

API TES 2003 -2008

Presented By:
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API TES Certification Program

- Initiated by API Safety & Fire Protection sub-committees
- Task force set up to develop program criteria
- Comprised of industry experts, owners and contractors
- Survey of industry showed broad support
- Program development started in 2003

Tank Incidents

- Take place in tanks, bins, silos, vaults
- Can occur in very small spaces
- Continue 17 years after OSHA 1910.146
- Over 50% of fatalities are would be rescuers
- Approximately one third are supervisors

Common Elements Of Tank Related Incidents

- Failure to recognize hazards
- Improperly implemented or no confined space program
- Failure to perform atmospheric testing prior to entry
- Failure to provide adequate ventilation
- Limited points of ingress and egress
- Untrained or poorly trained entry supervisors
- Untrained or poorly trained entrants and attendants
- Lack of, and training in the use of PPE
- No provisions made for performing a rescue
- Outside sources not trained in performing CS rescues

AST Incident Auburn Township, Ohio May 2008

- Contractor hired by jobber to clean a small AST at gas station
- Contractor enters tank with cartridge respirator
- Contractor becomes disoriented (probably due to lack of oxygen)
- His 19 year old son enters with no PPE to check on father
- Second son (17) enters with no PPE after neither entrant emerges
- Facility owner becomes concerned calls Auburn Fire Department
- All three entrants are inside tank when rescuers arrive
- Rescuers lack necessary rescue equipment - other resources summoned
- Limited ingress/egress through 18" manway
- Rescuers ventilate tank and eventually remove all victims
- Seventeen year old victim pronounced dead at scene
- This incident is presently being investigated by OSHA

The Aftermath Is Always The Same



Case Histories

- www.steeltank.com/Publications/TankUseMishaps/tabid/187/Default.aspx
- [www.cdc.gov/niosh/topics/confined space/](http://www.cdc.gov/niosh/topics/confined_space/)

Program Development

- API staff
- Industry experts, owners/operators, and consultants
- Professional Examination Services

Body Of Knowledge

- API 2015, 2016, 2026, 2207, 2219
 - May be ordered from IHS (800) 854-7179 or <http://www.ihs.com>
- ACGIH Threshold Limit Values For Chemical Substances.....
- OSHA 29 CFR Part 1910 and 1926
 - 1910.38 (Emergency Plans and Fire Protection)
 - 1910.132-138 (Personal Protective Equipment)
 - 1910.146 (Permit-Required Confined Spaces)
 - 1910.147 (Lockout-Tagout)
 - 1910.1000 (Toxic and Hazardous Substances)
 - 1910.1200 (Hazard Communication)
 - 1926.404 (Electrical)

Seven Activity Areas

- Project planning
- Tank preparation
- Ventilation and atmospheric testing
- Entry for inspection (Initial entry)
- Tank cleaning
- Entry for repair and modification (Inspection)
- Return to service

TES Certification Objectives

- Provide a baseline of professional competency
- Enhance the quality and competency of tank entry activities
- Minimize the risks of confined space hazards
- Improve the overall safety performance of tank maintenance
- Participation - Voluntary (Except where required)

Target Audience

- Tank cleaning contractors
- Tank inspection companies
- Tank repair contractors
- Third party inspectors
- Tank lining contractors
- Owner/operator in house inspectors

Prerequisites

Education	Minimum Experience Required	Skills
BS degree in engineering or technology	1 year	Supervisory experience in CS permits, entry, atmospheric testing, cleaning, repair and maintenance per 2015 and 2016
Two year degree or certificate in engineering technology	2 years	Same as above with 1 year as a supervisor
High school diploma or equivalent	4 years	Same as above

TES Exam Administration

- Twice yearly (March and September)
- 120 multiple choice questions
- Closed and open book
- Eight hours to complete exam

Exam Locations

- Alberta: Edmonton
- California: Los Angeles
- Georgia: Atlanta
- Louisiana: Baton Rouge
- Maryland: Baltimore
- Michigan: Detroit
- Pennsylvania: Philadelphia
- Quebec: Montreal
- Texas: Houston
- Wisconsin: Madison
- Washington: Seattle

Elsewhere: (Please contact API to verify availability of these sites)

Bahrain

Malaysia

Mumbai

Singapore

Trinidad

Venezuela

Other test sites available where a significant interest is expressed!

API TES Certification Fees

	API Member	Non Member
Number of other API Certifications	Certification Fee	Certification Fee
No other current API Certifications	600	800
Any other current API certification	550	750

Certification Process

- Obtain an application package:
 - Download from the API website: www.api.org/icp
 - Contact TES Program Manager: Tina Briskin
 - (202) 682-8191 or briskint@api.org/icp
- Verify your qualifications
- Fill out and return notarized application
 - Note: Application Deadline is approximately 60 days prior to exam
- Pay fee
- Take and pass exam

The Success Of API TES

Year	Tested Spring	Passed	Tested Fall	Passed	Total For Year
2004	14	10	33	31	44
2005	25	21	35	29	50
2006	23	20	25	23	43
2007	72	50	119	73	123
2008	116	69	86		69

TES Breakdown

Company/Employment Type	TES Certified
Owner/User	127 (41.4%)
Inspection Company	42 (13.7%)
Consulting/Construction	54 (17.6%)
Individual Contractor	35 (11.4%)
Unidentified/Other	49 (15.9%)

Need More Information

- TES Certification Contact:
 - Tina Briskin, ICP Manager
 - (202) 682-8191
 - Briskint@api.org
- ICP Website www.api.org/icp
 - Other ICP Staff
 - (202) 682-8064
 - Inspector@api.org
- ICP TES Directory - 307 Certified TES
- Les Bente (225) 275-2926 lbente@don-miller.com

Additional Resources

■ Safe Tank Entry Workshop

- Two day interactive seminar to learn proper practices and procedures
- This workshop provides the following benefits:
 - Recognize confined spaces and their hazards
 - Learn best practices and procedures per 2015/ 2016 NFPA 326
 - Ensure safe tank entry for cleaning, maintenance, and repair
 - Select, maintain, and use atmospheric monitoring devices
 - Document hazard assessment and evaluation on permits

Note: The course provides very valuable information, but should not be considered to be a preparation course for the TES exam.

Safe Tank Workshop Contact Info

Guy Colonna, P.E.

Division Manager

NFPA

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Closing Remarks

- Would you trust a non 653 inspector to inspect your tanks?
- Should entry supervisors be held to a similar standard?
- As tank owner/operators the decision is yours!

Tanks Are Not Designed For Continuous Human Occupancy

