COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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| THE APPLICATION OF MALLARD POINT DISPOSAL SYSTEMS, INC., FOR AN ORDER PURSUANT TO CHAPTER 278 OF THE KENTUCKY REVISED STATUTES FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AND FOR AN ORDER APPROVING UNIFORM RATES FOR A WASTE WATER TREATMENT SYSTEM TO SERVE THE RESIDENTS OF MALLARD POINT SUBDIVISION, SCOTT COUNTY, KENTUCKY | CASE NO. 9517 |

O R D E R

On February 25, 1986, Mallard Point Disposal Systems, Inc., ("Mallard Point") filed its application for a certificate of public convenience and necessity to construct a sewage system, approval of the proposed financing for the project and the establishment of initial rates therefor. The Commission granted the requested certificate and approved the proposed financing by its Order entered May 14, 1986. This Order addresses the rates proposed by Mallard Point in its application.

COMMENTARY

Mallard Point is a sub-chapter S corporation formed for the purpose of providing sewage treatment service to the residents of the Mallard Point Subdivision ("Subdivision"), which is located in Scott County approximately 7.5 miles north of Georgetown. The Subdivision is being developed by Maric Development Corporation ("Maric") which is wholly owned by Mark Smith and Eric Smith ("Shareholders"). The Shareholders are also the sole owners of Mallard Point.

An informal conference with the Commission staff was held on March 14, 1986, to discuss various filing deficiencies in Mallard Point's application.

A hearing was held in the Commission's offices in Frankfort on June 26, 1986. There were no intervenors present and no protests were entered.

After development of Phase I of the Subdivision Mallard Point will serve approximately 154 single family residential lots and 6 to 8 commercial units. For purposes of this application, Mallard Point assumed full development of Phase I and service for 162 customers. Mallard Point calculated that a rate of $27.57 per month would produce annual revenues of $53,603. In this Order the Commission has determined Mallard Point's revenue requirement to be $43,123 and has established an initial rate of $22.18 per month.

## TEST PERIOD

Inasmuch as Mallard Point is just being started, the background for an historical test year is not available. Mallard Point offered estimates of its costs of operation to render service to 162 customers in Phase I of the Subdivision.

## CAPITALIZATION

Mallard Point estimated $228,976 as the cost of construction of the facilities necessary to serve Phase I, $141,000 for sewer lines, $80,476 for the purchase of the treatment plant and $7,500 for the installation of the plant.

The sewer lines were constructed by Maric in the development of the Subdivision. The Shareholders, as individuals, purchased the lines from Maric and exchanged them for 500 shares of stock in Mallard Point, valued at $140,000 in this application.

The treatment plant purchase price of $80,476 consisted of $30,000 cash and a lease/purchase obligation of $50,476 to acquire the plant over a 48-month period. This amount, however, excluded several cost components of the plant: $1,500 tax on the initial payment of $30,000; $3,384 in taxes on the monthly payments required under the lease/purchase agreement;[1] the 10 percent lump-sum payment of $5,048 required at the end of the 48-month lease period and the 5 percent tax of $252 on that payment. The total capital costs incurred relative to the acquisition of the treatment plant amount to $90,660.[2]

After estimated installation costs of $7,500, $98,160 should be recorded as the cost of the finished, installed treatment plant. After these modifications Mallard Point's initial balance sheet, as related to its utility plant accounts, should appear as follows:

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| Collection Plant | $140,000 |
| Treatment and Disposal Plant | 98,160 |
| Total Utility Plant | $238,160 |
| | |
| Stockholders' Equity | $179,000 |
| Capital Lease | 59,160 |
| Total Equity and Liabilities | $238,160 |

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1 Monthly lease payment ($1,410) X Tax Rate (.05) = $70.50 Monthly Tax ($70.50) X 48 Months = $3,384.

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|---|---|---|
| Total Initial Payment | | $31,500 |
| Asset Value of Capital Lease | | |
| Original Lease | $50,476 | |
| Lump Sum | 5,048 | |
| Taxes | 3,636 | 59,160 |
| Total Cost of Plant | | $90,660 |

The sewer lines should be recorded at $140,000, the value of the stock issued to acquire the lines, rather than the estimated construction cost of $141,000, as Mallard Point's acquisition thereof represents the sewer lines' initial dedication to utility service.

## REVENUE REQUIREMENTS

Mallard Point projected its annual operating expenses to be $42,626 and calculated a desired profit margin of $10,977 in determining its required revenue of $53,603.[3] The Commission has reviewed the various components of Mallard Point's projected operating expenses and desired profit margin and has made adjustments consistent with the evidence of record and the Commission's established rate-making practices. The Commission's adjustments to Mallard Point's projections are enumerated herein. Any projected expense levels not addressed herein have been accepted by the Commission as proposed by Mallard Point.[4]

### Amortization Expense

Mallard Point included $643 for the amortization of capitalized expenses in its proposed operating expenses. This

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3 Mallard Point's first revised estimated annual cost of operation.

