution control facilities within the effluent and water quality standards prescribed by the National Pollutant Discharge Elimination System permit program through continued upgrading of wastewater treatment plant processes, improved facility maintenance, inspection of interceptor sewers and instrumentation, and expanded plant services and research and development programs.

Business Services: To supervise for the Commission the necessary services for personnel administration, labor agreement negotiation, labor contract administration, life and medical insurance assistance, property and casualty insurance processing, all purchasing functions and overall office management.

Comptroller: To perform the full range of required financial services for the Commission on a timely basis including collections, disbursements, payroll, investments, budgeting, general accounting, final reporting, cost effectiveness studies and other related financial matters.

## General Fund – Revenues & Expenditures

	<u>Proposed 1978</u>	<u>Budget 1977</u>	<u>Actual 1976</u>
ESTIMATED REVENUES:			
Sewer Service Charges - Communities	\$ 39,295,745	\$33,374,233	\$31,240,269
Industrial Strength Charges	2,416,400	1,995,011	- 0 -
Service Availability Charges	4,196,410	3,659,678	5,546,873
Investment Earnings	275,000	250,000	290,104
Federal Grants	130,424	211,026	282,292
Other	<u>25,000</u>	<u>15,000</u>	<u>39,159</u>
Total	<u>\$46,338,979</u>	<u>\$39,504,948</u>	<u>\$37,398,697</u>
ESTIMATED EXPENDITURES:			
Programs	\$28,149,768	\$22,645,871	\$19,271,092
Debt Service	14,120,350	13,140,092	12,848,045
Acquisition Costs	4,068,861	3,718,985	3,677,397
Transfer to SAC Reserve	- 0 -	- 0 -	910,913
Due to Local Governments	<u>- 0 -</u>	<u>- 0 -</u>	<u>691,250</u>
Total	<u>\$46,338,979</u>	<u>\$39,504,948</u>	<u>\$37,398,697</u>



# PROGRAMS

## ADMINISTRATION & MANAGEMENT (001)

Description: To ensure accomplishment of all agency goals and objectives through efficient and effective administrative management of overall Commission affairs.

1. Review financial affairs of the Commission;
2. Provide leadership and direction to Dept. Directors and Program Managers;
3. Insure that construction work is on schedule;
4. Review NPDES reports for compliance with effluent limitations;
5. Provide leadership in attaining affirmative action goals;
6. Carry out and administrate Commission policy;
7. Insure that plans and specifications and the Capital Program are presented on a timely basis.

### Performance Criteria

1. To administrate, in cooperation with the Comptroller, the financial affairs of the Commission in a manner that the expenditures do not exceed the income;
2. To administrate, in cooperation with the Comptroller, the Program Budget in such a manner that the manpower, cost estimates, and goals set forth in the management programs are met;

## ADMINISTRATION & MANAGEMENT (continued)

3. To administrate, in cooperation with the Construction Department, so as to maintain change order amounts to less than 3% of the construction value; maintain the construction work on schedule for 1978;
4. To administrate, in cooperation with the Operations Department, a 92% compliance with NPDES Effluent Limitations at the Metro Plant and 94% compliance at all other plants and maintain a severity rate of less than 40% at all plants during 1978.
5. To achieve the affirmative action goals in maintaining a program of recruitment, selection, upward mobility and training that will measure improvement in the overall employment of minorities, females and the handicapped.
6. To achieve a 95% frequency of acceptance on the recommendations made to the Commission.
7. To administrate, in cooperation with the Engineering Department, the completion of plans and specifications and the presentation of the Capital Program on schedule.

Resources Required: \$ 434,905

Work Hours Required 4,930

## COMMISSION ADMINISTRATION (002)

Description: To provide Commissioners with prompt administrative support and with efficient implementation of policy directives from official actions of the Commission.



## COMMISSION ADMINISTRATION (continued)

1. Review and/or prepare memorandums, resolutions and other pertinent data for presentation to Committee and/or Commission meetings;
2. Prepare and present various operational reports on all major functions of the Commission;
3. Promptly report and communicate all major items that have or could have any adverse effect on the Commission;
4. Carry out all Commission directives and requests.

### Performance Criteria:

1. Preparation of Commission business items and mail prior to Wednesday of the week preceding Commission Committee, regular and/or special meetings;
2. Present monthly operational reports, such as financial and other pertinent items;
3. Respond to Commission directives and/or requests within five (5) days.

Resources Required: \$ 90,027

Work Hours Required: 4,400

## AFFIRMATIVE ACTION (003)

Description: Maintain a program of recruitment, selection, upward mobility and training that will measure improvement in the overall employment of minorities, females and handicapped.

1. Carry out the complete requirements of the Commission's Affirmative Action Program;

## AFFIRMATIVE ACTION (continued)

2. Comply with all requirements of the State of Minnesota Department of Human Rights, and the Equal Employment Opportunity Commission;
3. Assist and direct the Commission's Affirmative Action Committee to act and perform in an effective and timely manner;
4. Provide Human Relations Training;
5. Employ and train minorities for professional and managerial job categories;
6. Employ handicapped and train, if needed;
7. Achieve Certificate of Compliance from Minnesota Department of Human Rights.

### Performance Criteria:

1. Increase the number of minorities and females employed during the budget year by approximately 3%.
2. Comply with all requirements of the State of Minnesota Department of Human Rights and requirements of EEO.
3. Publish monthly Affirmative Action Report.
4. Continue employee Human Relations Training Program.
5. Increase minority and female employees in professional and managerial categories.
6. Recruit and employ handicapped, where applicable.
7. Obtainment of a Certificate of Compliance from Minnesota Department of Human Rights.

Resources Required: \$ 70,805

Work Hours Required: 3,450



## PUBLIC INFORMATION (004)

Description: To conduct a total information and communication program for all internal and external Commission audiences.

1. Provide information and educational programs regarding pollution control objectives, activities and responsibilities to government organizations, the news media, individual citizens, and educational institutions;
2. Increase the level of government official and citizen involvement in the decision-making process pursuant to Commission objectives and in compliance with the dictates of EPA Regulations, public participation in water pollution control, and all other applicable federal and State regulations;
3. Insure total communications support to all levels and areas of staff and employee activity.

### Performance Criteria:

1. Produce and distribute 7,000 copies of 1977 Annual Report by February 1, 1978;
2. Produce and distribute 12 issues of Outfall Newsletter and Employee Newsletter and Employee News;
3. Produce special reports, brochures, presentations, projects as assigned.
4. Perform following aspects of Information Program to fulfill Commission and Section Program Objectives: Audio-visual programs; speech, statement and report writing and editing; ongoing public, news media, governmental, employee and visitor programs, and all other special projects and programs--all within set deadlines.

## PUBLIC INFORMATION (continued)

Resources Required: \$ 101,541

Work Hours Required: 5,625

## SAFETY (005)

Description: To provide an effective comprehensive safety program for all Commission employees and other personnel at all Commission facilities and projects.

1. Recognize and recommend the reduction of hazards to the health of employees;
2. Provide safety training.
3. Ensure investigation of all occupational injuries and illnesses;
4. Maintain a state of safety consciousness in all employees;
5. Comply with all state and federal regulations and guidelines.

### Performance Criteria:

1. Inspect each treatment plant for safe and healthful working conditions and good housekeeping at least once each month; issue notice of non-compliance to supervisors for violation of the Commission's Safety Program and policies.
2. Maintain accurate and adequate injury records; report injury statistics quarterly.
3. Respond to each request for air contaminant or noise analysis, or other safety service.
4. Provide safety training in the use of safety equipment, in the handling of hazardous materials, in operating procedures, in injury prevention, and in first-aid.



### SAFETY (continued)

5. Write and distribute to employees each month a Safety News-letter;
6. Hire one additional safety engineer/technician.

Resources Required: \$ 48,832

Work Hours Required: 2,100

### CAREER DEVELOPMENT (006)

Description: To provide educational and training opportunities for employees to aid in performing current job assignments more efficiently and to prepare for promotional and advancement opportunities within the organization.

1. Enroll and successfully complete courses of study for approximately 100 employees within the organization in the 10 major program categories listed below.

#### Performance Criteria:

1. Fundamentals of wastewater treatment;
2. Operation of wastewater treatment plants;
3. State certification;
4. Other operations programs;
5. Quality control;
6. Clerical-Secretarial program;
7. Management Center - College of St. Thomas;
8. University of Minnesota
9. Other educational and vocational programs;
10. Degree program.

### CAREER DEVELOPMENT (continued)

Resources Required: \$ 33,084

Work Hours Required: 220

### ENGINEERING ADMINISTRATION (007)

Description: To coordinate and administer all Engineering Department activities in a timely and efficient manner.

1. To administrate the department's responsibilities in an effective and efficient manner, including the use of program account funds, preparation and presentation of Commission Business Items, review and recommend action on interceptor acquisition requests, responses to requests and correspondence, continuously update design standards and criteria, provide effective supervision and make annual personnel evaluations, attend staff meetings to establish Commission policies and objectives and prepare the annual department program budget;
2. To prepare and recommend approval of special agreements including the coordination of site investigations, design review and consideration for Commission facilities;
3. To provide engineering support to other departments including the preparation and implementation of in-house plans and specifications for minor projects.

#### Performance Criteria:

1. Keep expenditures within the budgeted amounts in Accounts 5010 through 6200;
2. Effectively and timely provide, recommend and/or present business items, outside responses and interceptor acquisition requests;



ENGINEERING ADMINISTRATION  
(007)

3. Effectively accomplish and/or implement design standards and criteria, supervision, personnel evaluations, and attendance at staff meetings each time;
4. Prepare and submit annual budget by March 1, 1978;
5. Effectively and timely provide and implement all special agreements each time;
6. Effectively provide engineering support including the preparation of in-house plans and specifications;
7. Accomplish program objectives within the budgeted manhours and costs.

Resources Required: \$ 162,479

Work Hours Required: 8,610

COMPREHENSIVE SEWER PLAN (008)

Description: To conduct a community services engineering planning program providing technical comment and input to a variety of governmental units.

1. To request, review, coordinate and recommend approval of local comprehensive sewer plans (interim plans, amended plans and the sewer element of the comprehensive plan), local sanitary sewer improvement projects and to meet with local government units and the Metropolitan Council to discuss planning coordination for sanitary sewers;

COMPREHENSIVE SEWER PLAN (continued)

2. To review and comment on the Waste Management Policy Plan and amendments, community comprehensive plans, environmental impact statements, A-95 grant applications, watershed plans as requested.
3. To review and recommend approval of sewer connection permit applications, rental agreements and interceptor use policies.

Performance Criteria:

1. Prepare for and obtain Commission approval for 20-25 community comprehensive sewer plans (interim plans, plan amendments and sewer elements of the comprehensive plan).
2. Review and coordinate with Metropolitan Council and communities on approximately 50 comprehensive sewer plans.
3. Provide comments to the community and the Minnesota Pollution Control Agency on approximately 200 community sewer improvement projects.
4. Provide comments on 60 environmental impact statements and A-95 reviews to the Metropolitan Council.
5. Review and obtain approval of approximately 40 interceptor connection permit applications and sewer rental agreements.

Resources Required: \$ 59,723

Work Hours Required: 5,340



## FLOW DETERMINATIONS/ASSIGNMENTS (009)

Description: To perform a variety of technical and statistical tasks to ensure accurate determination and assignment of wastewater flows for cost allocation and other purposes.

1. To obtain, evaluate, and assign actual sewage flow for communities based on metered and unmetered flow information and to project estimated community flows, interceptor and treatment capacities to be used in the Cost Allocation Program;
2. To study, determine and assign Service Availability Charge (SAC) units for all new non-industrial users of the Metropolitan Disposal System.

### Performance Criteria:

1. Determine, review and assign the actual sewage flow volumes (135 metered and 65 unmetered) for 100 communities and report these total flows on both a quarterly and annual basis;
2. Provide the assigned treatment works and interceptor capacities and the estimated sewage flow volumes for 100 communities in the 1979 Cost Allocation Program;
3. Provide routine sewage flow and special flow analysis data to communities in a timely manner to 30 communities.
4. Prepare, distribute, collect and analyze "Survey of Sewer Use Data Forms" for 100 communities to obtain information on present and proposed sewer use and sewer connections plus similar data on water.
5. Determine and assign the SAC units in a timely manner and furnish the results to the communities in either oral (600-700) or written (100-150) communications;

## FLOW DETERMINATIONS/ASSIGNMENTS (continued)

6. Expand the present chart on SAC unit determinations to include additional commercial, public and institutional uses.

Resources Required: \$ 28,879

Work Hours Required: 2,640

## PROJECT PLANNING (010)

Description: To prepare the complete Development Program Report in accord with Metropolitan Council and federal requirements by December 31, 1978.

1. To prepare the Development Program for years 1980-84 in accord with the requirements of the Metropolitan Reorganization Act and with information from the Facility Planning Studies by December 31, 1978 within manhours and costs.

### Performance Criteria:

1. Development Program for years 1980-84 prepared by December 31, 1978 and within the budgeted amounts.

Resources Required: \$ 49,900

Work Hours Required: 1,434

## QUALITY CONTROL ADMINISTRATION (011)

Description: To plan, direct and control the activities of the Quality Control Department.

1. Supervise activities of the 8 programs within the Quality Control Department through reviews of expenditures and weekly assessments of progress toward objectives, by assigning new tasks and by holding semi-monthly departmental staff meetings.



QUALITY CONTROL ADMINISTRATION  
(continued)

2. Coordinate activities of the Quality Control Department with those of other departments through weekly meetings with the Chief Administrator, semi-monthly directors meetings, weekly meetings with the Engineering and Operations Departments, and other communications as the needs arise;
3. Provide information to the Commission through the preparation of Commission meeting agenda items and attendance at Commission meetings;
4. Communicate with outside agencies and organizations through meetings and reports, and participate in professional activities in the interests of the Commission;
5. Plan for future activities of the department through regularly scheduled planning sessions and the budget preparation process;
6. Conduct personnel-related activities and review the status of all Quality Control Department personnel semi-annually;
7. Visit each treatment facility twice annually and visit each regional laboratory monthly to assess the general operation;
8. Provide clerical support for all departmental programs;
9. Coordinate responses to citations of violations from and stipulations with the MPCA and assemble technical information required in legal action taken against the Commission in matters of water quality.

QUALITY CONTROL ADMINISTRATION  
(continued)

Performance Criteria:

1. Determine the degree of accomplishment of program objectives and the number of staff meetings held;
2. Assess the value of the various meetings scheduled;
3. Determine the number of Commission agenda items prepared and the problems encountered with each;
4. Evaluate the contributions to the Commission of these outside communications;
5. Availability of future plans for departmental activities and timeliness in preparing budgets;
6. Evaluate results of personnel reviews;
7. Review records of visits to facilities and the value to the programs;
8. Determine whether or not clerical support needs are being met;
9. Evaluate timeliness and adequacy of responses to citations, stipulations and requests for technical information.

Resources Required: \$ 73,335

Work Hours Required: 4,010

INDUSTRIAL WASTES (012)

Description: To administer the industrial waste regulations of the Commission and evaluate the impact of industrial wastes on treatment plant operations.

1. Plan and coordinate the industrial waste program;



## INDUSTRIAL WASTES (continued)

2. Maintain a current inventory of industrial waste discharges and prepare quarterly summary reports;
3. Process all industrial Service Availability Charge (SAC) applications received and determine charges;
4. Administer the industrial strength charge system;
5. Administer the industrial recovery system;
6. Inspect 120 industrial operations;
7. Monitor 100 industrial waste discharges;
8. Investigate 15 potential industrial waste problems at treatment plants;
9. Attend 3 conferences on industrial waste treatment technology;
10. Conduct nonroutine industrial waste studies.

### Performance Criteria

1. Comparison of objectives met and resources used;
2. Number of industries delinquent in reporting and those properly inventoried;
3. Number of SAC applications processed in 10 days and total number received;
4. Number of strength charge determinations prepared within 30 days of end of quarter;
5. Number of industrial cost recovery determinations prepared within 30 days of end of year;
6. Number of industrial operations inspected;
7. Number of industrial waste discharges monitored;

## INDUSTRIAL WASTES (continued)

8. Problems investigated and problems reported;
9. Assessment of value of conferences to the Commission;
10. Number of studies conducted and number assigned.

Resources Required:     \$ 227,250

Work Hours Required:     19,200

## RESEARCH AND DEVELOPMENT (013)

Description: To provide support for and conduct in-house research, external research, plant operations research, and pilot plant studies.

1. Sponsor at least two student research projects at U of M which address MMCC long term needs;
2. Conduct evaluations of new sensing elements used in monitoring and/or control strategies;
3. Review R & D work conducted by MMCC and other agencies;
4. Conduct pilot scale investigation of anaerobic digestion with PAC additions;
5. Initiate a study of the health effects of effluent disinfection end products and identify such end products at MMCC facilities;
6. Conduct evaluation of specific ion electrodes in relation to MMCC analytical and monitoring needs;
7. Evaluate the use of ATP measurements in disinfection and return sludge rate control strategies;
8. Conduct a demonstration of activated sludge bulking control by metal addition;
9. Provide funding for in-house projects, projects requiring matching funds, and extramural projects as the need occurs and priorities allow.



RESEARCH AND DEVELOPMENT  
(continued)

Performance Criteria:

1. Quality of final reports in terms of MWCC needs;
2. Topics reviewed in the technical literature and in meetings with other professionals;
3. Number and quality of evaluations completed;
4. Number and quality of evaluations completed;
5. Number and quality of evaluations completed;
6. Number and quality of evaluations completed;
7. Number and quality of studies completed;
8. Number and quality of studies completed;
9. Value to Commission for future planning and operation of land disposal facilities.

Resources Required: \$ 299,500

Work Hours Required: 12,350

TECHNICAL SERVICES (014)

Description: To provide support for wastewater treatment plant operations by conducting special plant surveys, plant efficiency studies and unit process studies.

1. Visit 16 treatment plants each month to calibrate instruments, advise operators on analytical techniques, and maintain stock of plant laboratory supplies;
2. Represent MWCC at all EPA and/or PCA surveys;
3. Conduct 10 plant surveys.

TECHNICAL SERVICES (continued)

Performance Criteria:

1. Number of visits made compared to projection;
2. Number of compliance surveys represented compared to total number of surveys;
3. Number of plant surveys conducted compared to projection.

