

INTERNAL AUDIT REPORT

CITY OF MANCHESTER

NEW HAMPSHIRE



**DEPARTMENT OF HIGHWAYS
ENVIRONMENTAL PROTECTION DIVISION**

PERFORMANCE AUDIT

DECEMBER 2006

Prepared by

City of Manchester, NH

Office of the Independent City Auditor

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DEPARTMENT OF HIGHWAYS
ENVIRONMENTAL PROTECTION DIVISION
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City of Manchester
Office of the Independent City Auditor

One City Hall Plaza
Manchester, New Hampshire 03101
Phone: (603) 624-6460
Fax: (603) 624-6549

January 28, 2014

Committee on Accounts, Enrollment and Revenue Administration
City of Manchester, New Hampshire
Honorable Aldermen: Sullivan, Lopez, Devries, M. Roy, Ouelette

Dear Honorable Committee Members:

At the January of 2005 meeting of the Committee on Accounts, Enrollment and Revenue Administration, an audit plan was accepted by the Committee. The plan was based on risk of the auditee and is adjusted annually for changes happening at the Departments. Based on that assessment the Division of Environmental Protection (EPD) was selected for a performance audit and included an audit of certain financial related information. A performance audit systematically examines evidence to independently assess the performance and management of a program against objective criteria. Performance audits provide information to improve program operations and facilitate decision-making.

The audit studied the efficiency and effectiveness of the financial operations at the EPD and looked at information from July of 2004 to December of 2006.

The audit procedures began with the documentation and evaluation of financial controls in place during the audit period. I then reviewed federal, state and local laws, rules and regulations covering the division and its activities. A search of the internet was conducted to find other audits and studies relating to municipal wastewater treatment plants. The following areas were selected for further study and testing:

- Cash management and rate setting
- State and Federal fund management
- Payroll
- Revenue collection
- Expenditure processing
- Ratio analysis to industry standards

Conclusion

In general the division is efficiently and effectively run during the audit period. Internal controls in place during the audit period were very good and the division is a model for the rest of the city in documenting through a set of written policies and procedures the controls in place and responsibilities for employees. This is to date the only department that I have found has a nearly complete and updated set of written policies and procedures.

My testing did reveal three areas where the division could make improvements.

Observation 1 on page six recommends that the division needs to more carefully monitor its cash balances and adjust rates in a timely manner to reflect activity in the division.

Observation 2 on page nine notes that some requests for reimbursement of federal funds were not done timely. This is most likely due to a shortage of personnel in the business office. I strongly recommend that the division hire additional administrative/finance staff to track and monitor financial activity of grants and construction projects.

Observation 3 on page thirteen states that the division has unusually high use of sick leave that is causing excess use of overtime. The cause may be due to language in the labor contract that seems to encourage use of sick leave.

The draft audit report was sent to the Chief Sanitary Engineer for his review and comment. The observations generated are included in the report that follows. The auditee did not respond in writing to the report observations and no responses are included in the report. They did respond however to the observation worksheets and were in agreement with most of the observations. We appreciate the courtesy and cooperation of the staff and administration of the Environmental Protection Division on this assignment.

Respectfully Submitted,

Kevin Buckley, CPA
Internal Audit Manager

INTRODUCTION

AUDIT BACKGROUND

At the January of 2005 meeting of the Committee on Accounts, Enrollment & Revenue Administration it was requested that a performance audit of the Department of Highways, Environmental Protection Division (EPD) be conducted. The City of Manchester Office of the Independent City Auditor has been designated by state law, city charter and local ordinance with the authority to conduct such examinations and audits.

Our audit was conducted in accordance with standards applicable to performance audits contained in Government Auditing Standards, issued by the Comptroller General of the United States.

AUDIT SCOPE AND OBJECTIVES

This audit was a performance audit designed to report on efficiencies in the design and operation of the EPD.

I looked at financial and performance data where available for fiscal years 2004, 2005, 2006 and the first six months of fiscal year 2007. Where appropriate data was collected and analyzed on a calendar year basis in order to more accurately reflect seasonal activity. Areas selected for examination were:

- Cash Management and Rate Setting
- State and Federal Funds Management
- Payroll
- Revenue Collection
- Expenditure Processing
- Comparison of financial and operating ratios to other jurisdictions.

The results of our testing are included in the recommendation and observation section of this report found starting on page six.

BACKGROUND OF AUDITEES

The Environmental Protection Division (EPD) is a division of the Department of Highways. The EPD is accounted for as an enterprise fund of the City of Manchester. The division is fully funded by user fees and State/Federal grants. The EPD operates the sewage treatment plant, sewerage pumping stations, collections systems and is responsible for the all services related to the transportation and treatment of raw sewerage for the City and parts of the outlying communities of Goffstown, Bedford and Londonderry.

MISSION STATEMENT

The Environmental Protection Division provides for the collection and treatment of wastewater to residents in the City of Manchester and to residents in designated portions of the towns of Bedford, Goffstown and Londonderry. Services are provided in accordance with Federal and State permit requirements.

