### METROPOLITAN SEWERAGE DISTRICT BOARD

### April 19, 1983

The regular monthly meeting of the Metropolitan Sewerage District Board was held in the Boardroom of MSD's Administration Building at 2 p.m., Tuesday, April 19, 1983.

Chairman Robinson called the meeting to order, and Mrs. Crowe called the roll. In addition to the Chairman, the following members were present: Messrs. Batts, Boggs, Clark, Dent, Pope, Smith, Warlick, and Williams and Mrs. Sciara.

In addition to the Board, the following attorney, consultant, and MSD staff were present: Mr. John S. Stevens; Mr. Dean Huber; Mr. W. H. Mull and Mrs. Jan Crowe.

Mr. Boggs moved that the March 15 minutes stand approved as written, and Mr. Clark seconded the motion. Voice vote was unanimous in favor of the motion.

Mr. W. H. Mull, Engineer-Manager, reported on the following:

- a. Resolution amending FY '82-83 budget: Mr. Dent moved that the Board amend the budget as presented, and Mr. Williams seconded the motion. Roll call vote was unanimous in favor of the motion. A copy of the amended budget and supporting documents are attached to and thereby made a part of these minutes.
- b. Amendment to Engineering contract, Sewer System Evaluation Survey: Mr. Mull told the Board that he had met with Mr. Huber for the purpose of negotiating an amendment to the District's contract with Harry Hendon and Associates for rendering engineering services for SSES work, with this amendment to reduce the ceiling for field work by \$183,562 (from \$263,817 to \$80,255). Mr. Smith moved that the Board accept this amended engineering contract as presented and authorize the Chairman to execute the contract with the engineers. Mr. Pope seconded the motion, and roll call vote was unanimous in favor of the motion.
- c. Amendment to Engineering contract, South Buncombe Interceptor Sewers: After Mr. Huber presented to the Board information requested in connection with the South Buncombe Interceptors (see c of 3/15/83 Board meeting), Mr. Smith moved that the Board ratify the motion made at that meeting. Mr. Pope seconded the motion, and roll call vote was unanimous in favor of accepting this amended engineering contract as presented. Mr. Smith requested that Mr. Mull compile right-of-way costs for this project for presentation at the May Board meeting.
- d. Ratify Board's decision to purchase \$15,000 of MSD Bonds: Mr. Smith moved that the Board ratify the action taken by the Board and that the Board be instructed by the Trustee as to the procedure to follow in future transactions. Mr. Boggs seconded the motion, and roll call vote was unanimous in favor of this motion. The bonds purchase consisted of the following: \$5,000 face amount, due 7/1/86, with 3.60% coupons attached; \$10,000 face amount, due 7/1/87, with 3.70% coupons attached. It was the consensus of the Board that Mr. Mull request the Trustee to attend a Board meeting in the near future and present information as to whether it is beneficial for the MSD to retire bonds early or whether funds would earn more interest if left as invested.
- e. Hydroelectric project update: Mr. Mull told the Board that he, the consulting engineers, Mr. Stevens, and the Fish and Wildlife people will meet in Raleigh April 28 in hopes of resolving differences in regard to this project and that he will have a report for the next Board meeting.

Minutes Page Two April 19, 1983

- f. Status report on Hominy Valley, South Buncombe, and Weaver-ville projects: Hominy Valley: Phase I and II are complete; Phase III is 96% complete, with a projected completion date of 4/30/83. South Buncombe: Phase I is complete; Phase II is 70% complete, and Taylor & Murphy ended winter layoff 4/7/83; Phase III, work should begin week of 4/25/83; Phase IV, awaiting outcome of rescheduled Henderson County bond referendum. Weaverville: Project is 3.6% complete, work having begun in March. This report was received as information by the Board.
- g. Right-of-Way Review Committee report: Nothing to report under this item this meeting.
- h. Proposal from TVA regarding application of liquid sludge to agricultural lands: Mr. Mull told the Board that TVA has approached him with an offer to provide technical assistance to the MSD in disposing of sludge by a land application program, with arrangements made with the agronomy staff at North Carolina State University to provide management of the sludge demonstration and associated research. TVA would assist the MSD in securing the necessary permits from State regulatory agencies. They will also provide a tractor and a tanker truck for \$1 a year, with the MSD furnishing a driver, gasoline, and insurance for same. After discussion, Mr. Williams moved that the Board support this concept and authorize Mr. Mull to negotiate with the TVA for this program, thereby approving the project in principle. Mr. Warlick seconded the motion, and roll call vote was unanimous in favor of the motion.
- i. Consulting Engineers' annual report: Mr. Huber presented the Annual Report by Harry Hendon and Associates, Inc., to the Board. A copy of that report is attached hereto and thereby made a part of these minutes.

