1977 BUDGET

OBJECTIVES AND PROGRAMS

OFFICIALLY APPROVED

METROPOLITAN WASTE CONTROL COMMISSION
Twin Cities Area

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

RESOLUTION NO. 76-49

RESOLUTION APPROVING THE 1977 CAPITAL IMPROVEMENTS BUDGETS OF THE METROPOLITAN TRANSIT COMMISSION AND THE METROPOLITAN WASTE CONTROL COMMISSION

WHEREAS, the Metropolitan Waste Control Commission and the Metropolitan Transit Commission have submitted proposed 1977 Capital Budgets for the Metropolitan Council's review pursuant to Minnesota Statutes (1975 Supplement) Section 473.163; and

WHEREAS, said Section requires that the Metropolitan Council approve or disapprove the proposed capital improvements budgets of the Metropolitan Transit Commission and Waste Control Commission; and

WHEREAS, the Metropolitan Council has reviewed the proposed 1977 capital improvements budgets in relation to area-wide fiscal capacity, functional system objectives, the Metropolitan Development Framework and other applicable metropolitan plans and policies; and

WHEREAS, the Physical Development Committee of the Metropolitan Council in discharge of the above statutory duty has made specific determinations concerning the above budgets and recommends that the Council adopt the Committee's Report No. 76-117 dated September 23 1976, attached hereto as its approval of said budgets.

NOW, THEREFORE, BE IT RESOLVED:

1. That the Metropolitan Council approve the 1977 budgets of the Metropolitan Transit Commission and the Metropolitan Waste Control Commission subject to the determinations contained in Report No. 76-117, dated September 23, 1976, which is hereby incorporated herein by reference.

2. That the chairman of the Council immediately transmit this resolution and Report No. 76-117 to the above commissions and advise the commissions of the procedure to be followed in amending said budgets in accordance with this action and to take all other actions necessary to the discharge of the Council's statutory duty with regard to its review and approval of the commissions' capital improvements budgets.

ADOPTED this 28th day of September, 1976.

METROPOLITAN COUNCIL

By _____
Chairman

_____
Council Secretary

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

RESOLUTION NO. 76-268

RESOLUTION APPROVING AND ADOPTING
1977 PROGRAM BUDGET

WHEREAS, the 1977 Program Budget was presented to the Commission at its regular meeting of July 20, 1976, and

WHEREAS, public hearings were held on the proposed budget on August 10, September 14, and October 12, 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 1977 Program Budget as amended by the Metropolitan Council, and

2. That the amount of $33,374,233 be allocated to the various units of government for current use costs, and

3. That the amount of $1,995,011 be allocated to industrial users for Industrial Strength Charges, and

4. That the amount of $3,659,678 be allocated to the various units of government for reserve capacity charges, and

5. That the SAC unit charge applicable during the 1977 budget year is $375.00, 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 $420,000 for projects summarized on Schedule 15, and

7. That the Commission concur with the Metropolitan Council on the reappropriation of $217,307,522 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 19th day of October, 1976

METROPOLITAN WASTE CONTROL COMMISSION

By_____
Joseph D. Strauss, Chairman

By_____
Richard J. Dougherty, Chief Administrator

RLB:jm
10.13.76

METROPOLITAN
WASTE
CONTROL
COMMISSION
Twin Cities Area

Chief Administrator's Message

July 8, 1976

The Honorable Joseph D. Strauss, Chairman
Members of the Commission
Metropolitan Waste Control Commission
350 Metro Square Building
St. Paul, Minnesota 55101

Dear Mr. Strauss and Commissioners:

Enclosed for your review and consideration in accordance with the Metropolitan Council Act, Minnesota Statutes Chapter 473B.063 (as amended by the Metropolitan Reorganization Act, Chapter 422, 1974 Session Laws), is the proposed 1977 Budget for the Metropolitan Waste Control Commission covering the period January 1 through December 31, 1977.

The Metropolitan Reorganization Act provides for Budget implementation and preparation in a program budgeting format within three years after the effective date of the Reorganization Act, or January 1, 1978. The Commission staff implemented this new budgeting format during the current budget year and has been further reviewed and refined for the 1977 budget year.

The procedure followed in preparation of the Budget began with the submission of a budget request by each Department Director stating their personnel requirements, budgetary needs and programs for 1977. Each proposed program included a description, performance criteria and resources required. These programs were then reviewed by the Budget Committee which consisted of the Chief Administrator, Deputy Chief Administrator, and the Comptroller. Meetings followed with each Department Director to review, revise and justify the resources required to implement the proposed programs. The Budget document submitted to you represents the results of this process and procedure.

Expenditures for the administration, operation and maintenance of the Metropolitan Disposal System during 1977 totals $39,504,948. This amount represents a $3,634,452 or 10.1 per cent increase in proposed expenditures over the current year's Budget. The total proposed expenditures of $39,504,948 are detailed and described in 84 Program Budgets as indicated on Schedule 3 through 3-38 Each Program Budget indicates a description of the program, performance criteria and total resources required. You will find that Program Budgets and performance measurements, which emphasize results, not dollars spent, will tell you a great deal more about our activities and whether they meet community needs and requirements

ichard J. Dougherty
ief Administrator

Anthony C. Gnerre
Deputy Chief Administrator

partmental Directors
ernard J. Harrington
Engineering

ynold O. Folland
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George W. Lusher, Jr.
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than the traditional line-item budgeting. In addition, this new budgeting concept outlines a considerable amount of information in an understandable manner.

Some of the major categories requiring increases over the current year's Budget are as follows:

Salaries and Wages - Proposed salaries and wages for 1977 total $8,087,251, an increase of $616,845 over the prior year. This increase is attributed to 32 new positions and pay increases as provided for in labor agreements for longevity, merit and cost of living considerations.

Employee Benefits - Proposed employee benefit costs for 1977 total $1,940,155, an increase of $147,258 over the prior year. This increase is attributed to increases in premiums for insurance coverages, Social Security taxes, and contributions for employees who participate in the Municipal Employees Retirement Fund. In addition, employee benefit costs are directly related to employee earnings which parallel the salary and wage increase noted previously.

Utilities - Utility costs which include electricity, fuel oil, natural gas and water are estimated to cost $5,279,146, an increase of $1,325,421, or 34 per cent over the current year's Budget. This increase is attributed to the continual rate increases for all utility costs. It is anticipated that fuel oil alone will increase 30 per cent over current rates.

Chemicals - Chlorine - These costs are estimated at $2,434,909, an increase of $434,023, or 22 per cent over the current year. Chlorine and other chemical costs continue to escalate beyond our control.

Debt Service - Debt Service costs for 1977 total $13,140,092, an increase of $292,049 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 needs for 1977 require 32 new positions resulting in a total compliment of 549 employees. Six (6) of these positions are required for the Construction program, six (6) in Quality Control, primarily for Industrial Strength Charge System, and twenty (20) for Operations attributed to new treatment works and interceptor facilities.

Sewer Service Charges - Allocation of current use charges to local governments being served by the Metropolitan Disposal System is estimated to cost $35.53 per 100,000 gals (per family) based on flow volume of 93,931 million gallons. This flow volume estimate is 1.5% greater than the current year. 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 SAC unit rate for 1977 will be $375.00 in accordance with the current policy and revenues are estimated at $3,659,678.

Industrial Strength Charges - During the latter part of the last year and early part of this fiscal year a series of informational meetings were held during the development of the Industrial Strength Charge Allocation System. Public Hearings were held on April 21 and May 11, 1976 and the Commission adopted the Industrial Strength Charge System at its regular meeting of June 15, 1976. This System anticipates revenues from approximately 120 firms located in 24 units of government with estimated revenues of $1,995,011.

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 1977 includes two (2) planning studies with estimated cost of $320,000: one (1) project requiring preparation of plans and specifications with estimated cost of $100,000 resulting in a grand total of $420,000 for the 1977 Capital Improvements Program. 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 $45,836,214 and are detailed and described in Schedules 14-7 through 14-11.

Revenue requirements to finance the proposed projects and those previously approved and authorized total $280,784,465. These revenues include Certified Federal Grants of $47,705,507, Certified State Grants of $9,367,096, anticipated future Federal and State Grants of $192,034,026, and investment earnings of $6,260,000. A complete financial review, analysis and update of the Capital Improvements Program indicates a fund balance on May 31, 1975 in the amount of $35,346,420; estimated total revenues in the amount of $255,376,629, expenditures for previously funded programs totaling $280,364,465 and the 1977 funding request totaling $420,000, resulting in a fund balance at completion of the current program in the amount of $9,938,584. This financial analysis indicates that the program fund balance of $9,938,584 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. It is anticipated that the sale of bonds will not be required within the next three (3) to five (5) years. A summary statement of the fund balance, revenues and expenditures is indicated on Schedule 7.

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 1977 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 has 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 and the Commissioners our complete cooperation and assistance in the review process.

Very truly yours,

RICHARD J. DOUGHERTY
Chief Administrator

RJD:ACG:sl

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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

	Proposed 1977	Budget 1976	Actual 1975
ESTIMATED REVENUES:			
Sewer Service Charges - Communities	$33,374,233	$31,300,362	$27,878,318
Industrial Strength Charges	1,995,011	- 0 -	- 0 -
Service Availability Charges	3,659,678	4,149,057	4,169,975
Transfer from SAC Reserve	- 0 -	- 0 -	355,147
Investment Earnings	250,000	250,000	304,252
Federal Grants	211,026	161,077	9,000
Other	15,000	10,000	24,833
Total	$39,504,948	$35,870,496	$32,741,525
ESTIMATED EXPENDITURES:			
Programs	$22,645,871	$19,359,976	$16,804,767
Debt Service	13,140,092	12,848,043	12,169,455
Acquisition Costs	3,718,985	3,662,477	3,743,075
Due to Local Governments	- 0 -	- 0 -	24,228
Total	$39,504,948	$35,870,496	$32,741,525

PROGRAMS

ADMINISTRATION AND MANAGEMENT (001)

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

1. Meet and decide major issues;
2. Provide leadership and direction to Department Directors and Managers;
3. Carry out and administrate Commission policy;
4. Respond to correspondence on a timely basis;
5. Perform all other necessary supervisory and management responsibilities.

Performance Criteria:

1. Meet on a monthly basis with Department Directors and Managers and other key personnel;
2. Respond to communications and requests within 7 days;
3. Attend and participate in special meetings on major issues;
4. Make decisions on a timely basis.

Resources Required: $ 321,667

Work Hours Required: 3,540

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 days.

Resources Required: $ 77,024

Work Hours Required: 4,000

AFFIRMATIVE ACTION (003)

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

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/or train minorities for professional and managerial job categories;

6. Achieve compliance certification from the Minnesota State Department of Human Rights.

Performance Criteria:

1. To increase the number of minorities and females employed from 12/31/76 to 12/31/77 by 15%;

2. To publish monthly Affirmative Action Reports;

3. To continue Human Relations Training Program;

4. To employ minorities and/or females in at least three professional and/or managerial categories;

5. To receive a Certificate of Compliance from the Minnesota Department of Human Rights.

Resources Required: $ 50,963

Work Hours Required: 3,090

PUBLIC INFORMATION (004)

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

PUBLIC INFORMATION (continued)

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 1976 Annual Report by January 15, 1977;

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.

Resources Required: $ 92,790

Work Hours Required: 5,350

SAFETY (005)

Descripton: 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;
2. Maintain accurate and adequate injury records;
3. Respond to each request for air contaminent or noise analysis;
4. Train 100 employees in first aid;
5. Train all employees who may have need to use emergency breathing apparatus;
6. Write and distribute to employees each month a safety newsletter;
7. Publish an employee's safety manual;
8. Issue notice of non-compliance to employees and their supervisors for violation of the Commission's Safety Program and policies.

Resources Required: $ 44,835

Work Hours Required: 1,950

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 Educatonal and Vocational Programs;
10. Degree Program.

Resources Required: $ 30,960

Work Hours Required: 250

ENGINEERING ADMINISTRATION (007)

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

ENGINEERING ADMINISTRATION (continued)

1. Prepare and present approximately six business items for each monthly Commission meeting to be submitted three work days prior to the Com

2. Prepare and recommend approval of ten special agreements for Committee meeting;

3. Review and recommend action on six interceptor acquisition requests for Commission approval;

4. Prepare about 200 responses within two weeks turnaround to public and other agency requests on Commission policies and business;

5. Prepare an annual Departmental Program Budget by June 1, 1977;

6. Prepare and implement six in-house plans and specifications for minor Metropolitan Disposal System improvements for Operations Department at their request;

7. Provide engineering support within 30 days of a request of other Commission departments;

8. Coordinate contract services for emergency or unforeseeable necessary improvements to the Metropolitan Disposal System;

9. Continuously update planning and design criteria with information obtained from education, attendance at conferences and technical meetings, public hearings, and special seminars;

10. Provide effective supervison through creative thinking, biweekly department staff meetings, annual personnel evaluations for the department staff;

11. Meet with the Chief Administrator and attend staff meetings to establish Commission policies and objectives.

ENGINEERING ADMINISTRATION (continued)

Performance Criteria:

1. Number of business items submitted on time and presented each month during 1977;

2. Unit costs and manhours per special agreements prepared during 1977;

3. Unit cost and manhours per recommendations on interceptor acquisition requests during 1977;

4. Achieve 75 per cent of letter and meeting responses on time each month during 1977;

5. Initiate preparation of budget by February 1 and submit 1978 Department Budget by June 1, 1977;

6. Unit cost and manhours used in the preparation and implementation of six improvements during 1977;

7. Number of times engineering support is not provided within 30 days;

8. Were contract services made and implemented within manhours and costs during 1977;

9. Number of problems encountered with inadequate design on projects during 1977;

10. 500 manhours effectively spent in supervision, creative thinking, department staff meetings and evaluations;

11. 300 manhours spent meeting with the Chief Administrator and attending staff meetings to establish Commission policies and objectives.

Resources Required: $ 203,729

Work Hours Required: 12,060

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. Review and obtain the Commission approval of 40 community comprehensive sewer plans (interim plans and addendums);

2. Review and comment on approximately 200 community sewer improvement projects;

3. Review and comment on approximately 35 community comprehensive plans and A-95 grant applications as requested by the Metropolitan Council;

4. Review and comment on approximately 70 Metropolitan Council Systems Statements as to sewer needs and available sewer capacity;

5. Review and obtain the approval of approximately 50 sewer connection permit applications as submitted;

6. Formulate recommendations for submission to the Metropolitan Council as input to the Waste Management Policy Plan;

7. Review and recommend changes to Commission maintenance and rental agreements and policies for interceptors;

8. Meet with 12 local governments to discuss regional and local planning relationships.

Performance Criteria:

1. Unit costs and manhours per community comprehensive sewer plans reviewed and/or approved during 1977;

2. Unit costs and manhours per community sewer improvements reviewed during 1977;

COMPREHENSIVE SEWER PLAN (continued)

3. Unit costs and manhours per community comprehensive plans reviewed and commented on during 1977;

4. Unit costs and manhours per Metro Council Systems Statements reviewed and commented on during 1977;

5. Unit costs and manhours per Metropolitan Facilities Connection permits approved during 1977;

6. Number of recommendations made to Metro Council as input to Waste Management Policy Plan during 1977;

7. Was review of maintenance and rental accomplished with 200 manhours;

8. Metropolitan planning relationships established with 12 communities with 100 hours.

Resources Required: $ 48,748

Work Hours Required: 4,660

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. Determine, review and assign the actual quarterly and annual wastewater flow volume for 100 communities from 140 meters and 60 unmetered sources for the 1977 Cost Allocation Program and other pertinent uses;

2. Determine, review and assign treatment works and interceptor capacity and 1978 estimated sewage flow volumes for 100 communities in the Annual Cost Allocation Program;

FLOW DETERMINATIONS/ASSIGNMENTS
(continued)

3. Determine and assign the Service Availability Charge (SAC) units for all new users of the Metropolitan Disposal System;

4. Provide communities with routine and special flow analysis, flow data on a regular basis and provide written and oral explanation of the flow volumes originating in their community;

5. Request, collect and analyze current wastewater flows for inflow/infiltration and consistency with water use data from communities using the Metropolitan Disposal System;

6. Analyze current wastewater flows with interceptor and wastewater treatment plant capacities for disposal system planning.

Performance Criteria:

1. Determine, review and assign the actual wastewater flow volumes (metered and unmetered) for all communities and report these total flows on both a quarterly and annual basis;

2. Provide the assigned treatment works and interceptor capacities and the 1978 estimated sewage flow volumes for 100 communities in the Cost Allocation Program by June 15th of the year;

3. Determine and assign the SAC units in a timely manner and furnish the results to the communities in either oral (400-500) or written (100-150) communications;

4. Provide routine wastewater flow and special flow analysis data to 25 communities in a timely manner.

FLOW DETERMINATIONS/ASSIGNMENTS
(continued)

5. Analyze current wastewater flows for I/I for consistency with water use data for 100 communities;

6. Analysis of current wastewater flows and system capacities made with 100 manhours.

Resources Required: $ 19,955

Work Hours Required: 1,880

PROJECT PLANNING (010)

Description: To prepare the complete Development Program Report in accord with Metropolitan Council and federal requirements by December 31, 1977.

