If you have any questions or comments regarding API standards, please visit https://www.api.org/standards.

NOTE Free publications with an asterisk are subject to a $10.00 handling charge for each total order, plus actual shipping charges.

**GENERAL**

**Publ 1593**
Gasoline Marketing in the United States Today
Provides information on motor fuel and gasoline consumption, U.S. motor fuel distribution, the U.S. gasoline pricing system, motor gasoline prices and taxes, the number/configuration of retail gasoline outlets, and employment/productivity in the retail gasoline distribution industry. Pages: 77
3rd Edition | May 1992 | Product Number: A15930 | Price: $118.00

**Publ 1673**
Compilation of Air Emission for Petroleum Distribution Dispensing Facilities
Compiles the most widely accepted, available emission factors and emission estimation techniques for developing air emission estimates from evaporative loss sources of petroleum products at marketing and distribution facilities. These losses can occur from transfer and storage operations and fugitive equipment leaks and spillage. Pages: 29
2nd Edition | July 2009 | Product Number: A16732 | Price: $83.00

**AVIATION**

**RP 1543**
Documentation, Monitoring and Laboratory Testing of Aviation Fuel During Shipment from Refinery to Airport
Aviation fuels pass through a variety of storage and handling facilities, from refinery to airport. As aviation fuels are stored and transported in storage and transportation systems where contact with non-aviation products may occur, a fuel quality monitoring program is required, in addition to equipment, operating, inspection and maintenance standards. The purpose of this practice is to ensure the fuel remains on specification. This recommended practice (RP) was written to provide guidance on the development of an aviation fuel monitoring and testing program (fuel quality monitoring program) for aviation fuel from point of manufacture to delivery to the airport. “Proper handling” entails documenting and testing aviation fuel quality as product is transported throughout the supply chain to maintain the original product specification. Pages: 25
1st Edition | July 2009 | Product Number: A154301 | Price: $61.00

**RP 1595**
Design, Construction, Operation, Maintenance, and Inspection of Aviation Pre-Airfield Storage Terminals
Contains basic requirements for the design, construction, operation, and maintenance of pre-airfield storage terminals located directly upstream of the airport, hereafter referred to as “pre-airfield storage terminals.” This recommended practice provides guidance on the minimum equipment standards and operating procedures for the receipt and storage of aviation fuels at pre-airfield storage terminals, located directly upstream of the airport, and its shipment directly via a grade-dedicated pipeline, marine vessel (barge or ship), or road/rail transport to an airport. This RP does not address in-transit or breakout storage upstream of the pre-airfield storage terminal. The design and construction provisions of this standard are intended for application at new facilities. Application of the design and construction provisions of this standard to facilities, equipment, structures, or installations that are already in place, that are in the process of construction or that are installed before the date of this publication, should be evaluated when circumstances merit. Such an evaluation should consider the site-specific circumstances and detailed accounting for both the potential and tolerance for risk, existing conditions at the installation, and overall benefit for applying the required design and construction provisions.

The operation, sampling, testing, and maintenance provisions in the various sections of this standard shall apply to both new and existing installations. Pages: 75
2nd Edition | October 2012 | Product Number: C159502 | Price: $239.00

As of 2010, API does not maintain or distribute the following aviation fuel equipment related documents:

**EI 1529**
Aviation Fuelling Hose

**EI 1540**
Design, Construction, Operation and Maintenance of Aviation Fueling Facilities, IP Model Code of Safe Practice Part 7

**EI 1542**
Identification Markings for Dedicated Aviation Fuel Manufacturing and Distribution Facilities, Airport Storage and Mobile Fuelling Equipment

**EI 1550**
Handbook on Equipment Used for the Maintenance and Delivery of Clean Aviation Fuel

**EI 1581**
Specification and Qualification Procedures for Aviation Jet Fuel Filter/Separators

**EI 1582**
Specification for Similarity for API/EI 1581 Aviation Jet Fuel Filter/Separators

**EI 1584**
Four-Inch Aviation Hydrant System Components and Arrangements

**EI 1585**
Guidance in the Cleaning of Aviation Fuel Hydrant Systems at Airports

**EI 1590**
Specifications and Qualification Procedures for Aviation Fuel Microfilters

**EI 1594**
Initial Pressure Strength Testing of Airport Fuel Hydrant Systems with Water

**EI 1596**
Design and Construction of Aviation Fuel Filter Vessels

**EI 1597**
Procedures for Overwing Fuelling to Ensure Delivery of the Correct Fuel Grade to an Aircraft

**EI 1598**
Considerations for Electronic Sensors to Monitor Free Water and/or Particulate Matter in Aviation Fuel

**EI 1599**
Laboratory Tests and Minimum Performance Levels for Aviation Fuel Dirt Defense Filters

The documents listed above are maintained and distributed by the Energy Institute. For ordering information, please refer to the following website: https://publishing.energyinst.org/.
MARKETING OPERATIONS

