IMPLEMENTATION REVIEW OF RAYTOWN WATER COMPANY

CASE NO. WO-93-194

FILED

FEB 25 1999

Missouri Public Service Commission

PREPARED BY THE

MISSOURI PUBLIC SERVICE COMMISSION

MANAGEMENT SERVICES DEPARTMENT

FEBRUARY 1999

9.

TABLE OF CONTENTS

CHAPTER I: INTRODUCTION ____ *1*

Procedural History ____ 1

Purpose ____ 1

Scope ____ 1

Approach ____ 2

Summary of Results ____ 2

CHAPTER II: STRATEGIC PLANNING ____ *3*

RECOMMENDATION 1: ____ 3
RECOMMENDATION 2: ____ 5
RECOMMENDATION 3: ____ 6
RECOMMENDATION 4: ____ 8
RECOMMENDATION 5: ____ 10
RECOMMENDATION 6: ____ 11
RECOMMENDATION 7: ____ 13
RECOMMENDATION 8: ____ 15
RECOMMENDATION 9: ____ 16
RECOMMENDATION 10: ____ 19
RECOMMENDATION 11: ____ 20
RECOMMENDATION 12: ____ 22
RECOMMENDATION 13: ____ 23
RECOMMENDATION 14: ____ 24
RECOMMENDATION 15: ____ 25
RECOMMENDATION 16: ____ 26

CHAPTER III: FINANCIAL MANAGEMENT ____ *28*

RECOMMENDATION 17: ____ 28
RECOMMENDATION 18: ____ 29
RECOMMENDATION 19: ____ 31
RECOMMENDATION 20: ____ 32
RECOMMENDATION 21: ____ 34
RECOMMENDATION 22: ____ 35
RECOMMENDATION 23: ____ 36

CHAPTER IV: OPERATIONS AND MAINTENANCE ____ *39*

Business Office Operations ____ 39

RECOMMENDATION 24: ____ 39
RECOMMENDATION 25: ____ 41
RECOMMENDATION 26: ____ 43
RECOMMENDATION 27: ____ 44
RECOMMENDATION 28: ____ 46
RECOMMENDATION 29: ____ 47
RECOMMENDATION 30: ____ 48
RECOMMENDATION 31: ____ 50
RECOMMENDATION 32: ____ 51
RECOMMENDATION 33: ____ 52
RECOMMENDATION 34: ____ 54
RECOMMENDATION 35: ____ 55
RECOMMENDATION 36: ____ 56

Field Operations 57
RECOMMENDATION 37: 57
RECOMMENDATION 38: 57
RECOMMENDATION 39: 60
RECOMMENDATION 40: 61
RECOMMENDATION 41: 63
RECOMMENDATION 42: 64
RECOMMENDATION 43: 66
RECOMMENDATION 44: 67
RECOMMENDATION 45: 69
RECOMMENDATION 46: 71

Construction and Maintenance Control Processes 72
RECOMMENDATION 47: 72
RECOMMENDATION 48: 75

APPENDIX *77*

CHAPTER I: INTRODUCTION

Procedural History

The Missouri Public Service Commission staff filed a motion for authority to conduct a management audit of Raytown Water Company on December 16, 1992. The Management Services Department staff (MSD staff) recommended that a management audit be performed to review and evaluate the Company's organization, policies, practices, and management systems. The Public Service Commission (Commission) issued an order from Case No. WO-93-194 on January 6, 1993, directing the MSD staff to perform a management audit of the Company.

Initial audit field work was completed June 4, 1993. The management audit report was filed on March 1, 1994 and the Company's implementation plan was filed on April 22, 1994. The implementation plan outlined the Company's intended actions to implement the MSD staff's recommendations and provided a description of the Company's work plan, anticipated costs, benefits and an estimate of the completion time.

The Company submitted seven status reports to the MSD staff in October 1994, March 1995, October 1995, May 1996, September 1998, October 1998 and November 1998.

Purpose

This report presents the MSD staff's evaluation of the Company's progress in implementing the recommendations contained in the March 1994 management audit report. The implementation review was structured to achieve the following purposes:

- Determine the implementation status of management audit recommendations.
- Assess the Company's efforts at implementing those recommendations.
- Evaluate the effects these changes have had upon Company operations.
- Provide a continuing source of information relative to the Company's operations and procedures to the Commission and to the public.

Scope

The scope of the implementation review included an examination of the actions the Company has taken to address deficiencies or opportunities for improvement in operations which were stated in the management audit report. The review also included a determination of the current status of each recommendation, an evaluation of the specific actions the Company has taken and a review of the improvements in operations as a result of implementing the recommendations.

Approach

The Company was contacted early in August 1998 regarding the MSD staff's desire to begin follow-up activity on the status of each recommendation. The MSD staff deemed it appropriate to begin fieldwork upon examination of the Company's September 1998 status report. Prior to on-site work, the MSD staff reviewed and analyzed project-related documents such as the management audit report, the Company's implementation plan, the seven status reports and various other documents.

The on-site portion of the implementation review was completed on November 19, 1998 at the Company's business office in Raytown and the Commission's office in Independence. The President and General Manager, accounting supervisor, and foreman were interviewed by the MSD staff in order to establish that the objectives of the recommendations had been met.

Summary of Results

The management audit report included 48 recommendations that dealt with the Company's operations. The results of the MSD staff's implementation review indicate that the Company has completed all anticipated action on 41 of the 48 of the recommendations. The Company plans to address the seven remaining recommendations in 1999. A listing of each recommendation and its status is included in the Appendix of this report.

The management audit focused on those areas of management control in the Company's operations that held potential for improvement. Objectives were also established to provide information by which the Company could achieve more cost-effective operations and provide an improved level of service. This implementation review report confirms that these objectives have been accomplished.

Several recommendations in the management audit report were identified as issues in the Company's filed 1994 rate case (Case No. WR-94-211). The MSD staff filed written testimony in this case which was eventually stipulated in September 1994.

CHAPTER II: STRATEGIC PLANNING

RECOMMENDATION 1:

Define the Company's mission statement and to establish policies, procedures, and practices necessary for developing and implementing an effective strategic planning process.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Reviewed mission statements from other water utilities and local businesses - May 1994.
2. Solicited employee input for mission statement - June 1994.
3. Prioritized and submitted goals for Board approval - April 1996.
4. Formalized Company mission statement - October 1997.

DISCUSSION:

A formal mission statement and an effective strategic planning process did not exist at the time of the management audit. A formal mission statement and an effective strategic planning process are designed to fulfill management's primary function, which is to plan, organize, direct and control critical resources.

In response to the recommendation, the Company formalized its mission statement in October 1997 and distributed a copy to each employee. The Company began the process in May 1994 by reviewing sample mission statements from other water utilities, local businesses, trade associations and government agencies. The Company identified mission statements from the City of Kansas City Water Department, the Missouri Rural Water Association and the Missouri Department of Natural Resources (DNR) that were particularly helpful.

The Company solicited employee input into the mission statement process beginning in June 1994. There have been ongoing discussions over the past four years between employees and Company management about setting goals and the strategies necessary to accomplish these goals.

A list of goals was prioritized and submitted to the Board for approval prior to the Company's three most recent requests for rate relief. The most recent approval occurred in April 1996.

The mission statement requires the Company to strive to provide safe and adequate water service for its customers, to stress courteous customer service and satisfaction, to be sensitive to its cultural diversity, to act in an environmentally responsible manner, to be committed to continual growth and progress in all aspects of utility services, to work to insure these ends and to represent, serve and support the goals and standards of the water industry.

The mission statement should provide an overall Company direction and philosophy as well as establishing a strategy for attaining Company objectives. Consequently, the Board is more aware of their involvement in the strategic planning process. The Company is committed to involve Board expertise primarily in the future setting of goals and establishing the means to achieve them. The Company's general procedure to achieve its goals includes the establishment of quantifiable measures of performance. Follow-up reviews are also being performed on an ongoing basis to determine if potential improvements in strategic planning can be realized.

The Company has formalized several policies, procedures and practices resulting from the implementation of many of the recommendations throughout the management audit. A copy of the mission statement has been framed and placed on the front wall by the counter and is used to guide the daily operations. The Company also plans to inform the public about the mission statement through inclusion on letterheads, customer notices, billings and telephone hold informational messages.

There have been minimal costs associated with this recommendation. The Company stated that a clear mission statement should help to focus employee efforts to utilize Company resources in the most cost-effective manner. Achievement of the mission statement assures customers, employees and the Company's business constituents that their own interests are also being met. The MSD staff concludes that the Company has addressed the intent of this recommendation.

RECOMMENDATION 2:

<u>Develop, implement, and regularly revise a formal, documented rolling three-to-five-year long-range plan. The plan should detail strategic goals, construction projects, marketing and public relations activities, technological changes (e.g., incorporating the use of plastic pipe in the system), means for financing future projects under consideration, and anticipated completion dates.</u>

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Continued involvement on City of Raytown's Advisory Committee - January 1994.
2. Solicited employee input for short-term and long-term purchases - May 1994.
3. Received Board approval for long-term purchases in Case No. WR-94-211 - July 1994.
4. Approved expenditures at bi-monthly Board meetings - December 1994.
5. Received Board approval for long-term purchases in Case No. WR-97-300 - May 1996.
6. Participated in Raytown Downtown Development Committee - July 1996.
7. Prepared "State of the Company Report" - August 1998.

DISCUSSION:

A formalized long-range planning document did not exist at the time of the management audit. The quantity, complexity and capital-intensive nature of the projects facing the Company dictated the need for formal documentation of the long-range planning process. The Company stated that this concern is being addressed in several ways.

First, the President and General Manager has worked on various committees for the City of Raytown since January 1994. This involvement has primarily been on the advisory committee for the City's Master Plan, a long-range planning document used to foster economic development in Raytown. Other involvement has included the Chamber of Commerce, city council meetings and various public forums.

Second, the Company has solicited considerable employee input regarding short-term and long-term purchases. This ongoing process formally began in May 1994 and resulted in over 200 suggestions to management. The information has been used to support field and office expenditures in the Company's two most recent rate cases.

According to the Company, long-term purchases are formally approved by the Board prior to the filing of a rate case. The Board approved long-term purchases in July 1994 for Case No. WR-94-211, and in May 1996 for Case No. WR-97-300. The Company plans to formalize anticipated long-term expenditures prior to filing an informal request for rate relief in early 1999.

Third, the Board reviews expenditures at each bi-monthly Board meeting. The Company also stated that its 1994 and 1996 formalized expenditure lists are the basis for ongoing review and are typically reviewed at every other Board meeting. The reviews began in December 1994 (see discussion in Recommendations 12 and 13).

Finally, the Company prepared a "State of the Company Report" in August 1998. This report updated the status of 30 operational concerns, many of which were recommended by the MSD staff in the management audit. The report also contains various schedules, contracts and other supporting documentation.

However, the Company has not formally developed and approved a long-range plan. The Company stated in 1997 that a formal long-range plan would be developed. The MSD staff recommends that the Company develop this plan prior to filing its next informal rate case. The primary benefit from this action would be to formally coordinate the Company's ability to accomplish future goals cost-effectively and within a desired time frame. The MSD staff concludes that this recommendation is "in progress" as of February 22, 1999.

RECOMMENDATION 3:

Eliminate the Assistant Manager position.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Performed staffing study of other comparable utilities - May 1994.
2. Eliminated Assistant Manager position - June 1994.
3. Received Chairman of the Board resignation - October 1994.
4. Utilized subcontractor to perform leak loss surveys - March 1996.
5. Utilized subcontractor to assemble data for 1996 informal rate case - April 1996.
6. Hired additional office personnel - November 1996.

DISCUSSION:

The Assistant Manager position was not deemed necessary by the MSD staff at the time of the management audit. This was based upon the MSD staff's review of the written job description for the position, an examination of actual duties performed, the time requirements associated with this workload, interviews with Company personnel and on-site observations.

In response to this concern, the President and General Manager surveyed other nearby utilities to determine an optimal staffing level for field and office activities. The May 1994 survey was intended to support management's claim of the need for additional personnel. The survey revealed that the Company has fewer employees than other similar-sized utilities in the area.

There were two significant personnel changes in 1994. The Company eliminated the Assistant Manager position in June and the Chairman of the Board resigned in October. The President and General Manager stated that the work previously performed by these employees has been distributed among most of the remaining employees. Ongoing regulatory reporting requirements have added to the workload of Company employees.

The President and General Manager stated that few activities are contracted out to a third party due to the Company's current financial position. Subcontractors are used primarily if the Company lacks the internal expertise. Third parties were used twice in the spring of 1996. Leak loss survey work was performed by a subcontractor in March and a consultant was hired to prepare the Company for its most recent informal rate case in April. The same subcontractor may be used by the Company when it files its next informal rate case in early 1999.

The Company hired another office staff person in November 1996. The additional staff has helped the President and General Manager with numerous administrative tasks and with some of the duties previously performed by the Assistant Manager.

The President and General Manager stated that another office staff person may be hired in 2000. The Company's accounting supervisor is approaching retirement. The Company may hire an office manager/supervisor in 2000 to oversee the office and produce accounting and financial reports. This should result in a reduced reliance upon the outside accounting firm for financial-related consulting and reporting expertise with the letter of credit bank, DNR and other entities. The Company may be justified in hiring an office manager/supervisor only after its current financial condition improves.

The MSD staff estimates that at least $45,000 has been saved annually by not paying the salary and retirement costs of the Assistant Manager position. The MSD staff concludes that the Company should utilize overtime hours and/or qualified outside resources on an as-needed basis and to meet temporary peaks in workload requirements. It is the opinion of the MSD staff that the Company has addressed the objective of this recommendation.

RECOMMENDATION 4:

Develop and implement recruiting and hiring procedures which are designed to select applicants having the highest level of knowledge, skill, and experience necessary to improve the operational performance of the Company.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Formalized Company hiring process - July 1994.

