



Published as an informational service to Owners and Engineers of Steel Water Storage Tanks by  
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### EDITOR'S CORNER

As TANK INDUSTRY CONSULTANTS, INC. enters its 11th year of providing professional engineering services to clients throughout the United States, we continue to have people who want to know just what makes us special -- what is it that sets us apart from other firms who offer similar services?

When I started this organization in 1979, I did so in response to the water industry's need for (1) qualified, unbiased evaluation of water storage tanks, and (2) the specialized engineering knowledge and expertise necessary to properly design, construct, and maintain water storage tanks in order to realize their maximum service life. With this in mind, TIC® offers a complete line of engineering services to the owners of steel water tanks. What sets us apart from other firms who may offer similar services is that we are a **professional engineering** firm with both the **technical training** and the **practical experience** necessary to design, inspect and oversee your tank project.

We are not .....

- A new tank construction firm that offers tank inspections as a sideline.
- A coatings supplier who prepares paint specifications in return for specifying their coatings.
- A maintenance contractor who offers complimentary or nominal fee inspections with the hope of getting a contract -- hopefully a contract with a lot of repairs in it.
- An independent testing laboratory which can gather a lot of data, but probably won't be able to tell you how this information affects your tank.
- A general consultant who does not have specialized expertise or hands-on experience in designing, constructing, repairing or painting tanks.
- A "kick the anchor bolt" type engineer or inspector who can't or won't climb the tank to properly access the work.
- A coatings or structural-analysis specialist who has no knowledge of the safety, structural, sanitary, protective coating, and corrosion protection needs of your tank.
- A former painter or paint salesman who has completed a coating inspection certification course,

but has no long-term responsibility to maintain his/her credibility or a license to act as a professional engineer.

We are a **professional engineering** firm subject to the rules, regulations, and liability of our profession. We offer unbiased, third party recommendations without any desire to sell paint or perform repairs. Our staff of engineers, technicians, and support personnel have over 240 years of practical hands-on experience in the tank industry. We take pride in offering our clients the best, most up-to-date services possible for their water storage needs.

That's who we are.

### WATER SYSTEM SECURITY

When TIC performs prebid inspections, we frequently find that basic water system security measures are either inadequate or non-existent. In this age of litigation and liability, terms like "attractive nuisance" are often used when referring to water tanks. Now, more than ever, it is especially important that tank owners install and maintain those items that will help protect their water system from vandalism, and at the same time help them comply with sanitary requirements. Gone are the days when graffiti was our greatest concern when the local vandals climbed your tank. We now have to be concerned with the safety of these vandals, and the sanitary violations their pranks cause. Some basic security measures we recommend to help protect your water system include:

- Tank site fencing with barbed wire and locked gates to help deter vandals and keep small children from playing on the tank site.
- Vandal deterrents on all access ladders to help prevent unauthorized personnel from climbing your tank.
- Locked manholes to prevent vandals from contaminating the inside the tank.
- Protective screening on all overflow pipes and vents to prevent the ingress of small animals or insects.

Properly installed and maintained, these items will help assure the security of your water system.

## NEW TANK PROJECTS

The emphasis of TANK TALK® has usually been geared toward minimizing the problems associated with maintaining tanks. We forget to tell our friends about the services we perform on new tank projects throughout the Country.

TIC® has served as consulting engineers on a number of new tank projects for a diverse group of clients. New tank construction projects presently under way or recently completed for which we are responsible for the total project are:

- Clarksville, IN - 1,000,000 gallon reservoir for Indiana Cities Water Corporation. Caldwell Tanks, Inc., contractor.
- Southampton, NY - 1,000,000 gallon single pedestal spheroid for Suffolk County Water Authority (NY). Pitt-Des Moines, Inc., contractor.
- Troy, OH - 1,000,000 gallon single pedestal spheroid and a 2,000,000 gallon fluted pedestal for the City of Troy, OH. CBI-NaCon and Pitt-Des Moines are the respective contractors.
- Greenwood, IN - 500,000 gallon elevated tank for the City of Greenwood and Indiana Cities Water Corporation. Caldwell Tanks, Inc., contractor.
- Fairfield County, OH - 750,000 gallon fluted pedestal for the Fairfield County Water District.

Other active new tank projects on which we have responsibilities as either sub-consultants or inspectors are for the DuPage County Water Authority (west Chicago suburbs); Indiana-American Water Company at Terre Haute, IN; City of Fort Wayne, IN; City of Xenia, OH; Prince George County, VA; Anne Arundel County, MD; Yaphank (Suffolk County Water Authority), NY; Kentucky-American Water Company at Lexington, KY; Winchester, KY; Warren County, KY; and Artesian Water Company, Hockessin, DE.

It has been our experience that many of the causes of premature coating failure, aesthetic unacceptability, and potential maintenance problems can be designed out during the specification phase. The minimum requirements stated in the AWWA D100 standard do not presently have sufficient provisions to assure owners of a quality end product from both an appearance and maintenance standpoint. Since TIC has taken an active role in the development and revision of the AWWA D100 standard, we are intimately familiar with its strengths and weaknesses. We believe that the new tank specifications we provide can fill in the gaps left by the D100 standard, yet keep the price within reasonable budgetary constraints.

As we go back and inspect tanks on which we performed engineering and inspection services 5 to 10 years ago, we are developing an excellent data base which underlines the need for good specifications, contractor selection, and inspection.

## TIC SEMINARS

"Steel Water Storage Tanks, Design, Construction, and Maintenance" seminars are again being offered by TIC. Up-coming dates and locations are:

Speedway, Indiana - January 30-31, 1990  
Philadelphia, Pennsylvania - February 21-22, 1990

Since we began presenting the seminars in 1984, we have had more than 400 people successfully complete the courses, and many of our former attendees have recommended our seminars to others. We think that the information presented at these seminars is of value to everyone in the water industry -- technicians, engineers, operators, managers, inspection personnel, contractors, suppliers.

Please call Linda Reed at 317/244-3221 (FAX 317/486-4708) for registration information.

### SPFA FEATURES SEISMIC SESSION AT GARDEN GROVE, CA SEMINAR

TIC also designs and coordinates the one-day Steel Tank Seminars sponsored by the Steel Plate Fabricators Association and the American Iron & Steel Institute. In response to increased concern about the seismic design of water storage tanks, Bob Wozniak, Senior Engineer for Chicago Bridge & Iron Technical Services, will offer a one-hour presentation on that subject as a part of the January 18th Steel Tank Seminar in Garden Grove, California. Bob, who has been instrumental in the development of the AWWA and API Standards for seismic design of steel storage tanks, is Chairman of the AWWA D100 Revision Task Force. For more information, call SPFA at 708/562-8750 (FAX 708/562-8436).

### W.H. "DOC" REED ASSUMES RESPONSIBILITY FOR CONSTRUCTION PHASE OF PROJECTS

In TANK TALK 12 we announced that Eric Meeks had assumed the accounting responsibilities at TIC. You may have wondered what Doc Reed is doing now. In recognition of the need to provide complete project administration once contracts have been awarded, we are now utilizing Doc's expertise in the field of construction management. This is not an area unfamiliar to Doc since it was one of his responsibilities while employed for 30 years by General American Transportation Company's tank erection division. He is now serving as TIC's primary client and contractor contact once a new tank or tank maintenance project reaches the "construction" phase.

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