RP 1525 ☀
Bulk Oil Testing, Handling, and Storage Guidelines

Designed to be used as a reference and management guide by personnel operating and managing petroleum and tank facilities associated with the storage and distribution of petroleum lubricants. Topics covered include equipment and facility standards, product sampling and testing methods and equipment, receiving and storage of bulk lubricants, and packaging and loading petroleum lubricants for distribution to other facilities. Pages: 28

1st Edition | June 1997 | Product Number: F15251 | Price: $67.00

RP 1604
Closure of Underground Petroleum Storage Tanks

Provides operating procedures that may be used for the abandonment, above ground bulk storage systems greater than 60,000 gallons. Pages: 9

3rd Edition | March 1996 | Reaffirmed: December 2010
Product Number: A16043 | Price: $78.00

RP 1615
Installation of Underground Petroleum Storage Systems

Guide to procedures and equipment that should be used for the proper installation of underground storage systems for bulk petroleum products or used oil at retail and commercial facilities. The stored products include gasoline, diesel fuel, kerosene, lubricating oils, used oil, and certain bio-fuel blends. This RP is intended for use by architects, engineers, tank owners, tank operators, and contractors. Contractors, engineers, and owners or operators who are preparing to design or install an UST system should investigate the federal, state, and local requirements and current methods of compliance for vapor recovery in that region. Vapor recovery is covered in detail in Section 17 of this document. This RP is not intended to cover specialized installations, such as fuel storage systems at marinas or airports, heating oil storage systems (either residential or bulk), or systems installed inside buildings. However, it does outline recognized and generally accepted good engineering practices that may be of use for these specialized installations. This RP does not apply to the installation of below ground or above ground bulk storage systems greater than 60,000 gallons. Pages: 89

6th Edition | April 2011 | Product Number: A16156 | Price: $211.00

RP 1621
Bulk Liquid Stock Control at Retail Outlets

Primarily applies to underground storage of motor fuels and used oil at retail and commercial facilities. It assists the operator in controlling bulk stock losses, thereby achieving a high level of safety and pollution control, while maximizing profits. Pages: 25

Product Number: A16210 | Price: $85.00

RP 1626
Storing and Handling Ethanol and Gasoline-Ethanol Blends at Distribution Terminals and Filling Stations

(Includes Errata 1 dated February 2011)
Describes recommended practices for the storing, handling, and fire protection of ethanol and gasoline-ethanol blends from E1 to E10 and from E70 to E100 (used for E85) at distribution terminals and filling stations. Where information exists for gasoline-ethanol blends from E11 to E15, it is shared. Recommended practices for E16 through E69 are not covered because currently these blends are not legal gasoline blends or alternative fuels. There is a general lack of information on the properties of these blends and there are currently no filling station components certified by any nationally recognized testing laboratory for these blends. Pages: 59

2nd Edition | August 2010 | Product Number: A16262 | Price: $160.00

RP 1631
Interior Lining and Periodic Inspection of Underground Storage Tanks

Provides minimum recommendations for the interior lining of existing steel and fiberglass-reinforced plastic underground tanks used to store petroleum-based motor fuels and middle distillates. Recommendations and procedures to be followed by contractors, mechanics, and engineers are presented. Methods for vapor-freeing tanks, removing sediment, and cleaning interior surfaces of steel and fiberglass tanks are also presented, as are guidelines for identifying tanks that may be lined. The methods described in this standard are applicable to steel and fiberglass-reinforced plastic tanks used for the storage of petroleum-based motor fuels and middle distillates. The procedures are applicable to tanks installed in typical retail service stations, but may also be used for tanks installed at other types of facilities. Pages: 25

Product Number: A16315 | Price: $89.00

RP 1637
Using the API Color-Symbol System to Mark Equipment and Vehicles for Product Identification at Gasoline Dispensing Facilities and Distribution Terminals

(Includes Errata 1 dated January 2007)
Describes a system for marking equipment used to store and handle bulk petroleum, alcohol-blended petroleum and biodiesel products. The marking system described in this recommended practice does not cover aviation fuels. Marking systems for aviation fuels are described in API/IP Std 1542. Pages: 15