1. Development Program prepared to carry out required Waste Management Policy Plan directives;

2. Development Program prepared to fulfill the requirements of the 201 studies program.

Performance Criteria:

1. Initiate work on the Program Report by June 1;

2. Complete Development Program formulation by December 31, 1977 within the alloted manhours and costs.

Resources Required: $ 13,703

Work Hours Required: 1,080

QUALITY CONTROL ADMINISTRATION (011)

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

QUALITY CONTROL ADMINISTRATION
(continued)

1. Provide general departmental support and coordination by reviewing existing programs and planning revisions, preparing and monitoring budgets, visiting regional plants and labs, and maintaining interdepartmental liaison;

2. Establishing and maintaining contacts with outside organizations and agencies for the betterment of the Commission;

3. Conduct performance reviews of all personnel, plan for career development of all personnel through in-house seminars and attendance at conferences, and to hold bi-weekly staff meetings;

4. Prepare items for Commission meetings, attend Commission meetings, and attend general staff meetings;

5. Provide coordination of departmental participation in 201 and 208 Planning activities;

6. Provide general clerical and administrative resources to the staff.

Performance Criteria:

1. Determine whether or not budget resources have been used properly, and review records of plant visits to evaluate the adequacy of visitation schedule;

2. Review activities outside the Commission and determine the positive values for the Commission;

3. Evaluate the personnel program for the past year in terms of technical and professional growth of employees and changes in job satisfaction of employees;

4. Compare goals of 201/208 programs with accomplishments within the department.

Resources Required: $ 62,759

Work Hours Required: 4,650

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. Maintain a current inventory of the characteristics of approximately 500 industrial waste discharges and prepare quarterly summary reports;

2. Aid approximately 20 industries to work toward compliance with

3. Conduct 100 surveys of industrial waste discharges;

4. Process all industrial Service Availability Charge (SAC) applications received and determine charges;

5. Compute industrial strength charges for 120 industries and prepare quarterly reports;

6. Compute industrial cost recovery charges for approximately 300 industries and prepare periodic reports;

7. Attend one conference on industrial waste treatment technology;

8. Evaluate 12 potential industrial waste problems at 8 treatment plants.

Performance Criteria:

1. Number of industries delinquent in reporting to those properly inventoried;

2. Number of industries aided to total industries not in compliance;

3. Number of surveys conducted compared to planning goal;

4. Number of SAC applications processed in 10 days versus number received;

5. Number of strength charge determinations unresolved and 30 days overdue versus total industries eligible;

INDUSTRIAL WASTES (continued)

6. Number of industrial cost recovery determinations unresolved and 30 days overdue versus total industries eligible.

Resources Required: $ 98,364

Work Hours Required: 5,550

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 the University of Minnesota which address long term needs of the Commission;

2. Provide funding for in-house projects, projects requiring matching funds, and extramural projects as priorities allow;

3. Design and procure pilot plant equipment required to evaluate: flocculent sedimentation, gravity thickening, mixing and energy requirements of sludge conditioning, activated sludge, effluent ozonation by June 30, 1977;

4. Review R & D proposals within 14 days of receipt;

5. Prepare proposals for evaluation of: gravity thickening, mixing and energy requirements of sludge conditioning, effluent ozonation, activated sludge bulking control by March 31, 1977;

6. Conduct in-house projects as per recommendations of R & D Committee;

7. Conduct four evaluations of new process instrumentation used for process monitoring and control;

8. Review R & D conducted by other agencies.

RESEARCH AND DEVELOPMENT (continued)

Performance Criteria:

1. Project completion and presentation of final report;

2. Number and funding level of high priority projects;

3. Date equipment available for use;

4. Number of projects with review times greater than 14 days;

5. Date proposals prepared;

6. Progress reports;

7. Number of evaluations completed and final reports generated;

8. Trip reports.

Resources Required: $ 72,120

Work Hours Required: 1,440

TECHNICAL SERVICES (014)

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

1. Visit 16 treatment plants each month to calibrate instruments, advise operators on analytical techniques, and maintain stock of plant laboratory supplies;

2. Conduct a summer and winter survey at each of 8 plants;

3. Investigate 4 new analytical techniques and prepare recommendations for possible use.

Performance Criteria:

1. Number of visits made compared to projection;

TECHNICAL SERVICES (continued)

2. Number of survey reports completed compared to projection;

3. Number of new analytical techniques implemented compared to techniques investigated.

Resources Required: $ 47,066

Work Hours Required: 2,425

WATER QUALITY MONITORING (015)

Description: To monitor and study the water quality of Metropolitan Area rivers and lakes through a comprehensive water quality monitoring program including MWCC routine river monitoring, the MWCC-USGS cooperative water quality surveillance program and the use of automatic monitors.

1. Operate and maintain nine presently installed MWCC and MWCC-USGS cooperatively owned automatic monitors;

2. Conduct, in cooperation with the USGS, the Water Quality Surveillance Program wherein grab samples for routine parameters are obtained monthly from fourteen Metropolitan Area locations and non-routine parameters are obtained yearly from six area locations;

3. Attend one conference on mathematical modeling of water quality systems;

4. Prepare an annual report of water quality data for 1976 by April 1st;

5. Analyze daily, using computers and other means, and make available current automatic monitoring, grab sampling, river flow and climatological data in tabular and/or graphical format;

6. Report weekly to the Director of Quality Control the state of water quality in the Metropolitan Area and downstream;

WATER QUALITY MONITORING (continued)

7. Conduct monthly field observations of Area rivers;

8. Conduct intro-commission "spontaneous" special studies (e.g. Computer projections of water quality due to changing plant performance).

Performance Criteria:

1. Percentage of the year that data is obtained from monitors;

2. Number of samples obtained compared to number planned;

3. Assessment of conferences attended;

4. Compare time of completion to scheduled date;

5. Data available on a current basis compared to data generated;

6. Number of weekly reports to Director;

7. Number of monthly field observations;

8. Number of intra-commission studies, completed compared to number requested.

Resources Required: $ 108,183

Work Hours Required: 4,080

LABORATORY SERVICES (016)

Description: To conduct routine sampling of wastewater treatment plants, rivers and lakes, and to provide complete laboratory services of the Commission for analysis and reporting of samples from treatment plants, rivers, lakes, industrial waste and from research and development and special studies programs.

1. Collect the influent and effluent samples from all 20 Commission treatment plants as requried for NPDES permits;

LABORATORY SERVICES (continued)

2. Collect samples from 25 sampling locations on the Mississippi, Minnesota, St. Croix and Vermillion Rivers at weekly intervals;

3. Conduct laboratory analyses as follows:

   a. 51,000 analyses for NPDES monitoring at treatment plants;

   b. 18,000 analyses for receiving water samples;

   c. 65,000 analyses for special treatment plant samples;

   d. 47,000 analyses for research and development projects;

   e. 10,000 analyses for industrial waste samples.

4. Prepare monthly NPDES reports by the 7th day of the month;

5. Prepare separate annual reports on treatment plant performance and laboratory activity by February 15;

6. Attend conferences on analytical chemistry and biological analysis;

7. Conduct an internal quality control program.

Performance Criteria:

1. Number of samples requiring resampling;

2. Number of weekly samples missed compared to samples scheduled to be taken;

3. Compare number of analyses conducted to number planned in program;

4. Number completed by 7th day of month to total monthly reports required;

5. Compare time of completion to scheduled date;

LABORATORY SERVICES (continued)

6. Assess value of conference to program activities and compare number of conferences attended to total professional personnel;

7. Number of analyses conducted for quality control purposes compared to total analyses.

Resources Required: $ 555,220

Work Hours Required: 55,360

AIR QUALITY MONITORING (017)

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

1. Collect and analyze monthly samples of gaseous emissions at the Metro and Seneca Plants and prepare quarterly reports;

2. Conduct 6 ambient air surveys at Commission facilities and prepare reports;

3. Attend one national and three local air pollution control conferences.

Performance Criteria:

1. Number of samples analyzed compared to planned schedule and number of quarterly reports prepared;

2. Number of surveys conducted and reports prepared compared to the program plan;

3. Assess the value of conferences attended.

Resources Required: $ 31,619

Work Hours Required: 2,560

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. Prepare report on evaluation of gravity thickener control strategy by September 30, 1977;

2. Implement new control strategy for one vacuum filter at the Seneca Plant by February 28, 1977;

3. Prepare report on evaluation of vaccuum filtration control strategy by August 31, 1977;

4. Sample input and output streams at Anoka primary anaerobic digester twice per week and conduct appropriate analyses;

5. Prepare and submit four quarterly progress reports to EPA project officer within 30 days of quarter anniversary dates;

6. Prepare 1977-78 work plan in cooperation with EPA project officer by April 30, 1977;

7. Implement 1977-78 work plan;

8. Present project results at one conference.

Performance Criteria:

1. Publication date of thickener report;

2. Date by which strategy implemented;

3. Publication date of vacuum filtration report;

4. Samples collected;

5. Dates progress reports submitted;

PROCESS AUTOMATION (continued)

6. Date work plan completed and agreement reached with EPA project officer;

7. Benchmark dates of 1977-78 work plan;

8. Presentation of project results.

Resources Required: $ 142,662

Work Hours Required: 4,850

PHYSICAL CHEMICAL TREATMENT EVALUATION (019)

Description: To evaluate and demonstrate a physical-chemical wastewater treatment plant specifically for the purpose of acquiring economic and performance data.

1. Sample process flow streams 3 days per week and perform appropriate analyses;

2. Conduct special plant studies, as required, to define operational problems and provide solutions;

3. Prepare 2-week cost reports within 14 days of anniversary dates;

4. Prepare and submit 4-week progress reports within 14 days of anniversary date;

5. Prepare and submit draft of final report to EPA project officer by September 16, 1977;

6. Present project results at one professional conference.

Performance Criteria:

1. Number of weeks sampling and analyses schedule completed;

2. Number of problems solved;

PHYSICAL CHEMICAL TREATMENT EVALUATION (continued)

3. Dates 2-week reports completed;

4. Dates 4-week reports submitted to EPA;

5. Date report submitted;

6. Presentation of project results.

Resources Required: $ 63,290

Work Hours Required: 3,530

CONSTRUCTION ADMINISTRATION (020)

Description: To provide overall administration of all construction contracts so as to complete those projects scheduled to be finished in 1977 in accordance with plans and specifications at a cost for all Construction Administration costs not to exceed 2.5 per cent of contract payments.

1. Maintain the Director's Constructions Project Log for 36 capital improvement contracts and 5 Material Testing Contracts by logging and filing an estimated 6,800 documents;

2. Maintain and revise all contract plan and specification documents for 36 capital improvement contracts to keep them current in the Director of Construction's office;

3. Review, evaluate, and prepare an estimated 60 change orders and resolutions and process them through the Engineering and Administration Departments with 90% of these to be provided to the Chief Administrator three days prior to mailing to the Commission;

4. Process monthly construction contract payments and other disbursements through the Engineering, Comptroller's, and Administration Departments with 90% of these to

CONSTRUCTION ADMINISTRATION (continued)

be provided to the Chief Administrator three days prior to mailing to the Commission.

5. Prepare annual budgets and review all other program budgets prepared in the Construction Department in order to achieve a reduction in cost;

6. To attend staff meetings, make personnel evaluations, meet with other Directors and Chief Administrator, review and revise Department policies, review and act on monthly construction progress and financial reports, and prepare and negotiate annual consulting contracts for materials testing and critical path construction scheduling.

Performance Criteria:

1. Total Construction Administration costs 2.5 per cent or less than those contracts on which final payment is made in 1977;

2. Director's Construction Log Book and Testing Contract cost control maintained up to date for all current contracts at all times during 1977;

3. Director's contract plan and specification documents kept fully revised and up to date for all current contracts during 1977;

4. Change Orders and Resolutions processed 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;

5. Monthly construction payments and other disbursements processed 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;

CONSTRUCTION ADMINISTRATION (continued)

6. All Construction Department Budgets reviewed and submitted in accordance with the budget calendar;

7. Consulting contracts negotiated for materials testing and critical path construction scheduling and other general administrative duties accomplished as outlined under this objective in 1977.

Resources Required: $ 42,513

Work Hours Required: 3,130

BUILDING INSPECTION DIVISION (021)

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

1. Inspect, prepare estimates of cost for maintenance, repairs, and improvements; and prepare individual reports on 20 Wastewater Treatment Plants (including the Metro Plant);

2. Inspect, prepare estimate for maintenance, repairs, and improvements; and prepare a report on 43 Lift Stations;

3. Inspect, prepare estimates for maintenance, repairs, and improvements; and prepare a report on 124 Metering Stations;

4. Inspect, prepare estimates for maintenance, repairs, and improvements, and prepare a report on 21 Regulator Vaults;

5. Prepare estimates of cost for maintenance projects, and supervise the construction of maintenance repair, and improvements projects under the Operations Department 1977 Budget;

BUILDING INSPECTION DIVISION (continued)

6. Meet with the Director of Construction and other Department Supervisors, attend staff meetings, make personnel evaluations, prepare and monitor Building Inspection Division job assignments and schedules, prepare monthly job progress reports, prepare annual budget, review program status reports, and assist in the preparation of EPA grant approval documents.

Performance Criteria:

1. Inspections, the estimates of cost, the man hours, and the reports completed on 20 Wastewater Treatment Plants within the scheduled time;

2. Inspections, the estimates of cost, the man hours, and the reports completed on 43 Lift Stations within the scheduled time;

3. Inspections, the estimates of cost, the man hours and the reports completed on 124 Metering Stations within the scheduled time;

4. Inspections, the estimates of cost, the man hours and the reports completed on 21 Regulator Vaults within the scheduled time;

5. Number and man hours on the projects assigned to the Building Inspection Division of the Construction Department under the Operation's Department Budget, completed within the scheduled time;

6. Administrative duties accomplished as outlined under this objective during 1977.

Resources Required: $ 114,561

Work Hours Required: 7,810

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. To attain 80% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category at the MWWTP and to attain 92% frequency in meeting NPDES limits and a 36% severity rate in measuring actual data to the NPDES standards for each category at all other plants.

1. Prepare weekly and monthly status reports of plants and interceptors for Commission use and NPDES compliance correspondence to State and federal agencies;

2. Meet with plant superintendents and staff twice monthly;

3. Meet with area supervisors twice monthly;

4. Prepare business items for Commission action;

5. Respond to personnel grievances within the constraints of existing labor agreements.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards;

2. All reports forwarded by 12-31-77;

3. 24 staff meetings held during 1977;

4. 24 area supervisors meetings held as scheduled;

5. Business items forwarded on time for action;

6. 75% of grievances resolved during 1977;

7. 1977 budget limitations met.

Resources Required: $ 302,152

Work Hours Required: 17,190

PROCESS ASSURANCE (023)

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

1. To reduce the number of treatment plant NPDES Permit effluent limitations non-compliance events in 1977 to 90% of the number occurring in 1976 for equivalent standards

2. To reduce treatment plant operation and maintenance costs in 1977 by a rate of $50,000 per year over those occurring in 1976;

3. To see that at least 90% of all treatment plant improvements affecting plant performance provided in treatment plant capital outlay budgets and in Project 74-10 are under construction or completed by December 31, 1977;

4. To prepare assessments of air pollution problems at all Commission facilities by Decmeber 31, 1977.

Performance Criteria:

1. Number of plant effluent non-compliance events in 1977 compared to the number in 1976;

2. The documented reduction in operation and maintenance costs of treatment plants in dollars per year during 1977;

3. The percentage of treatment plant capital outlay budget items and Project 74-10 projects underway or completed in 1977;

4. The percentage of Commission facilities for which air pollution assessments have been made during 1977.

Resources Required: $ 130,588

Work Hours Required: 7,650

METRO PLANT ADMINISTRATION (024)

Description: To attain a 75% frequency in meeting NPDES limits and a 38% severity rate in measuring actual data to the NPDES standards for each category.

1. Forward 12 monthly operational reports to the Commission;
2. React to 25 employee grievances at the first step level;
3. Meet with staff and plant personnel 40 times during 1977;
4. Comply with Safety and OSHA Regulations within 15 days of notice;
5. Manage liquid and strength operation and liquid and strength maintenance programs within limits of 1977 budget.

Performance Criteria:

1. Number of monthly reports issued by December 31, 1977;
2. Number of grievances resolved by December 31, 1977;
3. Number of sessions conducted by December 31, 1977;
4. Number of affirmative reports received by Safety Section by December 31, 1977;
5. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 613,508

Work Hours Required: 43,200

METRO PLANT LIQUID TREATMENT-SYSTEM-OPERATION (025)

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

METRO PLANT LIQUID TREATMENT-SYSTEM-OPERATION (continued)

1. Continuously operate primary liquid treatment system;
2. Continuously operate aeration system;
3. Safely and continuously operate chlorination system;
4. Produce final effluent quality not exceeding 45/65 mg/l BOD, 45/60 mg/l SS, and FeCl of 200 MPN/100 ml.

Performance Criteria:

1. Number of hours of continuous primary operation;
2. Number of hours of continuous aeration process operation;
3. Number of hours of chlorination system operation;
4. Number of violations of NPDES standards.

Resources Required: $ 2,779,896

Work Hours Required: 140,400

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

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

1. Continuously operate solid/strength collection equipment;
2. Remove 77,000 tons of solid/strength waste;
3. Dispose of 77,000 tons of solid/strength waste;
4. Meet MPCA air quality standards.

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

Performance Criteria:

1. Number of hours of continuous equipment operation;
2. Number of tons of solid/strength removed;
3. Number of tons of solid/strength disposed;
4. Number of air quality citations received.

Resources Required: $ 6,228,203

Work Hours Required: 122,400

METRO PLANT LIQUID TREATMENT SYSTEM-MAINTENANCE (027)

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

1. Respond to emergency work orders without delay;
2. Perform scheduled preventive maintenance;
3. Reduce backlog of work orders to a maximum of four weeks;
4. Reduce number and severity of work related accidents from 1976.