2. Advertised job vacancies in Raytown newspapers - July 1996.

3. Utilized written job application · - July 1996.

DISCUSSION:

Objective hiring procedures were not consistently utilized at the time of the management audit. The Company appeared to hire family members that may not have been qualified for job vacancies while overlooking potentially qualified applicants. The MSD staff concluded that the Assistant Manager position was not properly advertised or filled based upon a pool of potentially qualified applicants. The former Assistant Manager is the son of the Chairman of the Board, the brother of two Board members and the brother of the President and General Manager.

The Company formalized the hiring process in July 1994. The President and General Manager stated that employees discuss the job description for each unfilled position. The job description is typically updated or amended to meet the needs of the Company.

The Company began advertising for open positions in both Raytown newspapers in July 1996. The President and General Manager stated that each advertisement results in at least 20 applications from residents in Raytown or neighboring communities. The MSD staff reviewed the advertisements for each field and office vacancy since 1996.

The Company began using a written job application in July 1996. According to the Company's personnel files, more than 100 applications have been received for positions that have been filled in the last three years. The application process is usually open for a two-week period and all applications are kept on file for at least six months.

The President and General manager stated that all field or office employees are allowed to review each application depending upon the vacancy being filled. For example, office employees typically review the applications for an office vacancy and field employees typically review the applications for a field vacancy. This allows each employee to rank the applicants according to skill level, previous employment history and relative value to the Company. The top five candidates are contacted to schedule an interview. Upon completion of the interviews, the most qualified person is selected after a comprehensive discussion among the respective employees.

The Company will then notify the applicant that was selected for the position and conduct a routine background check. The applicant is notified and officially hired if the background check is positive. The new employee will be subject to a probationary period of up to six months in order to evaluate both technical and social skills. All applicants who were not selected are notified by mail that another person has been hired.

The Company stated that the new hiring procedures were used to hire two office and three field employees since 1996. The President and General Manager has been pleased with the quality of the new employees and the process has helped the Company obtain well-qualified employees in an objective manner. It is the opinion of the MSD staff that the Company has addressed the objectives of this recommendation.

RECOMMENDATION 5:

Develop a formal succession plan for key management positions.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Collected succession planning data from other companies - March 1994.
2. Formalized duties of accounting supervisor and foreman - December 1998.

DISCUSSION:

A formal succession plan for essential management personnel did not exist at the time of the management audit. A formal succession plan was deemed appropriate by the MSD staff in lieu of the 1994 departure of the Chairman of the Board and the Assistant Manager.

The Company began collecting information on succession planning from other family-operated companies in March 1994. The President and General Manager learned that none of these companies had a formal succession plan. The Company proceeded to contact several larger businesses. The President and General Manager discovered that a majority of the larger companies did have a succession plan consisting primarily of cross-training an Assistant Manager to serve as General Manager should the need arise. The Company did not find this solution feasible as the Assistant Manager position was eliminated in June 1994 (see discussion in Recommendation 3).

The President and General Manager stated that the Board is reluctant to manage the Company on a daily basis. However, the Board is willing to serve during an interim period and be responsible for recruiting a General Manager. The Board has recommended that the President and General Manager continue the long-standing practice of an 'open door' policy by keeping employees informed of business decisions and reporting on the results of meetings with outsiders.

The Company stated that formal Board approval was given in December 1998 authorizing the foreman and accounting supervisor to continue in their current roles if the President and General Manager was unable to perform daily management oversight responsibilities. The Company acknowledged that this action was taken to smooth the transition period and ensure consistent application of field and office policies and procedures.

The MSD staff is encouraged by the Board's action to formally address the foreman and accounting supervisor roles in succession planning. It is the conclusion of the MSD staff that the Company has addressed the intent of this recommendation.

RECOMMENDATION 6:

Develop and implement a plan for training employees in the use of the computer system and for regularly assessing data processing requirements for future software and hardware upgrades.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Attended computer vendor user conference - July 1993.
2. Attended computer vendor user conference - February 1996.
3. Began tracking attendance for in-house computer training sessions - April 1996.
4. Began tracking computer program software upgrades - May 1996.

DISCUSSION:

Training employees in the use of the computer system and evaluating data processing software and hardware requirements were not adequately being performed prior to the management audit. The MSD staff concluded that these deficiencies adversely affected the productivity and morale of employees resulting in an under-utilization of computer systems.

The Company's computer system was installed prior to the management audit. Several employees attended one-day computer vendor user conferences in Kansas City (July 1993) and Columbia (February 1996). These conferences helped employees learn more about the system and programs to use in daily operations. Employee input is presented to the software vendor regarding potential program changes or system enhancements during these conferences. Improvements are subsequently made from the suggestions of the utilities that are using the vendor's products.

The training concern has been addressed with a comprehensive cross-training program. The President and General Manager stated that two employees are very knowledgeable of the Company's computer system. The accounting supervisor is familiar with nearly all aspects of the computer system and provides most of the ongoing training to other personnel. A serviceman familiar with field activities provides the training in field related programs.

The Company believes that there is adequate training for office employees as there are at least two employees sufficiently trained for each office program. For example, each office employee has entered meter readings into the daily billing program and customer payments into the daily accounts receivable program. In addition, office personnel are called upon occasionally to help in the preparation of various weekly payroll and accounts payable reports used as support for the general ledger and other monthly financial statements.

The Company began tracking employee participation of in-house computer training sessions in April 1996. Each trainee is evaluated after the training session to determine if additional training in that area is warranted. According to the Company's training log, most office employees have been formally trained in the billing, accounts receivable and posting payments. The President and General Manager stated that the training results are included in employee performance evaluations.

The Company began tracking system upgrade installations and computer informational releases in May 1996. This will ensure that each employee is aware of various programming changes provided by the computer vendor. The Company has on-line manuals available to describe each computer program and software updates are received from the vendor as programming changes are made.

The MSD staff acknowledges that the Company has made considerable progress towards addressing the training, software and hardware concerns addressed in this recommendation. Based upon the improved level of documentation and the extent of the cross training provided, the MSD staff concludes that the Company has addressed the intent of this recommendation.

RECOMMENDATION 7:

Develop and implement formal competitive bidding procedures for all major equipment purchases and contracting activities.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Contacted other utilities about competitive bidding - April 1994.
2. Obtained sample bid forms from office supply vendors - April 1994.
3. Held employee meetings to discuss competitive bidding - February 1995.
4. Drafted competitive bidding policy and submitted to Board for approval - March 1995.
5. Implemented competitive bidding policy - June 1995.

DISCUSSION:

Formal competitive bidding procedures for computer and field equipment and contracts were not utilized at the time of the management audit. The MSD staff concluded that the lack of competitive bidding precluded the Company from evaluating all available procurement options and making the best purchasing decision.

The Company began to address this concern in April 1994. First, the President and General Manager contacted several area utilities about competitive bidding but learned that none of them used a formal competitive bidding process. The President and General Manager found that bid proposals typically are required to be in writing and the best bid may not necessarily be the lowest bid. Second, the Company contacted several office supply vendors about sample bid forms that could be used.

The Company currently requires written bids from at least three vendors on all purchases over $1,000 and approval from the Board and President and General Manager. This policy evolved from discussions with employees that began in February 1995. A formal competitive bidding policy was drafted and submitted to the Board the following month. The Board approved and implemented the policy in June 1995. According to the President and General Manager, competitive bids are frequently used for purchases as low as $250 depending upon the nature of the purchase.

The competitive bid policy generally applies to materials, trucks, equipment and contract labor for large purchases. Company policy requires a bid specification sheet to be completed from each potential vendor describing the purchase, quantity, price and other relevant information. There is also a bid review summary form to identify the vendor chosen and the reasons to support that selection. If the vendor is not selected, the reasons (such as reliability and price) are also documented. Company purchase orders are also required and all bids are maintained in a central file to facilitate timely review.

The MSD staff reviewed competitive bids on a dozen purchases since 1994. These purchases are normally included in the minutes of Board meetings. For example, the Company utilized competitive bids for the two million-gallon storage tower, transmission mains, old main replacements and new hydrants. Project specifications were developed by an engineering firm and subsequently bid to several area contractors. The Company also stated that water meters are bid on an annual basis.

Competitive bidding was used for purchases made after the 1996 rate case. The Company stated that considerable time was used in collecting bids for the purchase of new tools, equipment, trucks, trailers and backhoe. The President and General Manager stated that few large purchases are scheduled until after the Company files its next informal rate case.

The Company's competitive bidding policy should ensure that all viable purchasing options are properly evaluated in order to make the most effective long-term decision. Materials and equipment that meet job requirements should result in cost-effective material and labor expenditures and minimize downtime. Proper documentation may result in other policy changes in the purchasing area. The MSD staff concludes that the Company has addressed the intent of this recommendation.

RECOMMENDATION 8:

Develop and implement a formal policy for performing documented needs analysis prior to making major equipment purchases.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Contacted other utilities about formalizing major equipment purchase requests - April 1994.

2. Held employee meetings to discuss major equipment purchases - February 1995.

3. Discussed major equipment purchases with PSC staff in 1996 rate case - August 1996.

4. Formalized and implemented major equipment purchase policy - January 1997.

DISCUSSION:

The Company did not perform the necessary documented analysis prior to making major equipment purchases at the time of the management audit. This resulted primarily from the MSD staff's analysis of the 1992 purchase of the computer and field equipment, as employee input was not solicited and purchasing decisions were made without adequate information. Effective purchasing policies require a formal assessment of the needs of the Company and its employees.

This recommendation is related to the earlier discussion of competitive bidding (see discussion in Recommendation 7). The President and General Manager contacted several area utilities in April 1994 about the formalization of major equipment purchases. The Company found that other utilities did not have a formalized procedure but employees would make written or verbal equipment purchase recommendations.

The Company currently requires the completion of a needs analysis form on all purchases over $1,000. This policy evolved from several discussions with employees that began in February 1995. The needs analysis form details almost all of the critical information necessary to determine the propriety of the purchase. The form requires a description of the purchase, its purpose and frequency of use (daily, periodically or special project), estimated cost (purchase, rental or contract), timetable (immediate or future), operating skills required (employee knowledgeable or training required) and cash flow requirements (sufficient funds available or would cause cash shortfall).

The President and General Manager stated that major equipment purchases are usually timed in conjunction with a filed informal rate case. Prior to a case, employees compile a wish list of purchases deemed necessary to improve the Company's efficiency and overall level of service. Once the list is reviewed with the President and General Manager, a final determination is made and written bids are solicited from at least three vendors.

The Company and the PSC staff met four times during the 1996 informal rate case to discuss the propriety of more than 60 potential purchases. Both parties believed that the discussions were very productive and the Company was able to obtain greater assurance on the propriety of these purchases. Similar discussions are expected after the Company files its next informal rate case in early 1999.

The President and General Manager stated that the needs analysis form was not utilized during the 1996 informal rate case because of time constraints. The needs analysis form is required on all major equipment purchases as of January 1997. The Company's current cash flow problem has precluded any major equipment purchases since 1996. However, the PSC staff concludes that the Company has utilized competitive bidding procedures appropriately and received assurances that the needs analysis form will be used in its 1999 rate case.

The Company's needs analysis form should ensure that all major equipment purchases are properly evaluated in order to make the most effective long-term decision. Proper documentation may result in other policy changes. The MSD staff concludes that the Company has addressed the intent of this recommendation.

RECOMMENDATION 9:

Continue to negotiate with the City of Independence to provide wholesale water to the Company for its Independence customers.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Organized suburban water coalition - April 1993.

2. Selected consultant to develop cost of service study - May 1993.

3. Met with supplier to discuss concerns - December 1994.

DISCUSSION:

The Company's efforts to find alternative water supplies were not deemed adequate at the time of the management audit. This was a major concern because the Company's wholesale water supplier, the City of Kansas City, increased wholesale water rates by almost 17% in 1992-93. As part of the long-term contract, the supplier also required the Company to build a two million gallon storage tank and the related infrastructure. The combination of these two events forced the Company to file a rate increase in 1992.

Several events have occurred to mitigate this concern. The most significant event was the formation of a suburban water coalition in April 1993. The coalition consisted of several meetings between the Company and 29 other area wholesale customers to discuss wholesale water rates and investigate the feasibility of alternative sources of water. The coalition hired a consultant in the following month to perform an overall cost of service study. The consultant learned that the supplier had substantially reallocated overhead costs from residential to wholesale customers resulting in the double-digit rate increase discussed earlier.

According to the President and General Manager, the coalition has been successful in putting considerable pressure on the supplier to keep increases to a minimum. Wholesale water rates have experienced a negligible overall increase since the 1993-94 contract year after factoring the 4% decrease for the 1997-98 contract year. The increases dating back to the 1992-93 contract year are listed in the following table:

Rate increases from City of Kansas City

Contract Year	%Incr/(Decr)
1992-93	+16.61%
1993-94	+6.45%
1994-95	0%
1995-96	+1.69%
1996-97	+1.61%
1997-98	(4.00%)

Source: Company records

The Company stated that the supplier has had considerable changes in its personnel and its business approach since 1994 and is more aware of the concerns of the coalition members. The supplier met with the Company in December 1994 to discuss various concerns. The President and General Manager stated that the supplier is genuinely concerned about the coalition members seeking an alternative source of water and meets with the coalition prior to the announcement of any wholesale rate change.

The Company also met several times with the City of Independence to discuss alternative water sources. Independence hired an engineering firm to determine the need for future plant expansion. Although the current contract requires most of its water to be purchased from the supplier, the Company might enter into an agreement with Independence to serve the Company's 700 customers residing in Independence. The Company is also working with other coalition members to purchase water from other sources. According to the Company, the public relations aspect of this involvement cannot be underestimated. However, these discussions have not been seriously considered given the recent wholesale water rate changes.