Product Number: A16373 | Price: $68.00

RP 1639
Owner/Operator's Guide to Operation and Maintenance of Vapor Recovery Systems at Gasoline Dispensing Facilities

Provides guidance for owners and operators of gasoline dispensing facilities and regulatory officials regarding the operation and maintenance of gasoline vapor recovery systems and components. Proper operation and maintenance of the equipment can improve compliance with vapor recovery regulations and provide substantial emission reductions. This guide does not address the maintenance required qualified service technicians. Pages: 22

Product Number: A16391 | Price: $89.00

RP 1640
Product Quality in Light Product Storage and Handling Operations

Prepared by the API Fuels Marketing Subcommittee with technical participation and feedback from other industry stakeholders. It assists those involved in fuel handling at distribution and intermediate storage facilities. This publication provides guidance on the minimum equipment standards and operating procedures for the receipt, storage, blending, and delivery of light products, their blend components, and additives at distribution and intermediate storage terminals, including related operations of pipeline, marine vessel (barge or ship), and road/rail transport. This RP also covers the minimum equipment standards and operating procedures for the receipt, storage, blending of light products, including but not limited to gasoline, kerosene, diesel, heating oil and their blend components (i.e., ethanol, biodiesel, and butane) at distribution and storage terminals, as well as light product shipments directly via a pipeline, marine vessel (barge or ship) or road and rail transport. In addition, this RP provides guidance for the design, construction, operation, and maintenance of light products storage and distribution terminals with the specific intent of protecting or ensuring product quality. Pages: 64

1st Edition | August 2013 | Product Number: A164001 | Price: $165.00

MARKETING OPERATIONS

Phone Orders: +1 800 854 7179 (Toll-free: U.S. and Canada)

Phone Orders: +1 303 397 7956 (Local and International)

This publication is a new entry in this catalog.

This publication is related to an API licensing, certification, or accreditation program.
### Marketing

**Fax Orders**: +1 303 397 2740  
**Online Orders**: global.ihs.com

<table>
<thead>
<tr>
<th>Publ 1642</th>
<th>Alcohol, Ethers, and Gasoline-Alcohol and -Ether Blends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examines fire safety considerations at petroleum marketing facilities. Focuses on gasoline blended with oxygenates, and M85, but also includes alcohols and ethers because they may be present at terminals and bulk plants for blending purposes. Pages: 12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publ 1645</th>
<th>Stage II Cost Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addresses the general installation cost information for three different types of retail gasoline outlet (RGO) vapor recovery systems: vapor balance, passive vacuum assist, and active vacuum assist. Additionally, it provides an overview of how each system operates. Pages: 6</td>
<td></td>
</tr>
<tr>
<td>1st Edition</td>
<td>August 2002</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RP 1646</th>
<th>Safe Work Practices for Contractors Working at Retail Petroleum/Convenience Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides the recommended minimum safety procedures for working at retail petroleum/convenience facilities and is a key component of the API WorkSafe Program. It also details how to develop a task-specific Job Safety Analysis that should be completed before any work may begin. This document also provides the user with a general awareness of safety issues associated with maintenance and construction work at retail petroleum/convenience facilities, including service stations. It also highlights many of the Federal OSHA requirements that may apply to maintenance and construction work in the retail petroleum/convenience business. Pages: 84</td>
<td></td>
</tr>
<tr>
<td>2nd Edition</td>
<td>May 2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Std 2610</th>
<th>Design, Construction, Operation, Maintenance, and Inspection of Terminal and Tank Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guides the management of terminals and tanks in a manner that protects the environment and the safety of workers and the public. This standard is intended for petroleum terminal and tank facilities associated with marketing, refining, pipeline, and other similar facilities. This standard may be used as a resource and management guide by those responsible for such facilities and by those working on their behalf. This standard is a compilation of industry knowledge, information, and management practices for all relevant aspects of terminal and tank operations aggregated into an overview document comprising best practices. Pages: 100</td>
<td></td>
</tr>
<tr>
<td>3rd Edition</td>
<td>September 2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>USED OIL</th>
</tr>
</thead>
</table>

| A Guidebook for Implementing Curbside and Drop-Off Used Motor Oil Collection Programs |
| Designed to help municipal managers and regulators evaluate the types of available programs (either curbside or drop-off programs, including examples of both), and how to effectively implement these used oil recycling programs. It is based on national surveys of existing programs throughout the country and includes examples of budgets, procedures, equipment, and model programs that are currently underway. Pages: 47 |