Mr. Mull presented to the Board a resolution adopted April 11, 1983, by the Asheville Area Chamber of Commerce, Inc., approving in principle the concept of the sewer consolidation under the MSD and recommending that all efforts toward such a consolidation move forward as expeditiously as possible. This resolution was received as information by the Board.

Mr. Smith, Chairman of the Budget Committee, presented the Preliminary Budget for fiscal year 1983-84 for the Board's consideration, after which Mr. Warlick moved that the Board adopt the preliminary budget as submitted by the Budget Committee and schedule a public hearing to be held May 17 during the Board's regular meeting. Mr. Williams seconded the motion, and roll call vote was unanimous in favor of the motion.

Mr. Stevens reported to the Board on a House Bill entitled "An Act to Revise Chapter 162A of the General Statutes of North Carolina Relating to Metropolitan Sewerage Districts." This bill, passed by the House but must go before the Senate, (1) enables the District to impose civil fines and penalties for violation of its ordinances and to adopt its own ordinances regarding the control or discharge of sewer into any system operated by the District; (2) allows the District, with State permission, to generate electricity for the treatment plant by reactivating the old power house on the French Broad River (known as Craggy Dam, built in 1904, and abandoned by CP&L in 1951); and (3) to raise the per diem rate of \$25 to \$35 for Board members.

Date of the next regular meeting of the MSD Board will be May 17, 1983, at which time a public hearing has been scheduled for fiscal year 1983-84 budget.

There being no further business, the meeting was adjourned at 3:45 p.m.

Secretary

# MSD Metropolitan Sewerage District of Buncombe County, North Carolina.

W. H. Mull, P.E., Engineer-Manager P. O. Box 8969, Asheville, N. C. 28814 Telephone: Area Code 704-254-9646

John S. Stevens, General Counsel



C. LeRoy Robinson, Chairman M. Leon Williams, Vice-Chairman Walter T. Batts Walter J. Boggs Ben H. Clark Charles M. Dent Roy W. Pope Diane M. Sciara Frank S. Smith III Paul W. Warlick

I, Roy W. Pope, Secretary to the District Board of the Metropolitan Sewerage District of Buncombe County, North Carolina, do hereby certify that the attached is a true and correct copy of the resolution adopted by the Metropolitan Sewerage District Board at its regular meeting held

pril 19, 19<u>83</u>.

WITNESS my hand and seal of said District this  $\underline{/9}$  day of  $\underline{/9}$ , 1983.

Ву

Secretary to the Board Metropolitan Sewerage District of Buncombe County

#### RESOLUTION

WHEREAS, the Metropolitan Sewerage District Board passed a Resolution at its regular meeting held on April 19, 1983, adopting an Amended Operation and Maintenance Budget for Fiscal Year 1982-83; and

WHEREAS, increases necessary to meet the operation requirements of the Metropolitan Sewerage District of Buncombe County, North Carolina, consisting of line items

| Billing & Collections   | from | \$ 51,000 | to | \$ 51,500 |
|-------------------------|------|-----------|----|-----------|
| Telephone & Telegraph   | from | \$ 4,200  | to | \$ 6,100  |
| Office Supplies         | from | \$ 5,000  | to | \$ 5,200  |
| Insurance               | from | \$ 32,000 | to | \$ 39,000 |
| Consulting Engineers    | from | \$ 6,000  | to | \$ 9,000  |
| Legal Fees & Expenses   | from | \$ 10,000 | to | \$ 14,000 |
| Audit                   | from | \$ 3,000  | to | \$ 3,400  |
| Telephone               | from | \$ 2,000  | to | \$ 2,350  |
| Power & Lights          | from | \$340,000 | to | \$386,000 |
| Maintenance (Equipment) | from | \$ 65,000 | to | \$ 80,000 |

thereby decreasing line items

|                                       | _    |                        |
|---------------------------------------|------|------------------------|
| Salaries                              | from | \$133,500 to \$124,850 |
| Power & Water                         | from | \$ 4,000 to \$ 3,600   |
| Directors' Fees & Expenses            | from | \$ 7,500 to \$ 6,000   |
| Dues & Subscriptions                  | from | \$ 2,000 to \$ 1,000   |
| Accounting Service @ 1% of Payroll    | from | \$ 5,000 to \$ 4,800   |
| Social Security Taxes @ 6.70%         | from | \$ 33,400 to \$ 29,400 |
| Contributions Retirement Fund @ 8.20% | from | \$ 40,900 to \$ 37,500 |
| Capital Outlay (Equipment)            | from | \$ 3,000 to \$ 2,000   |
| Contingency                           | from | \$ 9,300 to \$ 4,000   |
| Salaries & Wages                      | from | \$365,000 to \$345,000 |
| Chemicals                             | from | \$ 42,000 to \$ 41,000 |
| Water                                 | from | \$ 17,000 to \$ 14,200 |
| Laboratory Supplies                   | from | \$ 5,000 to \$ 4,500   |
| Maintenance (Buildings & Grounds)     | from | \$ 14,000 to \$ 11,000 |
| Maintenance (Pipeline)                | from | \$ 8,000 to \$ 3,000   |
| Capital OutlayNew                     | from | \$ 20,000 to \$ 13,000 |
| Equipment Replacement                 | from | \$ 45,000 to \$ 43,000 |
| Contingency                           | from | \$ 13,000 to \$ 1,400  |

this being the same Preliminary Budget which was presented at the regular Board meeting on May 18, 1982, currently lying on the table and totaling \$1,330,900., of which the estimated monthly budget is equal to one-twelfth (1/12) of the total budget;

