

## **Buying 2 Vactors Justification**

**Prepared by Ed Donahue, Utility Supervisor (December 2018)**

### **Justification for having 2 new units in the Wastewater fleet.**

Buying 2 trucks would give us the ability to have one truck solely dedicated to cleaning sewer lines 5 days a week. The other truck would be utilized for lift station and treatment plant issues as well as cleaning sewer lines. We desperately need to accelerate our cleaning efforts to eliminate backups, root, grit, and odor issues. The fleet we have now is outdated and undependable and the majority of the time we only use one unit, keeping the other for emergencies. We are hesitant to use both vehicles daily so that we don't run the risk of both trucks breaking down leaving us with nothing, which unfortunately has happened. This is how we have been operating over the past few years and it is not the most efficient way to manage a system of this size. We are adjusting our work crews by adding more people and now we need to adjust our equipment so we can achieve the one goal of keeping the system flowing.

### **Benefits of having 3 units.**

Having a third truck as a backup would help to ensure that we are maintaining the system as we should without having to be afraid to use the equipment. Below are just a few benefits for having 3 units.

1. Spare unit for when one of the other units is broke down or being serviced. This will also keep us from having to rent a vactor during extended repairs.
2. Utilizing the third truck for working on ARI valves and hydro excavating.
3. Help keep from spilling during a major lift station failure when 2 trucks can't keep up with the flow.
4. Water Department - utilizing the spare truck for faster water excavation, saving time as well as money on utility repairs that may be damaged using a backhoe.
5. Parks and Rec - utility conflict when digging around trees and utilities. It could also be utilized for the septic systems at Sara Park.
6. Street Department - cleaning storm sewers and general storm cleanup.
7. After training personnel in the other departments, this would also free up 2 Wastewater employees that would normally be assisting to tend to Wastewater duties.

We met with four (4) companies, they have given us quotes based off of buying 1 versus buying 2 units. All 4 companies, Aquatech, Gap Vax, Vac-Con, and Vector, work off of a co-op.

Vac-Con – HGAC Co Op - No discount on 2 units but offered 2016 pricing – Vac-Con 5 year / 40% Buy Back on a trade in if desired. This is our preference because of the bigger engine not having to run at full speed, causing less wear and tear on the engine. It is also easier to work on and parts are not proprietary like Vector is. For the price difference, we are getting more bang for our buck. We called references and came back with outstanding customer service after the sale.

**\$439,000 60 to 90 days before delivery (This fiscal year)**

Vector – Source Well Co-Op - No Buyback Option - Deal on 2 units save \$12,000 each 420,000 each. Even at this, their proprietary equipment will cause us to spend more when replacing certain parts on this equipment. Customer service is little to none based off of our experience over the past 10 years.

**\$432,000 per vehicle 10 months before delivery (Next Fiscal Year)**

Gap Vax – HGAC Co-Op - No discount on 2 units – No buy back options. Water tank is located on top where debris tank is. This will tend to make the unit top heavy. Not many units in Arizona. **Too Pricey**

**\$458,000 6 months before delivery**

Aquatech – No discount on 2 units – **This unit was substandard, very weak construction** \$465,000

### **Below is a history and some information on the existing Vector's:**

**2010 Vector** – There has been a string of electrical issues that have plagued the 2010 Vector and continues today. Depending on if we decide to keep the vector, We will be spending this year, approximately \$40,000 to \$100,000 depending on what tank we decide to get. This includes a new back door from Vector. The Jet rodder water pump was just replaced. So far this year we have spent approx. \$35,000 on repairs and we also rented a Vector for \$13,000 We will need to rent another vector as back up while this truck is in Phoenix for the repairs if we do not acquire a new truck. In the end we will still have a 9-year-old truck that is at the end of its life cycle that will be needing a blower in the near future.

**2004 Vector** - The aux engine overheats. This has been an issue with the old motor and the new motor. Vehicle maintenance is still troubleshooting this problem. The debris tank is 7 years old and we will be looking at possibly replacing this tank and back door again within the next year or two. We normally get 6 to 8 years out of a tank (Tank price above). The Jet rodder water pump is 2 years old and we usually get 4 to 5 years out of them those cost approximately \$20,000. The fan blades are 14 years old and most likely will need replaced, also at a cost of \$10,000 plus labor. The water tanks are being

replaced now. The unit is 14 years' old and has had approx. \$33,000 worth of repairs this year.

**Parts and labor cost in the next year for the 2010 Vactor**

1. \$73,000.00 New factory debris tank. (X-Ten Steel - Vactor recommended)  
\$25,000 Tank company steel tank. (Softer Steel)
2. \$13,000.00 New factory back door.
3. \$2000.00 Tax & Freight
4. \$30,000 to \$35,000 New blower, we have 9 years on this blower. The average is life is between 10 to 12 years but the time frame is unknown at this point
5. Renting a Vactor during repairs \$13,000 per month

**Parts and Labor cost in the next few years for the 2004 Vactor**

1. Fan replacement on the 2004 vactor \$12,000
2. Cost associated with the continuing overheating problems.
3. \$73,000.00 New factory debris tank. (X-Ten Steel - Vactor recommended)  
\$25,000 Tank company steel tank. (Softer Steel)
4. Renting a Vactor during repairs \$13,000 per month
5. \$13,000.00 New factory back door.
6. \$2000.00 Tax & Freight