Given the recent success of the coalition, the Company has been able to keep its largest monthly expense at or below the level of inflation over the past four years. It is the opinion of the MSD staff that the Company has adequately addressed the intent of the recommendation.

RECOMMENDATION 10:

Develop and implement the most cost-effective way to automate the remaining field-related data.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Completed automation of most field operation data - January 1996.

2. Purchased inventory software - March 1998.

DISCUSSION:

The most cost-effective way to automate the remaining field-related data had not been adequately determined at the time of the management audit. The MSD staff concluded that operational data was primarily entered by Company personnel during periods of inclement weather or as time permitted as opposed to a systematic methodology for data entry.

In response to this concern, the Company stated that almost all field-related data has been automated as of January 1996. The Company was required to automate operational data as part of the stipulation and agreement entered into in Case No. WR-94-211, and acknowledged that updating these records would be performed on an ongoing basis. The President and General Manager stated that inventory is the only significant operating area yet to be automated. The inventory software was purchased in March 1998 and data entry is scheduled for 1999.

The Company has automated the meter inventory, property maintenance (fire hydrants and vehicles), service reports, complaints and backflow prevention programs. The operating reports reviewed by the MSD staff from each of these systems appear to have an adequate level of useful information.

The Meter Inventory Program used since 1993 is designed to identify the present location of each meter in the system. A working history is maintained on each meter including location, account number, installation date, initial meter reading, purchase date and price, meter size, rated number of gallons per minute and number of dials read. The history also contains the meter identification number, number and date of times tested, methods and reasons for testing and meter accuracy. This program also handles meter changes that are directly related to the Company's billing program.

The Property Maintenance Program maintains statistical information regarding fire hydrants and vehicle maintenance. A hydrant inventory is established to record the make, model, price, location and set-up time for maintenance. A Hydrant Inspection Program records the history of a hydrant at its installed location and contains testing and replacement information. The vehicle maintenance program tracks all vehicle expenditures to allow timely and cost-effective scheduling of vehicle maintenance.

The Service Reports/Complaints Program handles general service calls and customer complaints. The program records general information about the nature of the customer call, a description of the problem and its eventual resolution. The information is entered into the system after the required paperwork is returned to the office. A paper copy of the work is also maintained in a central filing cabinet organized by account number. The program also includes information on line locates, taps, water samples, leaks and breaks.

The Backflow Prevention Program was developed by the Board and approved by DNR. The program enables the Company to monitor 95 backflow prevention devices at 50 locations.

The Company has benefited considerably from automating field-related data primarily in terms of organization, accuracy, storage and convenience. The Company also plans to keep the operating system hardware and software current and continue cross-training personnel in various data entry functions (see discussion in Recommendation 6).

The additional automated field information should be very beneficial to field personnel and management and result in better purchasing and work scheduling decisions. The MSD staff concludes that the Company has made considerable progress on the automation of field-related data and has adequately addressed the intent of the recommendation.

RECOMMENDATION 11:

Install the unused PC in the President and General Manager's office and take action to implement the full capabilities of this technology to achieve operational efficiencies.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Assigned PC to new clerical person - November 1996.

2. Developed internal programs to utilize PC - January 1997.

DISCUSSION:

The MSD staff found a new PC in an unopened box on the floor of the President and General Manager's office during the course of management audit fieldwork. Given the current cash flow situation, it was surprising to see that the Company did not take the opportunity to utilize scarce resources in a more cost-effective manner.

The President and General Manager stated that this PC was assigned to an accounts clerk who started in November 1996. The accounts clerk began generating operating reports and routine correspondence to third parties in January 1997. The PC has the most current version of Windows 95 and can produce reports on a weekly, monthly and quarterly basis. The PC was also used to generate the "State of the Company" report.

The President and General Manager acknowledged completing only a minimal amount of computer training. The Company stated that additional administrative duties associated with responding to the management audit and the departure of the Assistant Manager and Board chairman have precluded PC training opportunities. The President and General Manager stated that greater system familiarity should result as time permits.

The use of the PC by the accounts clerk has resulted in greater operational efficiencies for the Company. Although it is unlikely that the President and General Manager will actively pursue additional PC training in the near future, the MSD staff concludes that the Company has addressed the intent of the recommendation.

RECOMMENDATION 12:

Provide all Board members with a written agenda and summarized financial information prior to all Board meetings.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Issued relevant information to Board members - September 1994.

2. Documented mailing of information to Board members - January 1995.

DISCUSSION:

During the management audit, the MSD staff could not substantiate the Company's assertion that Board members were provided adequate information prior to Board meetings. The MSD staff concluded that a possible lack of information could preclude the Board from making proper decisions in a timely manner. At a minimum, the MSD staff believed that a written agenda and summarized financial information should be sent to each Board member well in advance of each Board meeting.

The Company addressed this concern in September 1994. The President and General Manager stated that a written agenda, a summary of the minutes of the previous meeting and pertinent financial information are supplied to each Board member at least five days prior to the bi-monthly meeting. The President and General Manager mails this information after the accounting supervisor prepares the necessary financial information. Formal documentation to verify these mailings began in January 1995.

The MSD staff reviewed information sent to the Board in 1997 and 1998. The Company adopted a formal agenda for its Board meetings. The agendas are well organized and the financial information appears to be adequate from which to make proper decisions. There is a section for roll call, approval of previous meeting minutes, discussion of old business and new business (including financials) and closing remarks. The minutes are very detailed and more thorough than the minutes found at most other Missouri utilities.

The MSD staff concludes that the Board receives adequate information on a timely basis prior to each Board meeting. This should assist the Board in carrying out its fiduciary responsibility. It is the opinion of the MSD staff that the Company has addressed the intent of this recommendation.

RECOMMENDATION 13:

Require the Board of Directors to actively participate in all major decision-making processes.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Issued relevant information to Board members - September 1994.
2. Updated job description for Board members - August 1995.
3. Selected outside directors for Board - April 1997 and June 1997.
4. Formalized annual schedule of 1998 Board meetings - December 1997.

DISCUSSION:

The MSD staff concluded that the Board did not actively participate in all major decisions prior to 1993. At that time, the Board was comprised almost exclusively of family members. The MSD staff concluded that some family Board members were not very knowledgeable about the major decisions that the Company was facing.

The Company took several actions to ensure that Board members would be more actively involved in major decision-making processes. First, the Board is receiving timely financial reports and other necessary information five days prior to each meeting (see discussion in Recommendation 12). Second, the Company has updated the job description for Board members (see discussion in Recommendation 16). Third, the Company formalized its schedule for Board meetings (see discussion in Recommendation 14). Fourth, the Company plans to maintain Board membership at its current authorized level of seven members (see discussion in Recommendation 15).

The MSD staff is encouraged by the Board's enhanced involvement in the decision-making process. The Company could realize significant savings through additional Board input into the planning and management oversight processes. For example, the Board has been actively involved in the refinancing of the loan on the two million gallon tank. The President and General Manager stated that current interest rates have allowed the length of the loan to be reduced by four years without changing the payment amount. The Company estimates that a cumulative savings of approximately $400,000 could result after the refinancing is approved by the lender.

Increased Board involvement will be necessary to address a potential 1999 informal rate increase, changes in field and office operations and other regulatory concerns. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 14:

Formalize the schedule for Board of Directors' meetings.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Formalized schedule of Board meetings for 1998 - December 1997.
2. Formalized schedule of Board meetings for 1999 - December 1998.

DISCUSSION:

A formal schedule of Board meetings did not exist prior to 1993. The MSD staff concluded that it was important to formalize the schedule so each Board member could make the appropriate arrangements and plan to attend.

The Company corrected this concern in December 1997 by establishing a formal schedule for its 1998 Board meetings. The schedule of six bi-monthly Board meetings was mailed to each Board member. The Board is also reminded of each meeting in the packet of information sent to them five days prior to each meeting (see discussion in Recommendation 12).

The Company attempts to schedule meetings on the same time and day, such as 2 p.m. on the second Wednesday of even-numbered months. In order to accommodate each Board member's schedule, the Company makes every effort to re-schedule meetings to ensure full attendance. The Board typically meets at Raytown Equestrian Park, two blocks west of the Company's office. The Board relocated the meeting site to its current location to curtail distractions and to prevent breaches of confidentiality.

The Board has met on an infrequent basis as recently as 1994, when only two Board meetings took place. The President and General Manager stated two possible reasons for this. First, there were significant cash flow concerns that precluded the Company from paying its Board members to attend meetings. Second, the Company did not anticipate any significant capital projects that required the Board's attention after the 1992 completion of the two-million gallon tower.

The Company formalized its schedule of six 1999 Board meetings in December 1998. The MSD staff concludes that a formal schedule of Board meetings should help the Board carry out its management oversight and fiduciary responsibilities in a more timely manner. It is the opinion of the MSD staff that the Company has addressed the intent of this recommendation.

RECOMMENDATION 15:

Continue to actively seek and elect an additional outside Board member.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Elected engineer to Board - I :bruary 1993.
2. Determined criteria for Board membership - September 1993.

3. Contacted area civic leaders to recommend potential Board members - October 1993.

4 Elected certified public accountant to Board - April 1997.

5 Elected attorney to Board - June 1997.

DISCUSSION:

Board vacancies had not been filled on a timely basis since 1993. Between 1993 and early 1997, there were one or two vacancies on the seven-member Board. The MSD staff concluded that the Company needed to add outside independent expertise to its Board.

The Company agreed that additional outside expertise was needed. The process began in September 1993 with the determination of criteria necessary for Board membership. The Company acknowledged that three of its most pressing needs were in accounting, financial and managerial matters. The Board contacted area civic leaders the following month to solicit recommendations for potential Board members.

The Company filled three Board vacancies with non-family members since the management audit. A retired engineer, a certified public accountant and an attorney were elected to the Board in February 1993, April 1997 and June 1997, respectively. The President and General Manager stated that the new Board members have added considerable expertise to the Board.

The MSD staff encourages the Company to keep its Board membership at the current authorized level of seven and fill any vacancies that may occur in a timely manner. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 16:

Develop formal position descriptions for the Board of Directors.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Collected information on Board member duties from other companies - July 1995.

2. Formalized Board member position descriptions - July 1996.

DISCUSSION:

Formal position descriptions had not been developed for the Board at the time of the management audit. The MSD staff concluded that this was necessary to ensure that each Board member was fully aware of their responsibilities.

The Company began formalizing Board member position descriptions in July 1995. The President and General Manager contacted other local water companies about Board member responsibilities. Although none of these companies had a formal job description, the Company discussed Board member duties and incorporated some of the information into the job description.

The job descriptions for Board members were completed in July 1996. The job description details the Company's mission statement (see discussion in Recommendation 1), as well as membership terms and responsibilities. The specific terms section includes Board member compensation, meeting times and locations. The responsibilities section includes by-laws, rules, regulations, policy making, legal matters, committee reorganization, capital improvement purchases, industry trends, large contracts, special personnel situations, retirement, health care programs, public relations, rate case proposals, regulatory agencies, Board member replacement and succession planning.

The MSD staff reviewed the current Board job description and concluded that it was very comprehensive. The Company acknowledged that Board member job descriptions are subject to review on an ongoing basis as job duties and responsibilities change. For example, the Company's mission statement was formalized in October 1997 and added to the position description.

The MSD staff is encouraged by the thoroughness of the job description and concludes that Board members will be able to appropriately perform their duties and responsibilities by knowing exactly what is expected of them. The MSD staff concludes that the Company has adequately addressed the intent of the recommendation.

CHAPTER III: FINANCIAL MANAGEMENT

RECOMMENDATION 17:

<u>Automate the general ledger during 1993.</u>

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Completed computerization of general ledger system - December 1994.

2. Automated accounts payable and accounts receivable systems - December 1994.

DISCUSSION:

The general ledger was not fully automated at the time of the management audit. The Company was utilizing a general ledger system that was a combination of manual and automated processes. This resulted in confusion, operating inefficiencies and an overall lack of usefulness to third parties. The MSD staff concluded that an automated general ledger system would result in more timely generation of data with greater accuracy.

In response to this concern, the Company fully automated its general ledger in December 1994. The Company was required to automate the general ledger as part of the stipulation and agreement entered into in Case No. WR-94-211. The Company stated that the automated general ledger system generated financial statements for each month in 1994 and produced year-end financial statements in January 1995. The Company's accounting supervisor is responsible for all entries made to the general ledger.

The Company prints financial statements in-house each month and at the close of the calendar year. The year-end information is sent to the Company's external auditors. A set of year-end financial statements is issued after the external auditors make closing entries and other accounting adjustments. According to the Company, the closing financial statements for one year are used for informal budgeting purposes in the following year.

The accounting supervisor stated that the accounts payable and accounts receivable systems were automated in December 1994. Standard month-end journal entries are tied into the general ledger.

The President and General Manager stated that the automated general ledger system has helped reduce external auditor fees and other operating costs. The Company should also be able to respond in a more timely manner to information requests from third parties, such as the bond trustee. The general ledger has also assisted the Board in its strategic planning function. The MSD staff concludes that the Company has adequately addressed the intent of this recommendation.

RECOMMENDATION 18:

Develop a formal capital additions budget and a formal operating budget.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Solicited employee input for short-term and long-term purchases - January 1994.
2. Received Board approval for long-term purchases in Case No. WR-94-211 - July 1994.
3. Implemented competitive bidding policy - June 1995.
4. Received Board approval for long-term purchases in Case No. WR-97-300 - May 1996.
5. Discussed major equipment purchases with PSC staff in 1996 rate case - August 1996.

DISCUSSION:

A formal capital additions budget and a formal operating budget did not exist prior to the management audit. The MSD staff concluded that formalized capital and operating budgets should provide the Company with guidance for planning revenue, expense and cash flow projections.