NOW, THEREFORE, BE IT RESOLVED by the Metropolitan Sewerage District Board of Buncombe County that the April 19, 1983, resolution adopting the Amended Operation and Maintenance Budget for Fiscal Year 1982-83 be and is hereby unanimously approved by roll call vote.

ву

C. LeRoy Robinson, Chairman Metropolitan Sewerage District Board of Buncombe County

Attest:

W. H. Mull Engineer-Manager

## MSD Metropolitan Sewerage District of Buncombe County, North Carolina.

W. H. Mull, P.E., Engineer-Manager P. O. Box 8969, Asheville, N. C. 28814 Telephone: Area Code 704-254-9646

John S. Stevens, General Counsel



C. LeRoy Robinson, Chairman M. Leon Williams, Vice-Chairman Walter T. Batts Walter J. Boggs Ben H. Clark Charles M. Dent Roy W. Pope Diane M. Sciara Frank S. Smith III Paul W. Warlick

I, Roy W. Pope, Secretary to the District Board of the Metropolitan Sewerage District of Buncombe County, North Carolina, do hereby certify that the attached is a true and correct copy of the Amended 1982–83 Budget adopted by the Metropolitan Sewerage District Board at its regular meeting held April 19, 1983.

WITNESS my hand and seal of said District this 19 day of 1983.

By

Secretary to the Board Metropolitan Sewerage District of Buncombe County

Schedule 4, Page 1 of 2

OPERATION AND MAINTENANCE FUND -- S. \_\_IENT OF CASH RECEIPTS AND DISBURSEME

| FOR THE MONTH OF                     | _AND              | NDMONTH ENDED         |          | COMPARED WITH P | COMPARED WITH PREVIOUS YEAR Prior Year Month   |  |  |
|--------------------------------------|-------------------|-----------------------|----------|-----------------|--|--|--|
| AMENDED BUDGET                       | 1982-83<br>Budget | Current Year<br>Month |          | Pric            |  |  |  |
|                                      |                   | Month of              | Ended    | Month of        | Ended  |  |  |
| Salaries                             | 124,850           |                       |          |                 |  |  |  |
| Billing & Collections                | 51,500            |                       |          |                 |  |  |  |
| Telephone & Telegraph                | 6,100             |                       |          |                 |  |  |  |
| Travel & Convention Expenses         | 4,000             |                       |          |                 |  |  |  |
| Office Supplies                      | 5,200             |                       | -        |                 |  |  |  |
| Power & Water                        | 3,600             |                       |          | ******          |  |  |  |
| Directors' Fees & Expenses           | 6,000             |                       |          |                 |  |  |  |
| Insurance                            | 39,000            |                       | <u> </u> |                 | -  |  |  |
| Dues & Subscriptions                 | 1,000             |                       |          |                 |  |  |  |
| Accounting Service @ 1% of Payroll   | 4,800             |                       | <u> </u> |                 | **************************************   |  |  |
| Consulting Engineers                 | 9,000             |                       |          |                 |  |  |  |
| Legal Fees & Expenses                | 14,000            |                       | -        |                 |  |  |  |
| Trustee Fees                         | 8,500             |                       |          | ·               |  |  |  |
| Audit                                | 3,400             |                       |          | <u> </u>        | ·  |  |  |
| Postage & Petty Cash                 | 2,000             |                       |          |                 | Vaccination of the second seco |  |  |
| RepairsOffice Equipment              | 600               |                       |          |                 |  |  |  |
| Social Security Taxes @ 6.70%        | 29,400            |                       |          |                 |  |  |  |
| ContributionsRetirement Fund @ 8.20% | 37,500            |                       |          |                 | •  |  |  |
| Vehicle Expenses                     | 4,800             |                       |          |                 | ,  |  |  |
| Capital Outlay (Equipment)           | 2,000             |                       |          |                 |  |  |  |
| Contingency                          | 4,000             |                       |          |                 | ·  |  |  |
| Contingency                          |                   |                       |          |                 |  |  |  |
| otal Administrative & General        | 361,250           |                       |          |                 |  |  |  |