Resources Required: \$ 37,293

Work Hours Required: 2,680

WATER QUALITY MONITORING (015)

Description: To monitor and study the water quality of Metropolitan Area waters through the MWCC Comprehensive Water Quality Monitoring System which includes the MWCC routine River Grab Sampling Network, the MWCC-USGS Cooperative Water Quality Surveillance Network and the Automatic Monitor Surveillance Network.

1. Direct the MWCC grab sampling of Area rivers;
2. Direct, in cooperation with the USGS, the Cooperative Water Quality Surveillance Network;
3. Conduct the sampling of Area rivers through the Automatic Monitor Surveillance Network;
4. Make available current water quality data;
5. Prepare an annual report by April 15, 1978;
6. Direct the monitoring of Area lakes;
7. Attend one conference on water resource management and attend one training session on automatic monitor maintenance.



WATER QUALITY MONITORING  
(continued)

Performance Criteria:

1. Number of samples obtained versus the number scheduled;
2. Number of samples obtained versus the number scheduled;
3. Percentage of the year that data are reported for each parameter of each monitor;
4. Percent of data available within 2 weeks of date of analysis;
5. Compare completion date with scheduled completion date;
6. Number of samples obtained versus the number scheduled;
7. Written assessment of conference and training session.

Resources Required: \$ 128,487

Work Hours Required: 4,880

LABORATORY SERVICES (016)

Description: To conduct routine sampling of wastewater treatment plant and area waters and to provide complete laboratory services for the Commission by conducting and reporting of analyses performed on samples originating from treatment plants, rivers, industries, special studies, and research and development programs.

1. Collect samples from all treatment plants operated by the Commission as required for NPDES permits and operational control;
2. Collect samples from 25 locations on Area rivers at weekly intervals and from selected Area lakes;

LABORATORY SERVICES (continued)

3. Conduct 142,000 laboratory analyses and prepare appropriate reports as follows:
  - a) 45,000 analyses for NPDES monitoring of treatment plants;
  - b) 12,000 analyses for receiving water samples;
  - c) 35,000 analyses for treatment plant control;
  - d) 30,000 analyses in support of special studies projects;
  - e) 15,000 analyses for industrial wastes;
  - f) 5,000 analyses for internal laboratory quality control;
4. Prepare monthly NPDES summary by the 7th day of the month;
5. Prepare an annual report on laboratory activity by February 15;
6. Prepare an annual report on treatment plant performance by April 15;
7. Maintain professional stature through attendance at conferences on analytical chemistry and biological analysis and review of analytical publications;
8. Institute a laboratory equipment and supplies inventory system;
9. Maintain laboratory instrumentation and continuous monitoring equipment used for operation plant control.

Performance Criteria:

1. Number of samples requiring re-sampling compared to number of samples scheduled;
2. Number of samples taken compared to number of samples scheduled;
3. Compare number of analyses conducted to number planned in program.
4. Number completed by the 7th day of the month to total monthly reports required;



#### LABORATORY SERVICES (continued)

5. Compare time of completion to scheduled date;
6. Compare time of completion to scheduled date;
7. Assess value of conferences and publications to program activities;
8. Assess value of the inventory system;
9. Percentage of time laboratory instrumentation and monitoring equipment not functioning.

Resources Required: \$ 690,165

Work Hours Required: 68,994

#### AIR QUALITY MONITORING (017)

Description: To monitor ambient air quality and gaseous emissions resulting from sludge incineration for particulate, gaseous, odorous, and hazardous materials at all Commission facilities and assist in evaluation of air pollution abatement equipment.

1. Determine compliance of gaseous stack emissions from the Metropolitan and Seneca Plants with existing air quality standards and prepare quarterly reports;
2. Conduct 2 ambient air quality surveys at Commission facilities and prepare reports;
3. Conduct continuous H<sub>2</sub>S monitoring at the Metropolitan, Seneca, and Blue Lake Treatment Plants and prepare monthly reports;
4. Conduct documentation studies on all odor complaints received by the Commission;

#### AIR QUALITY MONITORING (continued)

5. Prepare an annual air quality report by April 15;
6. Attend conference on air quality monitoring.

#### Performance Criteria:

1. Number of compliance reports completed as compared to the number scheduled;
2. Number of air quality surveys completed as compared to the number scheduled;
3. Number of reports completed as compared to the number scheduled;
4. Number of studies completed as compared to the number of odor complaints received;
5. Compare time of completion to scheduled date;
6. Assess value of conference to program activities.

Resources Required: \$ 43,774

Work Hours Required: 2,410

#### PROCESS AUTOMATION (018)

Description: To demonstrate the cost effectiveness of automatic and semi-automatic control schemes available for a number of wastewater treatment processes.

1. Conduct the evaluation of automated control strategies for the vacuum filtration process and prepare a report by Feb. 28, 1978.
2. Report on the continued development of optimum control strategy for vacuum filtration at Seneca by Sept. 30, 1978.



### PROCESS AUTOMATION (continued)

3. Maintain monitoring and control hardware associated with vacuum filtration study;
4. Prepare individual evaluation reports on instruments used to monitor PH, sludge solids, cake moisture, cake thickness by June 30, 1978.
5. Implement (1977-78 work plan) automated control strategies on one incinerator at the Seneca plant.
6. Prepare application for grant renewal and submit to EPA by March 15, 1978.
7. Implement 1978-79 work plan for evaluation of control strategies of anaerobic digestion at Anoka plant.
8. Prepare and submit four quarterly progress reports to EPA project officer within 30 days of quarter anniversary dates;
9. Prepare report on the evaluation of automated control strategies for the incineration process at Seneca by September 29, 1978;
10. Present project results at two conferences.

#### Performance Criteria:

1. Date report completed and transmitted to EPA;
2. Date report completed;
3. Hours of instrument downtime related to improper maintenance procedures;
4. Date report completed;
5. Target date set forth in MWCC-EPA work plan.

### PROCESS AUTOMATION (continued)

6. Date application submitted to EPA;
7. Target dates set forth in MWCC-EPA work plan;
8. Dates reports submitted to EPA;
9. Date report completed;
10. Number of times project results presented.

Resources Required: \$ 178,248

Work Hours Required: 7,093

### CONSTRUCTION ADMINISTRATION (019)

Description: To provide overall administration by the Construction Department of an estimated 38 capital improvement contracts.

1. Maintain and utilize current project files, plans, and specifications; review and evaluate testing and schedule management services; review and evaluate Construction Department personnel performance and needs; review all program budgets prepared by the Construction Department; maintain an ongoing training program for all Construction Department personnel; and maintain a current Construction Department Policy Manual and Organizational Structure;
2. Review and evaluate an estimated 60 change orders and prepare current change order tabulations and process them through the Commission for an estimated 38 capital improvement projects;
3. Review and process contract payments through the Commission for an estimated 38 capital improvement projects.



CONSTRUCTION ADMINISTRATION  
(continued)

Performance Criteria:

1. Complete construction in accordance with the contract plans and specifications at a cost for all Construction Administration not to exceed 2½%;
2. Process Change Orders and Resolutions through the MWCC Engineering Department and MWCC Administration Department with 90% of these provided to the Chief Administrator three (3) days prior to mailing to the Commission;
3. Process monthly construction payments and other disbursements through the MWCC Engineering Department, Comptroller's Department, and Administration Department with 90% of these provided to the Chief Administrator three (3) days prior to mailing to the Commission.

Resources Required: \$ 43,035

Work Hours Required: 3,132

BUILDING INSPECTION DIVISION (020)

Description: To inspect, prepare cost estimates and individual reports for maintenance, repair and improvements to all existing Commission facilities on an ongoing basis.

1. To inspect, prepare estimates of cost for maintenance, repairs, and improvements; and prepare individual reports on 20 sewage treatment plants (this includes Metro Plant).

BUILDING INSPECTION DIVISION (continued)

2. To inspect, prepare estimates for maintenance, repairs and improvements; and prepare a report on 51 lift stations;
3. To inspect, prepare estimates for maintenance, repairs and improvements and prepare a report on 124 metering stations;
4. To inspect, prepare estimates for maintenance, repairs, and improvements, and prepare a report on 21 regulator vaults.

Performance Criteria:

1. Complete the inspections, the estimates of cost and the reports on 20 wastewater treatment plants within the scheduled time;
2. Complete the inspections, the estimates of cost and the reports on 51 lift stations within the scheduled time;
3. Complete the inspections, the estimates of cost and the reports on 124 metering stations within the scheduled time.
4. Complete the inspections, the estimates of cost and the reports on 21 regulator vaults within the scheduled time.

Resources Required: \$ 100,972

Work Hours Required: 7,818

PLANT DEMOLITION (021)

Description: Demolition and rehabilitation of Waconia and Prior Lake Plant sites.

Performance Criteria: Demolition and rehabilitation of Waconia and Prior Lake Plant sites meeting local agency and MPCA requirements.

Resources Required: \$ 25,000

Work Hours Required: - 0 -



## OPERATIONS ADMINISTRATION (022)

Description: To manage and oversee operation of all Commission wastewater treatment plants and conveyance and apparatus support systems in a timely and effective manner.

1. To attain 92% compliance with NPDES effluent limitations at the Metropolitan Wastewater Treatment Plant during 1978;
2. To attain an average of 94% compliance with NPDES Effluent limitations at wastewater treatment plants other than the Metropolitan Plant during 1978;
3. To attain effluent quality performance at the Metro Plant equal to 75% frequency and 40% severity and at other treatment plants an average equal to 88% frequency and 38% severity;
4. Respond to and resolve 75% of personnel grievances within the constraints of existing labor agreements;
5. Monitor financial status to assure compliance with 1978 Operating Budget.

### Performance Criteria:

1. The NPDES Permit compliance at the Metropolitan Wastewater Treatment Plant in 1978 compared to 92%;
2. The average NPDES Permit compliance at plants other than the Metropolitan Plant in 1978 compared to 94%;
3. The actual frequency and severity rates of effluent quality for the Metro Plant and for the other treatment plants;
4. Percent of employee grievances solved/total number of employee grievances;

## OPERATIONS ADMINISTRATION (continued)

5. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 288,342

Work Hours Required: 19,558

## PROCESS ASSURANCE (023)

Description: To ensure the most effective, economical, practical and environmentally sound operation of all Commission wastewater treatment plants.

1. To reduce the number of treatment plant NPDES Permit effluent limitations noncompliance events in 1978 to the same number occurring in 1977 for equivalent standards;
2. To reduce treatment plant operation and maintenance costs in 1978 by a rate of \$25,000 per year over those occurring in 1977;
3. To see that at least 70% of all treatment plant improvements affecting performance provided in the 1978 capital outlay budgets and in capital budgets for construction in 1978 are completed or under construction in 1978;
4. Manage operations within the limits of the 1978 Budget.

### Performance Criteria:

1. Number of plant effluent NPDES Permit noncompliance events in 1978 compared to the number in 1977;
2. The documented reduction rate in operation and maintenance costs of treatment plants in dollar per year during 1978 compared to the \$25,000 per year objective;
3. The percentage of treatment capital outlay budget items and 1978 Capital budget projects affecting plant performance which are underway or completed in 1978 compared to the objective of 70%;



PROCESS ASSURANCE (continued)

4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 165,171

Work Hours Required: 15,920

METRO PLANT ADMINISTRATION (024)

Description:

1. Attain 92% compliance with NPDES Permit effluent limitations during 1978;
2. Attain effluent quality performance equal to 75% frequency and 40% severity;
3. Prepare and submit 12 monthly operational reports to the Commission in 1978;
4. Meet with staff and plant personnel 40 times during 1978 for training and safety programs;
5. Manage Liquid and Strength Operations and Liquid and Strength Maintenance within the limits of the 1978 Budget;
6. Process grievances to settlement at Step 1 level insofar as possible;
7. Train personnel in operation and maintenance of new plant facilities to assure smooth start-up.

METRO PLANT ADMINISTRATION (continued)

Performance Criteria:

1. The actual NPDES Permit effluent limitations compliance during 1978;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. All operational reports forwarded to the Commission by the 20th day of each following month during 1978;
4. 80% of employees given training in operation, safety procedures and human relations during 1978;
5. Expenditures in each of the Metro Plant's five programs met within budgeted amounts;
6. A maximum of 12 grievances to Step 2 procedure;
7. New plant facilities taken over on schedule and brought into effective operation.

Resources Required: \$ 786,562

Work Hours Required: 45,000

METRO PLANT LIQUID TREATMENT SYSTEMS - OPERATIONS (025)

Description: To accomplish continuous, safe operation of all liquid treatment systems so as to consistently produce effluent meeting required standards.

1. Attain 92% compliance with NPDES Permit effluent limitations during 1978;
2. Attain effluent quality performance equal to 75% frequency and 40% severity.



METRO PLANT LIQUID TREATMENT  
SYSTEMS - OPERATIONS (continued)

3. Produce effluent safe for body contact water recreation at minimum chlorine dosages;
4. Manage operations within the limits of the 1978 Budget;

Performance Criteria:

1. The actual NPDES Permit effluent limitations compliance during 1978;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Maintain adequate compliance with fecal coliform limits at all times at an average chlorine residual not exceeding 1.2 mg/l;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 3,252,753

Work Hours Required: 138,576

METRO PLANT SOLID/STRENGTH TREATMENT SYSTEM - OPERATIONS (026)

Description: To accomplish continuous, safe operation of all solid/strength treatment systems in order to provide efficient disposal within air quality standards.

1. Attain 92% compliance with NPDES Permit effluent limitations during 1978.
2. Remove and dispose of solids/strength waste in safe and efficient manner during 1978;

METRO PLANT SOLID/STRENGTH TREATMENT  
SYSTEM - OPERATIONS (continued)

3. Minimize use of electrical energy consistent with adequate aeration;
4. Minimize use of conditioning chemicals consistent with adequate dewatering;
5. Minimize use of fuel in incineration;
6. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. The actual NPDES Permit effluent limitations compliance during 1978;
2. Number of dry tons removed and disposed of during 1978;
3. Maintain adequate BOD removal at an air usage not exceeding 1200 cubic feet per pound BOD removed;
4. Condition primary sludge with a maximum of 2% ferric chloride and 6% lime in F&I #1, and mixed sludge with a maximum of 10% ferric chloride and 25% lime in F&I #2;
5. Incinerate sludge at an evaporative efficiency of 3100 BTU per pound water in F&I #1, and 2700 BTU per pound in F&I #2;
6. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 7,766,522

Work Hours Required: 123,865



METRO PLANT LIQUID TREATMENT SYSTEM -  
MAINTENANCE (027)

Description: To ensure continuous operation through effective preventive maintenance and other programs.

1. Attain 92% compliance with NPDES Permit effluent limitations during 1978;
2. Perform 51 scheduled monthly preventive maintenance tasks;
3. Respond to emergency work orders without delay.
4. Manage maintenance within the limits of the 1978 Budget.

Performance Criteria:

1. The actual NPDES Permit effluent limitations compliance during 1978;
2. Ninety percent (90%) of scheduled preventive maintenance tasks are completed each month;
3. Number of emergency work orders completed within 24 hours each month;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 848,592

Work Hours Required: 34,900

METRO PLANT SOLID/STRENGTH TREATMENT SYSTEM - MAINTENANCE (028)

Description: To ensure continuous operation through effective preventive maintenance and other programs.

METRO PLANT SOLID/STRENGTH TREATMENT SYSTEM - MAINTENANCE (continued)

1. Attain 92% compliance with NPDES Permit effluent limitations during 1978;
2. Perform 51 scheduled monthly preventive maintenance tasks;
3. Respond to emergency work orders without delay;
4. Manage maintenance within the limits of the 1978 Budget.

Performance Criteria:

1. The actual NPDES Permit effluent limitations compliance during 1978;
2. Ninety percent (90%) of scheduled preventive maintenance tasks are completed each month;
3. Number of emergency work orders completed within 24 hours each month;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 1,246,179

Work Hours Required: 62,950

SENECA PLANT ADMINISTRATION (029)

Description:

1. To manage the liquid and solids/strength operations and maintenance programs to comply with NPDES Standards with a frequency of 99% within the 1978 Program Budget;
2. To attain effluent quality performance equal to 93% frequency and 33% severity;
3. To manage employee relations and training, and perform general clerical, storekeeping and recordkeeping work;



#### SENECA PLANT ADMINISTRATION (cont.)

4. To spend time in creative thinking so as to improve the quality, and economy of plant operations;
5. To manage operations within the limits of the 1978 Budget.

##### Performance Criteria:

1. Actual compliance with NPDES Standards versus 99% compliance of the Key Objective, expenditures versus approved 1978 Program Budget;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Number of employees cross-trained; recordkeeping and clerical work up to date;
4. Benefits/improvements resulting from time spent on creative thinking;
5. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 151,190

Work Hours Required: 9,240

#### SENECA LIQUID TREATMENT SYSTEMS - OPERATION (030)

Description: To continuously operate Liquid Treatment System producing effluent always within standards.

1. To comply with NPDES Standards for the Seneca plant with a frequency of 99% within the budget;
2. To operate the secondary Treatment System with zero days downtime;

#### SENECA LIQUID TREATMENT SYSTEMS - OPERATION (continued)

3. To operate the liquid system such that air quality standards are met;
4. Manage operations within the limits of the 1978 Budget.

##### Performance Criteria:

1. Actual compliance with standard versus the 99% objective, actual expenditures versus budget;
2. Number of days of downtime of the secondary system;
3. Number of citations or complaints received versus 1977;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 538,004

Work Hours Required 23,268

#### SENECA SOLIDS/STRENGTH OPERATIONS (031)

Description: To collect and dispose of in an environmentally sound manner, the solid/strength waste from both the Seneca and Blue Lake plants.

1. To comply with NPDES Standards for the Seneca Plant with a frequency of 99%; conditioning, dewatering and disposing of 11,000 tons of sewage solids, within the budget;
2. To collect all sludge from Seneca and 90% of the sludge from Blue Lake;
3. To meet MPCA Air Quality Standards;
4. Manage operations within the limits of the 1978 Budget.

##### Performance Criteria:

1. Actual compliance with NPDES Standards versus 99% compliance of key objective; actual expenditures versus budget;



SENECA SOLIDS/STRENGTH OPERATIONS  
(continued)

2. Hours of unplanned downtime versus 1977 and percentage of Blue Lake sludge handled at Seneca;
3. Number of air quality violations cited or complaints versus 1977;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$1,081,014

Work Hours Required: 36,376

SENECA LIQUID TREATMENT SYSTEM -  
MAINTENANCE (032)

Description: To perform all maintenance on the basis required: preventive emergency or routine.