**Publ 1830**  
National Used Oil Collection Study  
Reviews the status of used engine oil collection in the United States. Documents state efforts to collect oil and the outcomes of such efforts. Provides examples of how used oil collection can be successful, as well as warning of the pitfalls that should be avoided, based on the experience of other states. Pages: 248  
1st Edition | June 1996 | Product Number: B18301 | Price: $61.00 |

**Publ 1835**  
Study of Used Motor Oil Recycling in Eleven Selected Countries  
The study described in this report obtained information about used motor oil collection and recycling programs in 11 selected countries around the world. Pages: 55  
1st Edition | November 1997 | Product Number: B18351 | Price: $61.00 |

**TANK TRUCK OPERATIONS**

<table>
<thead>
<tr>
<th>RP 1004</th>
<th>Bottom Loading and Vapor Recovery for MC-306 &amp; DOT-406 Tank Motor Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides an industry standard for bottom loading and vapor recovery of proprietary and hired carrier DOT MC-306 tank vehicles at terminals operated by more than one supplier. Guides the manufacturer and operator of a tank vehicle as to the uniform features that should be provided to permit loading of a tank vehicle with a standard 4-in. adapter. This edition of RP 1004 requires an independent secondary control system and maximum requirements for outage in the tank to allow the secondary control system to function. Pages: 21</td>
<td></td>
</tr>
<tr>
<td>2-Year Extension: January 2018</td>
<td>Product Number: A10048</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RP 1007</th>
<th>Loading and Unloading of MC 306/DOT 406 Cargo Tank Motor Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring the safe and efficient loading and delivery of petroleum products to retail service stations and bulk facilities is the primary goal for all companies that transport product. This document is a guideline for use by the truck driver and persons responsible for loading and unloading of MC306/ DOT406 cargo tanks. It identifies specific steps to ensure that product can be loaded into tank trucks and unloaded into both underground and aboveground storage tanks in a safe and efficient manner that protects the environment. It is intended to be used in conjunction with existing driver training programs and procedures. Pages: 24</td>
<td></td>
</tr>
<tr>
<td>2-Year Extension: January 2018</td>
<td>Product Number: A10071</td>
</tr>
</tbody>
</table>

---

*These translated versions are provided for the convenience of our customers and are not officially endorsed by API. The translated versions shall neither replace nor supersede the English-language versions, which remain the official standards. API shall not be responsible for any discrepancies or interpretations of these translations. Translations may not include any addenda or errata to the document. Please check the English-language versions for any updates to the documents.*

- **This publication is a new entry in this catalog.**
- **This publication is related to an API licensing, certification, or accreditation program.**
RP 1112
Developing a Highway Emergency Response Plan for Incidents Involving Hazardous Materials

Provides minimum guidelines for developing an emergency response plan for incidents involving hazardous liquid hydrocarbons, such as gasoline and crude oil, transported in MC 306/DOT 406 and MC 307/DOT 407 aluminum cargo tanks, and for coordinating and cooperating with local, state, and federal officials. Covers response plan priorities, personnel training, special equipment, media relations, environmental relations, and post-response activities. The appendices outline a highway emergency response plan and suggest a procedure for removing liquid hydrocarbons from overturned cargo tanks and righting the tank vehicles. Pages: 21

2-Year Extension: January 2018
Product Number: A11123 | Price: $78.00

MOTOR OILS AND LUBRICANTS

Motor Oil Shelf Cards ●

This two-page laminated guide helps consumers understand the API Engine Oil Quality Marks—the API Certification Mark, "Starburst," and Service Symbol, "Donut," and the API Service Categories. Shelf Cards are available in English and Spanish and can be personalized with a company logo. For information on personalizing the shelf cards, call 202-682-8156.

Single copies free on request from API [eolcs@api.org or (202)-682-8516]

Publ 1509 ●
Engine Oil Licensing and Certification System
(includes Addendum 1 dated October 2014)

Describes the voluntary API Engine Oil Licensing and Certification System (EOLCS) and explains to marketers how different API marks are licensed and displayed for the consumer. The publication describes methods for developing new engine oil performance requirements and provides the marketer with a description of the API marks and their use, licensing requirements, aftermarket conformance, and enforcement procedures. EOLCS is the result of cooperation between U.S. and Japanese automobile manufacturers, diesel engine manufacturers, the additive industry represented by the American Chemistry Council (ACC), and the U.S. petroleum industry represented by API. This program benefits consumers, the petroleum industry, and gasoline- and diesel-engine manufacturers.