|  | 1982–83<br><u>Budget</u> | Current Year:<br>Month of               | Ended      | Prior Year:<br>Month of | Ended |
|--|--------------------------|---|------------|-------------------------|-------|
| Salaries & Wages   | 345,000                  |   |            |                         |       |
| Chemicals  | 41,000                   |   |            |                         |       |
| Telephone  | 2,350                    |   |            |                         |       |
| Power & Lights   | 386,000                  |   |            |                         |       |
| Maintenance Supplies & Small Tools   | 6,000                    |   |            |                         |       |
| Water  | 14,200                   |   |            |                         |       |
| Vehicle Expense  | 14,000                   |   |            |                         |       |
| Laboratory Supplies  | 4,500                    |   |            |                         |       |
| Uniform Service  | 3,000                    | · .                                     |            | -                       |       |
| Schools  | 2,200                    |   |            |                         |       |
| Maintenance (Buildings & Grounds)  | 11,000                   |   |            |                         |       |
| Maintenance (Pipeline)   | 3,000                    |   | · <b>t</b> |                         |       |
| Maintenance (Equipment)  | 80,000                   |   |            |                         |       |
| Capital OutlayNew  | 13,000                   |   |            | -                       | -     |
| Equipment Replacement  | 43,000                   |   | *          |                         |       |
| Contingency  | 1,400                    |   |            |                         | •     |
| Total Operations Expenditures  | 968,250*                 |   | -          | -                       |       |
| Total Disbursements  | 1,330,900**              |   |            |                         |       |
| Transfer Interest to Revenue   |                          |   |            |                         |       |
| Total  |                          |   |            |                         |       |
| Receipts:<br>Transfer from Revenue Fund  |                          |   |            |                         |       |
| Others:  |                          | *************************************** |            |                         | w     |
| Total Receipts   | · •                      |   |            |                         |       |
| Excess of Receipts over Disbursements  |                          |   | ·          |                         |       |
| (Disbursements over Receipts)  Cash Balance:  Beginning of Period                                  |                          |   |            |                         |       |
| Ending of Period  *The current expenses for each month a  **Estimated revenue to be collected from |                          |   |            |                         | ·     |

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<sup>1</sup> 

We have considered the proposed amendment to the 1982-83 budget increasing the budget amounts for

| Billing & Collections   | from | \$ 51,000 | to | \$ 51,500 |
|-------------------------|------|-----------|----|-----------|
| Telephone & Telegraph   | from | \$ 4,200  | to | \$ 6,100  |
| Office Supplies         | from | \$ 5,000  | to | \$ 5,200  |
| Insurance               | from | \$ 32,000 | to | \$ 39,000 |
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### thereby decreasing line items

| Salaries                              | from | \$133,500 | to | \$124,850 |
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| Capital OutlayNew                     | from | \$ 20,000 | to | \$ 13,000 |
| Equipment Replacement                 | from | \$ 45,000 | to | \$ 43,000 |
| Contingency                           | from | \$ 13,000 | to | \$ 1,400  |

and find the proposed increases necessary to meet the operating requirements of the Metropolitan Sewerage District of Buncombe County.

In accordance with Section 506 of the Bond Resolution, we recommend and approve this proposed amendment to the Annual Budget.

HARRY HENDON AND ASSOCIATES, INC.

By: Dean Holes

April 19, 1983

## Harry Hendon and Associates

INCORPORATED ENGINEERS

TELEPHONE (205) 823-7480 ADDRESS REPLY TO P. O. BOX 20348

SOUTHCREST BUILDING, VESTAVIA HILLS · BIRMINGHAM, ALABAMA 35216

HARRY H. HENDON (1904 - 1973)

L. E. HOFFMANN

A. B. JOWERS

P. L. BENTLEY

M. G. BUCKLEY, JR.

H. D. HUBER

S. W. NELSON

April 15, 1983

H. S. KAHLON
G. S. RAJAN
G. H. RHODES
L. R. ROBINSON, JR.

Metropolitan Sewerage District Buncombe County, North Carolina P. O. Box 8969 Asheville, North Carolina 28814

Attention: Mr. W. H. Mull, Engineer-Manager

Gentlemen:

Section 505 of the Resolution authorizing the Sewage Disposal System's Bond for the Metropolitan Sewerage District of Buncombe County requires the Consulting Engineer to prepare and file with the District Board, the Local Government Commission, the Engineer-Manager and the Trustee, on or before the 15th day of April in each year, a report setting forth the following:

"(a) their advices and recommendations as to the proper maintenance, repair and operation of the Sewerage System during the ensuing fiscal year, and an estimate of the amount of money necessary for such purposes."

An annual inspection was made of the MSD sewerage system on March 17, 1983. It was observed that steps have been taken to improve maintenance and operation of existing treatment facilities until new facilities, now under design, are available to supplement existing facilities. An example is that, in lieu of expending continual funds for repair of worn out sludge pumps, two new pumps have been purchased and placed in service. These new pumps will still be utilized when plant expansion plans are complete.