1. To comply with NPDES standards for the Seneca Plant with a frequency of 99% by performing liquid system maintenance activities;
2. To perform all routine and preventive maintenance as scheduled such that NPDES failures due to downtime are avoided;
3. React to all emergency maintenance requirements within one day of each occurrence;
4. Manage maintenance within the limits of the 1978 Budget.

Performance Criteria:

1. Actual compliance with NPDES standards versus the 99% objective;
2. How often did NPDES failures occur due to downtime of equipment compared to total possible NPDES failures;

SENECA LIQUID TREATMENT SYSTEM -  
MAINTENANCE (continued)

3. How often was emergency maintenance initiated within one day of occurrence compared with the total number of occurrences.
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 186,733

Work Hours Required: 7,966

SENECA SOLIDS/STRENGTH MAINTENANCE (033)

Description: To perform all maintenance on the basis required: preventive, emergency, or routine.

1. To comply with NPDES standards for the Seneca Plant with a frequency of 99% by performing Solids/Strength System Maintenance activities;
2. To perform all routine and preventive maintenance as scheduled such that NPDES failures due to downtime are avoided;
3. React to all emergency maintenance requirements within one day of each occurrence;
4. Manage maintenance within the limits of the 1978 Budget.

Performance Criteria:

1. Actual compliance with NPDES standards versus the 99% objective;
2. How often did NPDES failures occur due to downtime of equipment compared to total possible NPDES failures;
3. How often was emergency maintenance initiated within one day of occurrence compared with the total number of occurrences.
4. Quarterly report of percent compliance with 1978 Operating Budget.



SENECA SOLIDS/STRENGTH MAINTENANCE  
(continued)

Resources Required: \$ 122,893

Work Hours Required: 6,054

BLUE LAKE PLANT ADMINISTRATION (034)

Description:

1. To attain an annual average compliance with NPDES Permit effluent limitations of 99%;
2. To attain effluent quality performance equal to 93% frequency and 25% severity;
3. Schedule four meetings with the plant operators, four safety meetings with sludge truck drivers, and two general safety training sessions;
4. Comply with all OSHA and Safety Department recommendations within fifteen days after the recommendations are received;
5. Eliminate odors within one day after the odor was observed;
6. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year.
3. Number of meetings held with plant operators; number of safety meetings held with sludge truck drivers; number of general training sessions held;

BLUE LAKE PLANT ADMINISTRATION  
(continued)

4. Number of times odors were eliminated within one day as compared with total occurrences of odors observed;
5. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 73,932

Work Hours Required: 3,600

BLUE LAKE LIQUID PROCESS OPERATIONS  
(035)

Description: To continuously operate liquid process producing effluent always within standards.

1. Operate in such a manner that the plant effluent meets NPDES permit standards;
2. Operate the activated sludge process to produce an effluent from this phase of treatment of 25 mg/l of BOD and 30 mg/l of suspended solids 75% of the time;
3. Operate in such a manner to avoid odors 95% of the time;
4. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Actual number of NPDES permit failures as compared with the total number of failures possible;
2. Percent of time the activated sludge process with an effluent strength was not greater than 25 mg/l BOD and 30 mg/l suspended solids;
3. Number of days the plant was operated odor free as compared with total days elapsed;
4. Quarterly reports of percent compliance with 1978 Operating Budget.



BLUE LAKE LIQUID PROCESS-OPERATIONS  
(continued)

Resources Required: \$ 566,225

Work Hours Required: 21,055

BLUE LAKE LIQUID PROCESS -  
MAINTENANCE (036)

Description: To perform all maintenance on the basis required: preventive, emergency, routine.

1. To perform all routine and preventive maintenance as scheduled such that NPDES failures due to downtime are avoided;
2. React to all emergency maintenance requirements within one day of each occurrence;
3. Manage maintenance within the limits of the 1978 Budget.

Performance Criteria:

1. Number of NPDES failures due to downtime of equipment compared to total possible NPDES failures;
2. Number of times emergency maintenance was initiated within one day of occurrence compared with the total number of occurrences.
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 169,820

Work Hours Required 9,138

BLUE LAKE SOLIDS REMOVAL (037)

Description: To remove and transport solids.

1. Remove sludge from the plant on a continuous basis to avoid NPDES failures as a result of excess sludge inventory;

BLUE LAKE SOLIDS REMOVAL (continued)

2. Maintain sludge transports in good operating condition performing preventive maintenance inspections every 5000 miles and emergency maintenance within three days of the requirements;
3. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Number of days NPDES failures occurred as a result of excess sludge inventory as compared with total days elapsed;
2. Average mileage at which preventive maintenance inspections were performed; number of times a sludge transport was inoperative for a period of longer than three days before emergency maintenance was started;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 273,668

Work Hours Required: 15,221

ANOKA PLANT OPERATIONS (038)

Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 98%;
2. To attain effluent quality performance equal to 93% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Budget.



#### ANOKA PLANT OPERATIONS (continued)

##### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 194,822

Work Hours Required: 6,760

#### LONG LAKE PLANT OPERATIONS (039)

##### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 81%;
2. To attain effluent quality performance equal to 75% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Budget;

##### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 45,635

Work Hours Required: 2,214

#### MAPLE PLAIN PLANT OPERATIONS (040)

##### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 93%;
2. To attain effluent quality performance equal to 88% frequency and 40% severity;
3. Manage operations within the limits of the 1978 Budget.

##### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations and were budgeted manhours and costs adhered to;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 50,919

Work Hours Required: 2,574

#### SAVAGE PLANT OPERATIONS (041)

##### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 96%;
2. To attain effluent quality performance equal to 75% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Budget.



### SAVAGE PLANT OPERATIONS (continued)

#### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 71,792

Work Hours Required: 3,636

### COTTAGE GROVE PLANT OPERATIONS (042)

#### Description:

1. To achieve a minimum average compliance with NPDES Permit effluent limitations of 94%;
2. To attain effluent quality performance equal to 92% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Budget;

#### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 214,368

Work Hours Required: 9,140

### CHASKA PLANT OPERATIONS (043)

#### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 90%;
2. To attain effluent quality performance equal to 84% frequency and 50% severity;
3. Manage operations within the limits of the 1978 Budget.

#### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 175,724

Work Hours Required 6,990

### ORONO PLANT OPERATIONS (044)

#### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 88%;
2. To attain effluent quality performance equal to 92% frequency and 45% severity;
3. Manage operations within the limits of the 1978 Operating Budget.



### ORONO PLANT OPERATIONS (continued)

#### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 45,731

Work Hours Required: 2,574

### MEDINA PLANT OPERATIONS (045)

#### Description:

1. To operate so that there is no treated wastewater discharge to surface waters and to attain annual average effluent quality prior to seepage disposal of less than 25mg/1 BOD and 30 mg/1 TSS;
2. To attain effluent quality performance equal to 85% frequency and 33% severity based on 25 mg/1 BOD and 30 mg/1 TSS;
3. Manage operations within the limits of the 1978 Operating Budget.

#### Performance Criteria:

1. Annual average percentage of effluent quality prior to seepage disposal of less than 25 mg/1 BOD and 30 mg/1 TSS;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

### MEDINA PLANT OPERATIONS (continued)

Resources Required: \$ 18,176

Work Hours Required: 824

### STILLWATER PLANT OPERATIONS (046)

#### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 99%;
2. To attain effluent quality performance equal to 95% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Operating Budget.

#### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 261,568

Work Hours Required: 11,140

### APPLE VALLEY PLANT OPERATIONS (047)

#### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 95%;
2. To attain effluent quality performance equal to 90% frequency and 66% severity;
3. Manage operations within the limits of the 1978 Operating Budget.



APPLE VALLEY PLANT OPERATIONS  
(continued)

Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 214,105

Work Hours Required: 8,080

ROSEMOUNT PLANT ADMINISTRATION (048)

Description:

1. To supervise the operation and maintenance of the Rosemount Plant in order to achieve 97% compliance with NPDES standards;
2. To attain effluent quality performance equal to 93% frequency and 20% severity;
3. To correct or develop plans for correction to all safety hazards noted in MWCC Safety Inspection Reports within 5 working days of notice;
4. To meet shift operators as a group at least 10 times during the year;
5. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Percent NPDES compliance frequency attained;
2. The actual frequency and severity rates of effluent quality during the calendar year;

ROSEMOUNT PLANT ADMINISTRATION (continued)

3. Ratio of Inspection Reports answered within 5 working days to Inspection Reports filed;
4. Number of staff meetings held;
5. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 68,228

Work Hours Required: 3,600

ROSEMOUNT LIQUID PROCESS - OPERATIONS (049)

Description:

1. To maintain effluent quality at a level to insure at least 97% compliance with NPDES standards;
2. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Percent NPDES compliance frequency attained;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 314,802

Work Hours Required: 19,504

ROSEMOUNT LIQUID PROCESS - MAINTENANCE (050)

Description:

1. Maintain plant equipment to insure 97% compliance with NPDES standards;
2. Manage maintenance within the limits of the 1978 Operating Budget.



ROSEMOUNT LIQUID PROCESS -  
MAINTENANCE (continued)

Performance Criteria:

1. Percent NPDES compliance frequency attained;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 137,402

Work Hours Required: 4,860

ROSEMOUNT SOLIDS PROCESS -  
OPERATIONS (051)

Description:

1. Collect screenings, sludge and ammonia wastes and remove them to proper disposal sites. Waste handling shall be scheduled to allow plant process to achieve 97% NPDES compliance;
2. Manage operations within the limits of the 1978 Budget.

Performance Criteria:

1. Percent NPDES compliance frequency attained;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 64,004

Work Hours Required: 2,168

ROSEMOUNT SOLIDS PROCESS -  
MAINTENANCE (052)

Description:

1. Keep waste collection and disposal equipment in the condition necessary for orderly waste handling to insure against harmful effects of waste in plant operation and environmental application;

ROSEMOUNT SOLIDS PROCESS - MAINTENANCE  
(continued)

2. Manage maintenance within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Downtime of waste handling equipment;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 16,544

Work Hours Required: 540

FARMINGTON PLANT OPERATIONS (053)

Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 93%;
2. To attain effluent quality performance equal to 85% frequency and 60% severity;
3. Manage operations within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Annual average percentage compliance with NPDES permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 104,179

Work Hours Required: 4,796



## LAKEVILLE PLANT OPERATIONS (054)

### Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 93%;
2. To attain effluent quality performance equal to 85% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Budget.

### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 67,459

Work Hours Required: 2,836

## SO. ST. PAUL PLANT ADMINISTRATION (055)

### Description:

1. To manage the operations and maintenance programs to comply with NPDES standards during emergency discharges and minimize the effluent effect on the Metro Plant;
2. Manage operations within the limits of the 1978 Operating Budget.
3. To meet with employees and respond to their problems and grievances before they reach the first step level;

## SO. ST. PAUL PLANT ADMINISTRATION (continued)

4. To spend time in creative thinking to improve plant efficiency and minimize long range operation cost increases.

### Performance Criteria:

1. Meet NPDES permit requirements during emergency discharges; maintain plant efficiency as high as possible to minimize its effect on the Metro Plant operation;
2. Quarterly reports of percent compliance with 1978 Operating Budget;
3. Number of grievances solved/total number of employees grievances;
4. Number of manhours spent in creative thinking and results, if any.

Resources Required: \$ 21,494

Work Hours Required: 1,080

## SO. ST. PAUL PLANT OPERATIONS (056)

### Description:

1. To produce a plant effluent in compliance with NPDES permit requirements during emergency discharges and minimize its effect on the Metro Plant operation;
2. Manage operations within the limits of the 1978 Operating Budget.

### Performance Criteria:

1. Number of days all plant units were in operation; Number of days plant efficiency was maintained as high as possible;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 445,374

Work Hours Required: 19,670



SO. ST. PAUL PLANT MAINTENANCE (057)

Description:

1. Comply with NPDES standards during emergency discharges by performing treatment plant maintenance activities;
2. Manage maintenance within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Compliance with NPDES standards during emergency discharges;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 119,869

Work Hours Required: 4,920

SO. ST. PAUL PLANT SOLIDS REMOVAL (058)

Description:

1. To collect and remove paunch manure in a clean and efficient manner;
2. Manage operations within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Number of days solid material was continuously removed from the plant;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 67,223

Work Hours Required: 1,400

HASTINGS PLANT OPERATIONS (059)

Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 97%;
2. To attain effluent quality performance equal to 90% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 199,666

Work Hours Required: 9,140

BAYPORT PLANT OPERATIONS (060)

Description:

1. To achieve a minimum annual average compliance with NPDES Permit effluent limitations of 98%;
2. To attain effluent quality performance equal to 92% frequency and 33% severity;
3. Manage operations within the limits of the 1978 Operating Budget.



## BAYPORT PLANT OPERATIONS (continued)

### Performance Criteria:

1. Annual average percentage compliance with NPDES Permit effluent limitations;
2. The actual frequency and severity rates of effluent quality during the calendar year;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 135,736

Work Hours Required: 4,020

## MANAGEMENT INFORMATION SYSTEM (061)

### Description:

1. To plan, construct, and place into operation the Management Information System for NPDES reporting by August 1, 1978;
2. To develop a detailed plan including cost estimates and time deadlines for the orderly addition of financial programs to the Management Information System Data Base by December 1, 1978;
3. Manage within the limits of the 1978 Operations Budget.

### Performance Criteria:

1. NPDES programs to be installed and fully operational on time;
2. Complete plan and adopt work schedule on time;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 77,900

Work Hours Required: 3,300

## MAJOR EMERGENCY REPAIRS (062)

### Description:

1. Respond to and provide major emergency repairs of an unforeseeable nature in excess of \$5,000 for operational facilities and interceptor systems at a total cost of \$300,000.
2. Manage within the limits of the 1978 Operating Budget.

### Performance Criteria:

1. Complete major emergency repairs in an expeditious manner;
2. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 300,000

Work Hours Required: - 0 -

## INTERCEPTOR SYSTEM ADMINISTRATION (063)

### Description:

1. To direct and report in a timely manner, the financial and performance status of 1978 Interceptor Programs;
2. To coordinate staffing and start up of new facilities and programs;
3. To develop and review plans for new facilities and programs.
4. To manage within the limits of the 1978 Operating Budget.

### Performance Criteria:

1. Forward status reports by the 15th of each month;
2. Start new facilities on schedule;
3. Review Engineering Dept. plans on schedule; detect program deficiencies and include them in the 1979 Budget on schedule.
4. Quarterly report of percent compliance with 1978 Operating Budget.



INTERCEPTOR SYSTEM ADMINISTRATION  
(continued)

Resources Required: \$ 130,604

Work Hours Required: 9,200

INTERCEPTOR SYSTEM MAINTENANCE  
(064)

Description:

1. To review costs and monitor performance of Interceptor Maintenance and Rental Agreements;
2. To inspect and repair as needed 94 miles of gravity sewer;
3. Manage within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Review maintenance and rental agreements for cost and performance;
2. Complete inspections and prepare reports on time;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 513,898

Work Hours Required: 5,440

LIFT STATIONS (065)

Description:

1. To continuously keep in good operating order 60 lift stations by means of a first and second echelon maintenance program;
2. To continuously keep in good working order, the alarm system for 60 lift stations and 13 treatment plants;

LIFT STATIONS (continued)

3. To establish a preventive maintenance program for five newly acquired lift stations and sixteen treatment plants.

Performance Criteria:

1. Keep all stations in good operating condition and adhere to preventive maintenance schedules;
2. Keep alarm system continuously operational;
3. Develop and carry out schedules;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 1,115,649

Work Hours Required: 44,540

METERING STATIONS (066)

Description:

1. To keep 134 flow meters in good working order through a preventive maintenance and quarterly calibration schedule;
2. To prepare and forward to Engineering Department monthly meter flow reports by the 20th of the following month;
3. To keep in good working order all metering system computer components by means of a complete preventive maintenance program.
4. Manage within the limits of the 1978 Operating Budget.

Performance Criteria:

1. Keep maintenance and calibration schedules up to date;
2. Prepare and submit flow reports on time;



### METERING STATIONS (continued)

3. Keep computer maintenance schedule up to date;
4. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 365,468

Work Hours Required: 19,390

### REGULATOR SYSTEM (067)

#### Description:

1. To keep in good working order 17 instrumented and 120 noninstrumented combined sewer regulator installations through a complete inspection and preventive maintenance program;
2. To prepare and submit to Engineering Department monthly NPDES overflow summaries and sampling results;
3. Manage within the limits of the 1978 Operating Budget.

#### Performance Criteria:

1. Keep maintenance schedule current;
2. Submit reports on time;
3. Quarterly report of percent compliance with 1978 Operating Budget.

Resources Required: \$ 205,498

Work Hours Required: 12,860

### LABOR RELATIONS (068)

#### Description:

1. To review present labor agreements with management's proposals for each of the labor agreements to be negotiated;
2. To negotiate for 1979 seven labor agreements which expire in 1978 so that the agreement can be approved prior to the contract termination date and using a four person management negotiating committee;
3. Hold labor relations meetings with supervisory personnel for the purpose of assisting in understanding and administering the labor agreements;
4. Participate in formal and informal grievance proceedings which includes insuring that grievances are expedited through the procedure as outlined in the agreement;
5. Hold labor/management meetings with union representatives, when agreed upon, to create a positive labor relations atmosphere;
6. To gain additional knowledge of methods and techniques utilized in the labor relations field through dialogue and workshops conducted at the National Public Employers Labor Relations meetings and seminars and to remain current as to wage, salary and other labor matters by reading journals and books on the overall subject.

#### Performance Criteria:

1. Management should submit a written proposal to each union prior to beginning the negotiation;
2. Complete labor agreements with all unions within 120 days from beginning of negotiations;



### LABOR RELATIONS (continued)

3. Schedule and hold three meetings with supervisory staff to discuss labor relations and contract administration;
4. Handle all grievances within the time constraints outlined in the labor agreement;
5. If agreed upon, hold at least three meetings with union representatives in a non-negotiating atmosphere to discuss labor/management problems;
6. Attain a committee membership or office in national organization and read at least two books on labor management relations.