The Company acknowledged that formal budgets currently are not prepared. The President and General Manager stated that revenues and expenses from the previous year are used as a guideline for the current year. The Company does not expect much change in revenues from year to year unless a rate increase is granted. The percentage of increase for most expenses can be reasonably estimated.

The Company believes that formal budgeting has little practical use given the cash flow concerns and lack of discretionary money to budget for capital improvement projects. According to the Company, the cash flows necessary to do a formal budget are non-existent. For example, the wholesale water supplier is owed approximately $293,000 as of January 20, 1999.

According to the Company, several steps have been taken to mitigate the lack of a formal budgeting process. First, the Company solicited input from field and office employees regarding potential capital projects prior to each of the Company's last two informal rate cases (see discussion in Recommendation 2). Second, the Company requests written competitive bids on all purchases greater than $1,000 (see discussion in Recommendation 7). Third, the Company and the PSC staff have discussed the propriety of major purchases within the context of the most recent informal rate case (see discussion in Recommendation 8).

The Company believes that a formal budgeting process would be beneficial when its financial picture improves. The President and General Manager stated that a Budget Committee consisting of three Board members might be established to investigate the merits of a formal budget process. However, this committee has not been selected and the Company does not plan to formalize its capital and operating budgets for 1999.

The MSD staff encourages the Company to develop formal capital and operating budgets to help manage the daily operating functions of the Company. Until the Company develops a formalized budget, the MSD staff concludes that this recommendation is "in progress" as of February 22, 1999.

RECOMMENDATION 19:

Determine the most cost-effective checking account services, and implement their usage.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Obtained service charge schedules from three Raytown banks - April 1994.
2. Consolidated accounts payable and payroll accounts into one account - April 1994.
3. Moved operating account to United Missouri Bank - January 1998.
4. Purchased check encoder to reduce bank service charges - April 1998.

DISCUSSION:

The MSD staff concluded that the Company needed to determine the cost-effectiveness of its checking account services. The Company had checking accounts at several institutions and was unable to take advantage of the savings associated with consolidated bank balances.

The Company acknowledged the importance in periodic assessment of its banking relationships and service charges. A schedule of bank service charges was requested from three major Raytown banks in April 1994. The Company determined that it was appropriate to consolidate the accounts payable and payroll accounts into one checking account.

The Company believed that it was necessary to maintain customer deposits in a separate checking account. Office employees stated that the separation would facilitate tighter overall control. Deposit refunds are typically credited to the customer's account resulting in fewer checks being written (see discussion in Recommendation 31).

The most significant savings occurred by moving the operating account to United Missouri Bank in January 1998. The President and General Manager stated that one of the bank's officers has worked diligently to help the Company reduce bank fees. The Company currently earns between 5.27% and 5.6% on its escrowed funds and checks can now be generated electronically.

In order to reduce bank fees, the Company purchased a check encoding machine in April 1998 for $5,646. The machine will allow office personnel to internally micro-encode checks (customer bill payments) saving the Company approximately $.07 per check per month. The accounting supervisor estimated that the micro-encoder has reduced service charges by almost $1,400 during the first six months of operation. The micro-encoder payback period is estimated to be approximately two years.

The MSD is encouraged by the results of the Company's review of banking services and its ability to reduce bank service charges as described above. The MSD staff concludes that the Company has addressed the intent of this recommendation.

RECOMMENDATION 20:

Require reimbursement to the Company on a monthly basis for personal usage of Company business office labor and equipment.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Eliminated employees performing non-utility work - March 1994.
2. Contacted rental companies for market rate schedules - April 1994.
3. Developed vehicle and equipment logging and billing procedures - May 1994.
4. Updated rental rate reimbursement schedule - October 1998.

DISCUSSION:

The Company required semi-annual reimbursement for the personal use of Company labor and equipment at the time of the management audit. The MSD staff concluded that employee reimbursement should occur on a monthly basis to reduce the Company's potential for transactions not appearing to be performed on an 'arms-length' basis.

The MSD staff concluded that it was appropriate to review the nature of transactions between these entities, given the President and General Manager's non-regulated investments (horse stable, car wash, plumbing service, and numerous commercial and residential real estate holdings).

The most significant action occurred in March 1994 when the Company eliminated its employees from performing non-utility related work for the President and General Manager during business hours. The President and General Manager wanted to eliminate the perception that non-utility work might be performed during work hours or that reimbursement was not being made on a timely basis.

The Company contacted other utilities and construction companies in March 1994 about vehicle and equipment usage policies. The information learned from others was incorporated into the Company's vehicle and equipment usage policy. Each vehicle currently has a written log that is completed on a daily basis by the driver of the vehicle. The employee records the date, number of total miles driven, destination and purpose. These logs were required as part of the Company's compliance with the stipulation and agreement entered into in Case No. WR-94-211 (see discussion in Recommendation 41).

The Company contacted several area rental companies in April 1994 to request hourly and mileage rental rate information on vehicles and equipment similar to those of the Company. This information was used to develop the Company's rental rate schedule and updated in October 1998 to reflect current market rates. The MSD staff encourages the Company to periodically update the schedule to reflect market rental rates.

The Company went from semi-annual billing to monthly billing in May 1994. At the end of each month (i.e., January) the foreman will collect the logs and summarize any non-utility usage into a written report. The foreman gives this information to an accounting clerk who bills the appropriate employee and records the information in an accounts receivable ledger (i.e., February). The posting clerk records each payment into the cash receipts book when payment is received (i.e., mid-March). The foreman reviews the activity for each month to ensure that all bills have been paid.

The MSD staff reviewed employee billings and subsequent reimbursements for 1997 and 1998. The billings generally were supported with adequate documentation and reimbursements were timely. Reimbursements from field personnel were paid by cash or subtracted from an employee's next paycheck. Reimbursements from the President and General Manager were made by check from one of the businesses described above. Most of the billings were for mileage or after-hours plumbing work.

The MSD staff concludes that there are appropriate controls in the billing and reimbursement processes associated with employees using Company vehicles and equipment for non-utility purposes. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 21:

Implement cost accounting procedures and practices which require charging non-regulated businesses for the use of Company resources.

STATUS: Complete

MAJOR ACTION TAKEN BY THE COMPANY:

1. Eliminated personal usage of Company vehicles and equipment - March 1994.
2. Established policy of monthly billing for use of non-utility resources - May 1994.

DISCUSSION:

The Company did not have appropriate cost accounting procedures and practices that required timely reimbursement from employees for the non-utility use of vehicles and equipment in 1993. The Company required only semi-annual reimbursement from employees and the MSD staff found an overall lack of consistency in the application of that policy.

The President and General Manager agreed to correct this problem in March 1994 (see discussion in Recommendation 20). Employees are generally prohibited from using Company vehicles and equipment for non-utility business purposes. The Company also required monthly reimbursement in May 1994 from employees using Company vehicles and equipment for non-utility business purposes.

The MSD staff is encouraged that there is a greater degree of accountability in employee reimbursements resulting from non-utility usage of Company vehicles and equipment. The MSD staff concludes that the Company has addressed the intent of the recommendation.

RECOMMENDATION 22:

Institute a formal policy for review of gasoline credit card purchases.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Developed logging system to track gasoline purchases by vehicle - April 1994.
2. Discussed gasoline credit card record keeping concerns with employees - November 1994.
3. Changed gasoline suppliers - August 1998.

DISCUSSION:

A formal policy for reviewing gasoline credit card purchases did not exist in 1993. The MSD staff found numerous instances of potential gasoline credit card misuse, particularly with the former Assistant Manager. The MSD staff concluded that it was necessary for the Company to tighten controls on its gasoline purchasing practices.

The Company has made considerable improvement in this area. In April 1994 the Company developed a logging system to track gasoline purchases by vehicle. This logging system is used in conjunction with the Company's vehicle and equipment logs. The President and General Manager met with each employee in November 1994 to discuss record keeping requirements associated with the new gasoline credit cards. Gasoline purchases are identified on each vehicle's log.

Most of the gasoline refueling occurs each Friday at the supplier's 5304 Raytown Road location. The Company stated that the foreman observes each refueling, handles the transaction with the station attendant and maintains the gasoline credit card report. The foreman compares the purchases to each log at month-end and reviews for overall reasonableness. The President and General Manager reviews gasoline invoices each month before the invoice is paid.

The most significant change occurred in August 1998 when the Company switched gasoline suppliers. The previous supplier was unable to identify purchases by individual vehicle. The current supplier provides a detailed vehicle analysis report that identifies purchases by individual vehicle, location, date, time, driver, odometer reading, miles between fill-ups, type of product purchased, number of gallons, cost per gallon, cost per transaction and cost per mile. A summary of monthly and year-to-date gasoline purchases is presented.

The supplier also provides a detailed exception report to help the Company manage its gasoline purchases. For example, the exception report will identify instances where there was more than one purchase in a day, a purchase made at an unauthorized time (night or weekend), an unauthorized fuel type, total purchases in excess of 150 gallons per month or individual transactions exceeding $30 per purchase. The report identified other exception parameters that could be established.

The MSD staff reviewed gasoline supplier invoices and the exception report for August 1998. Both documents contain detailed information useful to the Company in managing monthly gasoline purchases of approximately $500. The President and General Manager stated that fluctuations in gasoline purchases have subsided considerably since 1993.

The MSD staff is encouraged by the actions that the Company has taken to solidify controls in its gasoline purchasing practices. The Company's use of a single gasoline supplier and the supporting level of information to management allows the MSD staff to conclude that the Company has addressed the intent of this recommendation.

RECOMMENDATION 23:

Incorporate pertinent accounting data into the work order system.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Assigned work order responsibility to accounting supervisor - July 1994.

2. Revised work order program - June 1995.

DISCUSSION:

Pertinent accounting data was not fully incorporated into the Company's work order system in 1993. The MSD staff concluded that this process could be automated to reduce overall paperwork responsibilities and help the accounting supervisor perform other responsibilities.

The accounting supervisor has been responsible for summarizing work order data since July 1994. The President and General Manager stated that the current automated work order system has been used since January 1995. According to the Company, the program does not interface with the general ledger but works well with the Company's manual record keeping processes.

The work order program was revised in June 1995 when separate investment and maintenance work orders were established. Investment work orders are used for capital intensive projects and are reconciled to general ledger account #107-1. Maintenance work orders are used for repairs, leaks, hydrants and other routine projects and are reconciled to general ledger account #186-1. Both investment and maintenance work order forms contain dollars for labor, materials, sales tax, stores clearing expense, transportation clearing expense, back hoe clearing expense and voucher expense. Investment work orders also include labor and overhead capitalization rates of 38.5% and 7.5%, respectively.

The program involves entering the information from each work order (payroll, various clearing expense accounts and accounts payable vouchers) for a given month. Each investment work order is categorized and entered into the proper plant account within the general ledger by an automated journal entry. This information is also contained in the Company's manual plant records and used to determine the proper monthly depreciation rates.

The current work order program utilizes computer-generated forms but it is not an automated spreadsheet. The information listed on the work order printout includes the date, work order type, address, description of the job, completion date, labor costs per employee, material cost breakdown, total job cost and final approvals.

Consequently, mathematical calculations must be completed manually, cross-checked and entered into the appropriate work order format. The Company stated that its automated work order system is cumbersome. Although the manual processes take additional time each month, the accounting supervisor has more confidence in the accuracy of the information generated. The Company acknowledged that the current program does not save time with data entry but does save time in accessing and retrieving pending and past work orders.

The Company has periodically investigated the feasibility of a new automated work order system. The Company has been unable to determine the cost to upgrade its current system or to determine how much time could be saved with a program that could interface with the general ledger. According to the President and General Manager, the Company's current cash flow situation has precluded further study of this process.

The MSD staff concludes that the Company has made substantial progress into incorporating pertinent work order data into its accounting records. Although the work order system is cumbersome to use, the Company is comfortable with the system's overall accuracy. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

CHAPTER IV: OPERATIONS AND MAINTENANCE

Business Office Operations

RECOMMENDATION 24:

Read the City of Kansas City's water meter monthly to verify the accuracy of the bill received.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Revised meter reader responsibility to read all eight master meters each month - January 1994.

2. Changed Company meter read date to coincide with read date by City of Kansas City - February 1994.

3. Designed spreadsheet for consumption comparison - March 1994.

4. Formalized new master meter reading procedure - April 1994.

5. Presented new procedures to foreman and field employees - October 1994.

6. Implemented monthly meter reading of the City of Kansas City master meters - November 1994.

DISCUSSION:

At the time of the management audit, the meter reader did not read the City of Kansas City water meters each month. As a result, the Company was unable to verify on a timely basis the accuracy of the bill received from Kansas City. Wholesale water purchased from Kansas City is the Company's largest monthly expense (about $65,000).

The Company contacted the Kansas City Water Department in February 1994 and received verification that the eight master meters are read on the first working day of each month. Company management stated an additional three hours of meter reader time will be spent each month (due to pumping and toxic gas sniffing requirements before entering a well) to verify the eight master meter reads. As a result, the Company will read the meters on the same day they are read by the Kansas City Water Department so readings will coincide and be comparable.

The eight master meters are located at:

1) 7500 Blue Ridge Cut Off Blvd.
2) 12205 East 47th Street
3) 5240 Raytown Road
4) 8709 East 55th Street
5) 8722 East 59th Street
6) 11600 East 58th Street
7) 11499 East 75th Street
8) 9699 East 75th Street

The duty of reading the master meters has been added to the job description of the meter reader. The meter reader completes a "Master Meter Verification" sheet for each master meter on a monthly basis. The information maintained includes the reads by meter number for both Kansas City and the Company (date, reading, consumption), vault information (deadly gas reading, use of sump pump, power, etc.) and additional comments. The Company reviews the readings each month for usage trends and indicates comments where appropriate. The Company works closely with its supplier to determine the reason for any meter reading differences.