The EPD strives to provide services with superior quality and competitive prices and remains competitive with other New Hampshire wastewater treatment facilities.

ORGANIZATION

The division consists of five sections:

- Administration

The Administration Section is in charge of all accounting and financial operations of the division. Among the duties of the section is payroll processing for 43 employees, processing over \$7 million annual in operating expenses, collection of over \$12 million of user fees (see billing office below) and other revenues, accounting for over \$124 million of capital assets (net of depreciation), accounting for close to \$30 million of debt, \$60 million dollars of capital projects, federal and state grant administration and contract administration. The section consists of a Business Service Officer who oversees the section, an accountant II, 2 accounting technicians, two customer service representatives and an administrative assistant.

- Billing

The billing office prepares and issues sewer bills to the residential, commercial and industrial users in Manchester. This includes billing to the three towns with inter-municipal agreements with the City. Currently EPD has approximately 24,000 accounts.

- Industrial Pretreatment

This section is responsible for the inspection and monitoring of all class I industrial users in the City. All industrial users are inspected at least once annually and their wastewater discharge is sampled and tested at least annually to determine the concentration and amount of pollutants discharged. The section is administered by two employees.

- Wastewater Treatment

The City of Manchester wastewater treatment plant is designed to treat an average daily flow of 34 million gallons per day (MGD) with a peak design of 56 MGD. The City is under an agreement with the Federal Environment Protection Agency that allows it to operate up to 80 MGD with the excess capacity going through primary treatment then directly to Chlorination/De-chlorination process. The agreement calls for the City to separate its combined sewer and storm water systems over a number of years.

- Storm Water

The EPD has developed a storm water management program to reduce or eliminate the discharge of pollutants contained in surface runoff.

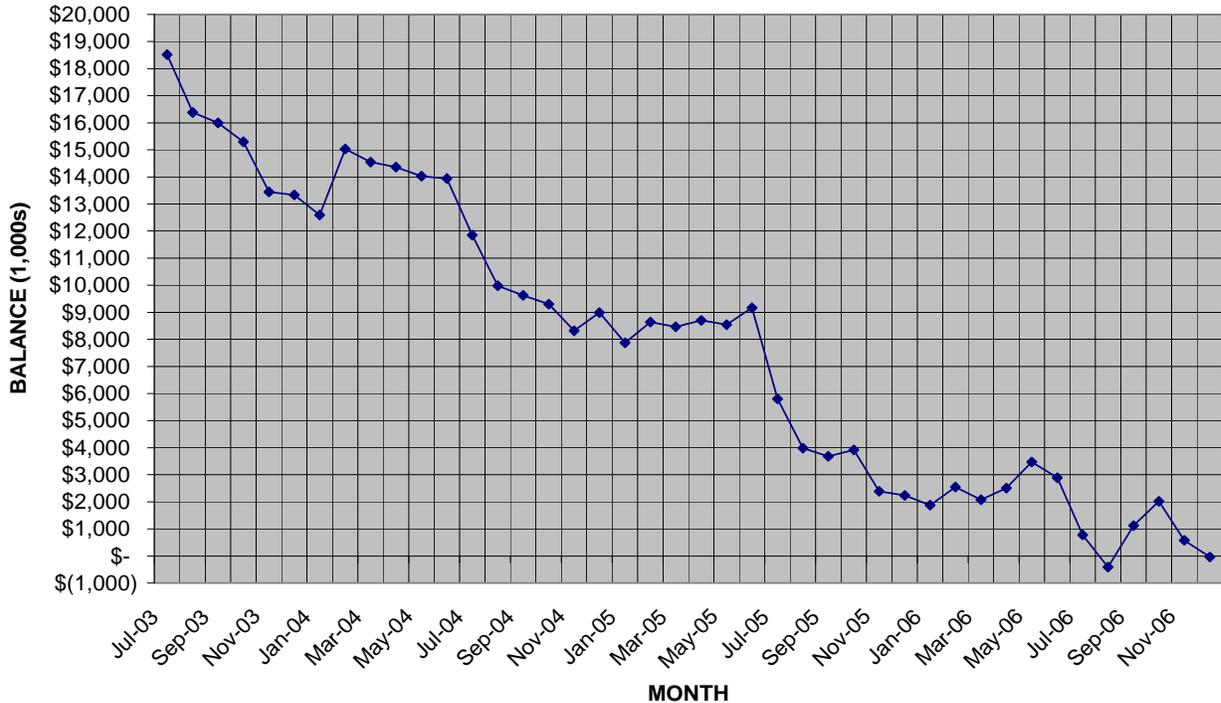
In the City of Manchester the majority of sewer lines collect both rain water from streets and sewage from homes and businesses. These lines are called combined sewers. When it rains the system is quickly overwhelmed and the mixture of rain water and sewage is relieved through a series of outfalls called combined sewer overflows (CSO). This is necessary to prevent the mixture from backing up into streets and basements throughout the City. It is estimated that about 220 million gallons of combined sewage is discharged annually to the Merrimack River.