Resources Required: \$ 26,077

Work Hours Required: 915

### PERSONNEL SERVICES (069)

#### Description:

1. To recruit, interview and hire employees within a four week period in accordance with rules and regulations set forth by the Equal Employment Opportunity Commission, the Minnesota Department of Human Rights, the Metropolitan Waste Control Commission Affirmative Action Program and the Metropolitan Waste Control Commission Personnel Placement Procedures Manual;
2. Conduct exit interviews with all terminating employees;
3. Maintain job applicant files by classification and send acknowledgement letter for all applications, update and maintain seniority, address and other personnel lists on a continuing basis to insure availability of current and accurate information.

### PERSONNEL SERVICES (continued)

4. Continually update and review all personnel files and distribute to supervisors evaluation and probationary forms insuring timely completion;
5. Maintain and update employment assistance resource list and add two organizations which will provide data in the area of professionals within protected group classes;
6. Through attendance at seminars and by reading professional journals and publications, investigate the implementation of innovative personnel policy guidelines.
7. Review Metropolitan Waste Control Commission job descriptions insuring compatibility with departmental needs and actual performance.

#### Performance Criteria:

1. In accordance with rules and regulations of agencies mentioned, insure that all positions are filled within four weeks from date of closing of job posting;
2. Conduct separation interviews with 90% of all terminating employees;
3. Crosscheck number of changes to seniority list to total number of hires and promotions on a monthly basis;
4. Conduct a monthly review of personnel folders of probationary employees and insure inclusion of supervisors evaluation upon completion of six months probationary period for all employees.
5. Contact at least two new employment assistant resources dealing with professional members of protected groups;
6. The introduction of two changes in personnel procedures;
7. Review and update, if needed, job descriptions.



PERSONNEL SERVICES (continued)

Resources Required: \$ 63,711

Work Hours Required: 4,720

DUPLICATING & FILING SERVICES (070)

Description:

1. To provide paper copying reproduction services on a daily basis for central office functions;
2. Maintain central file and paid invoice file systems;
3. To provide regular mailing services for Central Office.

Performance Criteria:

1. 90% of copy requests to be filled the day requested;
2. File paid invoices within two days; and remove and file all 1976 paid invoices in permanent storage space by 3-31-78;
3. Post all mail on the same day received.

Resources Required: \$ 66,823

Work Hours Required: 2,800

EMPLOYEE BENEFITS ADMINISTRATION (071)

Description:

1. Give complete explanation of fringe benefit program to new employees and complete necessary forms;

EMPLOYEE BENEFITS ADMINISTRATION (continued)

2. At termination advise employees of conversion provisions available on the various insurance policies;
3. Answer questions on policy content and assist with claim problems and referrals for health problems;
4. Maintain life and health insurance files for daily reference and assist with changes in coverage on a day to day basis;
5. Coordinate with Comptroller as to the proper premium payment on all insurance policies.

Performance Criteria:

1. Every employee should be signed up for fringe benefits within one day of beginning their job;
2. Close insurance files on a terminating employee within seven day period;
3. 80% of medical claim questions should be answered without referring to insurance consultant;
4. Changes are to be made within one day so files remain updated at all times;
5. Hold meetings with representatives of Comptroller's department at least monthly to verify that proper premium payments are being made.

Resources Required: \$ 9,890

Work Hours Required: 1,280



## PROPERTY & CASUALTY INSURANCE (072)

### Description:

1. To process all casualty and property damage claims so that each claim is processed expeditiously and to continually review outstanding claims to insure completion;
2. Administering the Worker's Compensation program, processing claims on a timely basis and reviewing claims continually to insure proper servicing by the insurance carrier;
3. Maintain ongoing update on all property and casualty risks to assure that each is properly covered and that premiums reflect the insurance in force.

### Performance Criteria:

1. 90% of all property damage claims should receive initial acknowledgement within three days;
2. Process all of the worker's compensation claims in two days of notification to the Business Services Dept.;
3. Report all of new insurable risks to insurance company within 15 days.

Resources Required: \$ 604,369

Work Hours Required: 1,470

## PURCHASING (073)

### Description:

1. To provide a centralized purchasing system with a proper set of checks and balances on orders;

## PURCHASING (continued)

2. Assure that the best prices available are being received for the quantities ordered;
3. Develop and implement an effective follow-up on purchase orders outstanding after a period of four weeks from date of order;
4. To review and update current bidding procedure and administer bidding procedures;
5. Establish a procedure that will seek out and help minority vendors to participate in all aspects of bid and non-bid purchasing programs;
6. Coordinate with Comptroller on all purchases against departmental budget allocations;
7. Update and review purchasing library, job descriptions and read current purchasing publications for new ideas and techniques.

### PERFORMANCE CRITERIA:

1. Process 80% of purchase orders completely within three days from date requisition is received;
2. Prepare price comparison recording system by 12-31-78;
3. Develop written follow-up program by 6-1-78;
4. Complete processing of contracts on bid items within five days from date of Commission approval;
5. Utilize two new minority vendors on a regular basis by 12-31-78;
6. Verify all purchase orders as to budget funding prior to purchase;
7. Develop one new technique in the purchasing sequence as a result of seminars or reading material.



PURCHASING (continued)

Resources Required: \$ 82,974

Work Hours Required: 8,500

BUSINESS SERVICES ADMINISTRATION  
(074)

Description:

1. Provide overall central office management to include security, mail distribution, telephone communications, central file system and office space allocations and furnishings;
2. Attend management staff meetings and unscheduled meetings with the Chief Administrator to discuss various Business Services Dept. matters;
3. Conduct monthly department meetings with staff to review Commission activities and allow staff members to discuss problem areas; Evaluate and consult individually with staff on specific areas of concern.
4. Oversee and supervise purchasing activities;
5. Prepare and present business items at committee meetings as they relate to labor and personnel matters;
6. Develop the 1979 Business Services Department Operating Budget.

Performance Criteria:

1. Hold at least one meeting with all central office secretaries to review the mail distribution and central file system;
2. Attend all staff meetings and place at least six items on the agenda throughout the year;

BUSINESS SERVICES ADMINISTRATION  
(continued)

3. Conduct 12 department staff meetings;
4. Hold formal meetings with the Purchasing Agent at least six times during the year to discuss and upgrade purchasing techniques;
5. Prepare business items in accordance with the preset time frame;
6. Meet budget calendar.

Resources Required: \$ 87,428

Work Hours Required: 3,000

EMPLOYEE ASSISTANCE PROGRAM (075)

Description:

1. Continue the training program for supervisors in identifying job performance problems of employees and referral of employees to diagnostic and referral counselors;
2. Continue relationship with a diagnostic and referral service which accepts supervisors referrals and self-referrals made by employees and their families, makes initial diagnosis and refers employee to the appropriate mode of care;
3. Establish an advisory committee to formulate recommendations concerning the operational policies of the Employee Assistance Program with special emphasis on chemical dependency.

Performance Criteria:

1. Hold training sessions for supervisory personnel;
2. Develop reporting system to determine usage of diagnostic and referral service;



EMPLOYEE ASSISTANT PROGRAM  
(continued)

3. Advisory committee should schedule bi-monthly meetings with representative of diagnostic and referral service.

Resources Required: \$ 4,432

Work Hours Required: 140

BILLINGS & COLLECTIONS (076)

Description:

1. Conduct Service Availability Charge (SAC) audits of 60 communities;
2. Collect and record SAC monies for 100 communities to be received by the end of the month following the month for which remitted;
3. Bill, collect and record Sewer Service Charge (SSC) monies for 100 communities to be received by the end of the month following the month for which remitted;
4. Record and post to a subsidiary ledger all monies received from State and Federal grants and reconcile balances with the grants administration section by the 5th day after the end of the month;
5. Record all investment earnings and redeem all certificates of deposit on the date due;
6. Deposit all monies on the day received;
7. Bill, collect and record Industrial Strength Charge (ISC) monies for industrial firms to be received within 30 days from date of billing.

BILLINGS AND COLLECTIONS (continued)

Performance Criteria:

1. Number of SAC audits not made by the end of 1978;
2. Number of SAC monies not received by the end of the month;
3. Number of SSC monies not received by the end of the month;
4. Number of months government grants not reconciled by the 5th day of the month;
5. Number of months certificates of deposits not redeemed when due;
6. Number of days deposits not made on same day as monies received;
7. Number of ISC monies not received within 30 days of billing;
8. Objectives met, manhours complied with and budget adhered to.

Resources Required: \$ 25,848

Work Hours Required: 2,980

DISBURSEMENTS (077)

Description:

1. Remit vendor's invoices and utility bills within 30 days;
2. Remit all discount invoices within a 10 day period;
3. Verify and prepare all disbursements to be approved by the Commission and forward these items to the Chief Administrator by noon on the 1st Wednesday of each month.

Performance Criteria:

1. Number of past due reminders received to total taken;
2. Number of discounts missed to total taken;



### DISBURSEMENTS (Continued)

3. Number of times disbursement list for Commission not forwarded to Chief Administrator by noon on first Wednesday of Month;
4. Objectives met, manhours complied with and budget adhered to.

Resources Required: \$ 58,300

Work Hours Required: 7,780

### PAYROLL (078)

#### Description:

1. Furnish data to compute payroll checks 3 days before payroll day;
2. Remit deductions taken on payroll checks to proper entities within 10 days after payroll day;
3. Balance all payroll general ledger accounts by the end of the month;
4. Generate quarterly sick leave and vacation report within 30 days after end of quarter.

#### Performance Criteria:

1. Number of times payroll data not forwarded 3 days before payroll date;
2. Number of remittances for deductions not forwarded within 10 days after payroll;
3. Number of accounts not balanced by 20th of the month;
4. Number of times sick leave and vacation reports not forwarded within 30 days;
5. Objectives met, manhours complied with and budget adhered to.

### PAYROLL (continued)

Resources Required: \$ 66,237

Work Hours Required: 6,580

### ACCOUNTING (079)

#### Description:

1. Maintain a Commission-wide fixed asset system satisfactory to the State Auditor;
2. Forward data to the computer center in a timely manner so that reports are forwarded to the Dept. Directors 7 days before the Commission meeting;
3. Properly account for all transactions so that the State Auditor's opinion states that the balance sheet and other financial statements present fairly the financial position of the MWCC.

#### Performance Criteria:

1. Fixed asset system maintained to satisfaction of State Auditor;
2. Number of months financial report not forwarded 7 days prior to Commission meeting;
3. Did State Auditor give the opinion that the reports presented fairly the financial position of MWCC;
4. Objectives met, manhours complied with and budget adhered to.

Resources Required: \$ 76,207

Work Hours Required: 2,580



## COMPTROLLER ADMINISTRATION (080)

### Description:

1. To improve present computer systems and applications in order to provide needed management information through visitation at both local government and industrial computer installations and by attendance at the national Municipal Finance Officers Association Conference and at appropriate seminars where information and displays of the latest management information systems are available;
2. Prepare cost effectiveness studies within 30 days of request;
3. File all Commission items and documents within 3 days of receipt;
4. Invest Federal and State grants on the same day received;
5. Prepare a budget calendar and perform all budget related functions within that calendar;
6. Manage and evaluate personnel annually and conduct 12 staff meetings;
7. Devote time to creative thinking as to how Commission activities and procedures can be improved;

### Performance Criteria:

1. Improve computer systems in order to provide needed management information by 12-31-78;
2. Cost effectiveness studies prepared within 30 days of request;
3. Commission items filed within 3 days of receipt;

## COMPTROLLER ADMINISTRATION (continued)

4. Investments made on the same day of receipt of Federal and State grants;
5. Budget prepared in accordance with the budget calendar;
6. Number of annual personnel evaluations made to number of personnel and number of staff meetings held;
7. 120 hours spent in creative thinking as to how to improve activities and procedures of Commission.

Resources Required: \$ 78,672

Work Hours Required: 5,280

## GRANTS ADMINISTRATION (081)

### Description:

1. Administration of the Commission's Construction Grants Program in accordance with the Federal Water Pollution Control Act Amendments of 1972 and other pertinent laws, rules and regulations.

### Performance Criteria:

1. Prepare applications for the award of federal and state construction grants for 1978;
2. Maintain liaison between the Commission and EPA/MPCA throughout the duration of each grant;
3. Monitor construction contracts to ensure contractor compliance with EEO and Fair Labor Standards of the federal government;
4. Assist other Departments in the preparation of grant applications and the coordination of grant information;
5. Monitor other state and federal programs for possible financial assistance to the Commission.



GRANTS ADMINISTRATION (continued)

Resources Required: \$ 90,129

Work Hours Required: 7,850

DEBT SERVICE METRO COUNCIL (082)

Description: To provide funds for the Metropolitan Council retirement of debt service based on anticipated needs.

Performance Criteria:

Meet October 1, 1978 debt service payment schedule.

Resources Required: \$11,992,283

DEBT SERVICE LOCAL GOVERNMENT (083)

Description: To provide funds for debt service payments bonded indebtedness assumed at time of treatment plant and interceptor facilities acquisition.

Performance Criteria:

Grant all credits for debt service assumed by Commission by December 31, 1978.

Resources Required: \$ 2,128,067

ACQUISITION COSTS (084)

Description: To provide funds in order to reimburse local governments for treatment works and/or interceptors acquired by Commission.

Performance Criteria:

Grant all credits for acquisition costs assumed by Commission by December 31, 1978.

Resources Required: \$ 4,068,861

LAND DISPOSAL FACILITY (085)

Description: To ensure and to manage disposal of residual solids from all Commission treated facilities in an effective, economical, practical and environmentally sound manner.

1. To dispose of all excess sludge from the Metro Plant following the beginning of the land disposal facility;
2. To dispose of all screenings and grit upon beginning of operational responsibility;
4. To manage land disposal facility operations to comply with all applicable standards and permits;
5. To manage operations within the operating budget.

Performance Criteria:

1. The percentage of excess sludge disposed of from the Metro Plant without affecting plant operation;
2. The percentage of screenings and grit disposed of without affecting plant operation;
3. The percentage of incinerator ash disposed of without affecting plant operation;
4. The number of instances in which facilities operation does not comply with applicable standards and permits;
5. Actual expenditures compared to operating budget.

Resources Required: \$ 600,000

Work Hours Required: 12,600



## Summary of Debt Service

	<u>Proposed 1978</u>	<u>Budget 1977</u>	<u>Actual 1976</u>
Treatment Works	\$10,174,848	\$ 9,244,425	\$ 8,503,369
Interceptor System			
Service Areas:			
1. Minneapolis - Saint Paul	1,488,797	1,534,184	1,723,661
2. North Suburban	635,279	714,695	827,021
3. Anoka	52,674	16,064	21,359
4. Southwest	929,781	1,057,329	1,093,735
5. Bloomington-Eagan-Burnsville	565,055	280,734	360,921
6. Southeast	<u>273,916</u>	<u>292,661</u>	<u>317,979</u>
	<u>\$14,120,350</u>	<u>\$13,140,092</u>	<u>\$12,848,045</u>



# METROPOLITAN COUNCIL SEWER BOND FUND DEBT SERVICE

Estimated Fund Balance - October 1, 1977	\$ 15,139.698
Less - Debt Service Payments November 1, 1977 through October 1, 1978	12,392,452
Add - Interest to be earned November 1, 1977 through October 1, 1978	<u>510,000</u>
Balance	3,257,246
Required Balance - October 1, 1978	<u>15,249,529</u>
Program Budget Requirement	\$ <u>11,992,283</u>

## Apportioned to:

<u>Cost Pool</u>	<u>Capital Improvements</u>	<u>% Of Debt Service</u>	<u>Amount</u>
Treatment Works	\$316,458,498	78.5	\$ 9,413,942
SA 1	31,525,489	7.8	935,398
SA 2	10,803,310	2.7	323,792
SA 3	1,607,999	.4	47,969
SA 4	27,465,223	6.8	815,475
SA 5	6,939,035	1.7	203,869
SA 6	<u>8,331,877</u>	<u>2.1</u>	<u>251,838</u>
	<u>\$403,131,431</u>	<u>100.0%</u>	<u>\$11,992,283</u>



Local Government Debt Service

Service Area 1 - Minneapolis - St. Paul

	<u>Treatment Works</u>	<u>Interceptors</u>	<u>Total</u>
Birchwood	\$	\$ 769.00	
Crystal		9,724.00	
Dellwood		5,949.60	
Forest Lake Township	2,759.00		
Forest Lake	1,745.02		
Golden Valley		17,851.89	
Landfall		1,093.00	
Little Canada		93,504.62	
Mahtomedi		9,293.04	
Oakdale		64,838.00	
Plymouth		8,799.00	
Roseville		121,697.00	
St. Paul		101,040.68	
Shoreview*		66,783.45	
Vadnais Heights		3,227.99	
White Bear Lake		10,240.00	
White Bear Township		8,033.00	
Willernie		4,064.00	
Woodbury		26,491.00	
		<u>553,399.27</u>	
TOTAL	\$ <u>4,504.02</u>	\$	\$ <u>557,903.29</u>

Service Area 2 - North Suburban

Shoreview*		40,931.79	
Brooklyn Park		155,278.00	
Circle Pines		3,502.59	
Coon Rapids		61,950.00	
New Brighton		46,475.00	
Spring Lake Park		3,349.00	
		<u>311,486.38</u>	
TOTAL	\$ <u>- 0 -</u>	\$	\$ <u>311,486.38</u>

\*Located in 2 Service Areas



### Service Area 3 - Anoka

	<u>Treatment Works</u>	<u>Interceptors</u>	<u>Total</u>
Anoka	\$ 43,522.00	\$	
Champlin		4,704.97	
TOTAL	\$ 43,522.00	\$ 4,704.97	\$ 48,226.97

### Service Area 4 - Southwest

Chanhassen	\$ 6,462.00	\$	
Chaska	30,450.00		
Deephaven		25,256.32	
Excelsior	7,535.00		
Greenwood		3,570.36	
Long Lake	10,712.00		
Maple Plain	15,803.00		
Medina	5,719.00		
Mnetrista		24,176.33	
Mound	25,943.47	24,622.27	
Orono	16,094.06	29,585.00	
Prior Lake	8,890.50		
Savage	9,504.00		
Shakopee	19,325.00		
Shorewood		703.48	
Spring Park	2,996.76	2,879.24	
Tonka Bay	6,245.12	3,512.88	
Victoria	6,813.83		
TOTAL	\$172,493.74	\$ 114,305.88	\$286,799.62

### Service Area 5 - Bloomington-Eagan-Burnsville

Bloomington	\$	\$ 76,863.61	
Burnsville	24,985.00	227,100.00	
Eagan	4,502.78	57,222.00	
TOTAL	\$ 29,487.78	\$ 361,185.61	\$390,673.39



