

# Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks

ANSI/API RECOMMENDED PRACTICE 2016  
FIRST EDITION, AUGUST 2001



American  
Petroleum  
Institute

**Helping You  
Get The Job  
Done Right.<sup>SM</sup>**



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## FOREWORD

This recommended practice was prepared under the auspices of the API Safety and Fire Protection Subcommittee. It is provided for the use of API member companies and others in the development and implementation of company and facility specific safe practices for planning, managing, and conducting tank cleaning operations in petroleum storage tanks.

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# CONTENTS

	Page
1 GENERAL.....	1
1.1 Scope .....	1
1.2 Applicability .....	1
1.3 Regulatory Requirements .....	1
1.4 Administrative Controls and Procedures.....	1
2 REFERENCES .....	2
2.1 Codes, Standards, and Related Publications.....	2
2.2 United States Government Regulations .....	2
2.3 Other Publications and References .....	3
3 DEFINITIONS.....	3
3.1 General.....	3
3.2 Definitions .....	3
4 PETROLEUM STORAGE TANK HAZARDS.....	8
4.1 Hazards.....	8
4.2 Oxygen Deficiency and Enrichment .....	8
4.3 Fires and Explosions .....	9
4.4 Toxic Substances .....	11
4.5 Stress Exposures .....	17
4.6 Physical and Other Hazards.....	17
5 VAPOR AND GAS FREEING, DEGASSING, AND VENTILATING TANKS. . . .	18
5.1 General.....	18
5.2 Vapor and Gas Freeing (and Degassing) Hazards.....	19
5.3 Mechanical Vapor and Gas Freeing .....	20
5.4 Steam Vapor Freeing .....	31
5.5 Natural Ventilation.....	31
5.6 Inert Gas Purging.....	32
5.7 Displacement of Vapors Using Water (Fuel Oil).....	33
5.8 Degassing .....	33
6 REMOVING SLUDGE AND RESIDUE FROM TANKS.....	39
6.1 General.....	39
6.2 Pumping and Vacuum Equipment .....	39
6.3 Safe Removal Precautions.....	39
6.4 Noninvasive Removal .....	40
6.5 Removal from Outside the Tank .....	40
6.6 Removal from Inside the Tank.....	43
6.7 Sludge Disposal .....	43
7 UNIQUE TANKS .....	44
7.1 General.....	44
7.2 Very Large Tanks .....	44
7.3 Floating Roof Tanks.....	44
7.4 Double Wall and Double Bottom Tanks .....	47
7.5 Low Pressure Storage Tanks .....	48
7.6 Conservation Tanks .....	49

	Page
8	SPECIFIC HAZARDOUS SUBSTANCES . . . . . 49
8.1	General . . . . . 49
8.2	Tanks with Pyrophoric Iron Sulfide Deposits . . . . . 49
8.3	Cleaning Tanks With Products That Contain Hydrogen Sulfide (H <sub>2</sub> S) . . . . . 50
8.4	Tanks That Have Been In Leaded Service . . . . . 51
8.5	Tanks Containing Hazardous Sludge and Residue . . . . . 53
9	CONTROL OF IGNITION SOURCES . . . . . 54
9.1	General . . . . . 54
9.2	Internal Combustion Engines . . . . . 54
9.3	Electrical Motors and Generators . . . . . 55
9.4	Artificial Lighting . . . . . 55
9.5	Electrical Bonding . . . . . 55
9.6	Lightning Storms . . . . . 55
9.7	Pyrophoric Iron Sulfide Deposits . . . . . 56
9.8	Hot Work . . . . . 56
9.9	Smoking . . . . . 56
10	TANK CLEANING CHECKLIST . . . . . 56
10.1	General . . . . . 56
10.2	Preplanning . . . . . 56
10.3	Removing Recoverable Product . . . . . 61
10.4	Tank Isolation. . . . . 66
10.5	Vapor-Freeing the Tank . . . . . 67
10.6	Atmospheric Testing . . . . . 69
10.7	Cleaning the Tank . . . . . 71
10.8	Working Inside and Around the Tank . . . . . 78
10.9	Returning the Tank to Service . . . . . 80
10.10	Recommissioning . . . . . 81
10.11	Recommissioning Safety Check . . . . . 83
11	OXYGEN, COMBUSTIBLE GAS, AND TOXIC SUBSTANCE INSTRUMENTS . . . . . 85
11.1	General . . . . . 85
11.2	Oxygen Monitors . . . . . 85
11.3	Combustible Gas (Flammable Vapor) Indicators . . . . . 85
11.4	Toxic Substance Testing Instruments . . . . . 87
12	FLOATING ROOF HAZARDS ASSOCIATED WITH TANK CLEANING. . . . . 88
12.1	General . . . . . 88
12.2	Applicability . . . . . 88
12.3	Floating Roof Stability . . . . . 88
12.4	Floating Roof Legs . . . . . 89
12.5	Roof Failure and Collapse . . . . . 89
12.6	Entry Onto or Below Floating Roofs (and Into Pontoons). . . . . 93
12.7	Inspections . . . . . 93
12.8	Floating Roof Temporary Support Requirements. . . . . 94

Figures

4-1	Example of Ventilation for Welding Fumes During Hot Work . . . . . 15
5-1	Tank Ventilation Guidelines . . . . . 21