Company management stated that usage trends in its distribution system would also be available for analysis in future engineering design work. Other benefits from reading the meter on the same day as Kansas City include having incorrect reads trued-up with notification for a re-read to be performed, alerting the Company to a changed meter or potential leaks in the vicinity and making observations in the pit that might allow leaks or other problems to be identified.

The MSD staff reviewed the master meter verification sheets for the first six months of 1998 and it appears the Company is reading the master meters in conjunction with Kansas City. The foreman and field employees are very satisfied with this procedure. The MSD staff concludes the Company has addressed the objective of the recommendation.

RECOMMENDATION 25:

Perform a study to determine the efficiency of the existing meter reading routes and adjust the routes as determined appropriate.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Held meeting with office and field employees - May 1994.

2. Constructed new meter sheets to reflect route changes - July 1994.

3. Completed data entry - August 1994.

4. Performed follow-up verification by office staff - September 1994.

5. Adjusted several meter routes - June 1998.

DISCUSSION:

The most efficient manner in which to establish meter reading routes had not been formally studied at the time of the management audit. The MSD staff concluded that re-routing should reduce the number of books carried by the meter reader each day and result in a more efficient meter reading process. The MSD staff also concluded that the Company's meter reading routes could be consolidated into a six-week reading cycle if reads were scheduled for a minimum of six hours each day.

The meter reader should be more available for other necessary tasks as re-routing would require less time to complete the meter reading process. Re-routing should also result in fewer chances for errors or the need for call backs on rc reads if a substitute meter reader is necessary. Vehicle expenses should also be reduced because duplicate trips would no longer be made to the same area to obtain meter readings.

The meter reader was responsible for redesigning the meter routes given the familiarity of the routes. Several employee meetings have been conducted about the re-routing of meter books and hand-held meter reading devices. The Company has reduced the number of meter books from 64 to 60 as of January 1999.

Company management expressed concerns over the use of account numbers and how they would be incorporated into a proposed route restructuring. After the meter account numbers were entered into the new meter books, office personnel changed the numbers on the meter pages and entered data into the computer using cross checks for accuracy.

The Company reported that entering the changed meter route number into the computer was a tedious and time-consuming project due to the Company's current computer program. The current meter program does not interface with the other computer programs and requires changing the numbers individually on each program. The meter reading route changes have an effect on the billing clerk's duties as billing is directly affected by these changes.

The following criteria were developed for rerouting. First, the Company would try to keep meters located on both sides of the road or street in the same book. Second, the Company would try to keep books and routes in sequence so that only one book is used for each area. Third, attempts were made to ensure that routes do not stop and begin in the middle of a block.

The Company considered the incorporation of addresses into account numbers. It is unknown the extent of time and Company resources necessary to handle the volume of transactions and potential errors that could result.

The Company anticipated potential posting problems associated with payments received during a transition period. New meter sheets have been constructed. Company management considered delaying the billing and posting process until all entries are made. The Company responded to this problem by pro-rating the bill for the month that was a partial month's bill.

The President and General Manager stated the re-routing process has been temporarily suspended. The Company and its computer vendor are currently revising procedures and making needed adjustments to resolve conflicts tc the process. The Company anticipates completing re-routing the remaining 3,000 meters by the summer of 1999. The MSD staff concludes this recommendation is "in progress" until all meter routes are adjusted.

RECOMMENDATION 26:

Investigate the utilization of a hand-held meter reading device with appropriate software to link the device with the existing computer billing system.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Solicited bids from vendors - April 1994.
2. Field and Office staff met with factory representatives - May 1994.
3. Completed competitive bidding process - September 1998.

DISCUSSION:

The Company had not utilized hand-held meter reading devices at the time of the management audit. The hand-held meter reading device should better track meter reader productivity throughout the day and alert the Company of high and low readings indicating a leak or a malfunctioning meter.

The hand-held meter reading device records the reading directly into the Company's computer system, making the meter reading process more time efficient. If the Company purchases a hand-held system that can show improvement in the billing cycle or reduce meter reading expenses, it is likely that such expenses will be recovered in the Company's next rate case.

There is a quantified amount of potential savings available. If the new system is selected, the $350 expense incurred with replacing meter books every four years would be eliminated. The billing clerk's job would be simplified and less subject to error allowing time to perform other duties. The meter reading device currently records the readings from the person who is walking the route. As the hand-held unit is waterproof, only one meter reader is required during rainy weather.

An automated system should more readily identify high and low meter readings, which might be an indication of a stuck meter or a meter with a leak. There should also be an increase in the number of accurate meter readings and a reduced chance for error or call backs for re-reads when a substitute reader is necessary.

The foreman solicited and received bids on hand-held reading devices and accompanying software. The estimated cost was $9,000 for one hand-held meter reading device and the accompanying software. Company management indicated a hand-held meter reading device may not be implemented within the next few years given current cash flow constraints. Board approval will be necessary before this purchase is made. The MSD staff estimates the total cost to implement the hand-held meter reading device process will be approximately $20,000.

Prior to the Company changing to the hand-held meter reading device, the Company could benefit by contacting other utilities concerning the benefits and the cost-savings associated with the hand-held meter reading device.

Although the Company has not implemented this meter reading device, the Company has investigated the utilization of a hand-held meter reading device with appropriate software. The MSD staff concludes the Company has addressed the intent of this recommendation.

RECOMMENDATION 27:

Develop a policy to periodically check inside remote meters to determine they are accurately recording water usage.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Compiled information from 64 meter books - February 1994.
2. Began meter testing and computer program updating - March 1994.
3. Instructed meter reader and billing clerk to watch consumption of inside meters - April 1994.
4. Formalized changes to rules and regulations - May 1994.
5. Presented new policies to employees - May 1994.

6. Changed 135 of 192 meters to an outside location - September 1998.

DISCUSSION:

At the time of the management audit, the Company did not have an established policy to periodically check its 192 inside remote meters. The MSD staff concluded this policy was necessary to determine if the remote meters are accurately recording water usage. Although the meters are read by a remote reading device, there is no assurance these meters are not tampered with unless periodic physical inspections are performed.

Company policy requires inside meters to be moved out of the remote area when a new copper service is installed. The Company will furnish the customer with a complete meter well setup at no charge (excluding labor) in order to move the remaining inside meters to the outside. The Company had 192 remote meters when this policy was implemented and approximately 57 inside remote meters have yet to be changed as of February 4, 1999.

Moving the meters will benefit both the Company and the customers in several ways. First, meter testing will not be hampered by missed appointments to access basements. Second, the potential for tampering with outside meters may be reduced. Third, inside meters have old curb stops at the property line that can break or corrode, preventing operation in case of an emergency.

In addition to testing, a schedule will be incorporated to verify the actual inside remote meter read corresponds with the outside read because broken or disconnected wires will cause the outside meter not to register. Office personnel have been instructed to pay special attention to pages marked as "inside meters" and to notify the foreman of any sudden changes in consumption. The meter reader will then look for any broken wires.

The inside remote meter is replaced with a new meter that is moved to the outside if the Company sets a service line or performs work inside the customer's home. For the remaining inside remote meters, the Company has a policy of mailing a series of three letters to schedule an appointment with the customer to move the remote meter to the outside.

It is the MSD staff's conclusion the Company has changed most of its inside remote meters. The MSD staff encourages the Company to continue the process of changing the remote meters to an outside location until there are no longer any inside remote meters on the system. The MSD staff concludes this recommendation is "in progress" as of February 22, 1999.

RECOMMENDATION 28:

Ensure that meter books are placed in the vault or a similar fire-proof location when not in use.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Revised Company policy - February 1994.
2. Revised billing clerk job description - March 1994.
3. Held information meeting on meter book security - April 1994.
4. Implemented new meter book security procedure - November 1994.

DISCUSSION:

While performing the management audit, the MSD staff observed the meter books were not properly stored in the vault or similar fireproof location when not in use. The MSD staff concluded meter book security would ensure overnight safety so duplication efforts required to replace a lost meter book would be eliminated.

Meter book security has been addressed by Company management. An employee meeting was used to communicate a new meter book policy requiring all meter books to be placed in the safe at the end of each day. The safe is located in the vault that is locked at the close of business each day.

The billing clerk is responsible for verifying all meter books are in the safe at the end of each day by taking a physical count of the 60 meter books (reduced from 64 due to re-routing). If all meter books are not accounted for, the billing clerk checks desks, meeting rooms and service trucks. Whenever a meter book cannot be located, a notice is placed on the shop door to inform the servicemen a meter book is missing and all other possible locations have been checked.

A form was developed to record the daily verification. If a book is left out overnight, the billing clerk will place an explanation in the safe. Company management stated it takes the billing clerk about eight minutes each day to perform this task properly. It is estimated $50 in materials and

16 hours of clerical time per book would be necessary to duplicate this information if a book is misplaced or lost.

The Company acknowledged all meter books are not placed in the vault each night. This was confirmed by a review of meter book security logs that indicated several instances where as many as six books would be checked out and not returned to the vault in a timely manner. There were several instances that the same book would be checked out for more than a week at a time. The MSD staff also learned of an instance when a meter book was left in a service truck overnight instead of being placed in the vault. The truck was stolen during the night and the meter book was not found. Reproduction of the meter book was required by one of the office personnel.

The MSD staff recommends the misplaced meter books be located by the billing clerk and placed in the safe instead of placing a notice on the shop door when a meter book cannot be located. The MSD staff also recommends the Company adheres to its policy and update the employee's personnel file whenever this policy is not followed. The MSD staff concludes the recommendation is "in progress" until the procedure for placing all 60 meter books in the vault at the end of each day is enforced.

RECOMMENDATION 29:

Develop, formalize and utilize consistent criteria for estimating customer water usage.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Reviewed PSC rule #4 and met with meter reader - February 1994.
2. Formalized estimating criteria - March 1994.
3. Presented information to Board for approval - April 1994.
4. Updated tariff to reflect changes made - May 1994.
5. Updated job descriptions - June 1994.

DISCUSSION:

Arbitrary criteria for estimating customer water usage were used at the time of the management audit. This led to many customer complaints and a somewhat indifferent attitude by the Chairman of the Board in trying to correct this deficiency.

The President and General Manager and the foreman worked with the meter reader to formulate criteria for determining when and how to estimate monthly water usage and who might best perform this task to ensure a more consistent procedure. The Company formulated criteria that would require estimated meter readings including extreme temperatures, snow cover, car parked over a meter, wind chill, ice formation and continuous rain. A formula was created for averaging the entire route when necessary.

The Company stated an estimated bill is used no more than three times per year and no customer bills were estimated between January 1997 and January 1999. The Board approved the criteria necessary for estimating customer water usage. Items to be considered in the estimation process include the history of water consumption, weather conditions during the billing cycle and special circumstances described in the comments section (house for sale, owner deceased, etc.).

The new Company policy may result in less time required responding to customer complaint calls. If the meter reader performs the estimates, the amount of time required to read the meters can be spent effectively on days when the weather prevents meter reading.

The President and General Manager stated sound and consistent estimating criteria should improve customer relations. Estimating decisions will be easier to monitor by having one employee responsible for estimating the usage. It is the MSD staff's conclusion the Company has addressed the objective of the recommendation.

RECOMMENDATION 30:

Develop customer deposit criteria consistent with Commission rules that is not based upon customer address or neighborhood.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Studied deposit criteria - March 1994.
2. Reviewed Commission deposit rules and regulations - April 1994.
3. Developed new customer deposit criteria and received Board approval - June 1994.
4. Obtained rule change from PSC - August 1994.

DISCUSSION:

Inconsistent customer deposit criteria were utilized in 1993. The MSD staff concluded that there were appearances of discrimination based upon a customer address. A $50 customer deposit was frequently charged to customers living in one part of the service territory while $35 deposits were charged in most areas. The Chairman of the Board acknowledged that people who live in certain areas have historically been problem-paying customers.

Office personnel contacted other utilities about customer deposit policies. Company management then established customer deposit criteria consistent with Commission rules. Factors considered included the amount of the deposit, the interest earned, special deposit requirements, deposit waivers and a customer credit application form.

This policy was changed in December 1994. If a deposit was required, the amount was $35 regardless of the customer address. A customer may have their deposit waived by providing a good-paying credit history with another water utility or by completing a Waiver of Deposit form. The Company could require in the future a deposit be made if the customer is frequently late with payments.

Deposits are kept for one year and refunded plus interest (prime rate plus 1% as published by the Wall Street Journal for the last business day of the preceding calendar year). The Company stated the deposit amount is normally credited to the customer's bill (see discussion in Recommendation 31). The Company typically would not refund a deposit if the customer has had three or more delinquencies within the year. If a customer leaves prior to a full year of service, the deposit plus interest is credited to the final bill and any balance is refunded to the customer.

The Company should realize lower interest costs by paying interest on $35 deposits as opposed to $50 deposits. The new policy treats all customers fairly regardless of residence. The Company policy will be defendable and consistent with Commission rules and not subject to discriminatory practices. It is the MSD staff's conclusion the Company has addressed the objective of the recommendation.

RECOMMENDATION 31:

Refund customer deposits with interest on a timely basis according to the Company's tariff.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Verified correct deposit amount entered into system - February 1994.
2. Generated computerized deposit reports - April 1994.
3. Prepared formal refund schedule - July 1994.
4. Refunded all deposits more than 15 months old - December 1994.

DISCUSSION:

Customer deposits with interest were not being refunded on a timely basis at the time of the management audit. In response to this concern, the Company implemented a three-tier process to begin timely refunding via credits to customer bills.

The Company reviewed all deposits on hand to verify they were correctly entered into the customer accounts register. Office personnel have been trained to use deposit reports the system is capable of providing. A formal refunding schedule was subsequently established.

The Company had approximately $67,000 of customer deposits on hand as of April 1994. The Company ran a status report on each customer with an outstanding deposit of at least two years on the first billing cycle. If no more than two late notices have been sent during this period, the deposit plus interest was credited to the customer account.