Service Area 6 - Southeast

	<u>Treatment Works</u>	<u>Interceptors</u>	<u>Total</u>
Apple Valley	\$ 12,966.65	\$ 22,078.35	
Cottage Grove	36,560.78		
Farmington	16,940.00		
Hastings	46,167.00		
Inver Grove Heights	14,679.00		
Lakeville	6,997.00		
Newport	5,643.00		
Oak Park Heights	13,006.00		
St. Paul Park	11,278.62		
South St. Paul	276,970.50		
Stillwater	69,690.00		
TOTAL	<u>\$510,898.55</u>	<u>\$ 22,078.35</u>	<u>\$532,976.90</u>
GRAND TOTAL	<u>\$760,906.09</u>	<u>\$1,367,160.46</u>	<u>\$2,128,066.55</u>



## Summary of Acquisition Costs

Treatment Works	\$ 579,985
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Interceptor System

Service Areas:

1. Minneapolis - St. Paul	3,028,472
2. North Suburban	137,070
3. Anoka	489
4. Southwest	74,599
5. Bloomington-Eagan-Burnsville	244,316
6. Southeast	<u>3,930</u>

TOTAL	\$ <u>4,068,861</u>
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Local Government Current Value Credit

Anoka	\$ 15,901	Excelsior	\$ 3,521
Apple Valley	771	Falcon Heights	2,204
Arden Hills	11,924	Farmington	10,999
Bayport	7,673	Forest Lake	8,807
Birchwood	257	Forest Lake Township	53
Blaine	7,352	Fridley	26,965
Bloomington	194,702	Golden Valley	131,187
Brooklyn Center	14,581	Greenwood	1,198
Brooklyn Park	60,157	Hastings	14,284
Burnsville	60,605	Hilltop	42
Champlin	1,025	Hopkins	27,454
Chanhassen	1,858	Inver Grove Heights	1,435
Chaska	7,075	Lakeville	8,255
Circle Pines	1,006	Landfall	354
Columbia Heights	22,272	Lauderdale	1,222
Coon Rapids	25,209	Lexington	586
Cottage Grove	5,537	Little Canada	2,345
Crystal	42,343	Long Lake	1,028
Deephaven	11,620	Mahtomedi	2,870
Eagan	28,747	Maple Plain	6,818
Eden Prairie	3,494	Maplewood	23,902
Edina	61,020	Medicine Lake	1,408



Local Government Current Value Credit (continued)

Medina	\$ 38	St. Louis Park	\$ 78,231
Mendota Heights	3,926	St. Paul	1,082,843
Minneapolis	1,426,356	St. Paul Park	7,394
Minnetonka	16,639	Savage	1,872
Minnetrista	543	Shakopee	9,064
Mound	10,344	Shoreview	22,930
Moundsview	3,561	Shorewood	594
New Brighton	2,192	South St. Paul	44,632
New Hope	46,523	Spring Park	2,926
Newport	595	Spring Lake Park	3,183
North St. Paul	30,968	Stillwater	10,511
Oakdale	1,150	Tonka Bay	1,684
Oak Park Heights	39	Vadnais Heights	195
Orono	33,988	Victoria	2,535
Osseo	14,928	Waconia	15,245
Plymouth	217	Wayzata	22,674
Prior Lake	3,001	West St. Paul	7,376
Richfield	133,042	White Bear Lake	41,047
Robbinsdale	5,150	White Bear Township	2,173
Rosemount	4,372	Willernie	1,053
Roseville	99,636	Woodbury	<u>2,647</u>
St. Anthony	8,778		
		TOTAL	<u>\$4,068,861</u>



## Allocation of Current Use Costs

<u>Local Government</u>	<u>Est. Flow (MG)</u>	<u>Treatment Works</u>	<u>Service Area</u>	<u>Total</u>
Andover	40	14,024.63	3,902.96	17,927.59
Anoka	585	205,353.80	27,286.93	232,640.73
Apple Valley	520	182,511.86	24,763.62	207,275.48
Arden Hills	310	108,810.67	23,574.09	132,384.76
Bayport	200	70,187.04	- 0 -	70,187.04
Birchwood	26	9,136.78	1,974.57	11,111.35
Blaine	710	249,216.70	69,278.98	318,495.68
Bloomington	2,640	926,647.83	315,172.54	1,241,820.37
Brooklyn Center	1,180	414,189.79	89,732.77	503,922.56
Brooklyn Park	1,000	350,999.09	97,576.43	448,575.52
Burnsville	940	329,946.18	112,220.30	442,166.48
Centerville	4	1,405.66	390.40	1,796.06
Champlin	77	27,026.96	3,591.61	30,618.57
Chanhassen	170	59,676.55	33,366.25	93,042.80
Chaska	345	121,110.18	- 0 -	121,110.18
Circle Pines	98	34,374.72	9,562.45	43,937.17
Columbia Heights	740	259,759.14	56,275.33	316,034.47
Coon Rapids	900	315,889.60	87,818.53	403,708.13
Cottage Grove	360	126,381.39	- 0 -	126,381.39
Crystal	845	296,593.76	64,257.63	360,851.39
Deephaven	125	43,862.90	24,534.57	68,397.47
Eagan	700	245,702.56	83,568.30	329,270.86
Eden Prairie	350	122,867.26	68,695.47	191,562.73
Edina	2,560	898,566.62	194,668.71	1,093,235.33
Empire Township	11	3,865.56	- 0 -	3,865.56
Excelsior	110	38,623.64	21,590.12	60,213.76
Falcon Heights	425	149,159.44	32,317.88	181,477.32
Farmington	160	56,162.41	- 0 -	56,162.41
Forest Lake	220	77,215.33	16,731.35	93,946.68
Forest Lake Township	98	34,406.66	7,451.91	41,858.57
Fridley	1,280	449,299.28	111,010.16	560,309.44
Gem Lake	23	8,050.59	1,748.76	9,799.35
Golden Valley	1,260	442,270.99	95,814.04	538,085.03
Greenwood	23	8,082.54	4,514.66	12,597.20
Hastings	500	175,515.51	- 0 -	175,515.51
Hilltop	22	7,731.12	1,675.24	9,406.36



<u>Local Government</u>	<u>Est. Flow (MG)</u>	<u>Treatment Works</u>	<u>Service Area</u>	<u>Total</u>
Hopkins	750	263,241.33	57,992.57	321,233.90
Hugo	31	10,893.85	2,357.93	13,251.78
Inver Grove Heights	330	115,807.02	13,953.98	129,761.00
Lake Elmo	1	351.41	78.77	430.18
Laketown Township	13	4,568.39	2,550.85	7,119.24
Lakeville	355	124,624.32	8,879.86	133,504.18
Landfall	22	7,731.12	1,669.99	9,401.11
Lauderdale	52	18,241.60	3,954.39	22,195.99
Lexington	42	14,727.46	4,098.41	18,825.87
Lilydale	14	4,919.80	1,066.06	5,985.86
Lino Lakes	8	2,779.37	780.28	3,559.65
Little Canada	230	80,729.47	17,492.83	98,222.30
Long Lake	62	21,755.75	- 0 -	21,755.75
Mahtomedi	112	39,326.46	8,512.72	47,839.18
Maple Grove	360	126,349.45	35,127.10	161,476.55
Maple Plain	52	18,273.55	- 0 -	18,273.55
Maplewood	1,510	529,996.81	114,829.80	644,826.61
Medicine Lake	8	2,811.32	609.18	3,420.50
Medina	33	11,596.67	- 0 -	11,596.67
Mendota Heights	306	107,405.02	23,269.49	130,674.51
Minneapolis	24,500	8,599,621.52	1,863,077.59	10,462,699.11
Minnetonka	1,260	442,271.00	247,304.52	689,575.52
Minnetonka Beach	18	6,325.46	3,533.17	9,858.63
Minnetrista	43	15,078.88	8,439.75	23,518.63
Mound	420	147,434.31	82,434.56	229,868.87
Moundsvew	400	140,406.02	39,030.58	179,436.60
New Brighton	690	242,188.42	67,327.50	309,515.92
New Hope	890	312,407.40	67,676.38	380,083.78
Newport	86	30,189.69	3,636.57	33,826.26
North Oaks	11	3,833.61	840.24	4,673.85
North St. Paul	425	149,191.39	32,317.87	181,509.26
Oakdale	430	150,916.51	32,695.99	183,612.50
Oak Park Heights	85	29,838.28	3,594.17	33,432.45
Orono	140	49,166.07	27,479.03	76,645.10
Osseo	114	39,997.35	11,124.04	51,121.39
Plymouth	1,180	414,189.79	89,732.77	503,922.56
Prior Lake	200	70,187.04	39,254.31	109,441.35
Richfield	1,080	379,112.24	82,128.57	461,240.81
Robbinsdale	520	182,511.86	39,543.97	222,055.83



<u>Local Government</u>	<u>Est. Flow (MG)</u>	<u>Treatment Works</u>	<u>Service Area</u>	<u>Total</u>
Rosemount	100	35,109.49	4,228.47	39,337.96
Roseville	1,650	579,162.88	125,469.39	704,632.27
St. Anthony	380	133,377.74	28,899.13	162,276.87
St. Bonifacius	20	6,996.34	3,925.93	10,922.27
St. Louis Park	2,300	807,294.72	174,901.97	982,196.69
St. Paul	21,800	7,651,920.78	1,657,758.79	9,309,679.57
St. Paul Park	134	47,057.58	5,666.21	52,723.79
Savage	144	50,539.78	- 0 -	50,539.78
Shakopee	730	256,213.05	143,279.84	399,492.89
Shoreview	560	196,568.43	43,894.16	240,462.59
Shorewood	158	55,459.58	31,011.36	86,470.94
South St. Paul	3,300	1,158,325.76	139,540.19	1,297,865.95
Spring Park	80	28,081.21	15,701.22	43,782.43
Spring Lake Park	168	58,973.72	16,393.13	75,366.85
Stillwater	720	252,730.85	- 0 -	252,730.85
Stillwater Township	2	702.83	- 0 -	702.83
Tonka Bay	60	21,052.92	11,776.13	32,829.05
Vadnais Heights	126	44,246.26	9,584.03	53,830.29
Victoria	27	9,488.19	5,299.34	14,787.53
Waconia	110	38,623.63	21,590.12	60,213.75
Wayzata	220	77,215.33	43,180.25	120,395.58
West St. Paul	766	268,863.96	58,249.89	327,113.85
White Bear Lake	680	238,674.27	51,711.75	290,386.02
White Bear Township	95	33,352.43	7,220.84	40,573.27
Willernie	15	5,271.21	1,139.58	6,410.79
Woodbury	330	115,838.97	25,097.03	140,936.00
 TOTAL	 <u>91,015</u>	 <u>\$31,946,763.66</u>	 <u>\$7,348,981.10</u>	 <u>\$39,295,744.76</u>



## Construction Fund – Revenues & Expenditures

FUND BALANCE - April 30, 1977

Total  
Program

\$ 26,966,806

### REVENUES:

Certified Federal Grants	\$108,525,712
Certified State Grants	24,866,051
Anticipated Grants	99,030,089
Investment Income	4,095,000
Miscellaneous	<u>10,000</u>

Total Estimated Revenues

236,526,852

### EXPENDITURES:

Previously Authorized	
Encumbered Balance	\$119,828,767
Unencumbered Balance	<u>131,609,765</u>

Total Previously Authorized

251,438,532

Request for Funding

Planning (Step I)	\$ <u>271,541</u>
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Total Request for Funding	\$ <u>271,541</u>
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Total Estimated Expenditures

\$251,710,073

ESTIMATED FUND BALANCE

\$ 11,783,585



**Request For  
Funding**

Project 78-01 Future System Configuration/Central Cities and  
Contiguous Communities Study

Description: This program will initially consist of two (2) parts:

1. An analysis of the cost estimates and environmental impediments resulting from financial and environmental study outputs attributable to seven (7) particular study areas, e.g., "Southwest Suburban Area Study, 76-26". The purpose is that of producing a least to maximum cost range for a combination of all solutions on a regional basis, including a ranking of such regional solutions on an environmental basis. This part will cost approximately \$265,000.
2. The second part of this program is that of coordinating and supplementing the work assigned to and within the capability of the "208" planning agency in conformance with federal guidelines at an approximate cost of \$6,541.

Resources Required:

Step I Planning	\$271,541
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Annual Expenditures:

During 1978	\$260,541
During 1979	<u>11,000</u>
Total	\$271,541



**Previously  
Funded**

Project 71-03 Lakeville-Farmington T.P. & Interceptor

Description: This project consists of a new wastewater treatment plant and interceptors. Plants in Lakeville, Farmington and Apple Valley are nearing capacity, and expansion of these facilities is not feasible. The new plant will treat sewage from the three communities which will be conveyed by the Lakeville-Farmington Interceptor and result in the phasing out of the Lakeville and Farmington treatment plants. The authorized funds for this project include planning, detail engineering and construction.

Status: Construction commenced June 1977. Completion is anticipated in 1979 and will be put into operation in 1979.

Annual Expenditures:

Prior to 12/31/76	\$ 1,307,093
During 1977	12,595,104
During 1978	6,704,492
During 1979	1,073,311

Project 71-06 Metro Pre-Treatment Facilities

Description: This project consists of the construction of additional screening and grit removal units to provide adequate capacity for treatment of all the flow expected through the main interceptor. These new units will be able to handle 655 million gallons per day.

Status: The project is 96% complete and will be completed in 1977 and operating in 1978.

Annual Expenditures:

Prior to 12/31/76	\$ 14,016,830
During 1977	1,069,342
During 1978	953,943

Project 71-07 Metro Primary Sedimentation Tanks

Description: The project consists of the construction of additional primary sedimentation tanks to provide effective primary treatment and peak wastewater flows entering the plant. The maximum expected flow from the present interceptor is estimated at 655 million gallons per day. These additional primary treatment units will combine with the proposed additional secondary treatment units to provide an effluent that meets the present effluent and river standards of the Mississippi River. These units also provide the added capacity necessary to eliminate the need to bypass untreated wastewater during peak flows because of limitations in existing treatment units.

Status: The project is 96% complete and will be completed in 1977 and operating in 1978.



Project 71-07 Metro Primary Sedimentation Tanks (continued)

Annual Expenditures:

Prior to 12/31/76	\$ 19,875,569
During 1977	1,736,208
During 1978	1,672,523

Project 71-08 Metro Aeration & Final Sedimentation Tanks

Description: The project consists of the construction of additional aeration tanks and final sedimentation tanks to accomplish an effluent that meets the effluent and river standards for the Mississippi River. The expanded secondary treatment process, in conjunction with the proposed additional pretreatment and primary treatment facilities, will provide sufficient capacity for secondary treatment of all wastewater received at the treatment plant, eliminating the need for bypassing of partially treated wastewater peak flows.

Status: The project is 92% complete with completion scheduled for 1977 and will be in operation in 1978.

Annual Expenditures:

Prior to 12/31/76	\$ 46,078,051
During 1977	7,670,498
During 1978	1,151,951

Project 71-09 Metro Compressors

Description: This project consists of providing supplementary aeration compressor capacity as required to accomplish the treatment of the wastewater at the Metro Treatment Plant.

Based upon the successful experience at MWWTP with the large size multi-stage compressors, aeration requirements will be met with two units of 100,000 cubic feet per minute capacity or three units of 65,000 cubic feet per minute capacity, depending upon the economics of the application and other factors.

Status: This project was awarded in the fall of 1976. The equipment will be delivered and installed in 1979 in the Compressor Building.

Annual Expenditures:

Prior to 12/31/76	\$ 29,390
During 1977	1,592,370
During 1978	1,044,670
During 1979	548,570



### Project 71-13 Orono-Long Lake Interceptor

Description: The Orono-Long Lake Interceptor will phase out the Orono and the Long Lake Sewage Treatment Plants and carry the sewage from these locations to the Wayzata Interceptor with ultimate destination of the sewage being the Blue Lake Plant.

Status: Construction is scheduled to commence late in 1977 with completion late in 1978, contingent upon Federal and State grants.

#### Annual Expenditures:

Prior to 12/31/76	\$ 272,000
During 1977	392,000
During 1978	3,594,600

### Project 71-20 Prior Lake Interceptor

Description: The Prior Lake Interceptor is planned as a gravity interceptor between a point near the Blue Lake Plant and the existing Prior Lake Plant. The interceptor will be designed to convey the sewage from Prior Lake, Spring Lake Township and Eagle Creek Township to the Blue Lake Plant for treatment.

Status: Contract has been awarded and approximately 95% complete at the current time with full completion anticipated by late 1977 or early 1978.

#### Annual Expenditures:

Prior to 12/31/76	\$ 3,828,998
During 1977	236,835
During 1978	104,252

### Project 71-29 MWWTP Warehouse & Machine Shop

Description: The project will consist of the construction of a central warehouse distribution center and maintenance shop to serve all Metro Plants, located at Metropolitan Wastewater Treatment Plant. The facility will be constructed in conjunction with the existing vehicle maintenance garages and warehouse at the north end of the Metro Plant. The eastern portion of the new structure would house the controlled access warehouse with truck dock facilities. An addition to the south of the existing warehouse, as well as the existing warehouse space, will be used for the new maintenance shop. The existing vehicle maintenance garages will be unaffected by the new construction. The warehouse will be provided with shelving, bins, and pallets for storage, a loading and unloading dock at the eastern end of the warehouse, an office for records and inventory control, a freight elevator providing access to the plant tunnel system. The maintenance shop will consist principally of the machine shop, electric shop, weld area, and sand blast areas.



Project 71-29 MWWTP Warehouse & Machine Shop (continued)

Status: This project has been designed and is scheduled for bids in the fall of 1977. It will be completed in 1978 contingent upon Federal and State grants.

Annual Expenditures:

Prior to 12/31/76	\$ 138,559
During 1977	37,466
During 1978	1,863,975

Project 71-32 Little Canada-Shoreview Interceptor

Description: This project is proposed as an all gravity interceptor which begins in Shoreview at the existing Grass Lake Lift Station and continues southeasterly to its connection with an existing interceptor at South Owasso Boulevard in Little Canada.

Status: Construction is expected to begin in 1977 with completion scheduled for 1978.

Annual Expenditures:

Prior to 12/31/76	\$ 226,798
During 1977	2,257,772
During 1978	715,430

Project 72-02 Metro Compressor Building

Description: The project consists of an addition to the Compressor Building at the Metropolitan Wastewater Treatment Plant to provide the space for the two new compressors, as well as room for one additional compressor. The project also includes the necessary intake and discharge silencers for the compressors, flow metering tubes, check valves and butterfly valves; intake and discharge piping, air filtering system, and the electrical and control work for the complete installation and operation of the two compressors.