4 At the hearing Mallard Point was directed to file supporting documentation for several of its estimated expenses. In response Mallard Point filed a second revised estimated annual cost of operation in which it increased its estimated operating expenses by $2,631. Absent an additional hearing the Commission cannot accept these changes for rate-making purposes. However, the additional documentation provided by Mallard Point's consulting engineers has been considered as further support for the amounts included in Mallard Point's first revised estimate of operating costs.

amount reflected the proposed 5-year write-off of $3,213 which consisted of $1,650 for the land acquired for the treatment plant site, $1,500 sales tax on the $30,000 down payment for the treatment plant and $63 for a corporate book and seal. Mallard Point did not request recovery of $7,500 for the cost of installing the sewage treatment plant at the plant site.

The Commission is of the opinion that Mallard Point's proposed amortization is not acceptable for rate-making purposes and has made the following adjustments:

For accounting and rate-making purposes land is not considered a depreciable asset. The value of land does not decrease due to age or obsolescence; therefore it is inappropriate to amortize the cost of land. The sales tax of $1,500 on the down payment for the treatment plant is a component of the cost of acquiring and installing the plant. Accordingly, the $1,500 should be capitalized and depreciated over the estimated useful life of the treatment plant. This will be addressed further in another section of this Order. The cost of $63 for a corporate book and seal is properly capitalized as a cost of organization. The Commission is of the opinion that a 5-year write-off of this cost is reasonable and will allow $13 as Mallard Point's amortization expense for rate-making purposes.

State Taxes

Mallard Point included $846 in its projected operating expenses to reflect the $70.50 per month tax component of its monthly lease/purchase payment. This tax, like the tax on the initial $30,000 payment for the treatment plant, is a cost of the acquisition of the plant which should be capitalized and recovered through depreciation charges over the life of the asset rather than reported as an annual operating expense. Therefore, Mallard Point's proposed expense for state taxes has not been allowed herein, but has been included in its annual depreciation expense.

Depreciation Expense

Mallard Point included $7,792 for depreciation expense in its projected operating costs. Using $80,476 as the cost of the treatment plant, Mallard Point calculated its annual depreciation expense to be $6,494 and then increased this amount by 20 percent to allow for anticipated inflation that is expected to occur prior to the replacement of its assets. As stated previously in this Order, Mallard Point has understated the capital cost of its treatment plant by $17,684.[5] Using the total installed cost for the treatment plant of $98,160 and the same allocation of costs and projected service lives as proposed by Mallard Point, the Commission has calculated an annual depreciation expense of $7,378.

The Commission has not allowed the 20 percent inflation factor proposed by Mallard Point. For rate-making and accounting purposes, the purpose of recording depreciation expense is to recover, over the life of an asset, the cost of acquiring and preparing that asset for service. While the creation of a reserve fund for the purpose of funding future replacement of assets is desirable, such a fund should come from depreciation expense based

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5 $98,160 - $80,476 = $17,684

upon the original costs of the assets. Mallard Point's methodology would result in two untenable practices: the recovery of funds from ratepayers before the actual occurrence of costs and the creation of an accumulated reserve for depreciation greater than the original cost of the assets for which the depreciation is being taken.

Mallard Point did not request recovery of depreciation charges for the $140,000 cost of its sewer lines. As stated previously, the Shareholders, as individuals, purchased the lines from Maric and then gave the lines to Mallard Point in exchange for 500 shares of stock valued by them at $140,000. The Commission is in agreement with Mallard Point's decision to forego any rate recovery of depreciation on its sewer lines because, in substance, the above-described transactions result in the sewer lines being treated as contributed property for rate-making purposes. To date, the Shareholders have made an investment of $140,000 for sewer lines which they intend to recover from the sale of lots in the Subdivision. Therefore, there is no need for recovery of these costs through the rates charged by Mallard Point.

For accounting purposes, Mallard Point shows assets valued at $140,000 acquired through the issuance of stock. Accordingly, Mallard Point should reflect, on its books of account, depreciation expense for these assets.

In summary, Mallard Point should record depreciation expense in its books of account for all assets used and useful in rendering utility service to its customers. For rate-making purposes, the Commission will allow $7,378, the annual depreciation expense on Mallard Point's treatment plant, to be recovered through rates.

<u>Interest Expense</u>

Mallard Point included $4,301 in interest expense in its estimated annual cost of operation. This amount represents the average yearly interest expense that will be paid during the 48 months of the lease/purchase agreement through which Mallard Point is acquiring its treatment plant.

