



THE M&TS JOURNAL

The Journal of the International Machinery
& Technical Specialties Committee of the American Society of Appraisers

Volume 29, Issue 1, Winter 2013



\$35.00 ASA Members, MTS Discipline
\$50.00 ASA Members, Non-MTS Discipline
\$65.00 ASA Non-Members

Appraising Equipment For Retail Propane Companies

Jack Young ASA, CPA



Retail propane companies may need their equipment appraised for collateral lending situations, buy-sell agreements, family law, estate tax or several other situations. Whatever the reason, when appraising retail propane equipment, it's important for an equipment appraiser to understand the overall retail propane industry as well as how the basic equipment — trucks and trailers, customer tanks, and large volume storage tanks — fits into the big picture.

Retail Propane Industry

The retail propane industry is a commodity-based industry in a mature marketplace suffering from reduced sales and relatively flat projected growth. That being so, to be competitive, a company must either increase efficiency by decreasing costs or increase sales by appropriating another companies' market shares. Over the past few years, these conditions have inspired both consolidation and efficiency advances in the retail propane industry.

Consolidation

A recent dramatic example of consolidation in the propane industry was the 2011 purchase by AmeriGas of the Heritage Propane unit of Energy Transfer Partners, L.P. This merger created the largest propane company in the country! Post-purchase, AmeriGas worked on the efficiency side of the equation and started laying off redundant personnel and liquidating redundant equipment. The first equipment to go was customer propane tanks; industry experts expect that delivery trucks will be disposed of next. As you might expect, these used propane tanks caused a glut in the market place in late 2011 and early 2012. We'll look at this more closely when we discuss the individual components of appraising propane companies.

Efficiency

When addressing efficiency improvement, propane retailers naturally look at the areas of largest operating costs — actual costs of propane delivery and driver payroll. In the transportation industry, these areas are typically grouped together and referred to as route planning. The retail propane industry's particular issues with route planning hinge on the fact that they are making deliveries house-to-house (or business-to-business). Customer tanks need to be filled before they are completely empty, but it's not efficient to re-fill tanks that are nearly full. Add that to the quantity and various locations of tanks to be filled — along with the location of the propane source — and you may begin to understand the logistical and geographical complexity of the retail propane delivery system.

Because of this complexity, increasing route planning efficiency has taken two different routes. One trend involves increasing the carrying capacity of delivery trucks; the other depends on development and implementation of new technology, either remote tank sensing or route planning software targeted for the retail propane industry.

Both of these developments work in different ways to improve route planning efficiency. Of interest to the equipment appraiser of a retail propane company is the larger capacity delivery tanks. These larger tanks enable drivers to stay out longer without having to return to the central refilling location. New tanks hold in excess of 3,000 gallons, compared to the previously standard maximum size of 2,000 gallons. The additional 1,000 gallons allow drivers to make more deliveries at a greater distance in one day. This extra capacity works well as a stand-alone efficiency enhancer and may be even more effective in conjunction with one of the new technologies that directly influence delivery route planning.

Electronic remote tank sensing systems are one of the technological advances in route planning for propane delivery. Sensors placed on customer tanks provide information to a central propane delivery office regarding fuel needs for any route; this information is then used to maximize delivery route planning. Industry experts suggest that electronic remote sensing is perhaps more useful in monitoring the propane needs of rural vacation homes that may experience irregular occupancy (and therefore unpredictable fuel needs) than for homes or businesses with relatively unvarying propane use. It's also debatable — because of the data transmission costs associated with these systems — whether the more efficient route planning really increases profitability for the companies that use them.

For retail propane companies not convinced of the benefits of remote tracking systems, there is another technological option: specialized route planning software that considers past fuel usage and current weather trends to predict the needs of regularly occupied residential and commercial customer needs.

Market & Industry Trends

No matter the purpose of the appraisal, the equipment appraiser of a retail propane company needs to be aware of these trends in the industry and how they influence values. The effect of consolidation, for example, is directly connected to the issue of absorption, while the move toward larger delivery tanks creates obsolescence issues in the used market. These factors need to be taken into account when arriving at the opinion of value to be presented in the equipment appraisal report.

Retail Propane Equipment

With an overall understanding of the market, an equipment appraiser can more easily address the interesting challenges in valuing the three standard equipment categories of a typical retail propane company:

- Delivery, transport and service trucks and trailers
- Customer tanks
- Large volume storage tanks

Each of these categories presents its own particular challenges in valuation, from the varieties of obsolescence to the consideration of absorption, or blockage.