Status: Bids are scheduled for late 1977 with estimated completion and operational date in 1979.

Annual Expenditures:

Prior to 12/31/76	\$ 6,587
During 1977	1,031,199
During 1978	3,188,499
During 1979	2,570,245
During 1980	174,270



#### Project 72-04 Cottage Grove Treatment Plant

Description: The Cottage Grove Plant Expansion consists of an expansion of the existing Cottage Grove Plant on an interim basis to a capacity of 1.8 mpd and to meet anticipated secondary treatment standards of 25 MG/1 BOD and 30 MG/1 SS.

Status: The Metro Council has approved Step III (plans and specifications) which will be completed in 1977 and construction completed during 1978.

#### Annual Expenditures:

During 1977	\$	100,000
During 1978		796,100
During 1979		100,000

#### Project 72-07 Maintenance & Dispatch Building

Description: As part of its responsibilities for operating and maintaining the Metropolitan Disposal System, the Metropolitan Waste Control Commission owns approximately 130 to 140 metering stations and about 50 sewage lift stations spread throughout the six service areas presently comprising the Metropolitan Disposal System.

The proposed project consists of a maintenance and dispatch building to be constructed at the Seneca Plant, in order to properly service and maintain the flow metering stations, from a centralized location. The location of the facilities at the Seneca Plant is compatible with the presence of the metering station data collection center. In addition, the Seneca Plant location provides a satisfactory point from which to dispatch service vehicles and personnel to the facilities to be maintained and serviced.

Status: It is anticipated that Step II (plans and specifications) will be completed in 1978 with construction during 1978-1979.

#### Annual Expenditures:

Prior to 12/31/76	\$	4,343
During 1977		25,075
During 1978		10,582

#### Project 73-02 Sludge Disposal

Description: The proposed project will provide for additional sludge processing and disposal facilities to provide adequate capacity to handle future waste sludge quantities. The sludge disposal facilities consist of the following:



Project 73-02 Sludge Disposal (continued)

Sixteen Circular Flotation Sludge Thickening Tanks;  
Eight or ten thermal conditioning units and the equipment systems;  
Eight sludge conditioning and storage tanks with building;  
Distributed Digital Acquisition and Control System for sludge processing;  
Four twin roll type continuous sludge presses;  
Sludge dewatering building to house sludge presses; and  
Two sludge incinerators and building with sludge drying, waste heat recovery and coal handling and storage.

Status: The plans and specifications have been completed and submitted to MPCA and EPA for approval except for the incinerators and the building. The sludge processing equipment plans and specifications will be completed by the fall of 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 6,829,986
During 1977	970,014
During 1978	66,000

Project 73-06 Chaska Treatment Plant

Description: The project consists of additions to the Chaska Wastewater Treatment Plant to augment the capacity of the facility from .75 mgd to 1.4 mgd to meet increasing wastewater flows and to upgrade the treatment process in compliance with applicable effluent standards.

Status: The Metro Council has approved Step II (plans and specifications) which will be prepared during 1977 and allow for construction during 1978.

Annual Expenditures:

During 1977	\$ 40,000
During 1978	410,000

Project 74-01 (400) Sludge Thickening Facilities, MWWTP

Description: This project consists of sixteen circular flotation sludge thickening tanks each 55 ft. in diameter; two thickener galleries; one main service area; return liquor treatment facilities; pipe equipment tunnels; interconnecting piping systems and service for other projects.



Project 74-01 (400) Sludge Thickening Facilities, MWWTP (continued)

Status: The project is over 29% complete as of April 30, 1977 with the completion of thickeners scheduled for 1978. The completion of the return liquor facility is scheduled for 1979.

Annual Expenditures:

Prior to 12/31/76	\$ 5,552,748
During 1977	17,473,524
During 1978	5,415,077
During 1979	2,417,847

Project 74-01 (401) Sludge Thermal Conditioning & Dewatering Equipment Systems, MWWTP

Description: Equipment includes eight or ten thermal conditioning units, four circular decant tank mechanisms and eight sludge dewatering presses. Project includes all piping, controls and odor control equipment.

Status: Project will be awarded in 1977, estimated completion in 1980 and will be operational in 1980.

Annual Expenditures:

Prior to 12/31/76	\$ 26,430
During 1977	9,881,161
During 1978	6,329,275
During 1979	7,273,881

Project 74-01 (402) Sludge Conditioning & Storage Facilities, MWWTP

Description: This project consists of eight concrete storage tanks 135 ft. by 30 ft.; a 275 ft. by 103 ft. three story building for conditioning equipment; and four circular 60 ft. diameter decant tanks.

Status: Project awarded in February, 1977; estimated completion 1979 and will be operational in 1979.

Annual Expenditures:

Prior to 12/31/76	\$ 18,088
During 1977	6,632,534
During 1978	9,388,301
During 1979	1,923,757



Project 74-01 (403) Distributed Digital Acquisition & Control System  
for Sludge Processing, MWWTP

Description: Six process computer subsystems are included in the project along with one central computer in addition to a building to house the computer and peripheral equipment.

Status: Scheduled bid date is in 1977; completion in 1980; and operational during 1981.

Annual Expenditures:

Prior to 12/31/76	\$ 17,724
During 1977	346,389
During 1978	4,674,115
During 1979	5,583,372

Project 74-01 (404) Roll Type Continuous Presses & Accessories for  
Primary Sludge Dewatering, MWWTP

Description: Equipment consisting of four twin roll variable nip continuous discharge sludge presses. Units would replace four existing vacuum filters to increase capacity.

Status: Contract awarded in 1977; will be operational upon completion and coordination with Project 74-01 (406).

Annual Expenditures

Prior to 12/31/76	\$ 690
During 1977	1,268,787
During 1978	1,057,839
During 1979	1,752,564

Project 74-01 (406) Sludge Dewatering Building, MWWTP

Description: This project consists of a building to house plate type presses and associated equipment for dewatering sludge such as conveyors, pumps and compressors. The building is designed to become a part of the sludge processing complex.

Status: Scheduled bid date is summer of 1977; estimated completion date, 1980.

Annual Expenditures

Prior to 12/31/76	\$ 1,571
During 1977	1,767,112
During 1978	4,220,291
During 1979	4,500,359



Project 74-01 (407) Sludge Processing Equipment, MWWTP

Description: This project consists of two sludge incinerators. This contract will be for the incinerators furnished and installed in the sludge processing building.

Status: Scheduled bid date is in 1977. Completion date and operational date will depend on completion of Project 74-01 (408) currently estimated to be 1980.

Annual Expenditures:

Prior to 12/31/76	\$ 1,185
During 1977	500,000
During 1978	3,188,483
During 1979	4,511,113
After 1980	1,000,000

Project 74-01 (408) Sludge Processing Building, MWWTP

Description: This project consists of a building complex to house sludge incinerators, waste heat recovery facilities, sludge drying facilities and storage and loadout area. Equipment included in the sludge processing building includes rotary sludge dryers, gas cleaning systems, waste heat boilers, and incinerator modifications.

Status: Scheduled bid date is in 1977. Estimated completion and operational date to be 1980.

Annual Expenditures:

During 1976	\$ 6,474
During 1977	12,323,169
During 1978	17,341,518
During 1979	15,028,343
After 1979	9,680,496

Project 74-02 Carver Lake Interceptor

Description: This project consists of an interceptor approximately one and one-half miles in length spanning Maplewood along Carver Avenue or Fish Creek, from a point near Carver Lake at the boundary of Maplewood and Woodbury and westerly to the existing 24 inch St. Paul gravity sewer along Point Douglas Road. The Carver Lake interceptor will serve as a permanent outlet for an area in western Woodbury and serve portions of Maplewood in the vicinity of Carver Road. In conjunction with construction of the subject interceptor, it may be necessary to acquire the existing 24 to 30 inch gravity sewer along Point Douglas Road for connection of the subject interceptor to the Metropolitan Disposal System. This existing sewer is about three-fourths of a mile in length and appears to have adequate capacity to serve additional upstream areas in Maplewood and Woodbury.



Project 74-02 Carver Lake Interceptor (continued)

Status: Construction is expected to be completed late in 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 141,278
During 1977	1,053,722

Project 74-07 Blue Lake Sludge

Description: The project consists of on-site solids processing facilities and an ultimate disposal site for the existing Blue Lake Wastewater Treatment Plant, Phase II. On-site processing facilities include gravity thickeners, anaerobic digesters, dewatering units, waste liquor treatment system, odor control system, and related support structures. Ultimate disposal will be to agricultural land for fertilization and soil conditioning. The land spreading site will have sludge storage facilities and an equipment storage area.

Status: The plans and specifications have been submitted to MPCA for approval, which is expected upon resolvment for the use of a land application site.

Annual Expenditures:

Prior to 12/31/76	\$ 919,032
During 1978	7,306,968
During 1979	7,524,393

Project 74-09 Apple Valley Interceptor

Description: The proposed project consists of the elimination of the Apple Valley Plant, completely, with the construction of a gravity interceptor southward about 3.5 miles to a connection with the proposed Lakeville-Farmington Interceptor. Treatment of the wastewater would then be provided at the proposed new Lakeville-Farmington Treatment Plant.

Status: Bids will be received late in 1977 or early in 1978 with completion anticipated in 1979 and will be operational in 1979.

Annual Expenditures:

Prior to 12/31/76	\$ 132,716
During 1977	367,284
During 1978	1,589,051
During 1979	1,198,949



#### Project 74-10 Metro Disposal System Improvements

Description: Implementation of major improvements to the Metropolitan Disposal System have been delayed beyond original scheduling by reduced Federal funds, the Federal Water Pollution Control Act Amendments of 1972, and the uncertainty of applicable water quality standards. As a result of these factors, as well as the enactment of the OSHA requirements, it is necessary to provide improvements not originally planned in the previously mentioned improvements projects. The project consists of numerous improvements to the interceptor system and the waste treatment plants to aid in the future effective operation of the Metropolitan Disposal System.

Status: The engineering and construction is an on-going process and is presently about 40% completed. The design and construction of the improvements will be completed in 1980.

#### Annual Expenditures:

Prior to 12/31/76	\$ 590,519
During 1977	371,481
During 1978	230,080
During 1979	250,000
During 1980	253,920

#### Project 75-01 Residual Solids Management

Description: The objective of the study is to develop a technically, economically, and environmentally acceptable system for reuse or disposal of the residual solids (ash, grit, screenings, and sludge) from all of the Commission's wastewater treatment plants. Immediate ash and sludge disposal needs will be analyzed. Alternatives for a long-range system will be analyzed, including solids processing, transport, and refuse/disposal.

Status: Initiated study spring of 1977 with completion in late 1978.

#### Annual Expenditures:

Prior to 12/31/76	\$ 3,250
During 1977	819,427
During 1978	48,000
During 1979	15,608



Project 75-05 Seneca Auxiliary Fuel Research (Co-incineration)

Description: The project is an in-plant study supported by a grant of 95% participation by the United States EPA. Purpose is to determine the feasibility in full scale tests of adding coal or other combustible matter such as solid waste to eliminate the major share of need for gas or oil fuels in the sludge incineration process. The grant is for a two year study period. Construction of temporary storage and conveying facilities and purchase of items of instrumentation and control are required.

Status: Construction and installation of the equipment is scheduled during 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 54,138
During 1977	275,862
During 1978	50,000

Project 75-08 Waconia Interceptor

Description: The Waconia Interceptor will provide service for Waconia and contiguous areas in accordance with the approval of the Metropolitan Council. This project consists basically of a lift station and forcemain from the existing Waconia Plant to a point in Victoria where it will connect with the Victoria Interceptor. This project will be sized to also accept flow from the areas around the lake (Harms Lake View Terrace Addition) and transport it to the Metropolitan Disposal System.

Status: The construction is 95% complete with final completion expected by late 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 1,186,293
During 1977	1,278,707

Project 75-10 Engineering Services - NPDES Permits

Description: The Minnesota Pollution Control Agency in accordance with the terms of PL 92-500, Water Pollution Control Act amendments, 1972 is issuing NPDES permits for each of the treatment plants under the jurisdiction of Metropolitan Waste Control Commission. Those plants which remain as permanent plants will require updating, revision or replacement in order to accomplish objectives. Each plant has its individual problems and requirements, and it will be necessary to determine the extent of revision before proceeding with any improvements.



Project 75-10 Engineering Services - NPDES Permits (continued)

Description (continued): This item will be accomplished by retaining the services of a qualified engineer to make a detailed analysis of each plant and recommend procedures for complying with the requirements of the NPDES permits.

Status: Analysis is being accomplished in-house.

Annual Expenditures:

Prior to 12/31/76	\$ 30,676
During 1977	50,000
During 1978	39,324

Project 76-01 Chemical Waste Land Disposal Facility

Description: To prepare necessary engineering and environmental studies to select a site, design, construct and operate a chemical waste land disposal facility based on an agreement with the Minnesota Pollution Control Agency and the Environmental Protection Agency Demonstration Grant. The grant participation amount for this project is \$757,549.

Status: The Step I consultant has been completed and Step II work has been initiated and will be completed in 1978.

Annual Expenditures:

Prior to 12/31/76	\$ 73,056
During 1977	319,628
During 1978	617,381



#### Project 76-05 Metro System Emergency

Description: An adequate number of emergency electric generators of various sizes will be acquired so they can be used throughout the Metropolitan Disposal System wherever power outages occur.

The system includes 19 wastewater treatment plants and 50 major sewage pumping stations which require a continuous supply of electricity. Many of these locations do not have emergency electric generating facilities. Portable emergency electric generating facilities are needed to prevent major pollution problems when there is a public power failure. This project (purchase of generators) will supplement the project in the 1974 Capital Budget which provided for the telemetry and switch gear at many of the sites.

Status: The plans and specifications will be completed in 1977 and bids will be received for the generators.

#### Annual Expenditures:

Prior to 12/31/76	\$	100
During 1977		74,900
During 1978		1,425,000

#### Project 76-06 MWWTP Oil Spill Prevention Improvements

Description: Improvements to the existing fuel oil storage and transfer facilities at the MWWTP must be made to conform to the requirements of 40 CFR 112 and WPC 4 of the Minnesota Pollution Control Agency. The improvements needed to provide adequate spill containment facilities for the fuel oil transfer area and thereby preclude accidental discharge of fuel oil to the river through the storm sewer system consists of installing remotely operated gates at the flood wall, over-riding controls on the stormwater pumping station, improving the existing containment area with use of clay to make impervious, and strategically locating over-riding controls on the transfer pumps in the galleries.

Status: Construction will be completed in 1977.

#### Annual Expenditures:

Prior to 12/31/76	\$	75,933
During 1977		74,067



#### Project 76-07 MWWTP Instrumentation

Description: Conduct the engineering to provide controls to alleviate instrumentation and control problems with the existing and expanded facility and meet standards. It is planned to initiate a project which consists of the furnishing and installation of a highly instrumented and direct digital control system for the Metro Treatment Plant. The control system will tie the existing portions of the Plant into the new single centralized system provided under the sludge disposal project and allow the utmost in efficient operation.

Status: Coordinate the preparation of the plans and specifications during 1978.

#### Annual Expenditures:

During 1977	\$	5,000
During 1978		563,000

#### Project 76-10 Industrial Waste Studies

Description: To comply with industrial cost recovery provisions of the Act, Metropolitan Waste Control Commission efforts are necessary in addressing problems and design criteria required for the industrial contributors.

Status: To be completed in 1978.

#### Annual Expenditures:

Prior to 12/31/76	\$	43,243
During 1977		106,082
During 1978		106,082

#### Project 76-13 Environmental Program

Description: To establish a base line inventory of environmental characteristics of the Metropolitan Area as a basis for project planning and preparation of environmental assessments. The study will provide a framework by which to evaluate the cumulative impacts of the facilities planned in the program. Emphasis is on water resources, community growth patterns, land use trends and questions of reserve capacity.

Status: The study will be initiated in 1977 and completed in 1978.

#### Annual Expenditures:

Prior to 12/31/76	\$	12,848
During 1977		404,461
During 1978		32,923
During 1979		3,500



Project 76-14 Cottage Grove-Woodbury-Lake Elmo Area Study

Description: To develop and analyze alternatives for providing immediate and long-range sewer service to the Cottage Grove-Woodbury-Lake Elmo area by completing the facility planning efforts begun in the Washington County Study and the Cottage Grove WWTP, Project 72-04. To analyze staged construction and alternative designs for interceptor construction. To analyze staged construction and alternative treatment processes for a new or enlarged and upgraded Cottage Grove WWTP.

Status: The overview of 201 Planning will provide information and direction for completing the report.

Annual Expenditures:

During 1977	\$ 167,200
During 1978	30,558
During 1979	6,194

Project 76-17 Facilities Planning to Comply with Air Quality Standards

Description: To obtain sufficient data on particulate and gas emissions from sewage incinerators to be used for future design of Systems and Optimization of improvements and to consider Ambient Air Quality in the evaluation of future facility design.

Status: The project will be completed in 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 17,168
During 1977	68,808

Project 76-18 Water Quality Assessment Program

Description: To compile and evaluate existing Metro lake water quality data with respect to recreation-aesthetics usefulness, and field sample other lakes probably affected by urban groundwater degradation. Purpose: to locate needs for wastewater management facilities to 1990 to enhance or preserve multiple lake resource use, and to set up an early warning system to detect water quality problems.

Status: To be completed in 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 5,086
During 1977	8,588
During 1978	21,311



Project 76-19 Management Information & Process Control System

Description: The study generally reviews current potential for application of data processing, data acquisition and process control as part of the Metropolitan Disposal System. The additional study will be undertaken to analyze needs outlined in the Management Information/Process Control System Study and formulate an implementation plan for the complete automation of treatment plant process control.

Status: Will be completed in 1978.

Annual Expenditures:

Prior to 12/31/76	\$	17
During 1977		22,743

Project 76-21 Cab Study

Description: This program constitutes an area of study for purposes of developing alternative solutions for transmission and treatment of sewage within the north area (Champlin, Anoka, Brooklyn Park).

Status: To be completed by 1979.

Annual Expenditures:

During 1977	\$	9,290
During 1978		126,394
During 1979		7,800

Project 76-25 Dakota Area Study

Description: This program constitutes an area of study for purposes of developing alternative solutions for transmission and treatment of sewage within the Dakota County area.

