Tank Talk® 37 Fall 2005

## Selecting the Type of Tank Inspection

One of the biggest mistakes tank owners can make is selecting a tank inspection service based on the way the inspection is performed. For instance, it is not uncommon for owners to solicit proposals for diving inspections on their tank. If asked why they want a diving inspection, the answer is usually, "I can't drain my tank." Well, if the tank truly cannot be drained, an inspection is a waste of money because any deficiencies cannot be fixed. What the owners often mean is that the cost of product or loss of service pressure makes it very inconvenient for me to drain a tank for inspection. While this is a valid response, it usually misses some important analysis.

Underwater inspections, either diving or remote operated vehicles, cannot be as thorough as drain-down inspections. Perspective is lost as the diver or vehicle travels around the tank and is able to see (or video) only a short distance. Additionally, sediment stirred from the bottom or scraping the shell can significantly reduce visibility. You have probably seen crystal clear photos from underwater inspections; however, in reality, underwater photos are usually blurred by the water and sediment in the tank.

So, what type of evaluation is best for your specific circumstances? We recommend you retain the most qualified tank consultant who can assist your utility in ALL phases of your tank ownership. Involve this specialist in the planning of both the evaluation of tanks and the prioritization of maintenance. As an owner, you are really buying information and recommendations, not an inspection. The consultant should be able to discuss the pros and cons of different types of inspections under different conditions and then assist you in getting the necessary information given the water systems constraints. For instance, the consultant

might suggest a drain-down inspection of an older deteriorated tank with a follow-up rafting inspection of the roof structure in order to get all the information necessary to plan for future maintenance. The consultant may also suggest that a diving inspection be performed on a different tank because it is in better condition and you only need to update its condition. A firm that performs all types of inspections will be more likely to give unbiased advice on inspection types than a firm that only dives.

With this information, a good consultant will be able to assist you in prioritizing maintenance based on available funding. This involves spending scarce resources where it will do the community the most good. You might elect to do safety upgrades to multiple tanks in the first year, paint the outside of one tank and the inside of another tank in year two, and paint two complete tanks in year three. There is no rule that dictates that funds cannot be split among tanks. It is difficult for general consultants to have the depth of experience or the perspective to make these prioritization decisions, and a "tank inspector" doesn't have the experience or the resources to execute a project like this.

There is a quote attributed to the legendary oil well firefighter Red Adair. During the first Gulf War when the cost of his services was being debated, he was reported to have said, "If you think it's expensive to hire an expert, try hiring an amateur."

Remember the results? The fires were extinguished in a fraction of the time that was thought necessary and in the process saved millions of barrels of oil and minimized the environmental disaster. Sometimes the cheapest isn't the cheapest after all!