Pages: 72


Publ 1520 ●
Directory of Licensees: API Engine Oil Licensing and Certification System

Identifies the companies licensed to display the API Engine Oil Licensing and Certification System (EOLCS) Symbols. This directory can be accessed only through API’s website, https://www.api.org/products-and-services/engine-oil/eolcs-categories-and-documents/publication-1520.

DIESEL FUEL

Publ 1571
Diesel Fuel—Questions and Answers for Highway and Off-Highway Use

Provides answers to some of the frequent questions asked about diesel fuel. Included are explanations of the quality features of diesel fuel and their significance, descriptions of diesel fuel classifications, discussions of additives normally used and their purposes, and explanations of factors that can affect performance. Pages: 20


This publication is a new entry in this catalog. This publication is related to an API licensing, certification, or accreditation program.
Publ 1669
Results of a Retail Gasoline Outlet and Commercial Parking Lot Storm Water Runoff Study

This publication provides the results of a study to characterize storm water runoff from retail gasoline outlets and compares the results with runoff from commercial parking lots and published urban “background” values. Funded by the Western States Petroleum Association (WSPA) and the American Petroleum Institute (API), the results of this study indicate that fueling activities at normally operated and maintained retail gasoline outlets do not contribute additional significant concentrations of measured constituents in storm water runoff. Pages: 24

1st Edition | December 1994 | Product Number: A16691 | Price: $85.00

Publ 1628
A Guide to the Assessment and Remediation of Underground Petroleum Releases

Provides an overview of proven technologies for the assessment and remediation of petroleum releases in soil and groundwater. Covers accidental releases arising from the production, transportation, refining, and marketing of liquid petroleum products or unrefined crude oil. Pages: 119


Publ 1628A
Natural Attenuation Processes

Describes the physical, chemical, and biological processes that decrease the concentrations and ultimately limit the extent of the dissolved plume migrating from a hydrocarbon release. Pages: 16


Publ 1628B
Risk-Based Decision Making

Discusses risk-based decision making approaches used for the assessment of hazardous conditions. Also presents information that can be utilized to focus remedial measures and funds on petroleum hydrocarbon release sites while being protective of human health and the environment, and to facilitate timely closure of hydrocarbon-impacted sites. Pages: 13


Publ 1628C
Optimization of Hydrocarbon Recovery

Covers the optimization, in its broadest sense, to achieve an environmentally sound site closure in the appropriate timeframe for the least cost (to maximize efficiency of the selected system). Pages: 20


Publ 1628D
In-Situ Air Sparging

Addresses in-situ air sparging. Covers remediation technologies, starting with the early techniques of containment or mass reduction through today’s very aggressive site closure techniques. Addresses containment as well as residual petroleum hydrocarbon compounds. Pages: 13


Publ 1628E
Operation and Maintenance Considerations for Hydrocarbon Remediation Systems

Discusses concepts regarding operation and maintenance procedures necessary to achieve and maintain optimal performance of petroleum hydrocarbon remediation systems. Pages: 20


Publ 1629
Guide for Assessing and Remediating Petroleum Hydrocarbons in Soils

This publication provides information regarding the site and release characteristics relevant to, and methods for assessing and remediating, soils contaminated with petroleum hydrocarbons released from underground or aboveground storage tank systems and operations. Developed to complement Publ 1628, which focuses primarily on assessing and remediating petroleum releases that may impact groundwater. Pages: 81


Security

Std 1164
Pipeline SCADA Security

Provides guidance to the operators of oil and gas liquids pipeline systems for managing SCADA system integrity and security. The use of this document is not limited to pipelines regulated under Title 49 CFR 195.1, but should be viewed as a listing of best practices to be employed when reviewing and developing standards for a SCADA system. This document embodies API’s Security Guidelines for the Petroleum Industry. This guideline is designed to provide operators with a description of industry practices in SCADA security, and to provide the framework needed to develop sound security practices within the operator's individual companies. It is important that operators understand system vulnerability and risks when reviewing the SCADA system for possible system improvements. The goal of an operator is to control the pipeline such that there are no adverse effects on employees, the environment, the public, or the customers as a result of actions by the operator, or by other parties. This document’s main body provides a high-level view of holistic security practices. The annexes provide further details and technical guidance. Reviewing this document and following the guidance set forth in the annexes assists in creating inherently secure operations. Implementation of this standard to advance supervisory control and data acquisition (SCADA) cyber security is a continuous process. The overall process could take years to implement, depending on the complexity of the SCADA system. Additionally, the process would optimally be started as part of a SCADA upgrade project and use this standard to “design in” security as an element of the new system. Pages: 76

Product Number: D11642 | Price: $150.00