Performance Criteria:

1. Number of emergency work orders completed;
2. Number of hours of schedule P.M. performed;
3. Number of weeks of backlog remaining;
4. Number of accidents.

Resources Required: $ 725,519

Work Hours Required: 36,000

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

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

1. Respond to emrgency work orders without delay;
2. Perform scheduled preventive maintenance;
3. Reduce backlog of work orders to a maximum of four weeks;
4. Reduce number and severity of work related accidents from 1976.

Performance Criteria:

1. Number of emergency work orders completed;
2. Number of hours of scheduled P.M. performed;
3. Number of weeks of backlog remaining;
4. Number of accidents.

Resources Required: $ 1,034,165

Work Hours Required: 37,800

SENECA PLANT ADMINISTRATION (029)

Description: To attain a 97% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

1. Submit to the Director of Operations 12 monthly reports;
2. Respond to 40 employee grievances;
3. Meet regularly with plant and staff personnel for training and evaluation and safety instruction;
4. Maintain consumables and spare parts inventory so downtime does not occur as a result of lack of these items;

SENECA PLANT ADMINISTRATION (029)

5. Spend 338 hours in creative thinking to improve quality and economy of plant operations;

6. Arrange and conduct plant tours for schools and other interested organizations;

7. Perform general clerical, receptionist and employee time keeping.

Performance Criteria:

1. Individual programs requirements fulfilled;

2. Monthly reports submitted each month in a timely manner;

3. Number of grievances resolved versus the number filed;

4. Number of meetings held and number of employees cross trained;

5. Number of days of downtime caused by lack of consumables and normal spare parts;

6. 120 hours spent in creative thinking and the results;

7. Number of groups taken through plant;

8. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 120,147

Work Hours Required: 7,200

SENECA LIQUID TREATMENT SYSTEMS OPERATION (030)

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

1. Produce an effluent that does not exceed 25 mg/l SS, 30 mg/l BOD, 200 Fecal Coliform 100 ml and a dissolved oxygen not less than 4 mg/l;

SENECA LIQUID TREATMENT SYSTEMS OPERATIONS (continued)

2. Operate the liquid system such that air quality standards are not violated.

Performance Criteria:

1. Number of days of continuous operation at liquid system;

2. Number of days effluent standards were met;

3. Number of violations/complaints received.

Resources Required: $ 510,502

Work Hours Required: 20,600

SENECA SOLIDS/STRENGTH OPERATIONS (031)

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

1. To collect, condition, incinerate and dispose of 10,500 tons of solid/strength waste;

2. To meet MPCA air quality standards.

Performance Criteria:

1. Number of hours of continuous operation and percentage of Blue Lake sludge handled at Seneca;

2. Number of tons of solid/strength incinerated and disposed of;

3. Number of violations of air quality standards.

Resources Required: $ 861,910

Work Hours Required: 30,400

SENECA LIQUID TREATMENT SYSTEM MAINTENANCE (032)

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

1. Perform scheduled preventive maintenance;
2. Respond to emergency (breakdown) work orders;
3. Perform routine and deferrable maintenance on time without undue delays.

Performance Criteria:

1. PM work scheduled and completed on time;
2. Number of hours of downtime caused by emergency work not completed;
3. Number of routine work orders completed.

Resources Required: $ 145,926

Work Hours Required: 6,600

SENECA SOLIDS/STRENGTH MAINTENANCE (033)

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

1. Perform scheduled preventive maintenance;
2. Respond to emergency (breakdown) work orders;
3. Perform routine and deferrable maintenance on time without undue delays.

Performance Criteria:

1. PM work scheduled and completed on time;
2. Number of hours of downtime caused by emergency work not completed;

SENECA SOLIDS/STRENGTH MAINTENANCE (continued)

3. Number of routine work orders completed.

Resources Required: $ 121,266

Work Hours Required: 5,400

BLUE LAKE PLANT ADMINISTRATION (034)

Description: To attain a 97% frequency in meeting NPDES limits and a 20% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 71,255

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 the most effective manner possible;
2. Operate at the least possible cost;
3. Maintain a high quality of aesthetic conditions at and around the plant.

BLUE LAKE LIQUID PROCESS OPERATIONS (continued)

Performance Criteria:

1. Consistency of the effluent in meeting NPDES permit requirements;

2. Operation of the plant within the proposed budget;

3. Operation of the plant in a clean odor-free manner.

Resources Required: $ 456,855

Work Hours Required: 15,900

BLUE LAKE LIQUID PROCESS MAINTENANCE (036)

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

1. Maintain plant equipment, structures, and plant grounds;

2. Provide continued effective operations and aesthetic conditions.

Performance Criteria:

1. Relative amount of equipment which is in operational condition;

2. General appearance of plant grounds and structures.

Resources Required: $ 172,091

Work Hours Required: 7,500

BLUE LAKE SOLIDS REMOVAL (037)

Description: To remove and transport sludge solids.

1. Remove sludge from the treatment process safely transporting it to a disposal location.

BLUE LAKE SOLIDS REMOVAL (continued)

Performance Criteria:

1. Removal of all sludge generated from the treatment process on a continuous basis.

Resources Required: $ 209,667

Work Hours Required: 10,800

ANOKA PLANT OPERATIONS (038)

Description: To attain a 95% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 136,308

Work Hours Required: 5,400

LONG LAKE PLANT OPERATIONS (039)

Description: To attain a 85% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 48,886

Work Hours Required: 2,700

MAPLE PLAIN PLANT OPERATIONS (040)

Description: To attain a 93% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 44,809

Work Hours Required: 3,600

SAVAGE PLANT OPERATIONS (041)

Description: To attain a 91% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 44,030

Work Hours Required: 1,800

COTTAGE GROVE PLANT OPERATIONS (042)

Description: To attain a 98% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 202,391

Work Hours Required: 7,200

CHASKA PLANT OPERATIONS (043)

Description: To attain a 84% frequency in meeting NPDES limits and a 50% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 174,398

Work Hours Required: 5,400

ORONO PLANT OPERATIONS (044)

Description: To attain a 94% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 43,044

Work Hours Required: 3,600

MEDINA PLANT OPERATIONS (045)

Description: To maintain no surface discharge and to attain a 90% frequency and a 33% severity rate in measuring actual data on the plant effluent prior to seepage pond disposal based on 25 mg/l BOD and 30 mg/l SS.

Performance Criteria:

1. Percent (%) frequency attained and percent (%) severity rate in measuring actual data based on 25 mg/l BOD and 30 mg/l SS.

Resources Required: $ 15,370

Work Hours Required: 900

STILLWATER PLANT OPERATIONS (046)

Description: To attain a 98% frequency in meeting NPDES limits and a 22% severity rate in measuring actual data to the NPDES standards for each catogory.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 235,044

Work Hours Required: 9,000

APPLE VALLEY PLANT OPERATIONS (047)

Description: To attain a 89% frequency in meeting NPDES limits and a 66% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 177,787

Work Hours Required 7,200

ROSEMOUNT PLANT ADMINISTRATION (048)

Description: To attain a 99% frequency in meeting NPDES limits and a 10% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 76,797

Work Hours Required: 3,600

ROSEMOUNT LIQUID PROCESS OPERATIONS (049)

Description: To produce plant effluent which meets or is better than MPCA standards for the year 1977.

Performance Criteria:

1. Lab analyses of plant effluent;

2. Satisfactory operating data obtained and analyzed by operating personnel to be used for the interpretation of operating problems.

Resources Required: $ 252,235

Work Hours Required: 13,880

ROSEMOUNT LIQUID PROCESS MAINTENANCE (050)

Description: To keep plant process equipment in good working order thus reducing down time to a minimum.

Performance Criteria:

1. Down time hours;

2. Informative maintenance logs.

Resources Required: $ 74,029

Work Hours Required: 7,200

ROSEMOUNT SOLIDS PROCESS OPERATIONS (051)

Description: To collect screenings, sludge and ammonia wastes in a safe suitable manner, and direct their disposal to the proper disposal sites.

Performance Criteria:

1. Satisfactory waste hauling schedules;

2. Satisfactory operation and monitoring sludge injection;

3. Satisfactory ammonia disposal.

Resources Required: $ 130,312

Work Hours Required: 2,340

ROSEMOUNT SOLIDS PROCESS MAINTENANCE (052)

Description: To keep waste collection and disposal equipment in good working order thus reducing down time to a minimum.

Performance Criteria:

1. Downtime hours;

2. Informative maintenance logs.

Resources Required: $ 25,309

Work Hours Required: 1,260

FARMINGTON PLANT OPERATIONS (053)

Description: To attain a 95% frequency in meeting NPDES limits and a 50% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 83,545

Work Hours Required: 3,600

LAKEVILLE PLANT OPERATIONS (054)

Description: To attain a 90% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 48,340

Work Hours Required: 1,800

SO. ST. PAUL PLANT ADMINISTRATION (055)

Description: Manage operation of South St. Paul Plant pretreatment system.

1. Submit 50 weekly reports;

2. Meet with staff and operating personnel 12 times during 1977 for training and job analysis;

3. Submit required NPDES data;

4. Spend 50 hours at creative thinking to improve the efficiency and economy of the plant operation.

Performance Criteria:

1. Weekly reports submitted complete and on time;

2. Meetings with staff conducted and did training and evaluation take place;

3. The required NPDES information submitted to the Commission on time;

4. Improvements in plant efficiency or economy made.

Resources Required: $ 12,837

Work Hours Required: 900

SO. ST. PAUL PLANT OPERATIONS (056)

Description: Continuous operation of pretreatment system.

1. Produce a plant effluent in compliance with NPDES permit requirements.

Performance Criteria:

1. Pretreatment units operating on a continuous basis;

2. Plant efficiency maintained as high as possible to minimize its effect;

3. NPDES met on a continuous basis.

Resources Required: $ 375,249

Work Hours Required: 16,016

SO. ST. PAUL PLANT MAINTENANCE (057)

Description: Supervise all maintenance and equipment checks.

1. Coordinate and supervise regular preventive and contracted maintenance work.

2. Major equipment breakdown work.

3. Maintain preventive maintenance records, order spare parts etc.

Performance Criteria:

1. Preventive maintenance checks made on a regular basis;

2. Contracted services properly coordinated and supervised;

3. Work done during major equipment breakdowns done efficiently and quickly;

4. Preventive mainteannce records kept up to date neat and orderly.

Resources Required: $ 92,472

Work Hours Required: 4,184

SO. ST. PAUL PLANT SOLIDS REMOVAL (058)

Description: To collect and remove paunch manure in a clean and efficient manner.

Performance Criteria:

1. Appearance of the loading area neat and orderly;

2. Cost of hauling solids;

3. Equipment run on a continuous basis;

4. Loading delays minimized.

Resources Required: $ 67,568

Work Hours Required: 1,400

HASTINGS PLANT OPERATIONS (059)

Description: To attain a 90% frequency in meeting NPDES limits and a 40% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 184,440

Work Hours Required: 8,100

BAYPORT PLANT OPERATIONS (060)

Description: To attain a 92% frequency in meeting NPDES limits and a 33% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 76,870

Work Hours Required: 1,350

PRIOR LAKE PLANT OPERATIONS (061)

Description: To attain a 86% frequency in meeting NPDES limits and a 25% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 21,783

Work Hours Required: 900

WACONIA PLANT OPERATIONS (062)

Description: To attain a 80% frequency in meeting NPDES limits and a 75% severity rate in measuring actual data to the NPDES standards for each category.

Performance Criteria:

1. Percent (%) frequency attained in meeting NPDES limits and percent (%) severity rate in measuring actual data to NPDES standards.

Resources Required: $ 40,203

Work Hours Required: 900

INTERCEPTOR SYSTEM ADMINISTRATION (063)

Description: To perform all administrative functions necessary to accomplishment of Interceptor System programs.

1. Monitor financial and performance status of 1977 Interceptor Programs;
2. Establish 24 hour, 7 day per week staffing of the Computer and Interceptor Systems Dispatch Center by March 15, 1977;
3. Coordinate staffing and start up of new or acquired interceptor facilities with Engineering, Construction, and Local Government units;
4. Prepare and forward to the Director of Operations monthly Interceptor System Status Reports;
5. Prepare 1978 Interceptor System budget in accordance with Budget Calendar;
6. Lease Interceptor System warehouse space and establish inventory control program for system spares;
7. Spend 120 hours in creative thinking for improvement of Interceptor Programs and Operations;

INTERCEPTOR SYSTEM ADMINISTRATION (continued)

8. Review plans and specifications for Interceptor Construction Projects;
9. Spend 120 hours with Director of Operations in staff and personal meetings to ensure that Interceptor Department Operations are coordinated with Commission policies and objectives;
10. Thoroughly inspect newly acquired facilities so that deficiencies may be corrected.

Performance Criteria:

1. Interceptor Program objectives being met within budget;
2. Staffing complete and implemented by March 15th;
3. System startups completed on schedule;
4. Reports in by 15th of month;
5. Budget prepared and submitted on time;
6. Warehouse space leased and program established by February 15, 1977;
7. 120 hours spent on creative thinking;
8. Plans and specifications reviewed within schedule;
9. 120 hours spent in meetings and personal conferences;
10. New facilities inspected and report prepared by April 1, 1977.

Resources Required: $ 118,287

Work Hours Required: 3,713

INTERCEPTOR SYSTEM MAINTENANCE (064)

Description: To perform maintenance so as to ensure continuous operation of all gravity sewers and forcemains in the Interceptor System.

1. Review costs and monitor performance of Interceptor Maintenance and Rental Agreements;

2. Inspect and repair as many miles as required of gravity sewer;

3. Accomplish inspection 20 miles of deep interceptor sewers in accordance with PCA order during Spring 1977.

Performance Criteria:

1. Maintenance and rental agreements reviewed for cost and performance;

2. Inspections completed and reports prepared;

3. Deep interceptor inspection completed.

Resources Required: $ 610,475

Work Hours Required: 2,301

LIFT STATIONS (065)

Description: To ensure continuous operation and maintenance of all Lift Stations and component support systems.

1. Continuously keep in good operating order lift stations by means of a first and second echelon maintenance program;

2. Continuously operate and keep in good working order, the alarm systems for all lift stations and treatment plants;

3. Establish and carry out preventive maintenance program for newly acquired lift stations and portable generators;

LIFT STATIONS (continued)

4. Establish and carry out second echelon preventive maintenance program for small treatment plants.

Performance Criteria:

1. All stations in good operating condition and preventive maintenance schedules adhered to;

2. Alarm system continuously operational;

3. Schedule developed and carried out;

4. Small plant maintenance scheduling complete and carried out.

Resources Required: $ 939,491

Work Hours Required: 28,000

METER STATIONS (066)

Description: To continuously and accurately measure and record wastewater flow for all Interceptor Meter Stations.

1. Keep all flow meters in good working order through a preventive maintenance and quarterly calibration schedule;

2. Prepare and forward to Engineering Department monthly meter flow reports by the 20th of the following month;

3. Keep in good working order all metering system computer components by means of a complete preventive maintenance program.

Performance Criteria:

1. Maintenance and calibrations schedules up to date;

2. Flow reports prepared and submitted on time;

3. Computer maintenance schedule up to date.

Resources Required: $ 360,547

Work Hours Required: 20,310

REGULATOR SYSTEM (067)

Description: To ensure continuous operation of,reporting on, and relocation of the combined sewer regulator system.

1. Keep in good working order 17 instrumental and 120 non-instrumental combined sewer regulator installations through a complete inspection and preventive maintenance program;

2. Prepare and submit to Engineering Department monthly NPDES overflow summaries and sampling results;

3. Move combined sewer telemetry system from Metro Plant Computer to Seneca Metering System by March 1, 1977.

Performance Criteria:

1. Maintenance schedule current;

2. Reports submitted on time;

3. Telemetry move complete by March 1, 1977.

Resources Required: $ 194,222

Work Hours Required: 9,951

LABOR RELATIONS (068)

Description: To promptly complete negotiations for seven labor agreements, produce contractual documents and increase negotiation expertise.

1. Negotiate seven labor agreements with 45 days of their expiration date without any mediation or arbitration proceedings;

2. Produce contractual documents and explain proper contract administration to supervisory staff;

LABOR RELATIONS (continued)

3. By attendance at the National Public Employers Labor Relations meeting and by reading publications and journals develop trends regarding labor negotiation settlements and develop new methods and techniques of contract negotiation.

Performance Criteria:

1. Labor agreements with A.F.S.C. & M.E., Local 8; I.U.O.E., Local 34; I.A.M., Lodge 77; I.B.E.W., Local 110; U.A.P., Local 455; Painters and Allied Trades, Local 61; and Bricklayers, Local 1 completed within 90 days from beginning of negotiations;

2. Seven meetings held within 30 days after approval of agreements with all supervisors to explain contract administration;

3. Document at least one new method or technique used in labor negotiations.

Resources Required: $ 22,028

Work Hours Required: 850

PERSONNEL SERVICES (069)

Description: To provide the full range of personnel services in accordance with all applicable regulations, policies and programs.

1. 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 and the Metropolitan Waste Control Commission Affirmative Action Program;

2. Continually update personnel files and to review each to insure promotional and other job opportunities become known to qualified employees;

PERSONNEL SERVICES (continued)

3. Conduct exit interviews of all terminating employees;

4. Maintain job applicant files by classification and send acknowledgement letter for all applications;

5. Seniority, address and other personnel lists will be updated on a continuing basis to assure current information is available;

6. Administer testing procedures as necessitated by job openings;

7. Distribute to supervisors evaluation and probationary forms and ensure proper and timely completion;

8. Through attendance at two seminars and by reading professional journals and publications, update personnel policy guidelines based on new concepts, ideas and legal restrictions.