With an overall understanding of the market, an equipment appraiser can more easily address the interesting challenges in valuing the three standard equipment categories of a typical retail propane company.

Propane Delivery Trucks

The majority of equipment to be valued in a retail propane company will be trucks and trailers. Interestingly, the propane tanks mounted on these trucks have a far longer life than the trucks themselves. Consequently, these delivery tanks, often referred to as “barrels” (along with their hose / pump assembly) are generally installed sequentially on several different trucks during the normal life of the barrel. Because of this practice it is critical that the equipment appraiser collect not only the relevant information (year, make, model, vin, engine type etc) from the truck but also from the barrel. In most cases, you’ll find that a barrel will be quite a bit older than the truck it is mounted on.

In the past, this practice of reusing and reinstalling older barrels on newer trucks resulted in an active and fairly standardized resale market for propane delivery trucks with tanks. More recently, however, with the industry trend toward larger capacity tanks, the used propane delivery truck market has changed. Some resellers, citing reduced general demand for trucks with less than 3,000 gallon capacity, refuse to accept these lower capacity trucks as trade-ins. On the other hand, recent price increases in new trucks has supported demand for older, smaller delivery trucks from more budget-sensitive smaller independent propane retailers. Again, the equipment appraiser must consider all the aspects of market demand: while the propane truck market is a national one, local and regional market forces must also be considered.

Another aspect of market forces is government regulation of delivery truck maintenance. Because of the volatile nature of liquid propane gas, many states require that any commercial vehicle transporting propane be serviced every 90 days. To ensure compliance with these service regulations, states often send inspectors out periodically to review delivery truck maintenance files. Equipment appraisers of retail propane companies will find it good practice to be aware of maintenance regulations in the area and to examine several vehicle service files at each location to see if regular service is being conducted as required. Calling third party vendors that conduct the company’s 90-day services on the fleet may also a good idea.

Trucks & Obsolescence Factors

A professional equipment appraisal must consider three types of depreciation: physical, functional, and economic. Physical depreciation is complicated by the practice of moving older, reconditioned barrels on to new trucks. Hence the need to collect identifying data from both the truck and the propane tank assembly. Functional obsolescence must be considered in light of the preference for trucks with larger barrels. Economic obsolescence is perhaps the most pertinent for propane industry equipment, particularly at this time in California, due to current diesel emission regulations.

California Air Resources Board (CARB) Diesel Risk Reduction Plan (RRP) requires specified emission filters for certain vehicles, based on various factors, one of which is vehicle weight. And although the base chassis weight of a standard propane delivery truck is below the weight cut-off for compliance, the addition of the

propane tank assembly mounted on the trucks brings the gross vehicle weight over the compliance weight. As a result, many propane retailers in California have been liquidating their older fleet over the past several years and many others — those that qualified for the CARB phase-in program when it was being offered — continue to do so.

How does this information fit into the valuation of propane delivery trucks? So far, all indications support the conclusion that the current national market has assimilated the economic obsolescence information regarding the CARB RRP. In other words, both economic obsolescence and functional obsolescence, along with other information and forms of depreciation, are innately factored into the marketplace. The premise — that the assimilation of regulatory information is reflected in marketplace data — is supported by the lack of consensus among dealers regarding the financial weight of the regulations in the marketplace.

This, of course, supposes that an equipment appraiser would rely on Sales Comparison approach to arrive at values on the trucks and trailers. There is rarely a reason to use another approach, although, of course, all three approaches must be considered. As there is an active market for the equipment, Sales Comparison data is plentiful and dependable. When considering Cost Approach, an equipment appraiser would probably realize that due to the practice of retrofitting trucks with older delivery tank assemblies, it would be hard, if not impossible, to collect data of a good enough quality to be able to come to a reliable opinion of value.

One other aspect of this particular economic obsolescence factor that may need to be considered by an equipment appraiser is the cost to retrofit targeted diesel vehicles that do not currently comply with CARB regulations.

Customer Propane Tanks

The customer tank database of a propane company will typically list date of manufacture, manufacturer, serial number, size, location, and the tank's condition. Notes on the tank's condition primarily indicate whether or not a tank is operational within accepted guidelines and industry regulations. Customer propane tanks, as one would logically conclude, are highly regulated at the federal, state and local levels. This regulation, in combination with the long Normal Useful Life of customer propane tanks, means that a propane retailer is likely to have a large number of older tanks that still meet government regulations and continue to be in operation.