Instead of implementing the Facility Plan Update reported in the

1982 Annual Report, the Division of Environmental Management of the North Carolina Department of Natural Resources and Community Development (DEM) recommended that the proposed improvements to the Metropolitan Wastewater Treatment Plant be combined with plant expansion plans. A Facility Plan Amendment combining the recommendations contained in the Facility Plan Update with the plant expansion plans was submitted to DEM in September, 1982.

A contract was awarded to the Consulting Engineer on December 14, 1982, to design the recommended improvements to the Metropolitan Wastewater Treatment Plant. The amount of money necessary for providing the upgrade and expansion of the Metropolitan Wastewater Treatment Plant is estimated to be approximately \$30,000,000. Federal and State Grants in the range of \$25,000,000 to \$26,000,000 are expected to assist in the financing of the project leaving an estimated \$4,000,000 to \$5,000,000 as the local MSD share.

The <u>Crescent Hills Treatment Plant</u> is scheduled to be abandoned in August, 1983, as a result of the construction of Section 3 of the South Buncombe Interceptor Sewer Project. Maintenance expenditures to this plant should be kept to a minimum except as necessary to avoid permit violations.

The <u>Weaverville Treatment Plant</u> is scheduled to be abandoned in the Fall of 1983 as a result of construction of the Weaverville Pumping Station/
Force Main System. Maintenance expenditures to this plant should be kept to a minimum except as necessary to avoid permit violations.

Infiltration and Inflow are significant problems to the operation of the treatment system. Everyone recongizes that the solution to the problem will be very expensive and require many years of well organized effort to start getting the problem under control. The Sewer System Evauluation Survey (SSES) report was submitted to DEM in 1982. The Engineers believe that rehab work could now proceed, mostly on a force account basis without any addition-

al formal SSES activity. How the actual rehabilitation work will be accomplished is a key subject being addressed by the Buncombe Sewer Consolidation Study Task Force on which MSD is a key participant.

Excessive, illegal industrial discharges, which are adversely affecting wastewater treatment plant operations are still recurring frequently. Steps are being taken to curtail this problem through the development of a POTW Industrial Wastewater Pretreatment Program for MSD. Descriptions of the two stages of development of this Plan were submitted to DEM in October and December, 1982. A Notice of Request for Approval of a Pretreatment Program Submission was advertised by DEM on or before February 25, 1983, subject to a 90 day comment period. Upon approval and implementation of this Program, it is anticipated that the problem with industrial shock loads will be deminished.

"(b) their advices and recommendations as to the extensions, improvements, renewals and replacements which should be made during the ensuing fiscal year, and their recommendations as to the amount that should be deposited during the ensuing fiscal year to the credit of the Repair and Extension Fund for such purposes."

The Metropolitan Wastewater Treatment Plant upgrade is currently in the design stage based on a two phase construction program. To be consistent with the current grant funding schedule it is expected that the first phase construction activity can begin in early 1984. With a current estimated cost of \$30,000,000, the MSD share is expected to be between \$4,000,000 and \$5,000,000. The preparation of plans and specifications for the upgrade and expansion is under contract. Two additional commitments of funds will be necessary during the design stage. 1) Value Engineering as required by EPA on projects in excess of \$10,000,000 will be necessary at an estimated cost of \$70,000. 2) Subsurface investigation will be required at an estimated cost of \$15,000.

Sludge disposal is currently a major unsettled issue and one that requires immediate attention. The preliminary analysis done for the latest Facility Plan Amendment indicated the most cost effective alternative to be co-disposal with Buncombe County solid waste. This alternative however will require a very large commitment of funds, several years planning and development time, and full cooperation with Buncombe County. To further pursue this alternative, a detailed feasibility study estimated to cost between \$50,000 and \$150,000 is the next step. If requested by MSD, the Engineers will submit a proposal, which would be a joint effort with Greeley and Hansen, Engineers, for the co-disposal feasibility study, however, it is recommended that MSD not proceed with this expense unless there is interest and financial participation on the part of the Buncombe County Commissioners.

The MSD is currently cooperating, from a planning standpoint, with the Tennessee Valley Authority for an experiment in land application of sludge. Initial indication is that MSD commitment of funds will be minimal, consisting of some manpower, fuel, and insurance. This could turn into a feasible sludge disposal alternative or as a minimum provide some relief for the almost loaded lagoon.

If the co-disposal scheme with the County does not get off the ground in the near future, other options will need to be evaluated in more detail. A recently held international conference on sludge disposal was attended by the Engineer-Manager and your Consulting Engineer. There were several potentially feasible sludge disposal methods presented that would warrent more investigation.

This report recommends the following actions:

1) Formally approach the County to find out if there is interest in a solid waste co-disposal venture.