In March of 1999 the City was ordered by the Federal Environmental Protection Agency to spend approximately \$57 million dollars over a ten year period to begin to eliminate CSOs and provide more detailed planning for phase 2 of the program. Upon completion of the phase I program 14 CSOs will be eliminated and the annual volume discharged will be reduced by 75 million gallons annually.

CASH MANAGEMENT AND RATE SETTING

OPERATING CASH

AVERAGE MONTHLY CASH BALANCE



SOURCE: Finance Department Interest Allocation Spreadsheets

The EPD Business Office continually monitors the cash balance of the fund. At the beginning of phase I of the EPD mandated CSO project a rate increase was approved that would exceed the current cash needs of the division. This was done to build cash balance that would be used to fund the project. This also provided a stable rate for customers, eliminated the need for short term borrowing and provided interest income/eliminated interest expense for the fund. The plan was to spend the balance down during phase I and seek new rate increases at the beginning of phase II that would rebuild the balance for use during the new construction phase.

OBSERVATION 1: CASH FLOWS AND RATE INCREASE

On January 11, 2005 a proposal by EPD was presented to the Committee on Accounts (COA) informing them of the declining cash balance and projection of an operating fund cash deficit if rates were not raised. EPD proposed a series of increases starting at an increase from \$1.55 per 100 c.f. to \$1.80 per 100 c.f. on July 1, 2005 followed by three other increases ending with \$2.55 on July 1, 2011. This would allow the department to complete its planned construction work and slowly reduce the large cash balance to under \$2 million by the end of phase II. Increases were planned for every two years in order to slow the declining cash balance and avoid having a negative cash balance necessitating short-term borrowing from the General Fund.

At the January 18, 2005 COA meeting the proposal was discussed and a request was made by EPD for only the first increase. EPD had hoped to be able to manage the finances and put off the next increase until January of 2007. The request was passed and sent to the Committee on Bills on Second Readings.

On April 4, 2005 EPD made a presentation to the Committee on Bills on Second Reading where it was noted that the graph showed that EPD would have negative cash flows (Expenditures exceed revenues) up to 2010 even with all the rate increases. EPD explained that when the cash surplus was drawn down to a manageable level revenues and expenditures would be roughly equal. The committee recommended the increase to the full Board as ought to pass.

At the April 18, 2005 Board of Mayor and Aldermen meeting the increase was passed and effective July 1, 2005.

EPD then attempted to get a second rate increase as early as January of 2007 but attempts to get the increase on the BMA agenda were delayed.

EPD sent a letter dated January 29, 2007 to the BMA requesting a series of rate increases from \$2.25 /100 cf on 4/1/2007, \$2.70/100 cf on 1/1/2008, \$3.24/100 cf on 1/1/2009 and \$3.73/100 cf on 1/1/2010. The request was presented to the BMA at the 2/6/2007 meeting. The rate study and rate increases were compiled by the EPD management and CDM engineers. The motion passed.

It is noted that there was a large difference in the step increases noted in the 2005 proposal and the 2007 proposal. According to EPD management there were a couple of reasons for this. During the transition to a new CSE the former CSE informed the Highway Department that the new hire would have to quickly seek a rate increase. The former CSE had spreadsheets that he used to track cash flows and the new CSE was unable to access them. The CSE then had office staff perform a new rate study. As noted in observation N-4 the Business Section is understaffed and the BSO devoted a large portion of her time to the study. It was then suggested by the Finance Department that EPD hire a consultant to complete the study using the work office staff had completed to that date. All this contributed to the delay in seeking the rate increase.

In addition the new CSE took a much more aggressive approach to completing other new projects that were added to the work schedule as well as increasing cash payments to contractors.

In the meantime the cash balance dipped into the red causing the EPD to have to borrow funds from the General Fund. During the spring of 2007 the EPD Fund had a negative fund balance and had to pay the General Fund more then \$7,000 per month in interest costs.

Due to these factors the fiscal problem the division finds itself in is much more pronounced and requires larger and more frequent price increases. This could have been avoided if an increase was sought earlier as laid out in the 2005 plan and the division adhered to the original construction schedule without the additional work.

RECOMMENDATION:

The division needs to closely track the cash balance and adjust the level of spending or rates charged to customers in order to minimize or eliminate the amount of time that the fund is in a negative cash position.

If it is decided to accelerate the pace of additional construction activity then a new rate increase schedule should be sent to BMA for approval in a timely manner so that the inflow of receipts will match the increase in cash expenditures.