Because it is not possible to inspect every tank, the propane tank valuation process will typically rely upon management data as to the location, size, condition and age of the tanks, while also conducting procedures to gain an understanding of the general condition of the customer tanks in relation to management's assertion. To assess validity of management data, the appraiser may want to inspect a haphazard sample of customer tanks on-site and at customer locations and will certainly want to determine if the subject company has an active program of refurbishing tanks.

Customer tanks are frequently taken out of service temporarily to be refurbished. This process involves sandblasting, repainting and refitting with new valves. In the maintenance yards, therefore, an equipment appraiser would expect to see new tanks, recently refurbished customer tanks, tanks waiting to be refurbished, and a wide range of tank conditions between these two extremes. Tanks are also routinely cleaned, primed and painted at customer locations.

Of course, no matter how well maintained or frequently refurbished, many older customer tanks may have no trade value. Industry experts agree that many tanks older than forty-five years, as well as tanks with less capacity than 120 gallons, may have no resale value. While these older and smaller tanks are of no trade value, they are in use and therefore of value to the retail propane company. To reflect this, these particular tanks may be assigned a scrap value consistent with the value of their material content.

Customer tanks in use also have the value of already being installed. The appraiser may want to conduct interviews with company staff to determine the direct variable cost of installing a tank at a customer location and do an age-life analysis of those costs consistent with the length of time the average tank is at a customer location.

During on-site inspections, the appraiser will likely encounter tanks that do not meet government regulations. Although the steel in these tanks may appear to have some scrap metal value, these tanks can represent a dangerous disposal problem as flammable components from the propane permeate the steel during



prolonged use. These tanks can be removed by companies with the necessary permits; some companies charge to remove scrap tanks and other companies remove the scrap tanks for no charge, but it is unlikely that any company would buy these tanks. Therefore the “scrap” tanks not in use have no value and may even represent a liability.

Storage Tanks

Valuing propane storage tanks may be the simplest factor in the propane equipment valuation puzzle. Because large volume storage tanks themselves have no moving parts, they have a relatively long Normal Useful Life. The moving parts to be considered, such as valves and pumps, are maintained and replaced regularly due to the governmental regulations regarding propane tanks in general. Nationally, the prices for propane storage tanks and the related installation are fairly consistent. It is important, however, to distinguish between operational and non-operational tanks. In instances where not all storage tanks owned by a propane company are in operation, the tanks not in operation would have a lower “In-Use” value to reflect costs that must be incurred to make the tanks operational.



Propane Tanks & Absorption

Due to the large volume of customer tanks, storage tanks and delivery vehicles often owned by propane delivery companies, it is often necessary to consider absorption when determining respective values. Absorption is essentially an effect of the basic economic law of supply and demand which states that the greater the supply and the lower the demand, the lower the price will be. When considering absorption in equipment valuation, an appraiser takes into account the length of time needed for the assets to be absorbed by the current market at what price. Because the value of customer propane tanks is very price / volume sensitive, it's important to remember that the base price for valuing used customer tanks assumes a small number of tanks changing hands. Therefore, if a particular appraisal involves the assumption of a bulk purchase of the underlying assets that is large by industry standards the result would be a material reduction in value for those assets.

Conclusion

When approaching a value for equipment related to the retail propane delivery industry, an equipment appraiser will do well to consider all of factors that can influence the equipment's value — from the current state of the retail propane industry, with the increasing trends toward efficiency and consolidation, to the possible consideration of absorption as a market response. Of course, the purpose of the appraisal, and the level of trade most appropriate for the appraisal's use — along with any information collected during the inspection and research process — will also influence the equipment appraiser's conclusion of his or her opinion of value.

Jack Young ASA, CPA is an Accredited Senior Appraiser and the owner of Norcal Valuation (www.norcalvaluation.com) headquartered in the Sacramento Valley of California. He is also the Chapter President of the Northern California Chapter of the ASA.

Jack received his B.S. Accountancy, Arizona State University in 1988. While in college, he worked at the Phoenix mid-sized regional CPA firm, Price, Kong & Company as a staff accountant. Upon graduation he went on to work in the audit department of the international CPA firm KPMG in their Sacramento, California office. While at KPMG, Jack worked in the industries of banking, insurance, manufacturing, agriculture and distribution to name a few. Subsequent to working at KPMG Jack worked as a financial analyst in the insurance and international micro-finance industries. Jack is also an auctioneer and graduate of the Reppert School of Auctioneering.

For many years Jack worked as an auctioneer and auction manager of business assets, machinery, and equipment.