Performance Criteria:

1. 80% of employees hired in four weeks or less from date position was authorized to be filled;

2. 45 personnel files reviewed monthly;

3. 90% of all terminating employees given exit interviews;

4. All applications acknowledged within three days;

5. Number of changes to seniority list to total number of hires and promotions;

6. Number of tests given to number of job openings requiring testing procedures;

7. Number of probationary forms completed timely to number of employees completing probationary status;

PERSONNEL SERVICES (continued)

8. Two new changes in personnel procedures introduced.

Resources Required: $ 58,339

Work Hours Required: 4,575

DUPLICATING AND FILING SERVICES (070)

Description: To provide all necessary reproduction and filing services.

1. Develop a system which will more effeciently provide duplicating services;

2. Provide paper copying reproduction services on a daily basis for Central Office functions;

3. Develop an effective Central File system;

4. Maintain paid invoice files for Comptroller;

5. Update Central Files on a continuing basis.

Performance Criteria:

1. Increase duplexing (two sided copying) by 25%;

2. Number of duplications requested daily to number completed in a one day period;

3. Overall policy on the Central File system developed by 12-31-77;

4. Paid invoices filed within two days from being received in file room;

5. 10% of files reviewed each month to ensure properly filed communications.

Resources Required: $ 40,935

Work Hours Required: 2,475

EMPLOYEE HEALTH BENEFITS (071)

Description: To efficiently coordinate administration of employee health benefit program on a timely basis.

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

2. At termination advise employees of conversion provisions available on the various insurance policies;

3. Answer questions on policy content and assit with claim problems;

4. Coordinate with Comptroller as to the proper premium payment on all insurance policies.

Performance Criteria:

1. Every employee signed up for fringe benefits within one day of beginning their job;

2. Insurance files closed on an employee who terminates prior to retirement within a seven day period;

3. Number of medical claim questions answered directly to number of inquiries that must be made to insurance company or consultant;

4. Number changes not entered to total number of new hires or changed coverage.

Resources Required: $ 13,351

Work Hours Required: 1,550

PROPERTY AND CASUALTY INSURANCE (072)

Description: To properly process and administer all property and casualty insurance claims on a timely basis.

PROPERTY AND CASUALTY INSURANCE (continued)

1. Process all property and casualty damage claims so that affected party is expeditiously serviced and continually review all outstanding claims to ensure that action is being taken on them;

2. Administer the overall Worker's Compensation program to ensure that claims are processed timely and that the insurance carrier is servicing the claim properly;

3. Maintain ongoing update to assure that all risks are properly covered and that premiums reflect the insurance in force.

Performance Criteria:

1. Number of property damage claims receiving initial acknowledgement within three days to total number of claims;

2. Number of worker's compensation claims processed in two days to total number of claims;

3. Number of new insurable risks not reported to insurance company within one day.

Resources Required: $ 248,379

Work Hours Required: 750

PURCHASING (073)

Description: To manage a centralized purchasing system with an efficient bid solicitation and completion program, and effective record-keeping and purchasing programs.

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

PURCHASING (continued)

2. Implement a program that assures the best prices available are being received for the quantities ordered;

3. Develop a bid calendar for all items to be carried through the bidding process;

4. Review and update current bidding procedures and administer bidding procedures;

5. Establish a procedure that will ensure proper purchasing records are being kept throughout the year;

6. Coordinate with Comptroller all purchases against budget allocations;

7. Follow-up on incorrect or damaged deliveries of merchandise.

Performance Criteria:

1. Purchase orders processed completely within three days from date requisition is received;

2. New price program developed and implemented by 12-31-77;

3. Bid calendar developed by 6-1-77;

4. Number of bidders to number of bid openings and complete processing of contracts on bid items within five days from date of Commission approval;

5. New record-keeping procedure established by 12-31-77;

6. Number of purchase orders rejected because of lack of budget allocation to total purchase orders;

7. Number of material returns to number of purchase orders.

Resources Required: $ 79,617

Work Hours Required: 8,025

BUSINESS SERVICES ADMINISTRATION (074)

Description: To administer Central Office service functions in a timely, efficient manner.

1. Provide overall central office management to include office and business machine maintenance and security;

2. Manage central office telephone communications system and control primary mail log and mail distribution for central office;

3. Order and control office supplies;

4. Provide postal service function for all outgoing mail;

5. Spend 275 hours on department and management staff meetings and in meetings with the Chief Administrator regarding overall policy and functions of the Business Services Department;

6. Spend 100 hours on Commission business item preparation and presentation;

7. Prepare Business Services Department 1978 Operating Budget;

8. Perform departmental evaluations including individual consultation with employees;

9. Spend 100 hours in analyzing the Business Services Department functions and attempting to upgrade the operation.

Performance Criteria:

1. 100% of office machines serviced on a timely basis;

2. All mail logged and distributed within four hours;

3. Develop a check out control system for office supplies by 6-1-77;

BUSINESS SERVICES ADMINISTRATION (continued)

4. 100% of mail received in the mail-room posted the day it was received;

5. Number of staff meetings not held or attended to number scheduled;

6. All business items prepared in accordance with pre-set time schedule;

7. Budget calendar met;

8. Evaluations and individual consultations made with 10 employees;

9. 100 hours spent in creative thinking to improve the overall Business Services Department operation.

Resources Required: $ 96,613

Work Hours Required: 3,525

COMPTROLLER ADMINISTRATION (075)

Description: To provide total management administration of all financial affairs of Commission.

1. Oversee the installation of an on-line data processing system for both payroll and the general ledger to be installed by 12-31-77, through visitation at both local government and industrial on-line computer applications and by attendance at the national Municipal Finance Officers Association Conference, with its displays on the latest on-line systems;

2. Prepare cost effectiveness studies within 30 days of request through attendance at the MFOA Career Seminar;

3. File all Commission items and documents within 3 days of receipt;

4. Invest Federal and State grants on the same day received;

COMPTROLLER ADMINISTRATION (continued)

5. Prepare a budget calendar and perform all budget related functions within that calendar;

6. Manage and evaluate semi-annually 13 staff meetings;

7. Consult with the Chief Administrator in both staff meetings and in personal meetings so as to become completely aware of Commission policies and objectives;

8. Devote time to creative thinking as to how Commission activities and procedures can be improved.

Performance Criteria:

1. On-line payroll and general ledger system implemented by 12-31-77;

2. Cost effectiveness studies prepared within 30 days of request;

3. Commission items filed within 3 days of receipt;

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 semi-annual evaluations not made and number of staff meetings;

7. 180 manhours spent with Chief Administrator learning objectives and policies of Commission;

8. 120 hours spent in creative thinking as to how to improve activities and procedures of Commission.

Resources Required: $ 77,539

Work Hours Required: 5,380

BILLINGS & COLLECTIONS (076)

Descriptions: To receive, record and properly account for all local, state, federal, investment and other revenues.

1. Conduct service availability charge (SAC) audits of 60 communities to be completed by October 31, 1977;

2. To collect and record SAC monies for 98 communities to be received by the 20th day of the month following the month for which remitted;

3. To bill, collect and record Sewer Service Charge (SSC) monies for 98 communities to be received by the 20th day of the month following the month for which remitted;

4. Record and post to a subsidiary ledger all monies received from State & Federal grants and reconcile balances with the government programs 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 and prepare a listing of investments outstanding for the monthly Commission meeting by the 3rd day of the month;

6. Deposit all monies on the day received.

Performance Criteria:

1. Number of SAC audits not made by 10-31-77;

2. Number of SAC monies not received by the 20th of the month;

3. Number of SSC monies not received by the 20th of the month;

4. Number of months government grants not reconciled by the 5th day of the month;

BILLINGS & COLLECTIONS (continued)

5. Number of months investment listing not completed by the 3rd day of the month;

6. Number of days deposits not made on same day as monies received;

7. Objectives met, man hours complied with and budget adhered to.

Resources Required: $ 25,523

Work Hours Required: 3,115

DISBURSEMENTS (077)

Description: To maintain proper expenditure controls while accurately and promptly dispersing all required funds.

1. Remit vendors' 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 invoices not paid within 30 days to total paid;

2. Number of discounts missed to total taken;

3. Number of times disbursements not forwarded to Chief Administrator by noon on first Wednesday of month;

4. Objectives met, man hours complied with and budget adhered to.

Resources Required: $ 55,744

Work Hours Required: 7,995

PAYROLL (078)

Description: To accurately pay and account for all wages, salaries and deductions for all Commission employees on a bi-weekly basis.

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 20th day of the month.

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 month;

4. Objectives met, manhours complied with and budget adhered to.

Resources Required: $ 57,361

Work Hours Required: 6,130

ACCOUNTING (079)

Description: To accurately perform all general accounting functions, computer data input tasks, and account and ledger maintenance.

1. Complete a Commission-wide fixed asset system by August 31, 1977;

2. Forward data to the computer center in a timely manner so that all reports are received by the 7th calendar day of the month;

ACCOUNTING (continued)

3. Properly account for all transactions so that the Public Examiner's Report does not contain more than 2 exceptions.

Performance Criteria:

1. Fixed asset system completed by 8-31-77;

2. Number of months financial report not received by 7th day;

3. Exceptions on Public Examiner's Report exceeded 2 items;

4. Objectives met, man hours complied with and budget adhered to.

Resources Required: $ 71,616

Work Hours Required: 2,580

INDUSTRIAL COST RECOVERY (080)

Description: To implement the program for the collection of revenue starting in 1977 from industries to meet the Industrial Cost Recovery requirements of the United States Environmental Protection Agency and the Federal Water Pollution Control Act of 1972.

Performance Criteria:

1. Work with industries required to participate in the Industrial Cost Recovery Program;

2. Complete allocation of industrial cost recovery amounts for each industrial firm;

3. Implement plan for collection of industrial Cost Recovery revenue.

Resources Required: $ 48,417

Work Hours Required: 2,340

GRANTS ADMINISTRATION (081)

Description: To administer Federal and State construction grant applications and agreements and maintain Commission compliance with the terms and conditions of the Federal and State grant programs.

Performance Criteria:

1. Prepare applications for the award of grants for projects on the State grant priority list for FY77;
2. Process monthly grant payments for EPA and MPCA:
3. Assist other departments in preparation of research and demonstration grant applications;
4. Maintain compliance with the EEO and Fair Labor Standards requirements of EPA for all contractors and subcontractors employed by the Commission;
5. Maintain Commission compliance with the environmental assessment and public pariticpation requirements of EPA.

Resources Required: $ 116,900

Work Hours Required: 7,655

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, 1977 debt service payment schedule.

Resources Required: $ 11,253,024

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, 1977.

Resources Required: $ 1,887,068

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, 1977.

Resources Required: $ 3,718,985

Summary of Debt Service

	Proposed 1977	Budget 1976	Actual 1975
Treatment Works	$ 9,244,425	$ 7,898,264	$ 7,129,886
Interceptor System			
Service Areas:			
1. Minneapolis - Saint Paul	1,534,184	1,925,363	1,954,799
2. North Suburban	714,695	890,601	891,600
3. Anoka	16,064	26,840	34,687
4. Southwest	1,057,329	1,369,977	1,309,400
5. Bloomington-Eagan-Burnsville	280,734	363,113	531,704
6. Southeast	292,661	373,885	317,379
	$13,140,092	$12,848,043	$12,169,455

METROPOLITAN COUNCIL SEWER BOND FUND DEBT SERVICE

Estimated Fund Balance - October 1, 1976	$ 15,510,685
Less - Debt Service Payments November 1, 1976 through October 1, 1977	12,108,529
Add - Interest to be earned November 1, 1976 through October 1, 1977	700,000
Balance	4,102,156
Required Balance - October 1, 1977	15,355,180
Program Budget Requirement	$ 11,253,024

Apportioned to:

Cost Pool	Capital Improvements	% Of Debt Service	Amount
Treatment Works	$ 241,766,984	75.2%	$ 8,462,275
SA 1	27,155,682	8.4	945,254
SA 2	10,507,231	3.3	371,350
SA 3	354,981	.1	11,253
SA 4	27,071,148	8.4	945,254
SA 5	6,939,035	2.2	247,566
SA 6	7,842,979	2.4	270,072
	$321,638,040	100.0%	$11,253,024

Local Government Debt Service

Service Area 1 - Minneapolis - St. Paul

	Treatment Works	Interceptors	Total
Birchwood	$	$ 786.00	
Crystal		27,765.93	
Dellwood		6,171.60	
Forest Lake Township	2,823.00		
Forest Lake	1,804.02		
Golden Valley		50,741.52	
Landfall		1,130.00	
Little Canada		68,861.30	
Mahtomedi		9,565.18	
Oakdale		64,771.00	
Plymouth		8,943.00	
Roseville		126,378.00	
St. Paul		92,924.09	
*Shoreview		68,444.58	
Vadnais Heights		3,321.15	
White Bear Lake		19,630.00	
White Bear Township		8,256.00	
Willernie		4,219.00	
Woodbury		27,022.00	
TOTAL	$ 4,627.02	$ 588,930.35	$ 593,557.37

Service Area 2 - North Suburban

*Shoreview		41,949.91	
Brooklyn Park		160,476.00	
Circle Pines		3,617.25	
Coon Rapids		67,694.00	
New Brighton		45,802.00	
Osseo		20,381.71	
Spring Lake Park		3,424.00	
TOTAL	$ - 0 -	$ 343,344.87	$ 343,344.87

*Located in 2 Service Areas

Service Area 3 - Anoka

	Treatment Works	Interceptors	Total
Anoka	$ 44,575.00	$	
Champlin		4,811.22	
TOTAL	$ 44,575.00	$ 4,811.22	$ 49,386.22

Service Area 4 - Southwest

Chanhassen	$ 3,618.00	$	
Chaska	31,350.00		
Deephaven		20,000.00	
Excelsior	12,790.00		
Greenwood		5,000.00	
Long Lake	10,967.00		
Maple Plain	13,227.00		
Medina	5,850.00		
Minnetrista		20,000.00	
Mound	22,961.61	28,887.00	
Orono	16,547.84	31,614.00	
Prior Lake	9,162.50		
Savage	9,667.00		
Shakopee	19,865.00		
Spring Park	3,087.03	2,965.97	
Tonka Bay	6,414.08	3,607.92	
Victoria	3,810.75		
TOTAL	$169,317.81	$ 112,074.89	$ 281,392.70

Service Area 5 - Bloomington-Eagan-Burnsville

Bloomington	$	$ 33,168.01	
Burnsville	24,518.00		
Eagan	4,594.62		
TOTAL	$ 29,112.62	$ 33,168.01	62,280.63

Service Area 6 - Southeast

	Treatment Works	Interceptors	Total
Apple Valley	$ 13,266.72	$ 22,589.28	
Cottage Grove	41,023.27		
Farmington	27,918.00		
Hastings	47,222.00		
Inver Grove Heights	13,641.00		
Lakeville	7,140.00		
Newport	5,763.00		
Oak Park Heights	13,199.00		
St. Paul Park	11,155.68		
South St. Paul	284,724.50		
Stillwater	69,464.00		
TOTAL	$534,517.17	$ 22,589.28	$ 557,106.45
GRAND TOTAL	$782,149.62	$1,104,918.62	$1,887,068.24

Summary of Acquisition Costs

Treatment Works	$ 579,985
Interceptor System	
Service Areas:	
1. Minneapolis - St. Paul	2,891,922
2. North Suburban	137,070
3. Anoka	489
4. Southwest	74,815
5. Bloomington-Eagan-Burnsville	30,766
6. Southeast	3,938
TOTAL	$3,718,985

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		61,802	Golden Valley		131,187
Brooklyn Center		14,581	Greenwood		1,275
Brooklyn Park		60,157	Hastings		14,284
Burnsville		5,155	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		6,893	Mahtomedi		2,870
Eagan		3,547	Maple Plain		6,818
Eden Prairie		3,494	Maplewood		23,902
Edina		61,020	Medicine Lake		1,408

Local Government Current Value Credit

Medina	$ 38	St. Louis Park	$ 78,231
Mendota Heights	3,926	St. Paul	948,543
Minneapolis	1,426,356	St. Paul Park	7,394
Minnetonka	16,639	Savage	1,872
Minnetrista	5,411	Shakopee	9,064
Mound	10,344	Shoreview	20,680
Moundsview	3,561	Shorewood	391
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	35,285	Victoria	2,539
Osseo	14,928	Waconia	15,245
Plymouth	217	Wayzata	22,674
Prior Lake	1,901	West St. Paul	7,376
Richfield	133,042	White Bear Lake	41,047
Robbinsdale	5,150	White Bear Township	2,173
Rosemount	4,380	Willernie	1,053
Roseville	99,636	Woodbury	2,647
St. Anthony	8,778		
		TOTAL	$ 3,718,985