AUDITEE RESPONSE:

No Response

STATE AND FEDERAL FUNDS MANAGEMENT

EPD collects revenues on a reimbursement basis from several sources. Some projects are eligible for the State Revolving Fund (SRF) loan program, some are eligible for the State Assistance Grants, and some are eligible for Federal EPA grants. Some projects are also eligible for reimbursement from the surrounding towns based on their use of the asset being constructed. Depending on the type of project it can be eligible for one or a combination of these programs. Each program has its own set of requirements, rules and regulations. The more programs each project is eligible for the more difficult it becomes to track eligible/ineligible expenditures and reporting requirements. In most cases the division uses outside engineering firms to monitor the construction activity and determine eligible/ineligible expenditures. This information is reported to the business office so they can prepare the reports necessary to draw down funds from the State and Federal governments. Expenditures eligible for one program may be ineligible for another. The percentage of participation from the federal government may change throughout the program. All of these factors make for some very difficult tracking problems.

In addition to the problems with expenditure tracking, reporting and reimbursement there are several parties that are involved in any project whose responsibilities need to be clearly defined and coordinated. On any project the following parties may be involved:

- State of NH Department of Environmental Services – Wastewater Division, approves projects
- State of NH Department of Environmental Services - Grants Management Division, approves reimbursement requests for the State Revolving Fund and EPA Grants
- Private engineering firms act as designer and project manager
- Highway Department engineers act as designer and project managers
- Planning Department – prepare CIP Project extensions and line item changes
- EPD engineering staff – responsible for project management and contract management
- EPD accounting staff - process expenditures, track eligible costs, prepares reports and prepare draw down documents
- NH DOT – Administration of utility related projects
- EPA – Approval of federal reimbursements

Coordination and communication between all parties is crucial for the timely submittal of reimbursement requests.

OBSERVATION 2: UNTIMELY DRAWDOWN OF STATE AND FEDERAL FUNDS

Our testing revealed instances where reimbursement requests were not done timely. The amount of time that elapsed between the expenditure of City funds and reimbursement from the State varied from a few weeks to over a year. Time elapsed between the expenditure of funds and the collection of reimbursement represents lost interest to the EPD Fund. Currently the EPD is operating on a very low cash balance and has to borrow money on a short term basis from the General Fund. It is therefore very important that they draw funds timely from State and Federal sources.

Two projects stood out during testing as being particularly late in getting reimbursed. CIP project 711105 West Bridge, Lorraine, etc and CIP project 712103 South Mammoth Road Phase III.

The West Bridge project is funded by a combination of State grants, State Revolving Fund loans EPD funds and Federal Grants. The project is made up of two contracts with five change orders and due to problems encountered getting approval from the State for change orders, reimbursement for expenditures for the period March 1, 2006 through August 30, 2006 was not submitted until April 20, 2007.

The South Mammoth Road project was completed in May of 2006 at which point it became eligible for State Assistance Grant funds of 20% of eligible costs. The final cost for the project was \$1,916,844. If the total costs were eligible the City would be entitled to \$ 283,969. On 1/25/2007 a final change order was sent to the State and was rejected on 3/9/2007. The City and the State are currently in negotiations to determine how best to proceed with the reimbursement.

The original request was rejected by the State due to change orders to the project that were not submitted to the State for approval as required and ineligible costs were not identifiable from the documentation provided. The following problems were noted during the execution of the project that led to the late request for funds and subsequent rejection by the State:

Lack of training on State Assistance Grant requirements. The Highway Department decided to use its own engineers to design and monitor this project. The lead engineer had never dealt with SAG funded projects and was unaware of the program's unique requirements. It is a requirement that all change orders be submitted to the State for pre-approval. When the first bids for the project came in higher than the funds appropriated it was rebid on a smaller scale with the remaining work listed as "alternative items". The original contract approved by the State was for \$1,411,885. In the following budget process funds were appropriated to complete the alternative items and the contractor was given the go ahead to proceed for an additional cost of \$268,640. In addition problems were encountered during construction requiring further change orders that increased the cost of the project by \$206,950. The Highway Department engineers informed the State that the project had changed but did not get approval for the changes. In addition there were some sections of the original project that may not have been eligible for the SAG program but it was not determined in advance and the costs were not separately tracked as the project proceeded. At the end of a project a "Final Balancing Change Order" was submitted. This change order should only include changes that occurred between line items that had little or no cumulative effect on the total project. The Highway Department included all the change orders that increased the project by \$475,590 thereby causing the entire project to be rejected.

Chief Sanitary Engineer position vacancy. At a crucial time during the project the Chief Sanitary Engineer (CSE) retired and was replaced by a new CSE. The former CSE had been employed by the State of NH, Department of Environmental Services and was familiar with the program. The former CSE was actively involved with these projects and would ensure that the proper paper work was being sent to the State in a timely manner. When the new CSE came on board he was from private industry and was still learning his way around state government bureaucracy.

Lack of communication between all involved parties. It became apparent from reading memos and emails between all the involved parties that there were communication failures at crucial times. No one seemed to know the status of the final punch list items or who was responsible for producing and funding the Operation and Maintenance Manual. Completion of these items would hold up submittal of the Grant Request from March of 2006 when the substantial completion inspection was done until late fall of 2007 when these items were completed.

