

Preliminary Plant Estimate—

McKownville Water Revival Is Pegged at \$650,000

By STEPHEN GOLDSTEIN
Gazette Reporter

GUILDERLAND — Restoring the McKownville water treatment plant to service would cost at least \$650,000, based on construction costs of \$465,000 and other expenses involved.

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If this year's budget were to start paying for the project, the water tax for a McKownville home now assessed at \$4,000 would be \$147.84 rather than the current \$82.48, according to estimates.

Some McKownville residents have said they want McKownville's water supply to be ready as a backup water source.

They also want to protect the water supply from further pollution that might be caused by the construction of the Crossgates Mall or the widening of Western Avenue.

Also on their minds is incorporating McKownville as a village.

The McKownville Water District now buys its water from the adjacent Westmere Water District because the Albany County Health Department ruled McKownville's water is not fit for human consumption. The county department also is opposed to resurrecting the McKownville water plant.

"These are preliminary figures, not a formal engineering study," said Dennis L. Tyson, the Town of Guilderland's superintendent of water and wastewater management.

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McKownville Water District residents also would pay for any

engineering study, Tyson noted.

Most of the figures come from the U.S. Environmental Protection Agency's report of August 1979, "Volume 3, Cost Curves Applicable to 2,500 gpd (gallons per day) to 1 mgd (million gallons per day) Treatment Plants."

Tyson added in other expenses based on his experience with water plant construction. He also figured in inflationary effects on EPA's cost figures, which are based on 1978 dollars.

The total reflects the estimated cost of capital construction, initial operation and maintenance needs, necessary changes in existing piping and

new piping, a contractor's services, engineering and design, legal fees and administration and interest during construction prior to permanent financing.

"If anything, I feel these figures are low," Tyson said yesterday, "because there are things I left out intentionally."

For example, his figures "assume there's sufficient quality and quantity of water" for McKownville's needs and "assume the Albany County Health Department would approve the plans."

Yet testimony at the Crossgates Mall environmental hearing indicated the "safe yield" of the McKownville Reservoir has

been cut to less than 100,000 from more than 200,000 gallons per day in 1965 without the "upper reservoir," or Harrington's Pond.

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Tyson said his figures also assume the salvage value of the existing equipment equals the

cost of removing it. "I didn't allow credit for the existing structure, and major refurbishing of the existing building is assumed."

The figures also assume the "Village of McKownville" would need 350,000 gallons of water daily.

Cost Breakdown

Details of the cost estimates for restoring McKownville's water treatment plant follow. Dennis L. Tyson, superintendent of the Town of Guilderland Department of Water and Wastewater Management, provided the figures, based on U.S. Environmental Protection Agency estimates and his experience with water plant construction.

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Because of potential water quality problems caused by

sludge at the McKownville plant, Tyson said, hauling it to the Albany County Sewer District or somewhere else would require a truck and pumps to move it from the water plant into the truck.

These construction costs total \$398,150. Tyson added 8 percent to arrive at a 1979 cost of \$430,002 and another 8 percent to get a 1980 cost estimate of \$464,402.

Annual operating and maintenance costs would total \$82,312.65, Tyson calculated, adding 5 percent inflation factors for the cost difference between 1978 and 1980.

He also figured 4 cents per kilowatt-hour for electricity, rather than the 3 cents EPA

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Because of potential water quality problems caused by nearby highways and traffic, Tyson figured in "package granular activated carbon columns," which the EPA says would have cost \$48,948 two years ago.

To remove taste and odor from the drinking water, add a potassium permanganate feed system at \$7,360.

A water plant also needs a polymer feed system at \$19,000 to increase filtering ability.

A system for gas chlorination of the water disinfects the final sludge product; it would have cost \$4,310 in 1978.

A "raw (untreated) water" pumping station with a capacity of 350 gallons per

sludge at the McKownville plant, Tyson said, hauling it to the Albany County Sewer District or somewhere else would require a truck and pumps to move it from the water plant into the truck.

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He also figured 4 cents per kilowatt-hour for electricity, rather than the 3 cents EPA used in its figures, and 90 cents per gallon for diesel fuel rather than EPA's figure of 45 cents.

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To the total construction cost of \$464,402, Tyson added \$15,000 for a standby power supply and \$20,000 for miscellaneous costs and new pipes. That brings the total cost to \$499,402.

Add \$50,000 for a contractor's overhead and profit, \$55,000 for engineering and design fees, \$30,000 for legal fees and administration and \$12,000 for interest during construction to get the final total of \$646,402.