Allocation of Current Use Costs

Local Government	Est. Flow (MG)	Treatment Works	Service Area	Total
Andover	26	7,315.87	2,603.09	9,918.96
Anoka	560	157,462.96	21,576.59	179,039.55
Apple Valley	400	112,458.46	15,242.00	127,700.46
Arden Hills	270	75,931.91	19,602.01	95,533.92
Bayport	190	53,403.23	- 0 -	53,403.23
Birchwood	25	7,051.77	1,819.66	8,871.43
Blaine	630	177,139.23	63,075.42	240,214.65
Bloomington	2,500	702,931.37	116,649.89	819,581.26
Brooklyn Center	1,130	317,725.50	82,042.10	399,767.60
Brooklyn Park	1,000	281,172.55	100,119.92	381,292.47
Burnsville	900	253,071.14	41,993.76	295,064.90
Champlin	75	21,076.06	2,889.71	23,965.77
Chanhassen	170	47,804.08	32,179.98	79,984.06
Chaska	320	89,982.61	- 0 -	89,982.61
Circle Pines	85	23,902.05	8,510.15	32,412.20
Columbia Heights	850	238,994.02	61,716.42	300,710.44
Coon Rapids	950	267,121.84	95,114.12	362,235.96
Cottage Grove	365	102,607.12	- 0 -	102,607.12
Crystal	950	267,121.84	68,979.34	336,101.18
Deephaven	120	33,753.38	22,715.71	56,469.09
Eagan	660	185,564.38	30,795.63	216,360.01
Eden Prairie	325	91,382.39	61,521.00	152,903.39
Edina	2,450	688,880.67	177,886.37	866,767.04
Empire Township	9	2,535.46	- 0 -	2,535.46
Excelsior	130	36,552.96	24,608.08	61,161.04
Falcon Heights	410	115,284.44	29,770.09	145,054.53
Farmington	200	56,229.23	- 0 -	56,229.23
Forest Lake	220	61,854.79	15,973.17	77,827.96
Forest Lake Township	100	28,127.82	7,257.67	35,385.49
Fridley	1,330	373,954.74	114,727.73	488,682.47
Gem Lake	8	2,244.94	582.08	2,827.02
Golden Valley	1,280	359,904.03	92,933.85	452,837.88
Greenwood	23	6,470.72	4,354.15	10,824.87

Local Government	Est. Flow (MG)	Treatment Works	Service Area	Total
Hastings	480	134,960.71	- 0 -	134,960.71
Hilltop	22	6,180.20	1,599.42	7,779.62
Hopkins	770	216,518.18	55,906.09	272,424.27
Hugo	53	14,895.86	3,849.08	18,744.94
Inver Grove Heights	325	91,382.39	12,384.30	103,766.69
Lake Elmo	1	290.52	73.41	363.93
Laketown Township	12	3,380.62	2,271.16	5,651.78
Lakeville	400	112,458.46	7,239.92	119,698.38
Landfall	23	6,470.72	1,672.83	8,143.55
Lauderdale	52	14,631.75	3,775.67	18,407.42
Lexington	52	14,605.33	5,206.19	19,811.52
Lillydale	15	4,225.78	1,085.51	5,311.29
Lino Lakes	8	2,244.94	801.07	3,046.01
Little Canada	275	77,305.28	19,969.08	97,274.36
Long Lake	75	21,102.47	- 0 -	21,102.47
Mahtomedi	105	29,527.61	7,624.75	37,152.36
Maple Grove	310	87,156.62	31,037.23	118,193.85
Maple Plain	105	29,527.61	- 0 -	29,527.61
Maplewood	1,600	449,886.64	116,169.94	566,056.58
Medicine Lake	8	2,244.94	582.08	2,827.02
Medina	49	13,786.59	- 0 -	13,786.59
Mendota Heights	360	101,207.33	26,136.00	127,343.33
Minneapolis	27,000	7,591,737.99	1,960,394.55	9,552,132.54
Minnetonka	1,250	351,478.89	236,619.75	588,098.64
Minnetonka Beach	12	3,380.62	2,271.16	5,651.78
Minnetrista	33	9,270.29	6,246.52	15,516.81
Mound	440	123,709.59	83,290.12	206,999.71
Mounds View	375	105,433.10	37,544.97	142,978.07
New Brighton	665	186,990.58	66,579.79	253,570.37
New Hope	990	278,372.97	71,879.26	350,252.23
Newport	90	25,301.83	3,429.46	28,731.29
North Oaks	12	3,380.62	875.75	4,256.37
North St. Paul	450	126,509.16	32,670.00	159,179.16
Oakdale	450	126,535.57	32,675.26	159,210.83
Oak Park Heights	85	23,902.04	3,238.88	27,140.92
Orono	145	40,778.73	27,447.84	68,226.57
Osseo	125	35,153.17	12,514.99	47,668.16
Plymouth	1,100	309,273.96	79,865.85	389,139.81
Prior Lake	200	56,229.23	37,859.52	94,088.75

Local Government	Est. Flow (MG)	Treatment Works	Service Area	Total
Richfield	1,050	295,249.66	76,237.01	371,486.67
Robbinsdale	560	157,462.96	40,661.83	198,124.79
Rosemount	90	25,301.83	3,429.46	28,731.29
Roseville	1,650	463,937.35	119,804.02	583,741.37
St. Anthony	420	118,084.02	30,493.76	148,577.78
St. Bonifacius	20	5,625.56	3,785.54	9,411.10
St. Louis Park	2,500	702,957.77	181,515.19	884,472.96
St. Paul	21,800	6,129,619.63	1,582,838.32	7,712,457.95
St. Paul Park	120	33,726.97	4,572.62	38,299.59
Savage	165	46,404.30	- 0 -	46,404.30
Shakopee	675	189,790.15	127,774.14	317,564.29
Shoreview	550	154,636.97	41,587.67	196,224.64
Shorewood	160	45,004.52	30,286.80	75,291.32
South St. Paul	3,500	984,103.91	133,368.11	1,117,472.02
Spring Park	90	25,301.83	17,036.99	42,338.82
Spring Lake Park	160	45,004.51	16,018.84	61,023.35
Stillwater	650	182,764.80	- 0 -	182,764.80
Stillwater Township	3	845.16	- 0 -	845.16
Tonka Bay	80	22,475.84	15,143.81	37,619.65
Vadnais Heights	120	33,753.38	8,710.26	42,463.64
Victoria	30	8,425.14	5,678.72	14,103.86
Waconia	130	36,552.96	24,608.08	61,161.04
Wayzata	240	67,480.36	45,431.42	112,911.78
West St. Paul	850	238,994.02	61,716.42	300,710.44
White Bear Lake	700	196,841.91	50,824.68	247,666.59
White Bear Township	95	26,701.62	6,895.83	33,597.45
Willernie	15	4,225.78	1,090.75	5,316.53
Woodbury	325	91,382.40	23,597.92	114,980.32
TOTAL	93,931	$26,411,097.76	$6,963,135.28	$33,374,233.04

Construction Fund – Revenues & Expenditures

			Total Program
FUND BALANCE, May 31, 1976			$ 35,346,420
REVENUES:			
Certified Federal Grants	$ 47,705,507		
Certified State Grants	9,367,096		
Anticipated Grants	192,034,026		
Investment Income	6,260,000		
Miscellaneous	10,000		
Total Estimated Revenues			$255,376,629
EXPENDITURES:			
Previously Authorized			
Encumbered Balance	$ 63,056,943		
Unencumbered Balance	217,307,522		
Total Previously Authorized		$280,364,465	
Request for Funding			
Planning (Step I)	$ 320,000		
Detail Engineering (Step II)	100,000		
Total Request for Funding		$ 420,000	
Total Estimated Expenditures			$280,784,465
ESTIMATED FUND BALANCE			$ 9,938,584

CAPITAL IMPROVEMENTS PROGRAM

Request for Funding

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.

Resources Required:

Step II Detail Engineering	$ 100,000

Annual Expenditures:

During 1977	$ 100,000

Project 77-02 Metropolitan 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.

Resources Required:

Step I Planning	$ 50,000

Annual Expenditures:

During 1977	$ 50,000

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.

Resources Required:

Step I Planning	$ 270,000

Annual Expenditures:

During 1977	$ 270,000

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 will begin in 1976 with completion of the treatment plant in 1979.

Annual Expenditures:

Prior to 12/31/76	$ 3,842,388
During 1977	12,619,823
During 1978	4,144,478
During 1979	1,073,311

Project 71-05 Metro Effluent Pump Station

Description: The Effluent Pumping Station was designed to provide pumping capacity of 655 million gallons per day which is the peak flow anticipated at the plant through the existing interceptor, and therefore, this station will permit continuous treatment of all flows when the river levels exceed elevation 693 (the existing final sedimentation tank wire elevation).

Status: This project is near completion at the current time. The station is due to be operational by late 1976.

Annual Expenditures:

Prior to 12/31/75	$ 5,790,000
During 1976	809,750

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: As of June 1, 1976 the project is about 50% complete and will be completed in 1977 and operating in 1978.

Annual Expenditures:

Prior to 12/31/75	$ 7,218,000
During 1976	5,810,460
During 1977	1,069,342
During 1978	1,942,313

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: As of June 1, 1975 approximately 50% of the project is done and will be completed in 1977 and operating in 1978.

Annual Expenditures:

Prior to 12/31/75	$ 11,433,000
During 1976	7,597,732
During 1977	1,736,208
During 1978	2,517,360

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 contract was begun in March of 1975 and is proceeding on schedule.

Annual Expenditures:

Prior to 12/31/75	$ 17,976,000
During 1976	22,568,468
During 1977	11,484,856
During 1978	2,871,176

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.

Project 71-09 Metro Compressors (continued)

Status: This project was awarded in April of 1976. The equipment will be delivered and installed in 1979 providing the Compressor Building (Project 72-02) is ready to receive the units.

Annual Expenditures:

Prior to 12/31/75	$ 17,000
During 1976	158,829
During 1977	1,592,370
During 1978	11,193
During 1979	1,219,881
During 1980	215,727

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. Gravity branch sewers will run from each treatment plant to a junction point in the vicinity of Luce Line and Brown Road (County Road 146) and thence in a southeasterly direction to a lift station at the intersection of County Road 15 and Ferndale Road. The length of the gravity system will be 4.3 miles. A 1.7 mile long forcemain along County Road 15 will connect the above lift station with the Wayzata lift station.

Status: The preliminary planning for this project has been completed, and funds have been authorized for the detail engineering and construction which have now been completed. The project is scheduled for bid letting in 1976.

Annual Expenditures:

Prior to 12/31/76	$ 350,000
During 1977	3,521,804
During 1978	386,796

Project 71-14 Golden Valley-New Hope Interceptor

Description: The Golden Valley-New Hope Interceptor includes a lift station and force main through which sewage from New Hope will be pumped south, through Golden Valley, to the newly constructed Plymouth forcemain. This interceptor will replace present facilities in Golden Valley which are undersized or near-capacity. The lift station will be located in Golden Valley, just south of Medicine Lake Road and East of Winnetka Avenue. The force main will connect this lift station with the Plymouth force main at Rhode Island Avenue and Highway #55.

Project 71-14 Golden Valley-New Hope Interceptor (continued)

Status: The construction and detailed engineering plans have been completed. Construction is scheduled to be completed in 1976.

Annual Expenditures:

Prior to 12/31/75	$ 523,075
During 1976	1,226,925

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.

Two phases of construction are anticipated: Phase I is currently under construction. Funds have been authorized for detail engineering and construction of Phase II. This phase provides for sewerage to be conveyed to the Blue Lake Plant and the phasing out of the Prior Lake Plant.

Status: Contract has been awarded and approximately 85% complete at the current time with full completion anticipated by late 1976.

Annual Expenditures:

Prior to 12/31/75	$ 2,158,597
During 1976	1,711,488

Project 71-22 Beltline Interceptor

Description: The Beltline Relief Interceptor is planned as a gravity interceptor extending from the old sewage treatment plant at White Bear Lake southerly to St. Paul.

Status: The detailed plans and specifications have been completed and bids have been awarded and the construction of this project is approximately 65% complete.

Annual Expenditures:

Prior to 12/31/75	$ 4,778,746
During 1976	4,406,002

Project 71-27 Maple Plain Treatment Plant

Description: This project consists of (1) upgrading and expansion of the existing Maple Plain Plant to provide increased capacity and degree of treatment of (2) elimination of plant by pumping area wastewater to the Mound Interceptor or the Orono-Long Lake Interceptor. Completion of a feasibility study will determine the most appropriate action in providing additional facilities.

The present Maple Plain Plant consists of a trickling filter, activated sludge, and effluent treatment pond system, operated in series, with a design capacity based on average annual flow of 220,000 gallongs per day.

Status: The Facility Planning Report (Step I) is in draft form and will be supplemented and updated during 1977. The overview of 201 Planning will provide information and direction for the completion of the report.

Annual Expenditures:

Prior to 12/31/76	$	4,785
During 1977		1,355
During 1978		2,860

Project 71-29 MWWTP Warehouse

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 (machining, metal working, pipefitting and assembly), metal shop, electric shop, weld area, and sand blast areas. The warehouse will total about 40,000 square feet, and the area of the machine shop will be approximately 15,000 square feet.

Status: This project is under design and is scheduled for bids in the fall of 1976. It will be completed in 1978.

Project 71-29 MWWTP Warehouse (continued)

Annual Expenditures:

During 1976	$ 93,147
During 1977	1,068,811
During 1978	878,042

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. The Step II work, preparation of plans and specifications and the acquisition of rights-of-way are essentially completed for the proposed gravity route.

The Metropolitan Council has included the proprosed interceptor as a project in their Waste Management Policy Plan. The Commission urged the Metropolitan Council to approve the gravity interceptor for 1976 construction as described in the Development Program in the previous submission of the Program.

Status: Construction is expected to begin in late 1976 with completion scheduled for 1977.

Annual Expenditures:

Prior to 12/31/76	$ 250,000
During 1977	2,950,000

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: The detailed engineering plans and specifications will be completed during 1976.

Annual Expenditures:

Prior to 12/31/75	$ 3,205
During 1976	391,795

Project 72-04 Cottage Grove Treatment Plant

Description: The Cottage Grove Plant Expansion consists of either an expansion of the existing Cottage Grove Plant or the construction of the first phase of a new regional plant to serve Cottage Grove and portions of upstream communities of Woodbury and Lake Elmo. The expanded plant at the existing site would serve the needs of Cottage Grove until about 1985; whereas, the new plant would serve the larger service area beyond 1985.

Status: The Facility Planning Report (Step I) is in draft form and considers only the alternatives of the expansion of the existing plant. The report will have to be supplemented during 1977 to include the alternatives for the start of a new regional plant. The overview of 201 Planning will provide information and direction for completing the report.

Annual Expenditures:

Prior to 12/31/76	$ 35,267
During 1977	104,767
During 1978	59,965

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: The Facility Planning Report is in preliminary form and will have to be supplemented during 1977 to fulfill the requirements of the Waste Management Policy Plan. The design can be initiated subsequent to inclusion and approval in a future Development Program.

Annual Expenditures:

Prior to 12/31/76	$ 6,343
During 1977	25,075
During 1978	8,582

Project 72-09 Metering Stations

Description: This project consists of the construction of additional metering stations which are required to enable the Commission to more exactly determine the wastewater volume discharge of each governmental unit.

Status: The detailed engineering plans have been completed, and bids were taken in 1975 with completion of the project in 1976.

Annual Expenditures:

Prior to 12/31/75	$ 33,777
During 1976	316,223

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:

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 in late 1976 or early 1977.

Annual Expenditures:

Prior to 12/31/75	$ 4,173,555
During 1976	1,650,302
During 1977	1,392,143

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 to meet increasing wastewater flows and to upgrade the treatment process in compliance with applicable effluent standards.

Status: The Facility Planning Report (Step I) is in draft form and will be supplemented and updated during 1977. The overview of 201 Planning will provide information and direction for the completion of the report.

Project 73-06 Chaska Plant Treatment Plant (continued)

Annual Expenditures:

Prior to 12/31/76	$ 65,339
During 1977	51,256
During 1978	130,404

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.

Status: Bid date is scheduled for July 1976. Project is estimated to be 15% complete by December 31, 1976; completed in 1979; and in operation in 1979.

Annual Expenditures:

Prior to 12/31/75	$ 12,000
During 1976	6,306,352
During 1977	17,473,524
During 1978	7,099,530
During 1979	7,444,950

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: Scheduled bid date is July, 1976. Project is estimated to be 10% complete by December 31, 1976; completed in 1979; and in operation 1979-1980.

Annual Expenditures:

Prior to 12/31/75	$ 1,000
During 1976	3,066,681
During 1977	7,967,351
During 1978	8,198,914
During 1979	4,276,801

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: Scheduled bid date is August 1976. Project is estimated to be 20% complete by December 31, 1976; completed in 1979; and in operation during 1979.

Annual Expenditures:

Prior to 12/31/75	$ 1,000
During 1976	3,675,771
During 1977	7,201,689
During 1978	3,565,353
During 1979	3,518,967

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.

Status: Scheduled bid date is August 1976. Project is estimated to be 10% complete by December 31, 1976; completed in 1980; and in operation during 1980 (upon completion).

Annual Expenditures:

Prior to 12/31/75	$ 12,000
During 1976	534,250
During 1977	2,049,974
During 1978	1,325,389
During 1979	861,772
After 1979	555,836

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

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

Status: Scheduled bid date is August 1976. Project is estimated to be 10% complete by December 31, 1976; completed in 1979; and in operation upon completion of 74-01 (405).

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

Annual Expenditures:

During 1976	$ 337,011
During 1977	2,777,469
During 1978	212,446
During 1979	752,954

Project 74-01 (405) Roll Type Continuous Presses Installation, MWWTP

Description: This project consists of installation of four roll type presses, conditioning chemical system, piping, electrical controls and miscellaneous work.

Status: Scheduled bid date is November 1976. No field work is to be performed in 1976. Estimated completion date is 1979 and will be operational upon completion.

Annual Expenditures:

During 1976	$ 4,940
During 1977	1,206,041
During 1978	1,007,159
During 1979	926,193

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 September 1976. Estimated to be 10% complete by December 31, 1976; estimated completion date 1979.