Inadequate Staffing in the Business Office. It does not appear that the business office has enough staff to adequately handle the work load of the office. In addition to processing payroll for 43 employees, \$18 million of non-payroll operating expenditures and \$16 million of revenue collections the office keeps track of several grants, CIP projects, cash balances and bond/loan requirements. Being an Enterprise funds the business office has duties that far outweigh those of a general fund agency. This is done with a staff consisting of a BSO, an Accountant II, 2 Accounting Technicians, 2 Customer Service Reps and an Administrative Assistant. Accounting for and tracking the grant requirements and projects is such a time consuming process that it leaves little time for the BSO's other duties. This in part accounts for the late draws of federal funds as noted in the West Bridge project.

RECOMMENDATION:

EPD and the Highway Department Engineers should develop a grants management manual outlining the policies and procedures of each grant. All employees working with each grant should become familiar with the requirements prior to working on the project. The manual would prove very useful whenever vacancies occur at the department.

At the start of a project a document should be developed spelling out the roles and responsibilities of each party working on the project. Regular updates of the status of every project should be sent to each of the employees working on a project.

EPD should perform an analysis of the staffing requirements in the business office to determine if they need more employees or realign current job positions. Given the complexity and volume of grant funded projects and construction contracts being monitored at EPD they should consider adding an additional administrative financial position to monitor all the grant and contract fiscal requirements. Currently the BSO handles these duties in conjunction with all her other financial and administrative duties. It appears that even with the extra hours she puts in she gets behind at the busy times of the year and has to catch up at a later date.

AUDITEE RESPONSE:

No Response

PAYROLL

Hourly employees at the EPD are members of the AFSCME Union. Article 8.2 of the AFSCME labor contract in force during the audit period states:

“All times worked in excess of the normal work day and all time worked in excess of the normal work week shall be paid at the rate of time and one-half. Paid holidays and paid vacation occurring during the work week shall be counted as hours worked for the purpose of determining the forty (40) hour straight time hours.”

Article 16.8 which addresses sick leave states:

“During periods of absence for approved sick leave the employee shall be entitled to full pay for such period at the regular rate of compensation, provided, however, that hourly employees shall be compensated on the basis of straight time pay not to exceed eight (8) hours per day and not to exceed forty (40) hours per week. **No sick leave benefits shall be paid on the basis of time and one-half.**” (Emphasis added).

The Wastewater Treatment Plant is in operation 24 hours per day. This requires that the operator’s normal daily work shift exceeds 8 hours. One day per week there is a short day during each shift so that the work week will equal forty hours. The labor contract allows this under section 8.8 by stating that the scheduled hours are considered normal hours for determining overtime pay. When ever the plant is burning waste it is required that there be three operators on duty. During the days that operators are ending the shift (the short day) only two operators are scheduled to work during two hours of that day. To make up for the missing person an operator who is coming off his shift will work the two hours as overtime. Unless the incinerator is down for repairs or maintenance the plant is burning. Because of this for a majority of the year the work week consists of 42 hours with two hours being paid as overtime. Operators are considered to be always working when at the plant so they get their lunch hour paid. For example, if they are physically at the plant for twelve hours they are paid for the entire twelve hours.

Maintenance employees at the plant work a shift from 7 am to 3 pm. They are paid for eight hours per day, forty hours per week on their normal scheduled work day. When asked why they get paid for working during lunch it was explained that they do not take the two required 15 minute breaks so they work as much as other employees who take the two breaks. Maintenance employees are also trained as operators and in some instances they will fill in during the day as an operator if an operator calls in sick.

According to the plant management, at one time sick and vacation time was not counted as part of the hours when calculating overtime. If an operator called in sick or was on vacation and was needed later in the week to cover someone else’s shift they would often refuse to come in for straight time. This would make it necessary to shut the incinerator down for the shift. Shutting down and restarting the incinerator was determined to be more expensive then paying for the occasional over-time. In order to minimize shut downs of the incinerator the labor contract was changed to provide for overtime in these instances.

OBSERVATION 3: PAYROLL OVERTIME AND LEAVE PRACTICES

During payroll testing the following conditions were noted that are attributable to labor practices governed by the labor contract in place at the plant:

1. Employees taking sick and vacation time off during the week were receiving overtime even though they physically were in the plant less than 40 hours per week. Sometimes as little as 12 hours in one week.
2. Employees who worked the day maintenance shift worked from 7 am to 3 pm and were paid for all eight hours they were at the plant. On occasion these employees would work the exact same hours but receive ½ hour of overtime per day. These were days when they would cover for operators who called in sick or were on vacation during the day shift. Technically as an operator they say they are working through their lunch.
3. In one instance a maintenance worker worked four hours, 7 am to 11 am, and took the rest of the day off as vacation. For this day he was paid for 4 ½ hours of work and was charged 3 ½ hours of vacation.
4. An employee who worked 29.25 hours one week was paid for 21.25 hours of regular time, 8 hours for floating holiday, 8 hours for a holiday, 4 hours vacation, 6.75 hours of sick time and 8 of overtime for the week. In total he was paid for 56 hours during a week that he only was physically at work for 29.25 hours.
5. An operator who worked one day for 12 hours in one week and yet received 1 hour of overtime, 29 hours of vacation, 8 hours of holiday pay and 11 hours of regular pay.
6. An operator who worked 40.5 hours and took 1.5 hours sick time for a doctor's appointment. He was paid for 38.5 hours regular time, 1.5 hours of sick time and two hours of overtime.