An 18-month review performed on the Company's second billing cycle resulted in approximately $11,000 in refunds. The Company stated all deposits on hand at least 18 months were refunded in September 1994 and all deposits on hand at least 15 months were refunded three months later. The Company used a one-year review of customers on the third billing cycle.

The Company's Deposits and Interest Status Report of October 30, 1998 revealed the Company had $15,499 in deposits and $785.24 in accrued interest. A bi-monthly schedule of deposits is now maintained. The Company tries to refund as many deposits as possible by reviewing credit and payment histories and making adjustments accordingly. The Company remains current on returns of customer deposits in accordance with Commission rule 4 CSR 24-13.030.

Timely refunding of customer deposits should have a positive public relations value, help reduce overall interest expense and be fair to all customers. It is the MSD staff's conclusion the Company has addressed the objective of the recommendation.

RECOMMENDATION 32:

Determine the propriety of current charges for insufficient funds check handling ($13) and after-hours service turn-ons ($10), and file appropriate market rates to recoup costs in the Company's next rate filing.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Conducted two studies to determine proper costs - March 1994.

2. Discussed findings with employees - April 1994.

3. Implemented new procedures for treatment of insufficient funds checks and after hours service turn-ons - July 1994.

DISCUSSION:

The Company did not charge a market rate for handling insufficient funds checks and after-hours service turn-ons at the time of the management audit. The charge for insufficient funds checks is $13 and the charge for after-hours service turn-ons is $10. A study of time and expenses was performed for after hours service turn-ons and handling returned checks.

Non-sufficient funds checks are run through the bank twice and the bad check buy-back policy is no longer in practice. The bank currently mails the insufficient funds checks to the Company after the checks have been run through the bank twice. The Company delivers notice to the customer informing them of their insufficient funds check at the Company. The customer has 48 hours to make payment for the insufficient funds check with cash or money order.

The new procedure has eliminated the need for large sums of petty cash and frequent trips to the bank. The Company estimates about one clerical hour per day is saved by not making repeat trips to the bank to buy back bad checks. The President and General Manager stated these savings mitigated the need to increase these charges in the Company 's 1996 rate case.

The increased service charges may help the Company's cash flow by deterring an unknown amount of bad checks and non-payments. The MSD staff encourages the Company to charge the market rates for the actual costs of performing these tasks so the charges will be appropriately shifted to the customers who cause this expense.

The MSD staff concludes the fees charged by the Company for insufficient funds checks and after hour service turn-ons are priced significantly below actual costs. It is the understanding of the MSD staff that Company will file appropriate market rates to recoup these costs in their next rate filing. Therefore, the MSD staff considers this recommendation "in progress" as of February 22, 1999.

RECOMMENDATION 33:

Review the need for the third cash drawer and if found necessary, implement effective control procedures to ensure the security of these funds.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Met with office staff to discuss the cash drawers - May 1994.

2. Prepared recommendations for Board approval - June 1994.

3. Implemented new procedures - July 1994.

4. Purchased automated counter top cash register - May 1996.

DISCUSSION:

The Company had three active cash drawers at the time of the management audit. The MSD staff concluded one or two cash drawers would be sufficient given the volume of cash handled in the business office each day. The MSD staff was also denied repeated access to count the money in the cash drawer maintained by the Assistant Manager.

The President and General Manager addressed this concern in several ways. The Company closed the drawer previously maintained by the Assistant Manager in July 1994. The current Company practice is for one cash drawer to handle customer payments.

The most significant improvement was the purchase of an automated counter top cash register in May 1996. The automated cash register tapes include the customer account number, amount paid and change given. All automated cash drawer tapes have been kept on file since the $230 cash register was purchased.

The cash register contains $100 petty cash at all times and is balanced daily. Office personnel operate the cash register during the day and secure the cash drawer contents in the vault each evening. A second drawer containing $100 is also secured in the walk-in safe and used for changing large bills and purchasing miscellane us small items.

The MSD staff concludes the control over cash has significantly improved with the use of one cash register and the Company has adequately addressed the intent of this recommendation.

RECOMMENDATION 34:

<u>Develop and implement a time reporting sheet to be completed by all business office and management personnel.</u>

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Met with Company employees - February 1994.

2. Studied system of accounts - March 1994.

3. Formalized time recording mechanism for Board approval - April 1994.

4. Updated policy manual - April 1994.

5. Performed follow-up activities with employees - May 1994.

DISCUSSION:

Adequate timekeeping records for business office and management personnel were not maintained prior to the management audit. The MSD staff concluded adequate timekeeping was necessary to accurately reflect the job activity of business office and management personnel.

All employees prepare weekly time sheets. The time for field personnel and the President and General Manager is identified by specific work order. The President and General Manager's remaining time is allotted by percentages to various accounts after analyzing time sheets for two years. Office personnel identify primarily customer service and administrative duties.

The Company experimented with the use of a time clock for approximately one year. The Company found some employees forgot to use the time clock or were unable to return to the office to clock out for lunch. Backup records were maintained as the payroll clerk could not rely on the accuracy of the time cards in issuing weekly paychecks.

The use of time sheets should result in a more productive work force and encourage greater accountability for the utilization of time. These records should help Company management to readily identify non-regulated activities and to reimburse the Company accordingly (see discussion in Recommendation 21). Time sheets may also be used to support areas where additional training may be necessary and would be available to support rate case expenditures.

The MSD staff is encouraged by the time sheet used for all business office and management personnel and recommends the Company to consider automating these records. The MSD staff concludes the Company has addressed the intent of this recommendation.

RECOMMENDATION 35:

Distribute position descriptions to appropriate Company personnel.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Revised position descriptions - February 1994.
2. Met with each employee individually - April 1994.
3. Met with all departments to explain positions - June 1994.
4. Met with all employees - July 1994.
5. Redistributed work responsibilities and updated all position descriptions - August 1996.

DISCUSSION:

The Company had developed position descriptions for its employees but had not distributed these at the time of the management audit. Some responsibilities have been expanded as a result of the management audit.

Company management reviewed each job description in February 1994. The descriptions have been discussed individually with field and office personnel. The Company currently has a very detailed and thorough position description for each employee and emphasis is placed on every employee knowing the responsibilities of other employees. The Company has yet to determine how these will be used in evaluating performance.

The President and General Manager believes job descriptions will help employees understand overall Company objectives better. The job descriptions should also assist in work scheduling efforts and result in employees being more productive. The Company acknowledged some employee strengths could be better utilized as a result of this process. Employees should also be more motivated if their job performance will be used as the basis for compensation within the context of the job description.

The Company updated all job descriptions in August 1996 to reflect the current duties of each employee. The MSD staff reviewed each current job description and concludes the Company has addressed the intent of this recommendation.

RECOMMENDATION 36:

Develop performance appraisal forms that provide realistic performance objectives for each employee and perform annual employee appraisals.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Collected data - March 1994.
2. Met with employees to discuss performance appraisals - April 1994.
3. Formalized appraisal process - May 1994.
4. Revised policy manual and presented procedure to Board for approval - June 1994.
5. Added appraisal process to job description - June 1994.
6. Held follow-up meetings with employees - July 1994.
7. Met with each employee to discuss 1998 job performance - February 1999.

DISCUSSION:

A performance appraisal system that provides realistic performance objectives for each employee did not exist during the management audit. The Company also did not evaluate personnel or perform employee appraisals on an annual basis.

Performance appraisals are a valuable tool to the Company and employee. Personnel appraisals can show if an employee needs further training or development. Successful completion of work assignments will increase if there is a corresponding increase in compensation and an employee will put forth greater effort if there is a clear understanding of Company goals. The appraisal process should also be more equitable to all employees.

The performance appraisal forms have been developed. The performance appraisals are done by the President and General Manager after consulting with appropriate supervisory personnel. It is the intent of the President and General Manager to complete the appraisals during October of each year.

The MSD staff reviewed the 1998 performance appraisal of each employee. These were completed in February 1999 and discussed with each employee. The MSD staff concludes the performance appraisal process is very important and that performance appraisals should continue to be completed annually and discussed with employees. The MSD staff concludes the Company has addressed the intent of this recommendation.

Field Operations

RECOMMENDATION 37:

Develop standards for routine tasks and use them to more accurately plan, organize, direct and control maintenance and construction activities.

RECOMMENDATION 38:

Communicate work standards to all field employees and solicit employee input into their development.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Collected work standards data from other utilities - March 1994.
2. Discussed work standards with field employees - July 1994.
3. Performed work standards time study on routine tasks - July 1995.

DISCUSSION:

At the time of the management audit, the MSD staff found two areas where the Company could improve in the management of its existing work volume and work force. The Company had not developed formal standards of work measurement for routine tasks nor was employee input solicited in the development of these standards.

The foreman historically used several informal standards associated with routine tasks to plan and schedule a field employee workday. For example, a three-man crew should need about four hours each to tap a six-inch main. The Company also believed one man should be able to do any of the following: set 25 meters per day; flush and test 25 hydrants per day; test and clean six meters in two hours.

The Company contacted other utilities and construction companies in March 1994 about establishing formal work standards. The information learned from others was discussed with field employees in July 1994. Time studies were performed over the next 12 months to determine an acceptable time standard for each routine task.

The Company formalized estimated completion times for routine tasks into a work standards time study developed in July 1995. Some of the more routine tasks and their estimated completion times are listed in the following table:

Listing of Routine Tasks and Estimated Completion Time

	Routine Task	Estimated Completion Time
•	main taps (3/4 inch through six inch)	one to six hours
•	meter sets	25 meters per day
•	fire hydrant flushing and flow tests	20 to 25 per day
•	meter tests	six meters in two hours
•	truck and equipment maintenance	10 to 15 hours per month
•	line locations	one hour
•	valve exercising	one to two hours
•	turn-ons	30 minutes
•	water samples	2.5 hours twice per month
•	reading master meters	four to six hours
•	tower inspection	four hours
•	vault inspection	30 minutes

Source: Company records

According to the Company, employee input into the development of these standards has resulted in greater overall employee acceptance. The Company acknowledged that reasonable work standards and performance goals have improved fieldwork and enhanced the productivity of field personnel. The MSD staff concludes that the Company should establish new standards if employee productivity improves or if the use of technology increases.

The primary benefit has been to guide employee development in areas where an above average amount of time was necessary to complete a work assignment. The President and General Manager believes that employees have been more productive by knowing what is expected of them each day and this can be measured objectively. Employees should be better able to compare the day's accomplishments against an established set of work standards.

The Company stated that these standards are used in the planning and scheduling of daily fieldwork and in evaluating employee productivity. According to the Company, one field employee was terminated for taking an excessive amount of time to complete routine tasks.

It appears that the Company has tried to quantify estimated completion times for many of the routine tasks that field personnel perform and that this information is used to schedule daily work activities. The MSD staff concludes that the Company has addressed the intent of these recommendations.

RECOMMENDATION 39:

Consider authorizing field personnel to take payments from customers in the field when service is about to be turned off.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Gathered field payment collection data from other utilities - May 1994.
2. Authorized field employees to collect payments prior to disconnection - April 1995.

DISCUSSION:

At the time of the management audit, the Company did not authorize field personnel to take customer payments prior to service disconnection. The MSD staff concluded that it was appropriate for personnel to collect payments in the field prior to disconnection in order to prevent a potential return trip to the field to reestablish service.

The Company contacted other area utilities in March 1994 about collecting customer payments in the field prior to service disconnection. The information learned from others was discussed with field and office employees in April 1995 and incorporated into the Company's field collection policy.

The current policy is to collect payments in the field from a customer prior to an actual service disconnection. The Company's disconnect/reconnect process begins with a computer-generated list of delinquent accounts scheduled for turn off each Thursday. The Company stated that approximately 50 turn-offs are scheduled to be worked each week.

The names are entered manually on a collections for turn-off list. According to the policy, field personnel work the list and knock on the customer's door to collect the past due amount. The serviceman will knock on the customer's door to collect payment prior to service termination. Service will remain uninterrupted if the customer pays at this time. A customer can pay by check or cash without an additional late charge or trip charge.

If a payment cannot be collected, service is disconnected and a notice is left at the premises explaining the reasons for disconnection and the amount owed (including reconnection charges). If the customer wants to be reconnected, the customer must either pay the past due balance and turn-on charge in full or make a payment arrangement with the office. The turn-on charge is $5 if service is restored before 3 p.m. or $10 if service is restored after 3 p.m. Service can be restored until 9 p.m. each business day or at the beginning of the next business day.

The President and General Manager stated that the new policy has also enhanced public relations between the Company and some of its delinquent customers. The MSD staff is encouraged that the Company has authorized field personnel to collect past due amounts prior to service disconnection. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 40:

<u>Place greater emphasis on safety issues including formalizing safety training for all field personnel.</u>

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Hired contractor to perform safety audit - April 1994.
2. Scheduled monthly safety meetings with field employees - January 1997.
3. Addressed insurance carrier risk management concerns - August 1998.

DISCUSSION:

The Company did not appear to have a comprehensive safety program in place at the time of the management audit. The MSD staff concluded that the Company needed to place greater emphasis on safety issues including a safety-training program for all field personnel.

The Company recognizes the importance of an effective safety training program for all employees. The President and General Manager stated that safety training is an ongoing area of discussion. The Company is using a combination of in-house and third party resources to enhance the training function.

A private safety supply company performed an in-house inspection of the Company's business office and shop areas in April 1994. The evaluation focused on compliance with federal safety rules and regulations. This analysis resulted in the Company purchasing new safety signs, fire extinguishers, an eye wash station, directional signs and miscellaneous safety equipment (traffic signs, orange cones, barricades and personal safety equipment).

The Company began conducting mandatory monthly safety meetings in January 1997. An agenda is prepared and a meeting notice is posted one week before the scheduled meeting. The Company stated that a record of employee attendance is maintained. Although the primary emphasis is on injury prevention, employees are encouraged to suggest other potential safety topics.