Annual Expenditures

Prior to 12/31/75	$ 2,000
During 1976	667,782
During 1977	2,708,800
During 1978	2,589,202
During 1979	1,377,216

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 October 1976. Completion date and operational date will depend on completion of Project 74-01 (408) currently estimated to be 1980.

Annual Expenditures:

During 1976	$ 4,898
During 1977	2,573,442
During 1978	2,061,512
During 1979	1,451,859
After 1979	914,289

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 modiciations.

Status: Scheduled bid date is June 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. Funds have been authorized for detail engineering and construction.

Project 74-02 Carver Lake Interceptor (continued)

Status: The detailed plans are completed. Construction is expected to begin in 1976 and completion is expected in 1977.

Annual Expenditures:

Prior to 12/31/76	$ 150,000
During 1977	1,045,000

Project 74-04 Savage Interceptor

Description: This project consists of the preparation of a supplementary Facility Planning Report evaluating alternatives to provide additional treatment capacity for the Savage Plant or phasing out the Savage Treatment Plant and constructing a 4 mile long interceptor to the Blue Lake Treatment Plant. A lift station will be required at Eagle Creek discharging into a 4000 foot long forcemain. The remainder of the interceptor will be gravity sewers located generally south of Highway 101.

Status: The initiation and the preparation of a supplementary Facility Planning Report by February 1, 1977 and completion by December 31, 1977 with a consulting firm is planned.

Annual Expenditures:

Prior to 12/31/76	$ 52,852
During 1977	22,028

Project 74-05 Medina Treatment Plant Expansion

Description: This project consists of the preparation of a supplementary Facility Planning Report to evaluate a new treatment plant, plant expansion, or elimination of the treatment plant by interceptor construction. The report must consider new population projections, Development Framework and infiltration/inflow problems. The same basic alternatives will be evaluated with these factors in mind. A Facility Planning Report was completed in draft form in 1973.

Status: The preparation of the supplementary report by February 1, 1977 and completion by September 1, 1977 with a consulting firm is planned.

Annual Expenditures

Prior to 12/31/76	$ 11,130
During 1977	99,370

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 are completed and have been submitted to MPCA and EPA for approval.

Annual Expenditures:

Prior to 12/31/75	$ 769,939
During 1976	130,061
During 1977	7,371,400

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: Detailed engineering plans are completed. Construction is scheduled to start in 1977 and to be completed by 1978 and coordinated with the Lakeville-Farmington Treatment Plant.

Annual Expenditures:

Prior to 12/31/75	$ 47,672
During 1976	102,328
During 1977	1,589,051
During 1978	1,548,949

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.

Project 74-10 Metro Disposal System Improvements (continued)

Description (continued): 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 30 percent completed. The design and construction of the improvements will be completed in 1978.

Annual Expenditures:

Prior to 12/31/76	$ 75,300
During 1977	428,388
During 1978	996,312

Project 74-11 Metro System Emergency Equipment

Description: This project provides for the telemetry and switch gear at many of the 40 major list stations sites. The telemetry system will provide for the transmission and analysis of alarm signals. The switch gear provides for the connection of portable emergency generators which are to be furnished under future projects.

Status: The telemetry portion of the project (74-11-1) is complete. The switch gear portion of the project (74-11-2) is under construction and is about 20% complete. The standby generators portion (74-11-3) will be completed in 1977.

Annual Expenditures:

Prior to 12/31/75	$ 288,716
During 1976	274,015
During 1977	437,269

Project 74-47 (385) Diffused Oxygen Equipment Evaluation

Description: This is a process study in sludge disposal. The project activity is evaluation of a proprietary system using pure oxygen in place of compressed air in the biological treatment process. The Marox Process uses diffusers which create fine bubbles of oxygen, resulting in claims of: (a) a dense float that can be skimmed directly as thickened waste activated sludge, and (b) superior oxygen usage efficiency.

No covering of tankage is thought necessary, thus facilitating conversion of existing plants and reducing capital cost. Evaluation will be addressed to both claims, as well as observing practicality of uncovered tanks in coldest winter weather.

Project 74-47 (385) Diffused Oxygen Equipment Evaluation (continued)

Status: A basin at Metro WWTP has been fitted with the equipment. The contract for oxygen supply will be negotiated by June, 1976. Estimated start-up date is August, 1976.

Annual Expenditures:

Prior to 12/31/76	$ 112,700
During 1977	28,000

Project 74-47 (386) Rosemount AWT Plant Sludge Injection

Description: This is a process study in solids disposal. The project activity is application of chemically precipitated primary sludge to land by subsurface injection. Objective of the project is to dispose of Rosemount AWTP sludge in the immediate vicinity of the plant, on our own land if possible. Further studies of crop growth on the treated land and degree of nitrate escape into ground strata will be carried out.

Status: Injection tests were run in 1974 and 1975. A continuation in 1976 is planned. This work is under permit issued by MPCA. A continuation in 1976 will utilize the Briscoe-Maphis subsurface injector. Work in 1977 will be report finalization.

Annual Expenditures:

Prior to 12/31/76	$ 65,000
During 1977	4,000

Project 74-47 (388) Coal Admix-Sludge

Description: This is a process study in solids disposal. The project consists of adding coal to dewatered sludge to augment heat value of sludge cake before it enters the incinerator, thus minimizing oil or gas fuel requirement.

Status: Program activity in 1976 will be very limited, in view of co-incineration research Project 75-05, which pursues same objective.

Annual Expenditures:

Prior to 12/31/76	$ 32,000

Project 74-47 (389) Empire Site Subsurface Injection
(formerly titled Blue Lake Injection)

Description: This is a process study in sludge disposal. The project activity is the direct burial of digested sludge in the form as drawn from the digester, unthickened and not dewatered. Purpose is to evaluate the mechanical capabilities of a towed injection machine direct-connected by hose to the sludge source, which will normally be an open lagoon. A high pressure pump delivers 600 gpm to the injector. Soil covers the sludge immediately after application, thus minimizing odor, runoff, and insect nuisance risks. Advantages of subsurface injection are 1) costs of dewatering are eliminated, 2) useful plant nutrients such as phosphorus and nitrogen are exported from the treatment plant, and made available for their fertilizing properties, instead of being recycled within the treatment plant from which they are released to the receiving waters or removed at high cost, 3) transport and storage of liquid sludge can be done by pipeline and pumps, a lower cost operation than trucking of cake, 4) significant elimination of odor and nuisance factors is achieved, and 5) field application is highly efficient, in that 600 to 800 gallons per minute can be placed.

Status: Project was initiated in 1975, with 2-year permission by the Minnesota Pollution Control Agency granted by letter permit. No injection activity in 1977 is presently contemplated, pending evaluation of 1976 results. Finalization of 1976 report will probably be complete by March 1977.

Annual Expenditures:

Prior to 12/31/76	$	66,000
During 1977		4,000

Project 74-47 Remaining Locations

Status: No 1977 Budget is required on the following, all of which have been or will be completed by the end of 1976.

		Location
-1	Fertilizer Production	381
-2	Pyrolysis-Char Evaluation	382
-3	Sludge Land Spreading (Univ. of Minn./USDA)	383
-4	Vari-Nip Sludge Press	384
-11	Odor Removal Scrubbers	387
-14	Particulate Scrubbers	390
-15	Air Flotation Evaluation	391
-16	Centrifuge Evaluation	392
-17	Heat Treatment Study	393

Project 74-99 Inflow/Infiltration Study

Description: The Federal Water Pollution Control Act of 1972 requires that all federal grant applicants must demonstrate that each sewer system discharging into a treatment works is not subject to excessive inflow and infiltration. The objectives of this study are to reduce untreated wastewater bypasses and overflows, reduce or eliminate extraneous flows, avoid constructing unnecessary treatment works and reduce volume discharges into State waters.

Status: This investigation and study is presently about 20 percent completed and has been delayed pending approval of state and federal grant funds. The work is expected to continue in coordination with 201 Planning and project designs.

Annual Expenditures:

Prior to 12/31/76	$ 26,081
During 1977	50,578
During 1978	173,340

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 2-year study period, from August 1, 1975. Construction of temporary storage and conveying facilities and purchase of items of instrumentation and control are required.

Status: The detailed engineering will be conducted in 1976. Construction and installation of the equipment is scheduled during 1976 and 1977. Preliminary tests are under way burning lump coal. Additional instrumentation and control gear for vacuum filter and furnace appear to be required, in addition to facilities and modifications described in the grant application.

Annual Expenditures:

Prior to 12/31/75	$ 2,641
During 1976	237,359
During 1977	140,000

Project 75-06 Seneca Treatment Plant Improvements

Description: The project is proposed to include: (1) Fiberglass covers for the aerated grit chambers and channels in the headworks area and that the air from the Screen Building and basin area be chemically scrubbed; (2) Modifications to sludge holding tanks to give positive control; (3) Ventilation air from the filter floor of Solids Processing Building be scrubbed if item 2 does not sufficiently control the odor problem; (4) A chemical scrubber at the Main Metering Station; and (5) Piping changes to remove sidestream flows from the primary basins and send them to the aerated grit chambers, where their odors will be controlled.

Project 75-06 Seneca Treatment Plant Improvements (continued)

Status: The plans and specifications have been completed and the project has not been bid pending major correction of the problem by using temporary covers.

Annual Expenditures

Prior to 12/31/76	$ 92,998
During 1977	103,002

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 force main 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 plans are completed and bids are scheduled to be taken in 1976 with completion expected in 1977.

Annual Expenditures:

Prior to 12/31/75	$ 116,110
During 1976	676,744
During 1977	1,672,146

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.

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: Limited analysis has been accomplished in-house to date.

Annual Expenditures:

Prior to 12/31/76	$ 5,000
During 1977	115,000

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 $3,720,050.

Status: The Step I consultant has been selected and will begin work in May, 1976, on developing site selection criteria, identification of candidate sites within seven-county metro area, selection of at least 3 sites for further study, characterize the waste stream, estimate volumes of wastes, estimate capital costs, O & M costs, user chargers, and provide a conceptual design by late 1976.

Annual Expenditures:

During 1976	$ 410,065

Project 76-02 Regulator Program Improvements

Description: The Metropolitan Disposal System Regulator Program Improvements consist of additional overflow controls for the prevention of combined sewage overflow into the river during periods of storm water infiltration. This program is an expansion of the existing program and will be designed to reduce the overflows at some of the remaining overflow points in the disposal system by installing movable crest dams at overflow points which can be operated at various heights keeping more flow in the interceptor and

Project 76-02 Regulator Program Improvements (continued)

Description (continued): allowing less combined overflows to enter the river. This proposed project will include improvements on several of the remaining 66 overflow points and also include modification and updating of the present regulator program as may be required.

Status: The System Overview of the 201 Planning will provide information and direction for the project. The planning will be initiated in 1977.

Annual Expenditures:

Prior to 12/31/76	$ 3,000
During 1977	39,500

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 early 1977 and bids will be received for the generators.

Annual Expenditures:

Prior to 12/31/76	$ 22,095
During 1977	52,905
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.

Project 76-06 MWWTP Oil Spill Prevention Improvements (continued)

Status: Contracts were executed May, 1976. Construction has begun and estimated date of completion is December, 1976.

Annual Expenditures:

During 1976	$ 100,000
During 1977	50,000

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 1977 and complete by April, 1978 with a consulting firm.

Annual Expenditures:

During 1976	$ 4,500
During 1977	500,000
During 1978	63,500

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 begun in the second half of 1976 and completed in 1977.

Annual Expenditures:

Prior to 12/31/76	$ 100,000
During 1977	155,407

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: To be begun in the second half of 1976 and completed in 1977.

Annual Expenditures:

Prior to 12/31/76	$ 50,000
During 1977	67,309

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 Facility Planning Report (Step I) is in draft form and considers only the alternatives of the expansion of the existing plant. The report will have to be supplemented during 1977 to include the alternatives for the start of a new regional plant. The overview of 201 Planning will provide information and direction for completing the report.

Project 76-14 Cottage Grove-Woodbury-Lake Elmo Area Study (continued)

Annual Expenditures:

Prior to 12/31/76	$ 35,267
During 1977	104,767
During 1978	94,965

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: To be begun in the second half of 1976 and completed in 1977.

Annual Expenditures:

Prior to 12/31/76	$ 30,000
During 1977	55,976

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 begun in the second half of 1976 and completed in 1977.

Annual Expenditures:

During 1976	$ 10,000
During 1977	24,985

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: To be begun and completed in 1977.

Annual Expenditures:

During 1977	$ 22,760

Project 76-20 Standby Power Provisions

Description: Most of the smaller treatment plants in the Metropolitan Waste Disposal System do not have standby power facilities at the site. In the event of power outages, the degree of treatment would be affected ranging from complete bypassing of treatment plants with lift stations on the influent end to a reduction in the degree of treatment depending upon the duration of the power outages in the case of gravity flow facilities. The addition of standby power facilities for plants without these facilities is a condition of the NPDES permits.

Status: To be begun and completed in 1977.

Annual Expenditures:

During 1977	$ 27,000

Project 76-21 Anoka Final NPDES Limitations

Description: The Anoka Plant will reach its design capacity by 1980 and probably somewhat sooner since the plant may not meet 25/30 standards at design capacity. The North Area Study recommended that the Anoka plant be phased out in the 1980's upon completion of the Brooklyn Park, Anoka and Champlin Interceptors. An interim plant expansion to handle flows until the interceptors are constructed may be necessary.

Status: To be begun and completed in 1977.

Annual Expenditures:

During 1977	$ 20,000

Project 76-25 Hastings Wastewater Treatment Plant

Description: To develop and analyze alternatives for providing additional wastewater treatment capacity for the community of Hastings. To compare the alternative of an interim plant expansion to the alternative of a larger plant at a new site, which would provide longer range sewer service.

Status: To be begun and completed in 1977

Annual Expenditures:

During 1977	$ 22,000

Project 76-26 Maple Plain Treatment Plant

Description: The final NPDES permit limits effluent phosphorus concentrations to 1 mg/1. To meet this requirement, phosphorus removal facilities would be needed. The study will evaluate plant expansion or construction of an interceptor.

Status: Work to be done in 1977.

Annual Expenditures:

During 1977	$ 26,000

Project 76-27 Medina Wastewater Treatment Plant

Description: A 1973 report by McCombs-Knutson recommended that the plant be phased out by interceptor construction. The report is presently being reviewed by the Commission staff. The staff review will then provide the basis for design of new facilities, whether treatment plant or interceptor. The study will evaluate interim treatment plant expansion and delaying interceptor construction in 1980.

Status: Project to be completed in 1977.

Annual Expenditures:

During 1976	$ 12,000
During 1977	19,130

Project 76-28 MWWTP Tertiary Treatment Facilities

Description: To evaluate alternatives for providing tertiary wastewater treatment facilities for removing additional organics, solids, and ammonia at the Metropolitan WWTP to meet water quality standards. To analyze the impact on, and need for additional, sludge processing facilities. To conduct pilot plant studies as needed to determine adequacy of alternatives and develop design criteria. To develop a plan for staged construction of facilities, if appropriate.

Status: To be completed in 1977.

Annual Expenditures:

During 1976	$ 20,000
During 1977	100,000

Project 76-33 Rosemount Wastewater Treatment Plant

Description: The Rosemount Advanced Wastewater Treatment Plant will reach its design capacity in 1982. A feasibility study will be needed to determine the most feasible method of providing wastewater disposal facilities for the Rosemount area until the 1990's.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 20,000

Project 76-35 Seneca Tertiary Treatment Facilities

Description: To evaluate alternatives for providing tertiary wastewater treatment facilities for removing additional organics, solids, and ammonia at the Seneca WWTP to meet water quality standards. To analyze the impact on, and need for, additional solids processing facilities. To conduct pilot plant studies as needed to determine adequacy of alternatives and develop design criteria. To develop a plan for staged construction of facilities, if appropriate.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 45,370

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 completed in 1977.

Annual Expenditures:

During 1977	$ 30,000

Project 76-39 Infiltration/Inflow Analysis

Description: To complete a wastewater flow analysis of each community in the Metropolitan Disposal System to determine quantities of infiltration and inflow and to identify those communities for which a full infiltration/inflow analysis is required; to complete an infiltration/inflow analysis for these communities, in accordance with EPA Rules and Regulations; to complete a sewer system evaluation survey of communities identified in the infiltration/inflow analysis to have potentially excessive infiltration/inflow.

Status: To be conducted in 1976 & 1977.

Annual Expenditures:

During 1976	$ 36,091
During 1977	531,372

Project 76-40 Rehabilitation Needs of Existing Metro Facilities

Description: To identify the capacity limitations of the interceptor conveyance system, to evaluate methods of expanding restricted sections or providing relief, and to analyze structural rehabilitation measures where inspection programs have revealed deficiencies.

Status: To be completed in 1977.

Annual Expenditures:

During 1976	$ 45,000
During 1977	100,000

Project 76-41 Chanhassen Interceptor

Description: The comprehensive sewer plan of Chanhassen proposed a trunk sewer to span the community in a northwesterly direction. The oversizing of this trunk and construction of the sewer as a metropolitan facility allows long term relief to the areas around Lake Minnetonka upstream of Chanhassen.

Preliminary planning is necessary to determine the timing and staging for the need of the interceptor.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 6,000

Project 76-42 Savage-Chaska-Blue Lake Area Study

Description: To develop and analyze alternatives for providing immediate and long-range sewer service to the Savage-Chaska-Blue Lake area by completing and expanding the planning effort begun in Chaska WWTP, Project 73-06, and Savage Improvements, Project 74-04. To analyze interim improvements at the Chaska and Savage plants. To analyze staged construction and alternative designs for interceptor construction. To analyze staged construction and alternative treatment processes for expanding and upgrading the Blue Lake WWTP.