- 2) If No. 1 above produces a favorable response, present the County with a feasibility study proposal and request their financial participation.
- 3) If No. 1 and/or 2 above fail to produce positive action, it is recommended that the MSD authorize the Engineers in cooperation with the MSD Staff and Sludge Committee to evaluate and make a recommendation for sludge disposal.
- 4) Continue with the TVA land application experiment.

The <u>Hominy Valley Interceptor sewer project</u> has been under construction since June, 1981. Construction is now approximately 98% complete. The current estimate of construction cost is \$5,600,000 of which \$236,000 is MSD funds.

The <u>South Buncombe Interceptor sewer project</u> has been divided into 4 basic phases. All phases are either complete or under construction except the last phase which has been totally on hold pending bond referendum activity in Henderson County. The first referendum failed. A second referendum will be held in April 1983, which should trigger either dropping the last phase or proceeding with it. Should the April referendum be successful, the anticipated completion date is October, 1984. The current estimate of construction cost for all phases is \$4,510,000 of which \$155,000 is MSD funds.

The <u>Weaverville Pumping Station/Force Main System</u> project construction started in March, 1983, and is scheduled to be complete in the fall of 1983. The current estimate of construction cost is \$1,020,000 of which \$128,000 is MSD funds.

The South French Broad Interceptor Sewer Project, Carrier Bridge

Pumping Station Expansion, Remote Flow Monitoring System and Syphon Grinders

Projects were authorized for design in December, 1982, at a cost of \$165,100.

The estimated construction cost of these project is approximately \$3,500,000. No construction schedule has been established and it is recommended that construction not be scheduled at this time unless a grant funding source is found or other pressing reasons develop.

The <u>Craggy Dam Hydroelectric Project</u> is proposed to reactivate power generating facilities to provide electric power for the operation of the Metropolitan Treatment Plant. The feasibility study prepared in 1982 showed the project to be financially feasible. A license exemption application was prepared, to be submitted to the Federal Energy Regulatory Commission (FERC) but it proved to be deficient because an endorsement was not obtained from the Fish and Wildlife Authorities. Current requirements of Fish and Wildlife Authorities appear to be excessively costly to the project and efforts are being made to negotiate a compromise that will satisfy the concerns and keep the project in a feasible state. The current estimated capital cost is between \$6,000,000 and \$7,000,000 with anticipated revenue from avoided power costs and surplus power sales in excess of \$1,000,000 per year during the first several years of operation.

Bookkeeping, record keeping, industrial billing, cost accounting for grant funds, etc. has grown to be a very major task for MSD personnel. This report recommends that budget be provided to purchase a microcomputer system to assist with the administration functions of the MSD. This report recommends that the system purchased be compatiable with that of the Engineer's so that software programs, formats, etc. used by the Engineer are transferrable for MSD's use. One example is the annual user charge analysis which is complicated and time consuming and is currently done by the Engineer. A program can be developed to enable the MSD staff to do the job with only a review and recommendation from the Engineers.

Metropolitan Wastewater Management Plan that will, if acceptable to all parties, increase the responsibilities of the MSD significantly. The proposed plan has been presented to almost all concerned parties, with enough favorable reaction to indicate that some form of consolidation agreement may be forthcoming. The current estimated capital cost involved in such a consolidation will add approximately \$45,000,000 to MSD's current capital programs plus approximately \$1,000,000 per year in annual 0 & M costs.

It is anticipated, based on current estimates, that MSD reserve funds, including the repair and extension and scheduled contributions to said funds will be adequate to cover the MSD share of the proposed project except for the following:

- 1. Hydroelectric Project
- 2. Sludge Co-disposal
- 3. Sewer Consolidation
- 4. South French Broad Interceptor Sewers

No major financial commitments have been made for any of the above four (4) projects and it is expected that commitments to proceed with any of the above will be preceded by a significant grant, user charge increase and/or a bond issue.

Funds on deposit in the Repair and Extension Fund totaled \$2,041,126 as of March 29, 1983, and are adequate to meet the requirements for the ensuing fiscal year. The build up and maintenance in the Repair and Extension Fund to \$2,000,000 as recommended previously is still considered a valid recommendation.

"(c) their advices and recommendations as to the insurance to be carried under the provisions of Section 706 of this Resolution."

We have obtained from the District's insurance carrier a tabulation of the policies and coverages currently in effect. The insurance being carried is in accordance with our recommendations as required by Section 706 of the Bond Resolution.

"(d) their recommendations as to any necessary or advisable revisions of the sewage disposal charges, and;"

Current sewer rates are based on a Resolution effective July 1, 1975, adopting charges for the discharge of domestic wastewater and industrial wastes. Adjustments were made to industrial waste charges in accordance with the annual User Charge Analysis conducted during July, 1982.