	Page	
5-2	Example of Air Mover Located on Shell Manway of Tank . . . . .	22
5-3	Example of Tank Mechanical Vapor-Freeing Equipment . . . . .	22
5-4	Sample Tank Ventilation Guidelines . . . . .	24
5-5	Examples of Typical Ventilation Arrangement . . . . .	26
5-6	Example of Vapor Freeing a Cone Roof Tank . . . . .	27
5-7	Examples of Vapor Freeing an External Floating Roof Tank . . . . .	28
5-8	Comparison of Tank Degassing Methods . . . . .	34
5-9	Example of Thermal Oxidation Degassing . . . . .	35
5-10	Example of Thermal Oxidation Unit—Internal Combustion Engine . . . . .	36
5-11	Sample Tank Degassing Refrigeration Process . . . . .	37
5-12	Sample of Tank Degassing Using Activated Carbon . . . . .	38
6-1	Example of Eductors Used for Tank Agitation . . . . .	41
6-2	Example of Water Balancing . . . . .	42
10-1	Sample Hazard Assessment Checklist . . . . .	58
10-2	Sample Contractor Screening Checklist . . . . .	59
10-3	Sample Safe Work Checklist . . . . .	60
10-4	Sample Supervisor’s Safety Inspection Checklist . . . . .	62
10-5	Sample Emergency Action Plan . . . . .	63
10-6	Sample Emergency Plan . . . . .	64
10-7	Sample General Entry Permit (Page 1 of 2) . . . . .	72
10-7	Sample General Entry Permit (Page 2 of 2) . . . . .	73
10-8	Sample Confined Space Entry Permit . . . . .	74
10-9	Sample Confined Entry Permit (Page 1 of 2) . . . . .	75
10-9	Sample Confined Entry Permit (Page 2 of 2) . . . . .	76
10-10	Sample Safe (Cold) Work, Hot Work, and Entry Permit . . . . .	79
10-11	Sample Final Tank Cleaning Inspection Checklist . . . . .	82
12-1	Example of Floating Roof Supports . . . . .	90
12-2	Examples of Floating Roof Support Legs . . . . .	91
12-3	Examples of Radial Beams with Anti-Rotation Brackets . . . . .	96
12-4	Example of Floating Roof Leg Blocks . . . . .	96
12-5	Example of Temp. Lateral Support Beam . . . . .	97
12-6	Example of Rim Wedges . . . . .	98

Tables

4-1	Explosive (Flammable) Ranges of Hydrocarbon Vapors and Gas . . . . .	10
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# Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks

## 1 General

### 1.1 SCOPE

ANSI/API Recommended Practice 2016, First Edition, *Guidelines and Procedures for Entering and Cleaning Petroleum Storage Tanks*, supplements the requirements of ANSI/API Standard 2015, Sixth Edition, *Requirements for Safe Entry and Cleaning of Petroleum Storage Tanks*. This recommended practice provides guidance and information on the specific aspects of tank cleaning, in order to assist employers (owners/operators and contractors) to conduct safe tank cleaning operations in accordance with the requirements of ANSI/API Standard 2015.

### 1.2 APPLICABILITY

This recommended practice is applicable to stationary atmospheric and low-pressure (up to and including 15 psig) aboveground petroleum storage tanks, used in all sectors of the petroleum and petrochemical industry, including crude oil and gas production, refineries, petrochemical plants, bulk plants, and terminals. Information applicable to entering and cleaning conservation tanks, low pressure storage tanks, and vessels and tanks containing specific hazardous substances is also included in this recommended practice. Employers (owners/operators and contractors) should use the information provided in this recommended practice to help develop the site, tank, and project specific guidelines and procedures required by ANSI/API Standard 2015 to ensure that the tank cleaning operations are conducted safely.

This recommended practice does not and cannot cover every possible unique situation that may arise during tank cleaning operations. Employers (owner/operators and contractors) shall use the appropriate principles and requirements provided in ANSI/API Standard 2015, supplemented by the practices, procedures, and considerations provided in ANSI/API Recommended Practice 2016, to address site specific and tank specific situations.

### 1.3 REGULATORY REQUIREMENTS

In addition to the requirements contained in ANSI/API Standard 2015, persons engaged in tank cleaning activities shall refer to applicable federal, state and local government regulations pertinent to specific circumstances, including regulations of governments other than those of the United States, where appropriate. ANSI/API Recommended Practice 2016 is intended to be consistent with Title 29 of the U.S. *Code of Federal Regulations*, Occupational Safety and Health Administration, and applicable NFPA Codes and Standards as they

apply to entering and cleaning aboveground petroleum storage tanks. If any provision of this recommended practice conflicts with statutory or regulatory requirements, said statutes and regulations shall govern. This recommended practice is not intended to function as a substitute for applicable regulations, codes, standards or employer (owner/operator and contractor) safe work practices and guidelines which must be reviewed in their entirety to determine their applicability to the facility, its location, the tanks involved and the proposed work.

### 1.4 ADMINISTRATIVE CONTROLS AND PROCEDURES

In accordance with the requirements of ANSI/API Standard 2015, employers (owners, operators or contractors) shall develop and implement appropriate administrative controls, procedures, and written plans for tank preparation, entry, and cleaning operations from decommissioning through recommissioning, including, but not limited to, the following:

- Tank pre-cleaning planning and meeting.
- Storage tank, area, atmospheric, physical and product hazard assessments.
- Entry permit requirements, limitations, issuance and cancellation.
- Identification, designation and classification by the employer of permit required confined spaces, non-permit required confined spaces and non-confined spaces.
- Entry requirements for each designated confined space.
- Safe (cold) work and hot work permit requirements.
- Vapor and gas freeing, degassing, testing, and ventilation requirements.
- Training and personal protective equipment requirements for workers and supervisors.
- Emergency response requirements, rescue operations and rescue capability.
- Contractor selection and responsibilities.
- Owner/operator responsibilities.
- Tank cleaning procedures, equipment and sludge/residue disposal.
- Regulatory and facility requirements applicable to tank cleaning operations.