Status: To be completed in 1979.

Annual Expenditures:

During 1977	\$	180,061
During 1978		36,340
During 1979		5,599



Project 76-26 Southwest Suburban Area Study

Description: This program constitutes an area of study for purposes of developing alternative solutions for transmission and treatment of sewage within the Southwest area.

Status: Study to be done by 1979.

Annual Expenditures:

During 1977	\$	50,000
During 1978		356,000
During 1979		39,010

Project 76-28 Metro Area Study

Description: This program constitutes an area of study for purposes of developing alternative solutions for transmission and treatment of sewage within the Metro area. Study will include planning for the digital control system of the existing plant at MWWTP. It will also include a study of an alternate power source & access road above the higher river levels at MWWTP.

Status: To be completed by 1979.

Annual Expenditures:

During 1977	\$	257,000
During 1978		174,663
During 1979		110,350

Project 76-35 Seneca Area Study

Description: This program constitutes an area of study for purposes of developing alternative solutions for transmission and treatment of sewage within the Seneca area.

Status: To be completed in 1979.

Annual Expenditures:

During 1977	\$	189,131
During 1978		69,441
During 1979		8,400



Project 76-38 Stillwater-Bayport-Lower St. Croix Area Study

Description: To develop and analyze alternatives for providing immediate and long-range sewer service to the Stillwater-Bayport-Lower St. Croix area by completing the facility planning efforts begun in the Washington County Study and the St. Croix WWTP Tertiary Treatment Study, Project 73-06. To analyze interim improvements and plant expansion alternatives for the Bayport and Stillwater plants. To analyze alternatives for providing long-range service to the Stillwater-Bayport area and to presently unsewered areas in the Lower St. Croix River watershed.

Status: To be conducted during 1978.

Annual Expenditures:

During 1978	\$ 108,525
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Project 76-48 Battle Creek Siphon Improvements

Description: The Battle Creek Siphon System serving the eastern Metropolitan Area (Maplewood, Woodbury and Oakdale) is anticipated to reach capacity in the 1980's. The combination lift station and forcemain along Point Douglas and Lower Afton Roads will also need relief in the 1980's if the anticipated growth takes place in Washington County. A study will be undertaken to evaluate alternatives for providing relief to this area.

Status: To be completed in 1978.

Annual Expenditures:

During 1977	\$ 10,000
During 1978	140,000



Project 76-51 Centerville Interceptor

Description: The proposed interceptor would serve the City of Centerville which is located south of the intersection of Interstate 35E and 35W in Anoka County. The proposed interceptor would be constructed to eliminate further pollution of Centerville Lake and not to stimulate any additional urban growth. Four alternatives are considered which consist of various combinations of forcemain and gravity sections and with the lift stations located at different points in the City.

Status: Project is under construction and will be completed near the end of 1977.

Annual Expenditures:

Prior to 12/31/76	\$ 16,968
During 1977	438,032
During 1978	25,000

Project 76-52 Rehabilitation of Interceptor No. 1-MN-312

Description: Approximately 450 feet of 27-inch interceptor sewer pipe on 52nd Avenue between Morgan Avenue North and Oliver Avenue North in Minneapolis is in need of replacement. This section of sewer pipe consists of a corrugated iron pipe laid in a concrete cradle and all supported by timber piles. The unreinforced concrete cradle has cracked down the center leaving the steel pipe without adequate lateral support which is causing the pipe to collapse and settle in between the piling supports. The piles, in turn, are puncturing through the steel pipe wall. Detailed plans and specifications for the replacement sewer have been prepared.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	\$ 260,000
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### Project 76-53 Systemwide Overview

Description: To evaluate the capacities and improvement needs of the existing wastewater treatment plants and interceptor system; to explain the interrelationships among systemwide studies and between systemwide studies and area/plant studies; to develop a detailed plan of study for the second segment of 201 facilities planning; and to inform the public of the intent of the facilities planning program and obtain public input to the plan of study.

Status: To be completed in 1977.

#### Annual Expenditures:

During 1977	\$ 50,769
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### Project 76-54 Areawide Planning Projections

Description: To prepare planning basis for estimating future wastewater flows and service needs. Study requirements include projections of population and industrial growth factors to be considered in facilities planning and design.

Status: To be completed in 1978.

#### Annual Expenditures:

During 1977	\$ 287,340
During 1978	25,000

### Project 76-55 Combined Sewer Study

Description: The study will determine the environmental impact of the combined sewer overflow on the Mississippi River and will formulate an abatement program leading towards the reduction or elimination of combined sewer overflows. The study will include an assessment of combined sewer overflows, general planning of the abatement program and preliminary engineering of the required abatement facilities.

Status: To be completed in 1979.

#### Annual Expenditures:

During 1977	\$ 879,004
During 1978	689,184
During 1979	1,189,412



#### Project 76-56 Alternative Waste Management Systems

Description: Wastewater Management and Facilities Planning required by the "201" process directs evaluation of alternative systems leading toward the selection of a plan. This element is designed to investigate a principle alternative dealing with onsite disposal feasibility related to hydrological, geological, physiographical and other factors which influence the suitability of this method of sewage disposal. This element will address the feasibility of onsite disposal and will be incorporated into segment two of the contemplated 201 grant application. During that time the results of this study will be included amongst the many alternatives then under consideration.

Status: To be completed in 1979

##### Annual Expenditures:

During 1977	\$	54,360
During 1978		54,360
During 1979		54,462

#### Project 77-01 Riverview Siphon System

Description: The Riverview Siphon System serves the entire City of West St. Paul and a portion of the City of St. Paul's west side. The project involves replacing the existing river crossing which has been plagued with problems for some time. The alternatives, which have been analyzed, include converting the river crossing to a forcemain system using the Riverview Pump Station; diverting flow directly to the South St. Paul river crossing; and replacing the existing three pipes with three new pipes.

Status: We anticipate this improvement will be accomplished in 1978 and operational in 1978.

##### Annual Expenditures:

During 1977	\$	100,000
During 1978		1,900,000

#### Project 77-02 Metro Interceptor Improvements

Description: This project consists of corrective measures for the elimination of restrictions, structural deficiencies, equipment replacement and to achieve conformance with codes in the Metropolitan Disposal System.

Status: Planning has started on the improvements and detailed plans will be conducted in 1977 and 1978.

##### Annual Expenditures:

During 1977	\$	50,000
During 1978		345,000



Project 77-03 Matching Funds by the MWCC for an EPA 208 Program

Description: The 208 Program will produce a 20 year plan, staged in 5-year interval to provide the Metropolitan Area of the Twin Cities with an adequate wastewater handling plan. The plan will deal with the location and general sizing of trunk line interceptors and wastewater treatment plants plus the handling of plant residuals. An appropriate management and financial program will also be prepared.

In addition to the 20 year plan, the current 208 grant will allow for a substantial amount of "Verification" work on a river load allocation model applicable to the Mississippi River below downtown St. Paul.

Status: This work is being conducted by the Metro Council staff. It appears the work will be completed in 1978.

Annual Expenditures:

During 1977	\$ 180,000
During 1978	120,000

Project 77-04 Savage Plant Expansion

Description: The proposed project is to consist of an expansion of the existing wastewater treatment plant through the addition of a new biological unit and the modification of raw and intermediate pumping stations, chlorination facilities and piping systems. The proposed plant expansion will allow the design capacity to increase from 0.36 mgd to 0.86 mgd and thus fulfill Metropolitan Council policy objectives by enabling urban expansion in Savage to continue.

Status: It is anticipated the above described project will be designed in 1977 and constructed in 1978.

Annual Expenditures:

During 1978	\$ 210,000
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Project 77-05 Beltline Regulator/Interceptor Improvements

Description: The project consists of replacement of the Lower Beltline Regulator located near the intersection of Warner Road and TH No. 61 in St. Paul and replacement of the sanitary interceptor from that structure to the MWCC joint interceptor.

Status: Design will be conducted during 1977 and construction is anticipated in 1978 with completion in 1979.

Annual Expenditures:

During 1977	\$ 35,000
During 1978	1,065,000
During 1979	717,400



#### Project 77-06 Seneca Sludge Dewatering

Description: The dewatering improvement will consist of an additional vacuum filter unit. The unit will be similar to the existing vacuum filters and will consist of a 14 foot long, 12 foot diameter filter and associated appurtenances. A dewatering capacity of 4-5 wet tons/hour will be provided and will result in an adequate match between the dewatering and incineration capacity. In addition to the vacuum filter, there will also be modifications to the sludge feed system, chemical conditioning feed system, chemical conditioning tank, chemical storage facilities, dewatered sludge conveyance system, structural modifications and miscellaneous piping.

Status: It is anticipated that the furnishing and installing of the above described equipment will be accomplished in 1978.

#### Annual Expenditures:

During 1978	\$ 390,000
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#### Project 77-07 CAB Interceptor

Description: The upper segment (Anoka Interceptor) to alleviate a shortage of sewer capacity in the west side where service cannot be provided for development in an industrial area. The City of Anoka has documented their problems on the west side through submission of a report on their system.

Status: The plans and specifications will be prepared during 1977 with construction during 1978 - 1979.

#### Annual Expenditures:

During 1978	\$ 1,500,000
During 1979	1,723,000



# Certified Federal Grants

Grant	Project	Total Grant Amount	Received As Of 4-30-77	Balance Due	1977 Estimated Amount	1978 Estimated Amount
000	MWWTP - Sludge Thickening	\$ 23,079,150	\$ 4,412,008	\$ 18,667,142	\$ 7,273,524	\$ 8,065,077
002	MWWTP - Sludge Thermal Cond.	34,716,675	- 0 -	34,716,675	3,325,285	16,730,834
003	MWWTP - Roll Type Presses	10,962,400	- 0 -	10,962,400	2,175,563	4,125,674
050	Lakeville-Farmington	16,686,675	- 0 -	16,686,675	3,183,520	10,720,245
579	Southwest Interceptors II	2,392,430	1,980,900	411,530	411,530	- 0 -
616	MWWTP - Flood Wall	6,647,593	5,318,073	1,329,520	1,329,520	- 0 -
662	MWWTP - Eff. Pump Station	4,664,100	3,731,271	932,829	632,829	300,000
663	MWWTP - Pre Treat. Units	11,528,625	9,222,900	2,305,725	1,605,065	700,660
664	MWWTP - Prim. Tanks	16,594,800	13,275,840	3,318,960	2,865,765	453,195
665	MWWTP - Aear. & Final Tanks	39,963,450	29,799,600	10,163,850	5,210,599	4,953,251
661	Newport-St. Paul Park Intcp	1,646,754	1,327,254	319,500	319,500	- 0 -
666	Metro Compressors	2,268,075	- 0 -	2,268,075	1,197,550	733,290
749	Waconia Interceptor	1,484,550	709,530	775,020	647,335	127,685
803-744	Chemical Waste Land Facility	757,549	27,589	729,960	553,318	176,642
803-927	Coinciration of Sewage Sludge with Refuse and/or Coal	372,622	130,427	242,195	175,230	66,965
999	Facilities Planning Study	2,680,875	- 0 -	2,680,875	1,850.655	830,220
	Various Final Reimbursement Grants	<u>2,014,781</u>	<u>- 0 -</u>	<u>2,014,781</u>	<u>2,014,781</u>	<u>- 0 -</u>
	TOTALS	<u>\$178,461,104</u>	<u>\$69,935,392</u>	<u>\$108,525,412</u>	<u>\$34,771,569</u>	<u>\$47,983,738</u>



# Certified State Grants

Grant	Project	Total Grant Amount	Received As Of 4-30-77	Balance Due	1977 Estimated Amount	1978 Estimated Amount
000	MWWTP - Sludge Thickening	\$ 6,880,200	\$ 849,774	\$ 6,030,426	\$ 1,755,136	\$ 3,277,290
002	MWWTP - Sludge Thermal Cond.	6,943,335	- 0 -	6,943,335	655,217	3,110,118
003	MWWTP - Roll type Presses	2,192,480	- 0 -	2,192,480	435,163	855,236
050	Lakeville-Farmington	3,337,335	- 0 -	3,337,335	657,135	1,890,679
616	MWWTP - Flood Wall	1,329,519	1,063,610	265,909	265,909	- 0 -
662	MWWTP - Eff. Pump Station	932,820	746,256	186,564	126,325	60,239
663	MWWTP - Pre. Treat. Units	2,305,725	1,729,288	576,437	405,123	171,314
664	MWWTP - Primary Tanks	3,318,960	2,489,220	829,740	437,710	392,030
665	MWWTP - Aera. & Final Tanks	7,992,690	5,587,425	2,405,265	604,135	1,801,130
661	Newport-St. Paul Park Intcp.	329,351	265,589	63,762	63,762	- 0 -
666	Aeration Compressors	453,615	- 0 -	453,615	275,565	178,050
749	Waconia Interceptor	296,910	100,652	196,258	120,183	76,075
999	Facilities Planning Study	536,175	- 0 -	536,175	375,105	161,070
	Riverview Siphon	500,000	- 0 -	500,000	25,000	255,136
	Centerville Interceptor	120,000	- 0 -	120,000	120,000	- 0 -
	Lino Lakes Interceptor	228,750	- 0 -	228,750	228,750	- 0 -
	TOTAL	<u>\$37,697,865</u>	<u>\$12,831,814</u>	<u>\$24,866,051</u>	<u>\$6,550,218</u>	<u>\$12,228,367</u>



## Anticipated Grants

<u>Account</u>	<u>Name</u>	<u>Grant Income</u>
70-11	Rosemount Treatment Plant	\$ 702,100
74-01 (403)	Metro Plant - Sludge Disposal Distributed Digital Acquisition & Control System	10,417,534
(407)	Sludge Processing Equipment	8,667,466
(408)	Sludge Processing Building	49,358,136
Various Facilities Planning Study - Phase II		3,158,579
74-07	Blue Lake Sludge	14,175,354
74-09	Apple Valley Interceptor	2,959,200
71-13	Orono/Long Lake Intcp. - Step III	3,318,000
72-02	MWWTP - Compressor Bldg.	<u>6,273,720</u>
TOTAL		\$ <u>99,030,089</u>



## Summary of Investment Income

Investment earnings for period  
May through December, 1977  
 $\$27 \text{ Million} \times .065 \times 2/3$  \$ 1,170,000

Investment earnings for period  
January through December, 1978  
based on average investment balance  
of \$25 million and yield of 6.50% 1,625,000

Investment earnings for period  
January through December, 1979  
based on average investment balance  
of \$15 million and yield of 6.50% 975,000

Investment earnings for period  
January through December, 1980  
based on average investment balance  
of \$5 million and yield of 6.50% 325,000

\$ 4,095,000



# Financial Status - Current Projects

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
71-03	Lakeville-Farmington T.P. & Intcp.	III	\$ 21,680,000	\$ - 0 -	\$ 21,680,000	\$ 1,320,093	\$ 20,359,907	\$ - 0 -
71-06	MWWTP - Pre. Treatment Units	III	16,040,115	- 0 -	16,040,115	13,746,403	2,293,712	- 0 -
71-07	MWWTP - Prim. Sett. Tanks	III	23,284,300	- 0 -	23,284,300	19,402,859	3,881,441	- 0 -
71-08	MWWTP - Aeration & Final Tanks	III	54,900,500	- 0 -	54,900,500	46,196,606	8,703,894	- 0 -
71-09	MWWTP - Compressors	III	3,215,000	- 0 -	3,215,000	33,151	- 0 -	3,181,849
71-13	Orono-Long Lake Intcp.	III	4,258,600	- 0 -	4,258,600	311,065	- 0 -	3,947,535
71-20	Prior Lake Interceptor	III	3,870,085	300,000 <sup>1&amp;2</sup>	4,170,085	3,828,998	341,087	- 0 -
71-29	MWWTP - Warehouse	III	2,040,000	- 0 -	2,040,000	130,240	11,673	1,898,087
71-32	Little Canada-Shoreview Interceptor	III	3,200,000	- 0 -	3,200,000	240,484	- 0 -	2,959,516
72-02	MWWTP - Compressor Bldg.	II	395,000	6,575,800 <sup>1</sup>	6,970,800	12,158	- 0 -	6,958,642
72-04	Cottage Grove Expansion	III	100,000	896,100 <sup>1&amp;2</sup>	996,100	- 0 -	- 0 -	996,100
72-07	Maint. & Dispatch Bldg.	II	40,000	- 0 -	40,000	4,343	- 0 -	35,657

<sup>1</sup>See Schedule 14-6

<sup>2</sup>No Federal and/or State Grant Participation



Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
73-02	MWWTP - Sludge Disposal	II	7,216,000	650,000 <sup>1&amp;2</sup>	7,866,000	7,266,474	599,526	- 0 -
73-06	Chaska Plant Expansion	III	40,000	410,000 <sup>1&amp;2</sup>	450,000	- 0 -	- 0 -	450,000
74-01	MWWTP - Sludge Disposal	III						
(400)	Sludge Thick. Facilities	III	38,336,356	(7,477,160) <sup>3</sup>	30,859,196	6,580,722	24,278,474	- 0 -
(401)	Sludge Thermal Cond. & Dewatering Equip.	III	23,510,747	- 0 -	23,510,747	48,068	23,462,679	- 0 -
(402)	Sludge Cond. & Storage Facilities	III	17,962,680	- 0 -	17,962,680	33,979	17,928,701	- 0 -
(403)	Digital Acquisition & Control System	III	5,339,221	5,282,379 <sup>3</sup>	10,621,600	11,827	222,524	10,387,249
(404)	Roll Type Cont. Presses & Accessories for Sludge Dewatering	III	4,079,880	- 0 -	4,079,880	2,077	4,077,803	- 0 -
(405)	Sludge Dewatering Bldg.	III	3,144,333	(3,144,333) <sup>3</sup>	- 0 -	- 0 -	- 0 -	- 0 -
(406)	Sludge Dewatering Bldg.	III	7,345,000	3,144,333 <sup>3</sup>	10,489,333	3,059	143,678	10,342,596
(407)	Sludge Processing Equip.	III	7,006,000	2,194,781 <sup>3</sup>	9,200,781	1,958	- 0 -	9,198,823
(408)	Sludge Processing Bldg.	III	54,380,000	- 0 -	54,380,000	11,838	- 0 -	54,368,162
74-01	TOTAL		161,104,217	- 0 -	161,104,217	6,693,528	70,113,859	84,296,830
74-02	Carver Lake Intcp.	III	1,195,000	- 0 -	1,195,000	349,756	845,244	- 0 -
74-07	Blue Lake Sludge	III	15,750,393	- 0 -	15,750,393	927,891	- 0 -	14,822,502
74-09	Apple Valley Intcp.	III	3,288,000	- 0 -	3,288,000	148,345	4,640	3,135,015