Status: To be completed in 1977.

Annual Expenditures:

During 1976	$ 150,000
During 1977	281,880

Project 76-43 Bloomington Interceptor

Description: The existing Bloomington Interceptor utilizes a force-main pumping station arrangement in lieu of a preferred all-gravity line. Proposed reconstruction of Cedar Avenue offers an opportunity to build the all-gravity line in conjunction with major road work. The Bloomington Interceptor gathers sewage from central parts of Bloomington and carries this flow to the Seneca Sewage Treatment Plant. The present interim forcemain pumping station arrangement is built along Cedar Avenue and is to be replaced with an all-gravity line at such time that Cedar Avenue is reconstructed to a major thoroughfare.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 50,000

Project 76-44 Express Interceptor

Description: To determine interceptor facilities needed to provide immediate and long-term conveyance capacity to the Metropolitan Wastewater Treatment Plant for Service Areas No. 2 and 3 and the northern portion of Service Area No. 1. The study will be interrelated with the combined sewer overflow abatement program.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 120,000

Project 76-45 Lower Beltline Interceptor

Description: To design relief interceptor facilities for the Lower Beltline Interceptor located within the city limits of St. Paul. The study will be interrelated with the combined sewer overflow program.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 100,000

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 1977.

Annual Expenditures:

During 1976	$ 2,500
During 1977	22,500

Project 76-49 Battle Creek Interceptor Improvements

Description: The Battle Creek Interceptor acquired from St. Paul in 1970 has been a continual source of maintenance. Two instances in the past three years have required emergency appropriations and unusual expenditures in order to prevent a major discharge of untreated sewage. The Commission has approved, as an emergency, the retention of a Consulting Engineer to study the problem and recommend solutions. The Phase 2 study is to be completed during the current year. A study is required to determine the overall needs and improvements for this facility.

Status: To be completed in 1977.

Annual Expenditures:

During 1977	$ 25,000

Project 76-50 Lino Lakes Interceptor

Description: The Lino Lakes Interceptor is planned as an interim system to serve the MUSA in the southwest portion of Lino Lakes. The proposed interim facilities will provide service for the next 10 to 15 years and serve the problem areas such as Country Lakes, Shenandoah, and the development along Highway 49. It is proposed to construct several interim lift stations and a forcemain system from the Country Lakes development in a southwesterly direction down to County Road "J" on Lexington Avenue.

If an acceptable agreement can be entered into with the City of Shoreview, the forcemain may discharge into the Shoreview Trunk sewer in lieu of the connection with the Metro facilities at County Road "J" and Lexington Avenue.

Status: Construction is expected to be completed in 1977.

Annual Expenditures:

During 1976	$ 750,000
During 1977	165,000

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: The project has been included in the Policy Plan and Development Program and is presently being reviewed. It is anticipated that the 1976 Budget will be amended to include design and construction funds.

Annual Expenditures:

Prior to 12/31/76	$ 40,000
During 1977	440,000

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

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

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 1977.

Annual Expenditures:

During 1977	$ 312,340

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 1977.

Annual Expenditures:

During 1977	$ 879,004

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 hyrological, 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 1977.

Annual Expenditures:

During 1977	$ 163,182

Certified Federal Grants

Grant	Project	Total Grant Amount	Received As Of 3-31-76	Balance Due	1976 Estimated Amount	1977 Estimated Amount
611	Apple Valley Treatment Plant	$ 291,854	$ 212,300	$ 79,554	$ 79,554	$ - 0 -
616	MWWTP - Flood Wall	6,880,200	3,895,283	2,984,917	2,984,917	- 0 -
662	MWWTP - Eff. Pump Station	4,855,050	3,731,271	1,123,779	1,123,779	- 0 -
663	MWWTP - Pre Treat. Units	11,528,625	6,187,708	5,340,917	3,582,400	860,000
664	MWWTP - Prim. Tanks	16,594,800	8,900,080	7,694,720	5,355,020	1,250,000
665	MWWTP - Aear. & Final Tanks	38,331,000	14,414,765	23,916,235	14,432,900	7,650,000
579	Southwest Interceptors II	2,392,430	1,980,900	411,530	411,530	- 0 -
660	South St. Paul	4,400,625	3,784,500	616,125	616,125	- 0 -
661	Newport-St. Paul Park Intcp.	1,804,275	1,327,254	477,021	477,021	- 0 -
666	Metro Compressors	1,856,925	- 0 -	1,856,925	135,000	998,375
803-744	Chemical Waste Land Facility	**757,549**	- 0 -	**757,549**	**307,549**	**450,000**
803-927	Coinceration of Sewage Sludge with Refuse and/or Coal	335,360	- 0 -	335,360	160,000	175,360
999	Facilities Planning Study	2,110,875	- 0 -	2,110,875	600,000	900,000
	TOTAL	$92,139,568	$44,434,061	$47,705,507	$30,679,795	$12,283,735

SCHEDULE 10

Certified State Grants

Grant	Project	Total Grant Amount	Received As Of 3-31-76	Balance Due	1976 Estimated Amount	1977 Estimated Amount
616	MWWTP - Flood Wall	$ 1,376,040	$ 778,839	$ 597,201	$ 597,201	$ - 0 -
662	MWWTP - Eff. Pump Station	971,010	699,615	271,395	271,395	- 0 -
663	MWWTP - Pre Treat. Units	2,305,725	1,239,169	1,066,556	691,018	375,538
664	MWWTP - Primary Tanks	3,318,960	1,778,963	1,539,997	1,059,126	250,000
665	MWWTP - Aera. & Final Tanks	7,666,200	2,883,111	4,783,089	2,705,069	1,530,000
660	South St. Paul	880,125	660,093	220,032	220,032	- 0 -
661	Newport-St. Paul Park Intcp.	360,855	265,589	95,266	95,266	- 0 -
666	Aeration Compressors	371,385	- 0 -	371,385	27,000	200,000
999	Facilities Planning Study	422,175	- 0 -	422,175	125,000	200,000
	TOTAL	$17,672,475	$ 8,305,379	$ 9,367,096	$ 5,791,107	$ 2,555,538

SCHEDULE 11

Anticipated Grants

Account	Name	Grant Income
70-11	Rosemount Treatment Plant	$ 408,431
71-08	Metro Plant - Aeration & Final Tanks	2,790,000
73-02	Metro Plant - Sludge Disposal - Step I & II	1,922,000
74-02	Metro Plant - Sludge Disposal - Step III	144,993,795
-1	Sludge Thickening Tanks	
-2	Sludge Thermal Conditioning & Dewatering Equip.	
-3	Sludge Conditioning & Storage Facilities	
-4	Distributed Digital Acquisition & Control System	
-5	Roll Type Continuous Presses (Equipment)	
-6	Roll Type Continuous Presses (Installation)	
-7	Sludge Dewatering Building	
-8	Sludge Processing Equipment	
-9	Sludge Processing Building	
Various	Facilities Planning Study - Phase II	1,287,882
74-07	Blue Lake Sludge	12,474,000
75-08	Waconia Interceptor - Step III	1,781,500
71-03	Lakeville/Farmington Treatment Plant & Interceptor System	19,039,807
74-09	Apple Valley Interceptor	3,056,911
71-13	Orono/Long Lake Interceptor - Step III	4,279,700
	TOTAL	$192,034,026

Summary of Investment Income

Investment earnings for period June through December, 1976	$ 1,500,000
Investment earnings for period January through December, 1977 based on average investment balance of $30 million and yield of 7.00%	2,100,000
Investment earnings for period January through December, 1978 based on average investment balance of $23 million and yield of 7.0%	1,610,000
Investment earnings for period January through December, 1979 based on average investment balance of $15 million and yield of 7.0%	1,050,000
	$ 6,260,000

Financial Status – Current Projects

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
71-03	Lakeville-Farmington T.P. & Intcp.	III	$ 15,180,000	$ 6,500,000[1]	$ 21,680,000	$ 1,099,113	$ - 0 -	$ 20,580,887
71-05	MWWTP - Eff. Pump Sta.	III	6,599,750	- 0 -	6,599,750	5,925,833	673,917	- 0 -
71-06	MWWTP - Pre. Treatment Units	III	16,040,115	- 0 -	16,040,115	9,770,516	6,269,599	- 0 -
71-07	MWWTP - Prim. Sett. Tanks	III	23,284,300	- 0 -	23,284,300	13,929,295	9,355,005	- 0 -
71-08	MWWTP - Aeration & Final Tanks	III	53,300,500	1,600,000[1]	54,900,500	25,728,618	27,571,882	1,600,000
71-09	MWWTP - Compressors	III	3,215,000	- 0 -	3,215,000	23,569	3,191,431	- 0 -
71-13	Orono-Long Lake Intcp.	III	4,258,600	- 0 -	4,258,600	252,776	- 0 -	4,005,824
71-14	Golden Valley-New Hope Interceptor	III	1,750,000	- 0 -	1,750,000	751,229	998,771	- 0 -
71-20	Prior Lake Interceptor	III	3,870,085	- 0 -	3,870,085	3,183,999	686,086	- 0 -
71-22	Beltline Interceptor	III	8,934,748	250,000[1&2]	9,184,748	6,371,008	2,813,740	- 0 -
71-27	Maple Plain STP	I	9,000	- 0 -	9,000	4,110	4,890	- 0 -
71-29	MWWTP - Warehouse	III	2,040,000	- 0 -	2,040,000	31,449	132,332	1,876,219
71-32	Little Canada-Shoreview Interceptor	III	3,200,000	- 0 -	3,200,000	198,680	- 0 -	3,001,320

[1] See Schedule 14-7
[2] No Federal and/or State Grant Participation

SCHEDULE 14

SCHEDULE 14-1

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
72-02	MWWTP - Compressor Bldg.	II	395,000	- 0 -	395,000	3,205	350,000	41,795
72-04	Cottage Grove Plant	I	200,000	(200,000)	- 0 -	- 0 -	- 0 -	- 0 -
72-07	Maint. & Dispatch Bldg.	II	40,000	- 0 -	40,000	4,343	35,657	- 0 -
72-09	Metering Stations	III	350,000	- 0 -	350,000	271,489	78,511	- 0 -
73-02	MWWTP - Sludge Disposal	II	5,216,000	2,000,000[1&2]	7,216,000	4,959,799	2,256,201	- 0 -
73-06	Chaska Plant	I	247,000	(247,000)	- 0 -	- 0 -	- 0 -	- 0 -
74-01	MWWTP - Sludge Disposal	III						
(400)	Sludge Thick. Facilities	III	38,336,356	- 0 -	38,336,356	23,364	- 0 -	38,312,992
(401)	Sludge Thermal Cond. & Dewatering Equip.	III	23,510,747	- 0 -	23,510,747	2,131	- 0 -	23,508,616
(402)	Sludge Cond. & Storage Facilities	III	28,204,500	(10,241,820)	17,962,680	1,452	- 0 -	17,961,228
(403)	Digital Acquisition & Control System	III	- 0 -	5,339,221	5,339,221	11,950	- 0 -	5,327,271
(404)	Roll Type Cont. Presses & Accessories for Sludge Dewatering	III	- 0 -	4,079,880	4,079,880	- 0 -	- 0 -	4,079,880
(405)	Roll Type Cont. Presses Installation	III	- 0 -	3,144,333	3,144,333	495	- 0 -	3,143,838
(406)	Sludge Dewatering Bldg.	III	10,250,300	(2,905,300)	7,345,000	2,001	- 0 -	7,342,999
(407)	Sludge Processing Equip.	III	14,706,800	(7,700,800)	7,006,000	60	- 0 -	7,005,940
(408)	Sludge Processing Bldg.	III	17,016,800	37,363,200	54,380,000	- 0 -	- 0 -	54,380,000
74-01	TOTAL		132,025,503	29,078,714	161,104,217	41,453	- 0 -	161,062,764
74-02	Carver Lake Intcp.	III	1,195,000	- 0 -	1,195,000	88,753	15,905	1,090,342
74-04	Savage Interceptor	I	74,880	(74,880)	- 0 -	- 0 -	- 0 -	- 0 -

[1]See Schedule 14-7

[2]No Federal and/or State Grant Participation

[3]See Schedule 14-7 thru 14-10

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
74-05	Medina Plant Expansion	I	110,500	(110,500)	- 0 -	- 0 -	- 0 -	- 0 -
74-07	Blue Lake Sludge	III	8,271,400	7,478,993[1]	15,750,393	836,551	- 0 -	14,913,842
74-09	Apple Valley Intcp.	III	3,288,000	- 0 -	3,288,000	47,672	102,350	3,137,978
74-10	Metro Disposal System Improvements	III	1,500,000	- 0 -	1,500,000	433,142	1,066,858	- 0 -
74-11	Metro System Emergency Equipment	III	1,000,000	- 0 -	1,000,000	289,164	710,836	- 0 -
74-47	Sludge Disposal Studies	III	1,000,000	32,500	1,032,500	881,413	118,587	32,500
74-99	Inflow/Infiltration Study	I	250,000	- 0 -	250,000	26,251	223,749	- 0 -
75-01	Ultimate Disposal Site	I	250,000	176,285	426,285	102	- 0 -	426,183
75-05	Seneca - Coal Handling	III	380,000	- 0 -	380,000	12,423	- 0 -	367,577
75-06	Seneca Plant Impr.	III	196,000	- 0 -	196,000	42,084	153,916	- 0 -
75-08	Waconia Interceptor	III	2,465,000	- 0 -	2,465,000	118,116	2,346,884	- 0 -
75-09	Land Acquisition-Sludge	III	1,920,000	(1,878,993)	41,007	41,007	- 0 -	- 0 -
75-10	Engineering Serv. - NPDES Permits	I	120,000	- 0 -	120,000	- 0 -	120,000	- 0 -
75-50	Metro Planning	I	192,488	175,000	367,488	12,646	354,842	- 0 -
76-01	Chemical Waste Land Disposal Facility	I	410,065	- 0 -	410,065	8,569	401,496	- 0 -
		II	- 0 -	600,000	600,000	- 0 -	- 0 -	600,000
76-01	TOTAL		410,065	600,000	1,010,065	8,569	401,496	600,000

[1] See Schedule 14-10

[2] No Federal and/or State Grant Participation

[3] See Schedule 14-11

SCHEDULE 14-2

SCHEDULE 14-3

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
76-02	Reg. Prog. Improvement	I	42,500	- 0 -	42,500	263	42,237	- 0 -
76-05	Metro System Emergency	III	1,500,000	- 0 -	1,500,000	- 0 -	1,500,000	- 0 -
76-06	MWWTP Oil Prevention Spill Improvements	III	150,000	- 0 -	150,000	1,447	148,553	- 0 -
76-07	MWWTP Instrumentation	I	568,000	- 0 -	568,000	- 0 -	568,000	- 0 -
76-08	Load Allocation/Nitrification Studies	I	675,480	(675,480)	- 0 -	- 0 -	- 0 -	- 0 -
76-09	Analysis of On-Site Swge. Disposal Problems	I	100,000	(100,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-10	Industrial Waste Studies	I	305,000	(49,593)	255,407	31	- 0 -	255,376
76-11	Energy Consumption Ruduction Study	I	140,000	(140,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-12	Vermillion Watershed Study	I	40,000	(40,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-13	Environmental Inventory & Assessment	I	60,000	57,309	117,309	- 0 -	- 0 -	117,309
76-14	Cottage Grove-Woodbury-Lake Elmo Area Study	I	35,000	200,000	235,000	34,511	- 0 -	200,489
76-15	Study for Water Flow Reduction Measures	I	15,000	(15,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-16	Rural Area Pollution Problems	I	60,000	(60,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-17	Air Quality Monitoring	I	60,000	25,976	85,976	- 0 -	- 0 -	85,976

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
76-18	Expansion of the Water Quality Monitoring Program	I	120,000	(85,015)	34,985	- 0 -	- 0 -	34,985
76-19	Management Information & Process Control System	I	20,000	2,760	22,760	- 0 -	- 0 -	22,760
76-20	Standby Power Provisions	I	27,000	- 0 -	27,000	- 0 -	- 0 -	27,000
76-21	Anoka Wastewater Treatment Plant	I	20,000	- 0 -	20,000	- 0 -	- 0 -	20,000
76-22	Bayport Final NPDES Limitations	I	3,000	(3,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-23	Blue Lake Tertiary Treat.	I	30,000	(30,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-24	Blue Lake Plant Extension	I	20,000	(20,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-25	Hastings Wastewater Treatment Plant	I	3,000	19,000	22,000	- 0 -	- 0 -	22,000
76-26	Maple Plain Tertiary Treatment Study	I	6,000	20,000	26,000	- 0 -	- 0 -	26,000
76-27	Medina Wastewater Treatment Plant	I	2,000	29,130	31,130	11,130	- 0 -	20,000
76-28	MWWTP Tertiary Treatment Facilities	I	120,000	- 0 -	120,000	- 0 -	- 0 -	120,000
76-29	Metro Auxiliary Fuels in Incinerations	I	40,000	(40,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-30	Fertilizer Production Study	I	20,000	(20,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-31	MWWTP Instrumentation	I	32,000	(32,000)	- 0 -	- 0 -	- 0 -	- 0 -