All of the above instances are caused by Article 8.2 of the labor contract. By saying that any time worked outside of an employee's **normal scheduled hours** will be considered overtime not only gives the intended incentive for employees to work overtime shifts when needed but also appears to encourage employees to take sick time one day then cover someone else's shift later in the week in order to receive overtime pay. An analysis of sick leave taken by plant employees over the last three years shows that on average an operations employee use 67% of sick time accrued each year. If combined with sick leave bank use the percentage of annual accrual used jumps to 84%. On average over the last three years each operations employee took almost 86 hours of time off due to illness. A similar pattern can be found with maintenance employees who averaged almost 79 hours off due to illness per employee per year. By comparison the average administrative employee took 43 hours of sick time per employee per year. It was also noted that several long time operations and maintenance employees had very low accrued sick leave balances.

RECOMMENDATION:

The City should explore ways to reduce the amount of overtime and sick time being used by changing some of the language in the labor contract when the current agreement expires. Article 16.8 which states that no sick time is to be paid at time and one half is negated by the effects of article 8.2. This encourages the use of sick time and should be changed to limit the appearance of abuse.

The division should also hold employees accountable for the large amount of sick time being taken each year. They should also look into ways of changing the shift structure or other measures in order to minimize the amount of overtime used.

AUDITEE RESPONSE:

No Response

REVENUE COLLECTION

The system of internal controls at the Environmental Protection Division over the collection, deposit, recording and reporting of revenues was documented and evaluated. Controls were determined to be properly designed and working as intended. The Business Office has taken great care in designing an excellent system of internal controls and goes to great lengths to ensure that there is proper segregation of duties. No instances of non-compliance with procedures were noted during testing.

Our testing of revenues involved obtaining a sample of transactions from source documents and tracing through deposit, recording and reporting. We found no errors in our testing and no instances of non-compliance with selected City, State or Federal laws, rules and regulations. As noted in Observation 2 we did note that collection of some State and Federal reimbursement payments could have been made in a timelier manner.

EPD receives over 85% of its revenue from a variety of user charges. The remaining revenue is from interest from invested funds and various grants. Most residential user charges are based on the amount of water used as determined by the Water Department meters.

The City has agreements with the towns of Goffstown, Bedford and Londonderry for the processing of sewage. Each town is charged their share of operating, maintenance and capital cost based on formulas in the agreements.

EPD receives State Grants of 20% of eligible construction project costs and a share of debt interest for CSO projects. The EPD also receives federal grant funds for approved CSO projects.

The table on the following page shows the amount of revenues recorded for the 18 months ended December 31, 2006.

REVENUES FOR THE 18 MONTHS ENDED DECEMBER 31, 2006

DESCRIPTION	Fiscal Year	6 Months	
	2006	Ended 12/30/2006	18 Months COMBINED
FEMA	\$ 24,410	\$ 344	\$ 24,754
EPD - State Aid Grant	195,528	134,932	\$ 330,460
AES Granite Ridge	198,408	66,203	\$ 264,611
EPD Londonderry Agreement	405,670	290,277	\$ 695,947
EPD Septage	598,893	258,180	\$ 857,073
EPD Bedford Agreement	158,720	134,880	\$ 293,600
EPD User Charge	10,319,351	5,262,070	\$ 15,581,421
EPD Goffstown Agreement	355,120	216,133	\$ 571,253
Deduct Meters	3,519	1,552	\$ 5,071
Copying Receipts	230	3	\$ 233
Bounced Check Charge	1,230	510	\$ 1,740
Income from Invested Funds	299,099	74,940	\$ 374,039
Interest on Accounts Receivable	1,141	-	\$ 1,141
EPD - Goffstown Bond Payments	6	-	\$ 6
EPD - Bedford Bond Payments	3	-	\$ 3
EPD - Londonderry Bond Payments	9	-	\$ 9
Contributions – Other	141,562	-	\$ 141,562
EPD - Tax Office Interest & Costs	97,922	65,704	\$ 163,626
EPD - Bid Fee/Project Specs	3,780	1,100	\$ 4,880
State Grants	1,361,768	-	\$ 1,361,768
Miscellaneous Reimbursement	11,960	14,861	\$ 26,821
TOTAL EPD FUND REVENUE	\$ 14,178,329	\$ 6,521,689	\$ 20,700,018
FEMA	122,752	-	\$ 122,752
Bedford Share of Capital Projects	45,846	15,480	\$ 61,326
Goffstown Share of Capital Project	232,706	33,663	\$ 266,369
Londonderry Share of Capital Project	140,661	47,385	\$ 188,046
TOTAL BOND FUND	\$ 541,965	\$ 96,528	\$ 638,493
EPA Grant	\$ 1,173,978	\$ -	\$ 1,173,978

SOURCE: HTE Budget to Actual Reports

EXPENDITURE PROCESSING

The system of internal controls at the Environmental Protection Division over the processing, recording and reporting of expenditures was documented and evaluated. Controls were determined to be properly designed and working as intended. The Business Office, as it has in revenue processing, has taken great care in designing the system of internal controls and goes to great lengths to ensure that there is proper segregation of duties. No instances of non-compliance with procedures were noted during testing.