The meetings often involve viewing videotapes on one or more aspects of safety. All field personnel are required to sign a statement verifying their understanding of the main points of each video. The President and General Manager stated that the videos provide actual demonstrations of safety hazards, preventive procedures and proper equipment usage.

The Company's insurance carrier and the PSC staff's Water and Sewer Department perform annual safety inspections. The insurance carrier's most recent evaluation was performed in June 1998. The survey appeared to be comprehensive and disclosed seven areas that the Company needed to address. According to the Company's August 1998 response, all items have been corrected or are in the process of being corrected. The PSC inspection requires the Company to propose written corrective measures to all deficiencies cited within 30 days (see discussion in Recommendation 46).

The Company acknowledged that its safety program has helped minimize costly accidents and injuries and eliminate time-consuming investigations. The safety program has also been valuable in keeping insurance premium increases to a minimum and reducing overall exposure to medical and liability claims. The safety videos have allowed the Company to maintain knowledge on proper equipment usage and national safety standards. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 41:

Ensure that vehicle and equipment logs are completed on a timely basis by all personnel, and that usage is regularly monitored to determine that resources are being appropriately utilized.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Contacted other utilities about vehicle and equipment logging practices - March 1994.

2. Developed vehicle and equipment logging procedures - May 1994.

DISCUSSION:

The Company had poor control over the usage of vehicles and equipment at the time of the management audit. The MSD staff concluded that it was necessary for the Company to strengthen controls over the usage of vehicles and equipment and the documentation associated with that usage.

The Company contacted other utility and construction companies in March 1994 about vehicle and equipment usage policies. The information learned from others was incorporated in May 1994 into the Company's vehicle and equipment usage policy. Written vehicle and equipment logs are completed daily by the vehicle driver or equipment user. The employee records the date, number of total miles driven, destination and purpose. These logs were required as part of the Company's compliance with the stipulation and agreement entered into in Case No. WR-94-211.

The foreman is responsible for reviewing the logs each month. Timely review of these logs is necessary to ensure that field personnel have the proper vehicles and equipment to perform their work in a cost-effective manner. Identifiable usage patterns will also help the foreman schedule routine vehicle and equipment maintenance and repairs. The President and General Manager stated that disciplinary action, including termination, could result if an employee does not complete the logs on a timely basis.

The MSD staff reviewed a sample of vehicle and equipment logs for 1997 and 1998. The President and General Manager's monthly log appears to have more detail and are completed in a more timely manner than the logs prepared by field personnel. The Company acknowledged that the President and General Manager has a higher percentage of non-utility related vehicle and equipment usage and may require further explanation (see discussions in Recommendations 20 and 21).

The MSD staff concludes that vehicle and equipment logs are completed on a timely basis and usage is monitored appropriately. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 42:

Develop and implement a formal vehicle replacement policy that includes elements such as vehicle purchasing justification, procedures for competitive bidding vehicles and vehicle specifications.

STATUS: Complete

MAJOR ACTION TAKEN BY THE COMPANY:

1. Contacted other utilities and contractors about vehicle replacement policy - April 1994.
2. Leased four trucks as part of Case No. WR-97-300 - October 1996.
3. Selected five-year replacement policy for most vehicles - January 1997.

DISCUSSION:

The Company did not have a formal vehicle replacement policy in 1993. The MSD staff concluded it was appropriate to establish replacement criteria (mileage or age of the vehicle) that would allow the Company the opportunity to purchase new vehicles in a cost-effective manner.

The President and General Manager stated that vehicle replacement has historically been timed in conjunction with a filed rate case. The Company acknowledged that cash flow concerns have typically prevented vehicle purchases from being made outside the timing of a rate case.

The Company contacted other utilities and contractors in April 1994 about vehicle replacement policies. The Company learned that vehicles are normally replaced every two to five years. Vehicles replaced every two years experience little to no maintenance work, have valid warranties and higher trade-in values. Vehicles replaced every five years experience routine maintenance costs and average trade-in values.

The Company entered in to a three-year lease agreement in October 1996 as part of Case No. WR-97-300. The monthly lease payments of approximately $2,175 include a bargain purchase price of $1 at the end of the lease period. The lease agreement covers the primary field truck, the meter reader truck, the service truck and the President and General Manager's truck. The Company traded in four trucks that were more than 10 years old and had odometer readings between 80,000 and 140,000 miles.

The President and General Manager stated that a five-year vehicle replacement policy was chosen in January 1997. The Company believes replacement within five years should maximize trade-in value, eliminating most major repair expenses and the replacement of costly drive train components. The only exception is the 10-year replacement schedule on the one-ton dump trunk (low mileage and less usage).

The Company has taken several other steps to address this concern. Vehicle logs are completed by field personnel on a timely basis (see discussion in Recommendation 41) and vehicle maintenance and repair records have been automated (see discussion in Recommendation 10). The Company also performs a documented needs analysis on all major purchases, including vehicles (see discussion in Recommendation 8). Competitive bids from at least two vendors are sought on vehicle purchases (see discussion in Recommendation 7).

The MSD staff concludes that there are appropriate controls in the vehicle replacement process. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 43:

Evaluate the cost/benefits of installing two-way radios in all service vehicles.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Performed internal study on two-way radios - February 1994.
2. Developed inspection and repair logs for two-way radios - April 1994.
3. Replaced five two-way radios - February 1997.

DISCUSSION:

The Company had not properly evaluated the costs and benefits of installing two-way radios in all service vehicles prior to the management audit. The MSD staff concluded that two-way radios are necessary to ensure proper communication between office and field personnel and to increase worker productivity and efficiency.

The Company performed an informal evaluation of its radio technology in February 1994 and determined that two-way radios were appropriate. Each service vehicle had a two-way radio installed at that time but performance and reliability concerns needed to be addressed. However, the Company's cash flow position precluded timely replacement.

Two hand-held radios are used when it is impractical to use a two-way radio (vehicle access) and instant communication is mandatory (traffic control, valve reactivation, on-site surveying). The President and General Manager stated that hand-held radios are incapable of transmitting long distances. For example, some of the Independence service territory is too far from the base to transmit.

The Company also has two base radios. The primary base radio is located at the Company's business office and handles all radio communication during regular working hours. The secondary base radio is located at the car wash and functions as an after-hours communication base. This allows the President and General Manager to handle emergencies and communicate with field personnel after hours.

The Company has been using two different logs since April 1994 to track radio inspections and repairs. The radio inspection log is completed each month to determine that all seven radios are operational. The foreman asks each driver to report any needed repairs. Field personnel typically notify the foreman of any operational problems that need to be addressed on a daily basis. The radio repair log is used to track service work performed on each radio and its costs.

The MSD staff reviewed these logs for 1996 through 1998. It appears that the inspections are being performed on a timely basis and repair costs are properly logged. According to the logs, five radios were replaced in February 1997 at a cost of $560 each. The foreman stated that there have been no problems or repair expenses since the new radios were purchased.

The President and General Manager is investigating the purchase of several two-way radios from a nearby water district. The Company believes that it would cost about $100 to purchase each radio and reset to the proper frequency. These radios would be used as a back up to the current radios.

The Company appears to have an adequate two-way communication system between its office and field personnel. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 44:

Provide field personnel with necessary hand tools and equipment to effectively perform their work.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Discussed hand tool and equipment requirements with field personnel - March 1995.
2. Performed inventory of hand tools and equipment for each service truck - March 1995.
3. Purchased hand tools and equipment for each service truck - June 1995.

4. Performed updated hand tool and equipment inventories - August 1998.

DISCUSSION:

The Company did not provide field personnel with the necessary hand tools and equipment to effectively perform their work in 1993. This resulted in repairs not being performed in a timely manner and unnecessary return trips being made by field personnel to locate hand tools and equipment on other service vehicles.

The Company addressed this concern in March 1995 by discussing hand tool and equipment requirements with field personnel. At the same time, the foreman completed a hand tool and equipment inventory for each service vehicle. This was performed to determine what hand tools and equipment were on hand and needed to be purchased. An inventory list was completed and competitive bids were sent to two contractor supply companies. The inventory for each service truck was purchased in June 1995.

The President and General Manager stated that the foreman typically performs a monthly inventory on each truck to determine what hand tools and equipment are missing, damaged or need to be repaired. The MSD staff reviewed the tool and equipment logs for 1998 and found that the inventories are performed on a quarterly basis.

The Company acknowledged that maintaining proper hand tool and equipment inventories is an ongoing process. Consequently, one of the field personnel has been assigned to perform periodic inventories and keep the Company apprised of hand tool and equipment requirements. The President and General Manager stated that a complete inventory takes about four hours to complete and that a complete restocking of the service vehicles was performed in August 1998.

The MSD staff also reviewed the hand tool and equipment inventories on each service truck by tracing major hand tools and equipment to the inventory listing. Field personnel subsequently accounted for the few missing items that were usually found on another service vehicle. Each truck appears to be stocked with the proper hand tools and equipment associated with the primary responsibilities of that vehicle.

It appears that the Company has aken the proper steps to address control weaknesses in its hand tool and equipment inventories. Field personnel have been able to make repairs in a more timely manner, and eliminate a number of unnecessary return trips to locate missing hand tools and equipment. Field personnel stated that they are also able to perform their work much more efficiently by having the necessary hand tools and equipment on the appropriate service vehicle. The MSD staff concludes that the Company has addressed the intent of the recommendation.

RECOMMENDATION 45:

Purchase the necessary inventory and equipment to complete valve exercising and meter testing programs.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Contacted other utilities about valve exercising and meter testing - March 1994.
2. Purchased beadblaster - December 1994.
3. Purchased electric valve turning wrench - December 1996.
4. Purchased new plastic meters to replace old brass meters - December 1996.

DISCUSSION:

The Company did not maintain the necessary inventory and equipment to complete valve exercising and meter testing on a timely basis in 1993. The MSD staff believed that the Company did not utilize current technology and practices to complete valve exercising and meter testing.

The valve exercising program consists of raising all mainline valve box lids to grade level, operating the valve, determining whether a valve is opened or closed and what geographic area is affected. The Company acknowledged that quick access to a valve during a water break should save money and allow for timely repair. PSC rules require meter testing and changing out each meter once every 10 years.

The Company contacted other area utilities in March 1994 about valve exercising and meter testing. The information learned from others was incorporated into the decision to purchase an electric valve turning wrench and a beadblaster, and to have new plastic meters replace old brass meters.

The President and General Manager stated that three competitive bids were sought on the power wrench. The Company considered the type of power, portability, safety features, weight, horsepower rating and cost. The power wrench requires only one operator and was purchased in December 1996 for approximately $2,700. Manual wrenches required two operators and resulted in more frequent workman's compensation claims.

The foreman acknowledged that the valve exercising program is well behind schedule. The Company plans to dedicate additional field personnel hours in 1999 to bring the valve exercising program current. The foreman estimated that approximately 100 valves were exercised in 1997 and 1998. The Company stated that part of the delay has resulted from valves being black topped by the City of Raytown and by customers regrading their yards.

The President and General Manager stated that the meter testing and replacement program is slightly ahead of schedule. Approximately 800 meters are replaced and retested each year. The Company began purchasing plastic meters in December 1996 to replace 5/8-inch and 3/4-inch meters. According to the Company, it is cheaper to discard the old meter and install a new plastic meter than it is to retest and recalibrate an old meter. The PSC staff's Water and Sewer Department stated that this technology is becoming more acceptable throughout the water industry.

The Company purchased a beadblaster for approximately $800 in December 1994. The beadblaster is primarily used for cleaning larger meters and replaced the five-gallon drums of acid used for cleaning meters. Larger meters (one-inch and above) continue to be pulled, tested and rebuilt. Smaller meters sent back to the manufacturer for warranty work are also cleaned with the beadblaster because of excessive calcium and lime buildup.

It appears that the Company has purchased the necessary equipment to address the valve exercising and meter testing concerns and that neter testing and replacing is slightly ahead of schedule. The Company plans to dedicate additional resources in 1999 to bring the valve exercising schedule current. It is the conclusion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 46:

Correct all deficiencies cited in the 1993 PSC Water Department inspection report.

STATUS: In Progress

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Performed minor work and electrical repairs at two tower sites - August 1993.
2. Solicited competitive bids for tower painting - April 1994.
3. Developed semi-annual tower inspection report - December 1994.
4. Developed monthly valve pit inspection report - January 1996.

DISCUSSION:

The PSC staff's Water and Sewer Department cited several deficiencies in its June 1993 inspection report. The Company acknowledged that substantive corrective measures have been taken on all but one of the items cited in the report.

The President and General Manager stated that field personnel and an electrician performed minor repairs in July 1993. The repairs, which cost approximately $450 in labor and materials, involved miscellaneous electrical repairs and work on the overflow lines at two of the Company's three tower sites.

The inspection also cited the lack of progress being made with hydrant testing, valve locating, and valve exercising. The Company stated that hydrant testing is currently near completion while valve testing is somewhat behind schedule (see discussion in Recommendation 45). The Company plans to seek an additional field person to assist in valve testing and other duties in its 1999 informal rate case.

The major concern that has not been corrected is the painting of the Gregory Tower (Gregory). This has been cited in each of the six annual inspections since 1993. The Company received competitive bids from three vendors in April 1994 ranging from $28,850 to $40,000.

According to an outside engineer's report, timely painting is recommended to avoid any sandblasting. The Company's in-house inspection disclosed that the legs, riser and bowl of Gregory are nearing a condition where painting alone may not be sufficient. The Company acknowledged that sandblasting might be required because of the 11% lead content in the existing paint. If sandblasting is necessary, it could substantially increase the initial total estimated cost.

The President and General Manager stated that cash flow constraints have precluded the Company from painting Gregory. Similar to the valve testing, the Company anticipates that the painting and other costs associated with Gregory will also be included in the Company's next informal rate case.