The annual user charge analysis dated September 10, 1982, suggested that a domestic user charge rate increase was in order. However, the report recommended no action until an analysis was made of the future capital program funds required to determining the size of the increase. It is obvious at this time that capital programs such as Sewer Consolidation, Hydroelectric project, etc., will not get defined adequately in the near future and therefore it is recomended that a domestic user charge rate increase be planned for implementation at the start of the upcoming budget year.

It is proposed that the user charge committee meet with the Engineer-Manager and your Engineers as soon as practical to discuss the proposed rate increase.

As for industrial rates, a user charge analysis will be made during July, 1983, and appropriate recommendations made at that time.

"(e) their findings whether the properties of the Sewerage System have been maintained in good repair and sound operating condition, and their estimate of the amount, if any, required to be expended to place the System in such condition and the details of such expenditures and the approximate time required therefor."

Problems with illegal industrial wastes discharges and loads at or

beyond design capacities continue to contribute to operational and maintenance problems at the Metropolitan Wastewater Treatment Plant. Progress is being made toward a sound modern operation and maintenance program through staff efforts and EPA funded projects which are at various stages of planning or completion.

Most all of the deficiencies noted during the inspection are currently undergoing repair or are awaiting parts. Other recommendations for minor maintenance improvements and repairs have been given to the Engineer-Manager.

Performance of the Metropolitan Plant is frequently below required limits because of industrial shock loads and continuing operation near or beyond design capacity. During 1982, this plant was in compliance for BOD removal 83 percent of the time and for suspended solids removal 58 percent of the time. Planned construction and implementation of the Industrial Wastewater Pretreatment Program will resolve this problem. In the interim MSD is working with DEM and is also seeking some temporary operational expendients in order to meet discharge requirements.

Performance of the Weaverville Plant continues to be much better than it had been in the past years durin the past year this plant was in compliance for BOD removal 100 percent of the time and suspended solids removal 83 percent of the time; however, operating problems are still apparent. This plant should be able to meet discharge requirements until it can be decommissioned upon completion of the Weaverville Pumping Station/ Force Main System which is now under construction.

Because of its overload condition, the Crescent Hills Plant has met the effluent requirements of 30 mg/l BOD only 50 percent of the time and suspended solids only 75 percent of the time during 1982. As has been re-

ported to the State, there is no way to meet those requiremnts during heavy periods of rain. A request for a bypass of excess flow has been rejected by the State. Without this permission, there appears to be no reasonable way to bring this plant into compliance until the South Buncombe County Interceptor is completed and placed in service. The State has extended the interim effluent limits to be consistant with the anticipated completion date of the South Buncombe Interceptor Sewer Project. Completion of this project will result in the abandonment of the Crescent Hills Treatment Plant.

Because of periodic industrial shock loads, excessive inflow during wet weather periods, and the fact that the Metropolitan Treatment Plant is running near capacity, occasional discharge permit violations are likely. What action the State and EPA might take with regard to these violations is unknown. Sewer connection moritoriums and fines are within the power of State and Federal authorities however, they are usually considerate when positive steps are being taken toward correcting the problem. We believe the fact that plant expansion design is underway with construction funding scheduled and the fact that your industrial pretreatment program is complete with approval and implementation expected soon should be ample evidence that positive action is being taken. In addition to these actions some experimenting with polymers is underway to see if improved solids settling can be achieved at a reasonable cost.

We would like to express our continuing thanks and appreciation to Mr. W. H. Mull and to Mr. R. L. Cunningham, who have been most cooperative with our work as Consulting Engineers over the years.

Very truly yours,

HARRY HENDON AND ASSOCIATES, INC.

Lean Huber

Bv

Dean Huber

DH:mc

cc: Local Government Commission Trustee

# MSD Metropolitan Sewerage District of Buncombe County, North Carolina.

W. H. Mull, P.E., Engineer-Manager P. O. Box 8969, Asheville, N. C. 28814 Telephone: Area Code 704-254-9646

John S. Stevens, General Counsel



C. LeRoy Robinson, Chairman M. Leon Williams, Vice-Chairman Walter T. Batts Walter J. Boggs Ben H. Clark Charles M. Dent Roy W. Pope Diane M. Sciara Frank S. Smith III Paul W. Warlick

I, Roy W. Pope, Secretary to the District Board of the Metropolitan Sewerage District of Buncombe County, North Carolina, do hereby certify that the attached is a true and correct copy of the PRELIMINARY 1983-84 BUDGET adopted by the Metropolitan Sewerage District Board at their regular meeting held April 1983.

WITNESS my hand and seal of said District this 19 day of 1983.