Our testing of expenditures involved obtaining a sample of transactions from the financial records and tracing them back to the source documents. We found no errors in our testing and no instances of non-compliance with selected City, State or Federal laws, rules and regulations. As noted in Observations 1 and 2 I did note that collection of some State and Federal reimbursement payments could have been made in a timelier manner and there are some issues of the use of sick leave and over time at the Division.

Expenditures during the audit period consisted to a large extent of construction related expenditures (36%) and debt service (18%). Salaries and benefits made up 8% of total expenditures with depreciation and operating cost contributing 16% and 22% respectively.

EXPENDITURES FOR THE 18 MONTHS ENDED DECEMBER 31, 2007

Description	6 Months		
	Fiscal Year 2006	Ended 12/30/2006 2007	18 Months Combined
Administration Division	\$ 13,265,249	\$ 8,234,737	\$ 21,499,986
Operations Section	4,397,027	1,787,490	6,184,517
Monitoring Section	194,587	97,811	292,398
Maintenance	46,006	23,751	69,757
Maintenance (General)	1,336,290	652,144	1,988,434
Crescent Road Pumping Station	74,954	44,785	119,739
Billing	347,910	175,806	523,716
West-Side Pump Station	118,477	39,244	157,721
Off-Site Work	257,033	163,826	420,859
Miscellaneous	41,807	-	41,807
Equipment	(75,617)	8,172	(67,445)
Bond Projects	8,725,280	6,866,897	15,592,177
Cash Projects	1,983,630	913,269	2,896,899
Federal Grant Funds	623,011	174,652	797,663
Payroll Suspense	-	63,287	63,287
Total Expended	\$ 31,335,644	\$ 19,245,871	\$ 50,581,515
Transfer to Capital Accounts	\$ (18,214,946)	\$ (4,740,080)	\$ (22,955,026)
Total Expenditures	\$ 13,120,698	\$ 14,505,791	\$ 27,626,489

SOURCE: HTE Budget to Actual Reports

RATIO ANALYSIS

The City of Manchester Water Department and EPD participated in the 2004 American Water Works Association (AWWA), Water and Wastewater Rate Survey. Participation in surveys of this kind provides a valuable tool that enables managers and users to compare their utility to others of similar size and compare the effectiveness and efficiency of operations. This survey focused on rate and financial information but there are other organizations that collect survey information on key benchmarking and performance indicators. Benchmarking can help companies to:

- Identify, track, and measure already established and tested performance measures
- Compare performance against peers
- Identify specific processes needing improvement
- Implement outstanding processes at a utility to improve performance

Participation in these programs indicates a strong commitment to organizational excellence. I encourage EPD to continue participation in these surveys and to seek other performance indicator surveys that would provide useful data to the organization.

The AWWA survey grouped the nearly 200 participating utilities into similar categories based on size, population, treatment capacity and number of employees. The EPD compared favorably in most categories compared to other utilities in its group.

EPD data was also compared to data collected from other jurisdiction's audits of their wastewater utilities. Of particular usefulness was the Kansas City Unified Government's (Kansas) 2003 performance audit of the sewer system enterprise fund. This provided a very good source of performance data to use as a comparison to the EPD operation. The following ratios and results from this study were examined. Explanation of the ratios can be found on the pages that follow.

Current ratios that are below industry averages or indicate problems in the financial health of the fund:

	2002	2003	2004	2005	2006
CURRENT RATIO					
Current Assets	\$ 33,174,025	\$ 28,711,591	\$ 23,820,540	\$ 18,210,549	\$ 11,776,639
Current Liabilities	\$ 9,213,678	\$ 9,092,030	\$ 10,066,486	\$ 10,376,668	\$ 9,374,873
Ratio	3.60	3.16	2.37	1.75	1.26
NET INCOME PER REVENUE DOLLAR					
Net Income	\$ 534,068	\$ 285,364	\$ 142,357	\$ (468,130)	\$ (315,205)
Operating revenue	\$ 11,145,505	\$ 11,225,665	\$ 11,293,628	\$ 11,053,377	\$ 12,036,162
	0.05	0.03	0.01	-0.04	-0.03
OPERATING RATIO					
Operating Expense	\$ 10,611,437	\$ 10,940,301	\$ 11,151,271	\$ 11,521,507	\$ 12,351,367
Operating Revenue	\$ 11,145,505	\$ 11,225,665	\$ 11,293,628	\$ 11,053,377	\$ 12,036,162
	0.95	0.97	0.99	1.04	1.03
CURRENT ASSETS - CASH					
Cash & Cash Equivalents	\$ 28,543,465	\$ 24,057,207	\$ 18,659,066	\$ 13,521,239	\$ 7,045,295
Current Assets	\$ 33,174,025	\$ 28,711,591	\$ 23,820,540	\$ 18,210,549	\$ 11,776,639
	0.86	0.84	0.78	0.74	0.60