SCHEDULE 14-5

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
76-32	Metro Disposal System Control of Plant Bypasses & Overflows	I	20,000	(20,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-33	Rosemount Wastewater Treatment Plant	I	25,000	(5,000)	20,000	- 0 -	- 0 -	20,000
76-34	Savage Final NPDES Limitations	I	5,000	(5,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-35	Seneca Tertiary Treatment Facilities	I	30,000	15,370	45,370	- 0 -	- 0 -	45,370
76-36	Seneca Plant Modifications for Auxiliary Fuel for Incinerators	I	20,000	- 0 -	20,000	- 0 -	- 0 -	20,000
76-37	So. St. Paul Alternate Use Study	I	5,000	- 0 -	5,000	- 0 -	- 0 -	5,000
76-38	Stillwater-Bayport-St. Croix Area Study	I	6,000	24,000	30,000	- 0 -	- 0 -	30,000
76-39	Inflow/Infiltration Analysis	I	852,000	(284,537)	567,463	46	- 0 -	567,417
76-40	Rehabilitation Needs Of Existing Metropolitan Facilities	I	150,000	(5,000)	145,000	- 0 -	- 0 -	145,000
76-41	Chanhassen Interceptor Improvement Study	I	6,000	- 0 -	6,000	- 0 -	- 0 -	6,000
76-42	Savage-Chaska-Blue Lake Area Study	I	75,000	356,880	431,880	117,566	- 0 -	314,314
76-43	Bloomington Interceptor	I	50,000	- 0 -	50,000	- 0 -	- 0 -	50,000
76-44	Express Interceptor	I	150,000	(30,000)	120,000	- 0 -	- 0 -	120,000

Program No.	Project	Step Approval	Previously Appropriated	Additional Appropriations	Total Appropriations	Expenditures As Of 5-31-76	Encumbered Balance	Unencumbered Balance
76-45	Lower Beltline Intcp.	I	100,000	- 0 -	100,000	- 0 -	- 0 -	100,000
76-46	Elm Creek Watershed Study	I	25,000	(25,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-47	Blaine-Ham Lake Intcp.	I	15,000	(15,000)	- 0 -	- 0 -	- 0 -	- 0 -
76-48	Battle Creek Siphon Intcp.	I	25,000	- 0 -	25,000	- 0 -	- 0 -	25,000
76-49	Battle Creek Intcp. Improvements	I	25,000	- 0 -	25,000	- 0 -	- 0 -	25,000
76-50	Lino Lakes Intcp.	III	915,000	- 0 -	915,000	150,292	764,708	- 0 -
76-51	Centerville Intcp.	III	480,000	- 0 -	480,000	- 0 -	- 0 -	480,000
76-52	Rehabilitation of Intcp. No. 1-MN-312	III	260,000	- 0 -	260,000	- 0 -	- 0 -	260,000
76-53	Systemwide Overview	I	- 0 -	50,769	50,769	- 0 -	- 0 -	50,769
76-54	Area-wide Population	I	- 0 -	312,340	312,340	- 0 -	- 0 -	312,340
76-55	Combined Sewer Study	I	- 0 -	879,004	879,004	- 0 -	- 0 -	879,004
76-56	Evaluation - Management System	I	- 0 -	163,182	163,182	- 0 -	- 0 -	163,182
	TOTAL		$310,231,914	$45,836,214	$356,068,128	$75,703,663	$63,056,943	$217,307,522

Request For Additional Funding

Project 71-03 Lakeville-Farmington Treatment Plant & Interceptor

Reason for Increase: The increase in costs for Step III from $15,180,000 to $21,680,000 is accounted for as follows:

June 1974 estimate of $15,180,000 was at the ENR of 1993.
The current estimate of $21,680,000 is at an ENR of 2400.
This increase accounts for $3,100,000.

The digital control system was added which has increased the costs by $2,500,000. This essentially accounts for the increase of $6,500,000.

Project 71-08 MWWTP - Aeration & Final Tanks

Reason for Increase: The increase of $1,600,000 is due to the expansion of the scope of the project to include the three (3) subprojects consisting of the following:

Electrical Distribution
Instrumentation of Control System
Addition to Field Office

Project 71-22 Beltline Interceptor

Reason for Increase: The increase of $250,000 is the difference between the estimated amount and the actual bid amount.

Project 73-02 MWWTP - Sludge Disposal

Reason for Increase: The increase of $2,000,000 is necessary for the redesign of the process with incineration in lieu of pyrolysis.

Project 74-01 MWWTP - Sludge Disposal

Reason for Increase:

(402) Sludge Conditioning and Storage Facilities: Program No. 74-01 (402) now includes sludge storage tanks and a building to house the thermal conditioning equipment. The principal thermal conditioning equipment which constituted a part of this project is presently included in Program No. 74-01 (401). Thus, there has been a change of scope which affects the costs.

In combination, Programs No. 74-01 (401) and 74-01 (402) have been subject to price increases of approximately 30 percent since the preliminary estimates were prepared. The Engineering News Record Cost Index increased 21 percent; however, unprecedented increases in the cost of waste treatment equipment in early 1974, accounted for the further change of cost estimates.

Project 74-01 MWWTP - Sludge Disposal (continued)

(403) Distributed Digital Acquisition & Control System for Sludge Processing: As planned in the preliminary concept, the process control system for the sludge disposal facilities was a conventional analog type system. Further investigation into the cost effectiveness of a computer system clearly indicated overall advantages. Thus, a separate project was developed which would cover the process control system for the sludge disposal facilities. The requirement for the supplemental appropriation is necessary because of a change in scope of the project.

(404) Roll Type Continuous Presses & Accessories for Primary Sludge Dewatering: At the time of the original study of sludge disposal facilities for the Metro Plant, the recommendation was for the continuation of use of the eight (8) existing vacuum filters for primary sludge dewatering. Subsequent to the studies, a program of research was conducted by the MWCC in an effort to reduce or eliminate auxiliary fuel for drying and incineration of sludge. The major thrust of this work has revolved around the application of continuous type mechanical roll presses to dewater the conditioned primary sludges.

On the basis of the very successful full scale tests at the Metro Wastewater Treatment Plant, a project was planned to replace four (4) existing vacuum filters with roll type presses. A complete cost effectiveness analysis shows that this system is the most economical.

Thus, this project is an added project in the overall sludge disposal program. Costs were not included in the previous appropriation.

(405) Roll Type Continuous Presses Installation: This project includes the installation of the roll type presses into existing Filtration and Incineration Building No. 2. Additions and modifications will be required to accommodate the presses. Included will be the conditioning chemical system, the piping, the electrical and the control system.

This project was not within the scope of the previous appropriation.

(407) Sludge Processing Equipment: As originally planned, a part of the waste activated sludge from the secondary treatment process was to be subjected to pyrolysis along with refuse. With the deletion of the Sludge/Refuse Pyrolysis Facilities, the secondary sludge will be incinerated.

Program No. 74-01 (407) includes two (2) sludge incinerators. These units were not part of the original appropriation.

Project 74-01 MWWTP - Sludge Disposal (continued)

(408) Sludge Processing Building: As presently planned, the Sludge Processing Building incorporates several items from the previous budget. These include the Waste Heat Recovery Improvement and the Sludge Drying Facilities.

The Sludge Processing Building project will house the Sludge Injection Equipment of Program 74-01 (407). In addition, the building includes waste heat recovery facilities, sludge drying facilities, standby boilers, and ash sotrage and load-out facilities. Thus, the scope has changed extensively.

The costs used in the original appropriation must be adjusted to reflect the construction cost increases since the time of the preparation of the estimates. The Engineering News Record Cost Index increased from a level of 1900 in late 1973 to 2400 presently, an increase of over 20 percent. Equipment included in Program No. 74-01 (408) has been subject to greater increases than that indicated by the Engineering News Record Index, in the order of 30 percent.

Thus, this program has been subject to a change in scope and an increase in the price level.

Project 74-07 Blue Lake Sludge

Reason for Increase: The increase in costs for Step III is due to the following:

1. Acceleration of wastewater treatment plant costs from June 1975 to June 1976 (about 10%).

2. Addition of odor control equipment and covers on the thickeners.

3. The difference between the estimate based on a preliminary design and the detailed cost estimate based on the completed design.

4. The transfer of $1,878,993 from Project 75-09 (Land Acquisition Sludge Disposal Sites) as directed by the Metropolitan Council.

Project 74-47 Sludge Disposal Studies

Reason for Increase: The increase in costs for Project 74-47 of $32,500 is due to the following:

The Marox Project is over the original amount due to the fact that originally the oxygen was to be purchased on the same contract that was used to purchase oxygen for Chaska treatment plant. This part of the contract was never exercised. Also, the original budget was made when it was possible that the tests and operation of the pilot unit could be performed by the existing Metro Wastewater staff. Since that time the procedure has changed so a separate section is performing this work and, consequently, the work cannot be done in connection with other duties.

Project 76-01 Chemical Waste Land Disposal Facility

Reason for Increase: This change from $410,065 to $1,010,065 reflects the advancement beyond Step I and into Step II.

Summary of Projects – Request for Funding

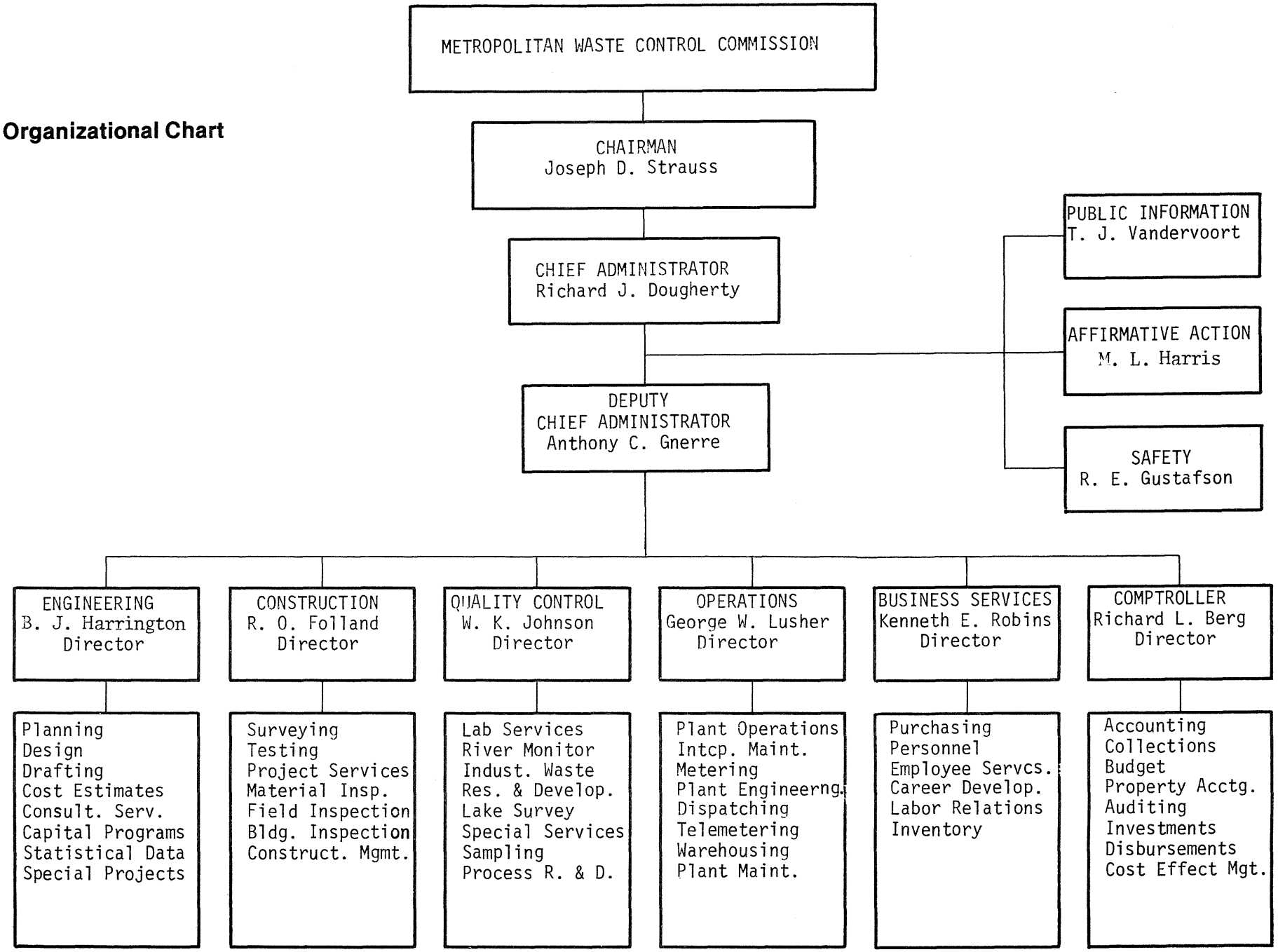
Account No.	Project Name	Step	Estimated Cost
77-A*	Riverview Siphon System	II	$ 100,000
77-B*	Metropolitan Interceptor Improvements	I	50,000
77-C*	EPA 208 Match	I	270,000
		TOTAL	$ 420,000

*No Federal and/or State grant participation

Status of Authorized Personnel

Department/Plant	Proposed 1977	Actual 1976
Administration	16	16
Engineering	26	26
Quality Control	48	42
Construction		
Central Office	10	6
Field Offices	53	51
Operations		
Central Office	6	6
Process Assurance	8	5
Area Supervisors	5	5
Metro Plant	189	182
Seneca Plant	39	39
Blue Lake Plant	21	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	14
Farmington	2	2
Lakeville	1	1
South St. Paul	12	12
Hastings	5	4
Long Lake	1	1
Bayport	1	1
Prior Lake	1	1
Interceptor System	42	34
Business Office	12	12
Comptroller	14	14
TOTAL	549	517

Organizational Chart



SCHEDULE 7

METROPOLITAN WASTE CONTROL COMMISSION
Twin Cities Area

Commission Members and Precincts

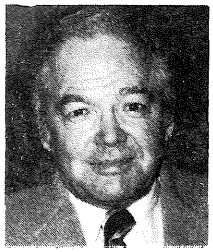

Richard A. Beens

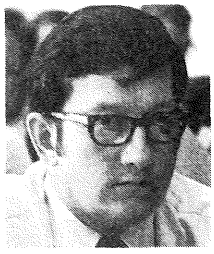

William T. Wallrich

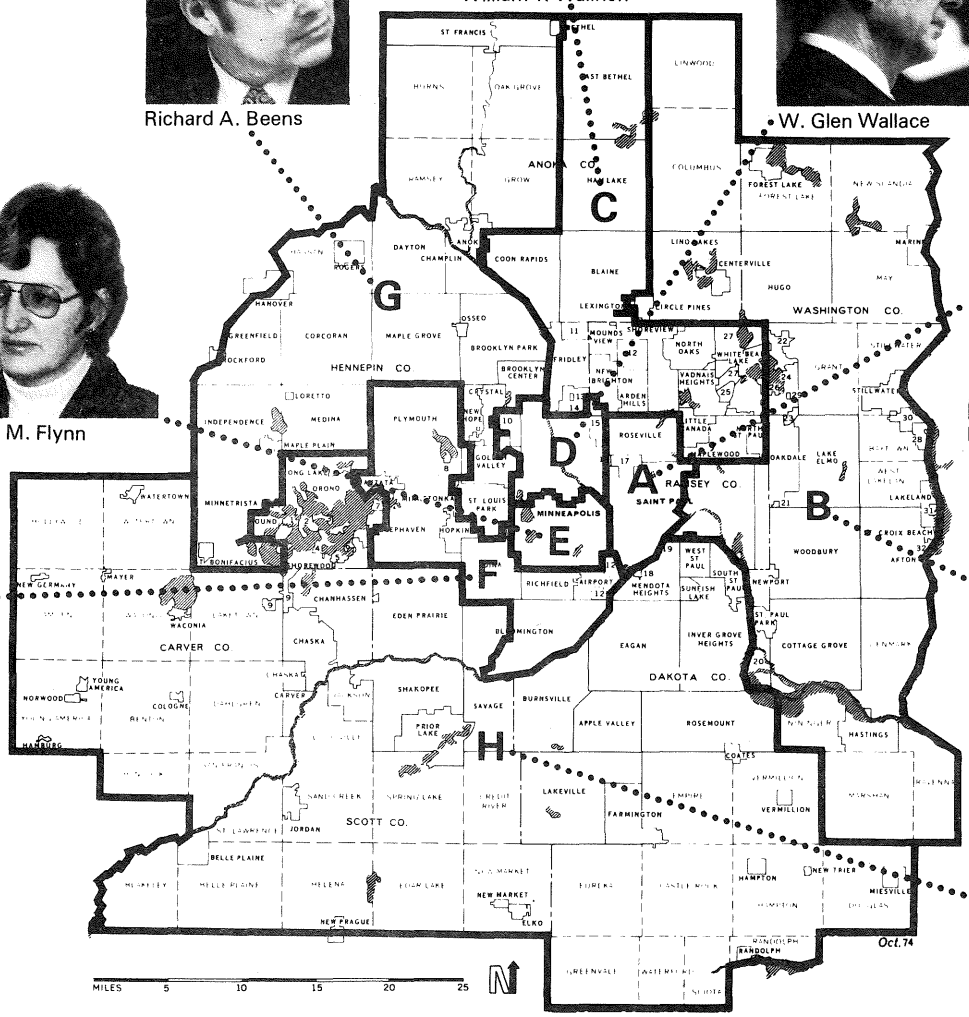

W. Glen Wallace


Carol M. Flynn


Richard C. Radman


C. Wayne Courtney


Calvin J. Brookman




Ruth K. Hustad