Bv:

Secretary to the Board Metropolitan Sewerage District of Buncombe County

## OPERATION AND MAINTENANCE FUND--31 ATEMENT OF CASH RECEIPTS AND DISBURSE TITLE OF CASH RECEIPTS AND DISBURSE TO THE OPERATION AND MAINTENANCE FUND--31 ATEMENT OF CASH RECEIPTS AND DISBURSE TO THE OPERATION AND DISBUR

| FOR THE MONTH OF                     | AND               | MONTH                 | ENDED | _ COMPARED WITH P | REVIOUS YEAR |  |
|--------------------------------------|-------------------|-----------------------|-------|-------------------|--------------|--|
|                                      | 1983-84<br>Budget | Current Year<br>Month |       | Prior YearMonth   |              |  |
| PRELIMINARY BUDGET                   |                   | Month of              | Ended | Month of          | Ended        |  |
| Salaries                             | 133,500           |                       |       |                   |              |  |
| Billing & Collections                | 52,000            | -                     | '     |                   |              |  |
| Telephone & Telegraph                | 6,200             | •                     |       |                   |              |  |
| Travel & Convention Expenses         | 4,000             | )                     |       |                   |              |  |
| Office Supplies                      | 5,500             |                       |       |                   |              |  |
| Power & Water                        | 4,000             |                       |       |                   |              |  |
| Directors' Fees & Expenses           | 7,500             |                       |       | -                 |              |  |
| Insurance                            | 45,000            |                       |       |                   |              |  |
| Dues & Subscriptions                 | 1,000             |                       |       |                   |              |  |
| Accounting Service @ 1% of Payroll   | 5,000             |                       |       |                   |              |  |
| Consulting Engineers                 | 10,000            | -                     |       |                   |              |  |
| Legal Fees & Expenses                | 15,000            |                       |       |                   |              |  |
| Trustee Fees                         | 8,500             |                       |       | _                 |              |  |
| Audit                                | 3,500             |                       |       |                   |              |  |
| Postage & Petty Cash                 | 2,000             |                       |       |                   |              |  |
| RepairsOffice Equipment              | 600_              |                       |       | _                 |              |  |
| Social Security Taxes @ 6.70%        | 34,000            |                       |       |                   |              |  |
| ContributionsRetirement Fund @ 8.38% | 42,000            |                       |       |                   |              |  |
| Vehicle Expenses                     | 4,800             |                       |       |                   |              |  |
| Capital Outlay (Equipment)           | 13,000            |                       |       |                   |              |  |
| Contingency                          | 13,200            |                       |       |                   |              |  |
|                                      |                   |                       |       | •                 |              |  |
| Total Administrative & General       | 410,300           |                       |       |                   |              |  |

|   | 1983–84<br><u>Budget</u> | Current Ye<br>Month of                         | Ended                                  | Prior Year:<br>Month of | Endeu |
|---|--------------------------|--|--|-------------------------|-------|
| Salaries & Wages                                      | 365,000                  |  |  |                         |       |
| Chemicals   | 42,000                   |  |  |                         |       |
| Telephone   | 3,500_                   |  |  |                         |       |
| Power & Lights  | 410,000                  |  |  |                         |       |
| Maintenance Supplies & Small Tools                    | 7,500                    |  |  |                         |       |
| Water & Garbage                                       | 16,000                   |  |  |                         |       |
| Vehicle Expense                                       | 15,500                   | :  | ************************************** |                         | :<br> |
| Laboratory Supplies                                   | 5,000                    |  |  |                         |       |
| Uniform Service                                       | 3,200                    |  |  |                         | •     |
| Schools   | 2,200                    |  |  |                         |       |
| Maintenance (Buildings & Grounds)                     | 14,000                   |  |  |                         |       |
| Maintenance (Pipeline)                                | 8,000                    |  |  |                         |       |
| Maintenance (Equipment)                               | 85,000                   |  | -                                      |                         |       |
| Capital OutlayNew                                     | 20,000                   |  |  |                         | · .   |
| Equipment Replacement                                 | 52,000                   |  |  |                         |       |
| Contingency   | 34,200                   |  |  |                         |       |
| Total Operations Expenditures                         | 1,083,100*               |  |  |                         |       |
| Total Disbursements                                   | 1,493,400**              |  |  |                         |       |
| Transfer Interest to Revenue                          |                          |  |  |                         |       |
| Total   |                          |  |  |                         |       |
| Receipts:<br>Transfer from Revenue Fund               |                          |  |  |                         |       |
| Others:   |                          |  |  |                         |       |
| Total Receipts  |                          |  |  |                         |       |
| Excess of Receipts over Disbursements                 |                          | <u>;                                      </u> |  |                         |       |
| (Disbursements over Receipts)                         |                          |  |  |                         |       |
| Cash Balance:<br>Beginning of Period                  |                          |  |  |                         |       |
| Ending of Period *The current expenses for each month |                          | 1  | h (1/12) of the                        | al budget               |       |

DISBURSEMENTS CONTINUED

Schedule 4, Page 2 of 2