All ratios derived from current asset information reflect the declining balance in the operating cash account. In preparation for Phase I of the federally mandated CSO project the Division raised its rates to a point where revenues would far exceed expenditures. This allowed the fund to obtain large cash balance for use in the construction of phase I and limit the amount of borrowing by the Division. The plan was to build the balance then have expenditures exceed revenues during construction and draw down the cash balance. In this manner the Division was able to hold a low rate structure over several years and avoid interest cost. They were also able to derive income from investment of excess cash for several years. This is reflected in the declining and unusually low Current Ratio, Negative Net Income per Revenue Dollar, High and rising Operating ratios. Current Asset to Cash does not reflect the true cash position of the fund. Cash balance for the comparable analysis was taken at year end prior to bond payments that are due in July. Operating cash has been very low after the July payments and at the end of July 2007 was negative. As noted above this was planned financial activity and since the recent rate increases the ratios have improved considerably. A further discussion of the ratios follows.

CURRENT RATIO

This ratio measures the ability of a utility to use liquid assets to pay for current liabilities in the short run. The ratio is a common ratio in all industries and although it may vary from industry to industry, the ratio should usually be at least 2.0.

NET INCOME PER REVENUE DOLLAR

This ratio measures the percent of every revenue dollar that results in income. The time series reveals the fund has been in a downward trend and did not generate net income during 2005 and 2006. As noted previously this was planned in order to provide for stabilized rates and use up the prior surplus to pay for capital improvements.

OPERATING RATIO

This ratio shows the percent of revenue used to pay for operating and maintenance expenses. The ratio is slightly higher than others in the Kansas report but again is reflective of the strategy to use up the cash surplus.

CURRENT ASSETS TO CASH

This ratio measures the amount of current assets that is compromised of available cash. Again the downward trend reflects the planned strategy of reducing the cash balance. The ratios appear to be strong compared to industry averages but figures are obtained from the balance sheet at year end prior to the bond payments that occur in July. Cash position after the bond payments would be below comparable industry average after the bond payments.

Current ratios that exceed or meet industry averages:

	2002	2003	2004	2005	2006
DEBT TO TOTAL ASSETS					
Total Assets	\$ 148,453,440	\$ 146,396,753	\$ 145,644,323	\$ 140,673,090	\$ 140,692,602
Debt	\$ 41,828,260	\$ 39,594,301	\$ 36,551,808	\$ 32,594,903	\$ 29,619,563
Ratio	0.28	0.27	0.25	0.23	0.21
TIMES INTEREST EARNED					
Operating Income	\$ 11,145,505	\$ 11,225,665	\$ 11,293,628	\$ 11,053,377	\$ 12,036,162
Interest Expense	\$ 1,303,867	\$ 1,091,910	\$ 1,070,940	\$ 882,010	\$ 769,331
	8.55	10.28	10.55	12.53	15.64
DEBT SERVICE COVERAGE					
Income	\$ 12,279,080	\$ 11,973,910	\$ 11,851,151	\$ 11,648,774	\$ 12,674,999
Debt Service Payments	\$ 6,080,559	\$ 7,046,869	\$ 7,629,917	\$ 7,293,302	\$ 7,660,238
	2.02	1.70	1.55	1.60	1.65
CAPITAL INVESTMENT RATIO					
Operating Revenue	\$ 11,145,505	\$ 11,225,665	\$ 11,293,628	\$ 11,053,377	\$ 12,036,162
Capital Investment	\$ 65,793,971	\$ 71,390,425	\$ 78,902,057	\$ 84,597,340	\$ 94,171,873
	0.17	0.16	0.14	0.13	0.13

DEBT TO TOTAL ASSETS

This ratio expresses debt as a percentage of assets. The ratio measures the utilities ability to meet current and long-term liabilities. The ratio is relatively low compared to utilities in the Kansas study and indicates that EPD has the ability to satisfy its long-term obligations.

TIMES INTEREST EARNED

This ratio measures the ability to cover interest expense charges on debt. This ratio shows that EPD has more than sufficient amount of operating income to cover interest expense on long term debt.

DEBT SERVICE COVERAGE

This ration indicates the utilities ability to meet annual long-term debt obligations based on operations. The Kansas study had ratios in a range of 1.17 to 2.59. EPD's ratio is well within that range.

CAPITAL INVESTMENT RATIO

This ratio expresses the amount of capital investment as a percent of annual operating revenue. It reflects the high level of capital improvements occurring at the plant and associated sewer lines. The ratio compared to other industries in the study is low indicating that the EPD has a much higher level of capital improvements than the average. This is due to the level of activity involved with the federally mandated CSO project.