While this amount does reflect the average interest expense Mallard Point will incur during the 4-year term of the lease/purchase agreement, the Commission is of the opinion that this is an excessive amount to recover through rates on an annual basis because to do so would violate the principle of matching revenues and expenses, as that principle applies to the rate-making process. Per Mallard Point's depreciation schedule, the estimated useful life for the tanks and major structural components of its treatment plant is 20 years. The composite life of all components of the treatment plant, including blowers, motors, pumps, etc., is approximately 13 years. In short, Mallard Point's sewage treatment plant is a long-lived asset which will be providing service and generating revenues far longer than the 48-month term of the lease/purchase agreement.

Typically, when utilities acquire assets through borrowing or some other type of financing arrangement the repayment period is often 20 to 40 years with some attempt to match the repayment period with the useful, revenue-generating lives of the assets.

For the same reason, some small companies have acquired assets through lease/purchase agreements ranging from 10 to 20 years in length. The Commission is of the opinion that some recognition should be given to this concept for rate-making purposes as it relates to the useful, revenue-generating life of Mallard Point's treatment plant. The Commission has chosen a 10-year period over which to amortize Mallard Point's total interest expense for rate-making purposes. This period of time recognizes the matching concept while affording Mallard Point some degree of protection in the event it has underestimated the service lives of the various components of its treatment plant. Therefore, the annual interest expense allowed herein for rate-making purposes is $1,720.

Reasonable Profit Margin

Mallard Point proposed a profit margin of $10,977 based on a return of 13.64 percent on the projected capital investment of $80,476 in its treatment plant. Eric Smith, Vice-President for Mallard Point, explained that this rate of return was recommended by the Commission staff at the informal conference of March 14, 1986. The Commission has determined that the staff, at the informal conference, indicated that a return on investment was a possible alternative to the .88 operating ratio originally proposed by Mallard Point. However, it appears there was a misunderstanding concerning any specific rate of return recommendation by the staff. At the conference reference was made to 1.1364 as the reciprocal of .88 for purposes of calculating the operating ratio and apparently Mr. Smith misinterpreted the reference and applied .1364 or 13.64 percent as a rate of return on investment.

The Commission is of the opinion that the .88 operating ratio is preferable to a return on investment for a relatively small, private company, such as Mallard Point, for determining a reasonable profit margin. The evaluation of capitalization ratios and costs of capital for small, privately-owned utilities is a tenuous process and the Commission finds the determination of an appropriate rate of return undesirable in this instance.

The .88 operating ratio, as the name implies, is applicable to the operating expenses of a utility. For rate-making purposes, the Commission does not include interest expense as an operating expense but does not provide a dollar-for-dollar recovery of interest expense under the category of other deductions. Therefore, based on an operating ratio of .88 and the other adjustments described herein, the Commission has determined Mallard Point's revenue requirement to be $43,123 which includes a profit margin of $4,968. Mallard Point's pro forma operating statement, after adjustments, appears as follows:

| | Utility Proposed | Commission Adjustments | Commission Adjusted |
|---|---|---|---|
| Operating Revenues | $53,603 | $<10,480> | $ 43,123 |
| Operating Expenses | 38,325 | < 1,890> | 36,435 |
| Operating Income | $15,278 | $< 8,590> | $ 6,688 |
| Other Deductions | 4,301 | < 2,581> | 1,720 |
| Net Income | $10,977 | $< 6,009> | $ 4,968 |

## SUMMARY

The Commission, after consideration of the evidence of record and being advised, is of the opinion and finds that:

1. The rates proposed by Mallard Point would produce revenues in excess of the revenues found reasonable herein and should be denied pursuant to KRS 278.030.

2. The rates in Appendix A are fair, just and reasonable for Mallard Point and with full development of Phase I of the Subdivision, as projected by Mallard Point, should produce annual operating revenues of $43,123.

3. Until such time as Phase I of the Subdivision is fully developed, the Shareholders may be required to absorb much of Mallard Point's operating cost and, in effect, subsidize the operation of the sewage treatment facility.

4. In the event the development of the Subdivision does not occur as Mallard Point anticipates, it is the Shareholders and not the customers of Mallard Point that will be at risk for any excess capacity and related fixed costs associated with the sewage treatment facility.

IT IS THEREFORE ORDERED THAT:

1. The rates in Appendix A be and they hereby are approved for service rendered by Mallard Point on and after the date of this Order.

2. The rates proposed by Mallard Point be and they hereby are denied.

3. Within 30 days of the date of this Order Mallard Point shall file with the Commission its tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 22nd day of September, 1986.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 9517 DATED 9/22/86

The following rates and charges are prescribed for the customers in the area served by Mallard Point Disposal System, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the effective date of this Order.

Monthly

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| All Customers | $22.18 |