<sup>1</sup>See Schedule 14-6

<sup>2</sup>No Federal and/or State Grant Participation

<sup>3</sup>Transfers within the 74-01 projects



Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
74-10	Metro Disposal System Improvements	III	1,500,000	196,000 <sup>1</sup>	1,696,000	649,335	1,046,665	- 0 -
74-99	Inflow/Infiltration Study	I	250,000	(250,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
75-01	Ultimate Disposal Site	I	886,285	- 0 -	886,285	4,355	881,930	- 0 -
75-05	Seneca - Coal Handling	III	380,000	- 0 -	380,000	75,841	304,159	- 0 -
75-06	Seneca Plant Impr.	III	196,000	(196,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
75-08	Waconia Interceptor	III	2,465,000	- 0 -	2,465,000	1,260,482	1,204,518	- 0 -
75-10	Engineering Serv. - NPDES Permits	I	120,000	- 0 -	120,000	32,583	87,417	- 0 -
75-50	Metro Planning	I	367,488	150,000 <sup>2&amp;3</sup>	517,488	142,319	225,169	150,000
76-01	Chemical Waste Land Disposal Facility	III	1,010,065	- 0 -	1,010,065	156,436	853,629	- 0 -
76-02	Reg. Prog. Improvement	I	42,500	(42,500) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-05	Metro System Emergency	III	1,500,000	- 0 -	1,500,000	100	1,499,900	- 0 -
76-06	MWWTP Oil Prevention Spill Improvements	III	150,000	- 0 -	150,000	77,415	72,585	- 0 -
76-07	MWWTP Instrumentation	I	568,000	- 0 -	568,000	- 0 -	568,000	- 0 -
76-10	Industrial Waste Studies	I	255,407	- 0 -	255,407	50,092	205,315	- 0 -
76-13	Environmental Inventory & Assessment	I	417,309	36,423 <sup>2</sup>	453,732	14,492	402,817	36,423

<sup>1</sup>Transfers Within Projects

<sup>2</sup>See Schedule 14-7

<sup>3</sup>No Federal and/or State Grant Participation



Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
76-14	Cottage Grove-Woodbury-Lake Elmo Area Study	I	235,000	(31,048) <sup>1&amp;2</sup>	203,952	43	197,957	5,952
76-17	Air Quality Monitoring	I	85,976	- 0 -	85,976	23,089	62,887	- 0 -
76-18	Expansion of the Water Quality Monitoring Program	I	34,985	- 0 -	34,985	6,059	28,926	- 0 -
76-19	Management Information & Process Control System	I	22,760	- 0 -	22,760	17	22,743	- 0 -
76-20	Standby Power Provisions	I	27,000	(27,000) <sup>2</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-21	Cab Study	I	20,000	123,484 <sup>1</sup>	143,484	- 0 -	20,000	123,484
76-25	Dakota Area Study	I	22,000	200,000 <sup>1&amp;2</sup>	222,000	- 0 -	42,000	180,000
76-26	Maple Plain Tertiary Treatment Study	I	26,000	419,010 <sup>2</sup>	445,010	- 0 -	445,010	- 0 -
76-27	Medina Wastewater Treatment Plant	I	31,130	(31,130) <sup>2</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-28	MWWTP Tertiary Treatment Facilities	I	120,000	422,013 <sup>1&amp;2</sup>	542,013	- 0 -	289,000	253,013
76-33	Rosemount Wastewater Treatment Plant	I	20,000	(20,000) <sup>2</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-35	Seneca Tertiary Treatment Facilities	I	45,370	221,602 <sup>1&amp;2</sup>	266,972	- 0 -	65,370	201,602

<sup>1</sup>See Schedule 14-7

<sup>2</sup>Transfers within the 201 projects



Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
76-36	Seneca Plant Modifications for Auxiliary Fuel for Incinerators	I	20,000	(20,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-37	So. St. Paul Alternate Use Study	I	5,000	(5,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-38	Stillwater-Bayport-St. Croix Area Study	I	30,000	78,525 <sup>2</sup>	108,525	- 0 -	30,000	78,525
76-39	Inflow/Infiltration Analysis	I	567,463	(567,463) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-40	Rehabilitation Needs Of Existing Metropolitan Facilities	I	145,000	(145,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-41	Chanhassen Interceptor Improvement Study	I	6,000	(6,000) <sup>2</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-42	Savage-Chaska-Blue Lake Area Study	I	431,880	(431,880) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-43	Bloomington Interceptor	I	50,000	(50,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-44	Express Interceptor	I	120,000	(120,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-45	Lower Beltline Intcp.	I	100,000	(100,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-48	Battle Creek Study	I	25,000	125,000 <sup>1&amp;2</sup>	150,000	63	49,937	100,000

<sup>1</sup>Transfers within the 201 Projects

<sup>2</sup>See Schedule 14-7



Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 4-30-77	Encumbered Balance	Unencumbered Balance
76-49	Battle Creek Intcp. Improvements	I	25,000	(25,000) <sup>1</sup>	- 0 -	- 0 -	- 0 -	- 0 -
76-51	Centerville Intcp.	III	480,000	- 0 -	480,000	27,228	452,772	- 0 -
76-52	Rehabilitation of Intcp. No. 1-MN-312	III	260,000	- 0 -	260,000	93,686	166,314	- 0 -
76-53	Systemwide Overview	I	50,769	- 0 -	50,769	44,200	6,569	- 0 -
76-54	Area-wide Population	I	312,340	- 0 -	312,340	66,185	246,155	- 0 -
76-55	Combined Sewer Study	I	909,004	1,848,596 <sup>2&amp;3</sup>	2,757,600	211,497	1,922,470	623,633
76-56	Evaluation - Management System	I	163,182	- 0 -	163,182	6,115	157,067	- 0 -
77-01	Riverview Siphon System	III	100,000	1,900,000 <sup>2</sup>	2,000,000	- 0 -	100,000	1,900,000
77-02	Metro Intcp. Impr.	III	50,000	345,000 <sup>2&amp;3</sup>	395,000	- 0 -	395,000	- 0 -
77-03	EPA 208 Match	I	270,000	30,000 <sup>2&amp;3</sup>	300,000	43,497	226,503	30,000
77-04	Savage Plant Expansion	III	20,000	190,000 <sup>2&amp;3</sup>	210,000	- 0 -	20,000	190,000
77-05	Beltline Reg./Intcp. Impr.	III	100,000	1,717,400 <sup>2&amp;3</sup>	1,817,400	- 0 -	100,000	1,717,400
77-06	Seneca Sludge Dewatering	III	25,000	365,000 <sup>2&amp;3</sup>	390,000	- 0 -	25,000	365,000
77-07	Cab Interceptor	III	250,000	2,973,000	3,223,000	- 0 -	250,000	2,973,000
TOTALS			<u>\$336,931,123</u>	<u>\$18,104,932</u>	<u>\$355,036,055</u>	<u>\$103,597,523</u>	<u>\$119,828,767</u>	<u>\$131,609,765</u>

<sup>1</sup>Transfers within 201 Projects

<sup>2</sup>See Schedules 14-7 & 14-8

<sup>3</sup>No Federal and/or State Grant Participation



**Request For  
Additional  
Funding**

Project 71-20 Prior Lake Interceptor

Reason for Increase: The increase of \$300,000 is needed to complete the construction and reflects the difference between estimated costs and actual costs for construction.

Project 72-02 MWWTP Compressor Building

Reason for Increase: This is a request for Step III funding of \$6,575,800. Plans and specifications will be completed and bids can be scheduled for late 1977.

Project 72-04 Cottage Grove

Reason for Increase: This is a request of \$896,100 for Step III funding. Step II will be completed by the end of 1977.

Project 73-02 Sludge Disposal

Reason for Increase: The increase of \$650,000 is necessary to complete the design of the sludge facilities and is necessitated by redesign of the process with incineration in lieu of pyrolysis.

Project 73-06 Chaska Treatment Plant

Reason for Increase: This is a request of \$410,000 for Step III funding. Step II will be completed by the end of 1977.

Project 74-01 (403) Digital Acquisition Control System

Reason for Increase: The increase of \$5,282,379 is estimated as the additional amount required to furnish and install the system. As the plans and specifications were progressing and the design completed, it became more apparent that the actual cost of the system would be near \$10,000,000 and not the previous estimated cost of \$5,000,000. The total 74-01 project cost will not increase as project 74-01 (400) has been decreased to cover this increase.

Project 74-01 (406) Sludge Dewatering Building

Reason for Increase: This increase is due to project 74-01 (405) being terminated and the costs included in this project (\$3,144,333).



Project 74-01 (407) Sludge Processing Equipment

Reason for Increase: The increase of \$2,194,781 is estimated as the additional amount required to furnish and install the two incinerators in the new building. The plans and specifications have been prepared and based on the completed design with the latest air emission standards, the project is estimated to cost about \$10,000,000 in lieu of the previous cost estimate of \$8,000,000. The total 74-01 project cost will not increase as Project 74-01 (400) has been decreased to cover this increase.

Project 75-50 Metro Planning

Reason for Increase: Based on the Metropolitan Council's projected billing for 1978, this project is increased \$150,000.

Various 201 Projects

Reason for Increase: Based on our current estimates, these amounts are needed in order to complete the 201 studies:

<u>Project No.</u>	<u>Amount Needed*</u>
76-13	\$ 36,423
76-14	5,952
76-21	123,484
76-25	180,000
76-28	253,013
76-35	201,602
76-38	78,525
76-48	100,000
76-55	623,633

\*These monies will not be expended unless federal and state grants are received.

Project 77-01 Riverview Siphon System

Reason for Increase: This is a request of \$1,900,000 for Step III funding. Step II will be completed in 1977 and bids can then be received to replace the existing river crossing which has been plagued with problems for sometime.



Project 77-02 Metropolitan Interceptor Improvements

Reason for Increase: This is a request for funds of \$345,000 for the Lake Gervais Lift station and funds to bring underground structures up to mechanical, electrical and safety codes including:

Metering Stations  
Lift Stations  
Regulator Vaults

Project 77-03 Matching Funds by the MWCC for an EPA 208 Program

Reason for Increase: Based on the 1978 estimates of costs forwarded by the Metropolitan Council, an additional \$30,000 will be required for our 25% share of the costs.

Project 77-04 Savage Plant Expansion

Reason for Increase: This is a request of \$190,000 for Step III funds. Step II will be completed in 1977.

Project 77-05 Beltline Regulator/Interceptor Improvements

Reason for Increase: This is a request of \$1,717,400 for Step III. Step II will be completed in 1977 and bids can then be taken to replace the existing sanitary interceptor and regulator.

77-06 Seneca Sludge Dewatering

Reason for Increase: This is a request of \$365,000 for Step III. Step II will be completed in time to allow for the timely installation of the unit in 1978.

77-07 CAB Interceptor

Reason for Increase: This is a request of \$2,973,000 for Step III funds. Step II will be completed near the end of 1977.



## Summary of Projects – Request for Funding

<u>Account No.</u>	<u>Project Name</u>	<u>Step</u>	<u>Estimated Cost</u>
78-01 <sup>1</sup>	Future System Configuration Central Cities & Contiguous Communities Study	I	\$ 271,541

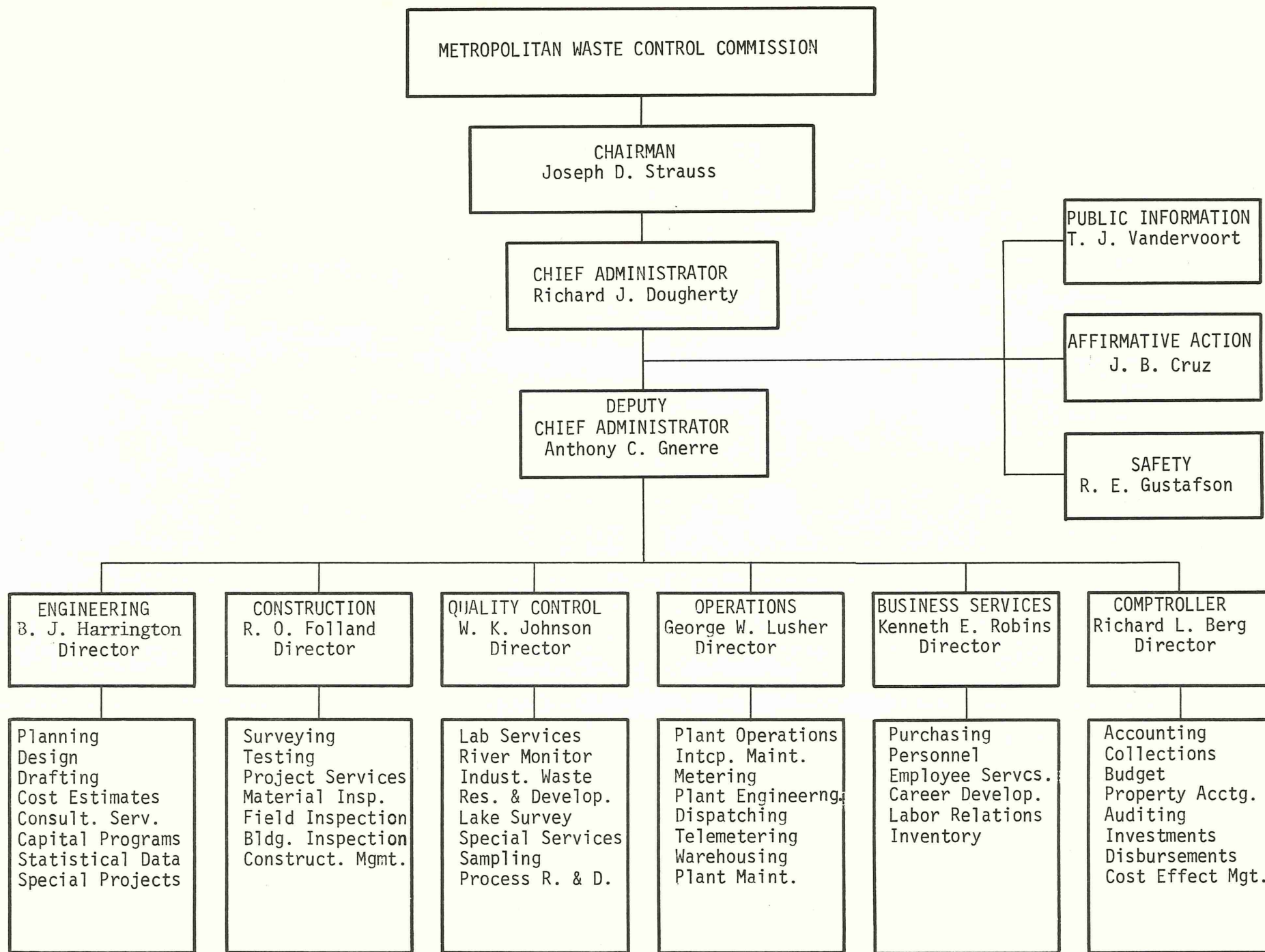
<sup>1</sup>Part of 201 Study and will receive 90% funding.



## Status of Authorized Personnel

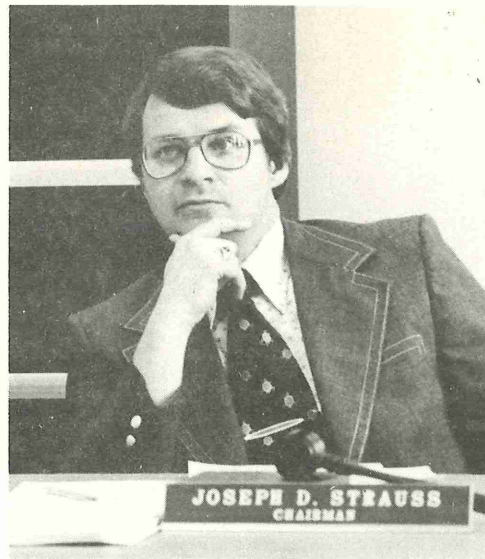
<u>Department/Plant</u>	<u>Proposed 1978</u>	<u>Actual 1977</u>
Administration	16	16
Engineering	28	26
Quality Control	61	48
Construction		
Central Office	10	10
Field Offices	65	53
Operations		
Central Office	6	6
Process Assurance	8	8
Area Supervisors	5	5
Metro Plant	209	189
Seneca Plant	40	39
Blue Lake Plant	23	21
Anoka	3	3
Maple Plain	1	1
Savage	1	1
Cottage Grove	4	4
Chaska	3	3
Orono	1	1
Stillwater	5	5
Apple Valley	4	4
Rosemount	15	15
Farmington	2	2
Lakeville	1	1
South St. Paul	12	12
Hastings	5	5
Long Lake	1	1
Bayport	1	1
Prior Lake	1	1
Interceptor System	51	42
Land Disposal Facility	7	0
Business Services	12	12
Comptroller	<u>14</u>	<u>14</u>
 TOTAL	 <u>615</u>	 <u>549</u>







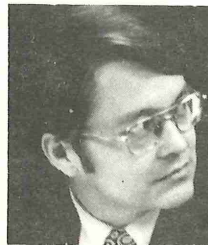
# Commission Members and Precincts



JOSEPH D. STRAUSS  
CHAIRMAN



**METROPOLITAN  
WASTE  
CONTROL  
COMMISSION**  
Twin Cities Area



Richard A. Beens



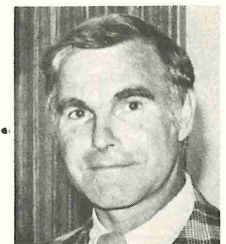
William T. Wallrich



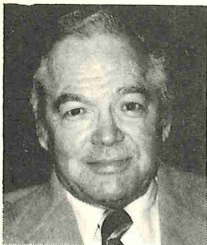
W. Glen Wallace



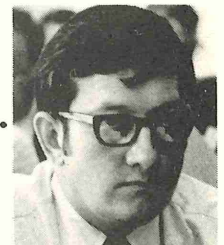
Carol M. Flynn



Frank Horak



C. Wayne Courtney



Calvin J. Brookman



Ruth K. Hustad