The Company expanded the scope of the recommendation by developing a semi-annual tower inspection report in December 1994. This report contains information about each tower's security, accessories, utilities, paint condition and an overall grounds check. The MSD staff reviewed a three-year sample of tower inspection reports. The in-house inspections repeatedly identified the Gregory painting concern as a top priority.

The Company also developed a monthly valve pit inspection report in January 1996. The report contains information about each of the eight valve pits, including power, sump pump, security, cathodic protection and heat. The MSD staff reviewed the 1998 inspection reports and found that most of the problems were relatively minor and corrected the following month.

The MSD staff is encouraged that the Company has addressed nearly all of the concerns in the 1993 PSC inspection report. However, since the most significant deficiency (painting Gregory) has not been corrected, the MSD staff concludes that this recommendation is "in progress" as of February 22, 1999.

Construction and Maintenance Control Processes

RECOMMENDATION 47:

<u>Determine when pipe replacement is more cost-effective than repair and develop a policy to guide field personnel accordingly.</u>

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Established policy to guide pipe repairs and pipe replacement - June 1996.

2. Used policy to guide replacement of old mains and cast iron pipe - July 1998.

DISCUSSION:

At the time of the management audit, the Company did not have a formal pipe replacement and repair policy. The MSD staff observed Company personnel were making repeated trips to fix nearby sections of a galvanized main. The MSD staff concluded that it is often more cost-effective to replace sections of pipe than to make repeated leak repairs.

The Company stated that informal discussions between the foreman and field personnel typically occur at the job site to determine if a section of pipe should be replaced or repaired. The Company has historically made repairing service breaks a top priority, followed by slow leaks and service line leaks. The President and General Manager acknowledged that it might be more economical in the long term to replace mains rather than repair mains.

A formal set of criteria to guide pipe repair and replacement decisions was established in June 1996. The Company uses a three-page form to document repair and replacement criteria. The first page includes a description of the project and location, anticipated construction dates and investment work order number. The second page includes the frequency of repairs, date of main installation, number of customers served, existing utilities in the area, street or green areas to be worked in and overall traffic congestion. The third page includes the engineering firm or in-house specification drawings, DNR approval, equipment and personnel, cash flow and financing, use of contractor or in-house crews for construction and Board approval.

The Company has not quantified at least three aspects of the pipe repair versus pipe replacement policy. First, there is no formal replacement criteria for a given number of or frequency of repairs. The policy states that those mains sustaining 'many' repairs and meeting other criteria would be replaced. Second, there is no formal replacement criteria for the age of pip~ or mains. The policy states that the installation date is a high priority and that older mains have more corrosion, requiring more repairs than new mains. Third, there is no formal replacement criteria for the number of customers. The policy states that a larger number of customers drawing off a given main results in less volume and lower pressure to customers.

The Company develops specification requirements after all criteria are investigated. Smaller project drawings are performed in-house while engineering companies may be consulted on larger projects. All main replacement and new main construction require prior approval from DNR. The Company stated that chlorinating and testing of a new main project is required before it can be put in service.

The President and General Manager stated that main replacement should occur if the project has a high priority, an adequate amount of available manpower and equipment, and if the project can be financed externally. Projects performed by third parties require the use of competitive bids (see discussion in Recommendation 7). The Company stated that Board approval is required on all main replacement projects.

The Company has replaced pipe more frequently in recent years. For example, the Company replaced about 110 feet of deteriorating six-inch cast iron pipe with new six-inch ductile iron pipe in 1994. The new policy was used in July 1998 to guide the replacement of almost 500 feet of bad eight-inch mains approximately 23 feet deep with new eight-inch mains, and the replacement of nearly 250 feet of old two-inch mains.

The MSD staff reviewed the documentation associated with the repair or replacement decisions that were made since the policy was adopted. The narrative descriptions generally provide an adequate amount of information and decisions to repair or replace appear to have been made on a consistent basis.

Although specific quantifiable guidelines do not exist for some of the more critical pipe replacement criteria, the MSD staff is encouraged by the progress that the Company has made to document pipe repair and replacement decisions. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

RECOMMENDATION 48:

Document progress observed regarding work performed by outside contractors and utilize documentation for project scheduling and future contractor use.

STATUS: Complete

MAJOR ACTIONS TAKEN BY THE COMPANY:

1. Contacted other utilities about documenting contractor performance - March 1994.
2. Developed criteria for monitoring contractor performance - September 1994.
3. Formalized interim and final contractor inspection reports - March 1995.

DISCUSSION:

At the time of the management audit, the Company performed minimal documentation on the work performed by outside contractors. The MSD staff concluded that this prevented the Company from ensuring all work was being done according to the terms of the contract. The President and General Manager acknowledged that the Company's informal policy of observing outside contractors needed enhancement.

The Company contacted other utilities, general contractors and engineering firms in March 1994 about documenting the work of outside contractors. Although none of these businesses had a formalized policy, the information was discussed with the foreman and field personnel. Employees also expressed concerns about contractor safety conditions, the amount of work performed in a day, the work being done properly and with the right materials, the time to complete the job and proper site clean up.

Outside contractors are normally selected through a competitive bidding process (see discussion in Recommendation 7). However, the President and General Manager stated that outside contractors have not been used since 1997 because of the Company's cash constraints. The Company does not plan to use outside contractors during 1999.

The Company developed several criteria to monitor and evaluate contractor performance in September 1994. The criteria includes the project description, job location, inspection date, name of inspector, project workmanship, progress deadlines, safety practices, specification requirements, use of qualified personnel, proper equipment and the Company's overall evaluation.

The Company began using two contractor inspection forms in March 1995. The contractor inspection report is an interim status report used by Company personnel visiting the work location prior to project completion. The final contractor performance review is used after the project is finished. The MSD staff reviewed the contractor inspection reports and final contractor performance reviews from 1995 through 1997. The reports appear to be completed on a timely basis and provide an adequate amount of information with which to evaluate contractor usage.

The President and General Manager stated that properly documented inspections would ensure that the Company is being billed appropriately for work performed within the terms of each contract and that contract specifications are being met. For example, one of the final inspections requested the contractor make corrections to fence work performed in December 1996. Employees can also observe the location of mains, fittings and valves, as well as the actual assembly of the new installation.

The Company stated that Larkin Engineering did all of the monitoring for the $3 million tower project, which included scheduling, inspections and specifications. The Trustee for Boatmen's Bank required documented inspections by a third party prior to each of the draws requested by the tower contractor.

The Company may extend record keeping responsibilities to include scheduling future jobs, job time studies, and rating and evaluating contractors. This information will be submitted to the Board for periodic review. Additional information on contractor performance should help the Company make appropriate contractor decisions in the future. The MSD staff is encouraged by the progress made in monitoring the work performea by outside contractors. It is the opinion of the MSD staff that the Company has addressed the intent of the recommendation.

APPENDIX

The management audit report listed 48 recommendations which appear in their order within the Strategic Planning, Financial Management, and Operations and Maintenance chapters. The MSD staff concluded that 41 recommendations are "complete" and seve.. are "in progress."

Rec. #	Recommendation	Status
1	CHAPTER II: STRATEGIC PLANNING Define the Company's mission statement and establish policies, procedures and practices necessary for developing and implementing an effective strategic planning process.	Complete
2	Develop, implement, and regularly revise a formal, documented rolling three-to-five-year long-range plan. The plan should detail strategic goals, construction projects, marketing and public relations activities, technological changes (e.g., incorporating the use of plastic pipe in the system), means for financing future projects under consideration, and anticipated completion dates.	**In Progress**
3	Eliminate the Assistant Manager position.	Complete
4	Develop and implement recruiting and hiring procedures which are designed to select applicants having the highest level of knowledge, skill, and experience necessary to improve the operational performance of the Company.	Complete
5	Develop a formal succession plan for key management positions.	Complete
6	Develop and implement a plan for training employees in the use of the computer system and for regularly assessing data processing requirements for future software and hardware upgrades.	Complete
7	Develop and implement formal competitive bidding procedures for all major equipment purchases and contracts.	Complete
8	Develop and implement a formal policy for performing documented needs analysis prior to making major equipment purchases.	Complete

9	Continue to negotiate with the City of Independence to provide wholesale water to the Company for its Independence customers.	Complete
10	Determine and implement the most cost-effective way to automate the remaining field-related data.	Complete
11	Install the unused PC in the president and general manager's office and take action to implement the full capabilities of this technology to achieve operational efficiencies.	Complete
12	Provide all Board members with a written agenda and summarized financial information prior to all Board meetings.	Complete
13	Require the Board of Directors to actively participate in all major decision-making processes.	Complete
14	Formalize the schedule for Board of Directors' meetings.	Complete
15	Continue to actively seek and elect an additional outside Board member.	Complete
16	Formalize position descriptions for the Board of Directors.	Complete
17	CHAPTER III: FINANCIAL MANAGEMENT Automate the general ledger during 1993.	Complete
18	Develop a formal capital additions budget and a formal operating budget.	**In Progress**
19	Determine the most cost-effective checking account services, and implement their usage.	Complete
20	Require reimbursement to the Company on a monthly basis for personal usage of Company business office labor and equipment.	Complete
21	Implement cost accounting procedures and practices which require charging non-regulated businesses for the use of Company resources.	Complete
22	Institute a formal policy for review of gasoline credit card purchases.	Complete
23	Incorporate pertinent accounting data into the work order system.	Complete

24	CHAPTER IV: OPERATIONS & MAINTENANCE Read the City of Kansas City's water meter monthly to verify the accuracy of the bill received.	Complete
25	Perform a study to determine the efficiency of the existing meter reading routes and adjust the routes as determined appropriate.	**In Progress**
26	Investigate utilization of a hand-held meter reading device, with appropriate software to link the device with the existing computer billing system.	Complete
27	Develop a policy to periodically check inside remote meters to determine they are accurately recording water usage.	**In Progress**
28	Ensure that meter books are placed in the vault or a similar fire proof location when not in use.	**In Progress**
29	Develop, formalize and utilize consistent criteria for estimating customer water usage.	Complete
30	Develop customer deposit criteria consistent with Commission rules that is not based upon customer address or neighborhood.	Complete
31	Refund customer deposits with interest on a timely basis according to the Company's tariff.	Complete
32	Determine the propriety of current charges for insufficient funds check handling ($13) and after-hours service turn-ons ($10), and file appropriate market rates to recoup costs in the Company's next rate filing.	**In Progress**
33	Review the need for the third cash drawer and if found necessary, implement effective control procedures to ensure the security of these funds.	Complete
34	Develop and implement a time reporting sheet to be completed by all business office and management personnel.	Complete
35	Distribute position descriptions to appropriate personnel.	Complete
36	Develop performance appraisal forms that provide realistic performance objectives for each employee and perform annual employee appraisals.	Complete
37	Develop standards for routine tasks and use them to more accurately to plan, organize, direct and control maintenance and construction activities.	Complete
38	Communicate work standards to all field employees and solicit employee input into their development.	Complete

39	Consider authorizing field personnel to take payments from customers in the field when service is about to be turned off.	Complete
40	Place greater emphasis on safety issues, including formalizing safety training for all field personnel.	Complete
41	Ensure that vehicle and equipment logs are completed on a timely basis by all personnel, and that usage is regularly monitored to determine that resources are being appropriately utilized.	Complete
42	Develop and implement a formal vehicle replacement policy that includes elements such as vehicle purchasing justification, procedures for competitively bidding vehicles and vehicle specifications.	Complete
43	Evaluate the cost/benefits of installing two-way radios in all service vehicles.	Complete
44	Provide field personnel with necessary hand tools and equipment to effectively perform their work.	Complete
45	Purchase the necessary inventory and equipment to complete valve exercising and meter testing programs.	Complete
46	Correct all deficiencies cited in the 1993 PSC Water Department inspection report.	**In Progress**
47	Determine when pipe replacement is more cost effective than repair and develop a policy to guide field personnel accordingly.	Complete
48	Document progress observed regarding work performed by outside contractors and utilize documentation for project scheduling and future contractor use.	Complete

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

FILED

FEB 25 1999

Missouri Public Service Commission

In the Matter of a Management Audit of)
the Raytown Water Company.) Case No. WO-93-194

MOTION TO CLOSE DOCKET

COMES NOW the Staff of the Missouri Public Service Commission (Staff) and for its motion states:

1. On March 1, 1994, the Staff filed a report entitled "Management Audit of the Raytown Water Company." The Raytown Water Company's "Implementation Plan" was filed on April 22, 1994.

2. Concurrent with the filing of this motion, the Staff is filing a report entitled "Implementation Review of Raytown Water Company." The implementation review report explains that Raytown Water Company has completed all anticipated action on 41 of the 48 recommendations presented in the Staff's management audit report. The implementation review report also explains that Raytown Water Company plans to address the seven remaining recommendations in 1999.

3. The Staff anticipates no further activity in this docket.

WHEREFORE, the Staff requests the Commission to close the docket in Case No. WO-93-194, *In the Matter of a Management Audit of the Raytown Water Company.*

48 .

Respectfully submitted,

Dana K. Joyce
General Counsel

William K. Haas
Senior Counsel
Missouri Bar No. 28701

Attorney for the Staff of the
Missouri Public Service Commission
P. O. Box 360
Jefferson City, MO 65102
(573) 751-7510 (Telephone)
(573) 751-9285 (Fax)

Certificate of Service

I hereby certify that copies of the foregoing have been mailed or hand-delivered to all counsel of record as shown on the attached service list this 25th day of February, 1999.

Service List for Case No. WO-93-194
Revised: February 25, 1999

Neal Clevenger
Raytown Water Company
9820 E. 63rd Street
Raytown, MO 64133

Office of the Public Counsel
P.O. Box 7800
Jefferson City, MO 65102