

Location	Text	Change
Throughout document	Double space after period	Single space after period
Throughout document	Inconsistent fonts	Changed body text to 11 pt Times New Roman
Throughout document		Changed date of document to 9/2024
Throughout document	Notes on equations	Reformatted notes to differentiate from body text and added equation number to help differentiate within long notes.
Throughout document	Greek letters	Replaced images of Greek letters with Word symbols
Throughout document	Equations	Replaced images of equations that were difficult to read
Throughout document	Equations	Replaced Word equations with images and added Alt Text
Throughout document	Equations	Renumbered equations to account for new Equation 1-16 and new Equation 1-17
Throughout document	Equations	Added parameter definitions below equations where missing
Throughout document	Equation 4-1 and afterward	Removed italicized equation parameters to be consistent with earlier equations
7.1-14	The following section presents the emission estimation procedures for fixed roof, external floating roof, domed external floating roof, and internal floating roof tanks.	The following section presents the emission estimation procedures for <b>vertical and horizontal</b> fixed roof, external floating roof, domed external floating roof, and internal floating roof tanks.
7.1-14	While this software does not address all of the scenarios described in this chapter, <b>is known to have errors, and is no longer supported, it is still made available for historical purposes.</b>	While this software does not address all of the scenarios described in this chapter, <b>known errors have been corrected and a new version, TANKS 5.1, is now available.</b>
7.1-15	Users of these programs are advised to understand the extent of agreement with AP-42 Chapter 7 calculation methodology and assume responsibility <b>of</b> the accuracy of the output as they have not been reviewed or approved by the EPA.	Users of these programs are advised to understand the extent of agreement with AP-42 Chapter 7 calculation methodology and assume responsibility <b>for</b> the accuracy of the output as they have not been reviewed or approved by the EPA.
7.1-21		Corrected Equation 1-16 for rectangular tanks and corrected Equation 1-17 for square tanks
7.1-22	Added clarifying text for Equation 1-17	$D_{Er}$ or $D_{Es}$ should be used in place of $D$ in Equation 1-4 for calculating the standing loss (or in Equation 1-3, if calculating the tank vapor space volume) from rectangular or square tanks, respectively.

Location	Text	Change
7.1-24	True vapor pressure may be determined by ASTM D2879 (or ASTM D6377 for crude oils with a true vapor pressure greater than 3.6 psia) or obtained from standard reference texts.	True vapor pressure may be determined by ASTM D2879 (or ASTM D6377 for crude oils with a true vapor pressure greater than 3.6 psia <b>or ASTM D6378 for petroleum products with a true vapor pressure greater than 1.0 psia</b> ) or obtained from standard reference texts.
7.1-29	Equation 1-39	Added notes related to rectangular tanks and square tanks
7.1-29	Equation 1-40	Added notes related to rectangular tanks and square tanks
7.1-49	Equation 3-21	Removed $W_L$ because it is not used in the equation.
Table 7.1-1		Added definition of $P_v$ (vapor pressure at average ambient temperature, psia)
Table 7.1-1		Moved variables beginning with $\Delta T_A$ from the first column to the second column to balance the table length
Table 7.1-2		Removed Jet Naptha (JP-4) and added note: “Jet Naptha (JP-4) was removed from this table because it is no longer produced or procured. ‘Coordinating Research Council, Aviation Fuel Properties Handbook, CRC Report No. 663’”
Table 7.1-3	Physical Properties Of Selected <b>Petrochemicals</b>	Physical Properties Of Selected <b>Organic</b> Chemicals
Table 7.1-3		Added information for Dibromoethane (1,2)
Table 7.1-3		Added information for Tetraethyllead
Table 7.1-3		Reorganized table so that the alternative name of the chemical is on the same row
Table 7.1-4	+ <b>clingage</b>	+ <b>(0.01 in / 12 in./ft)</b>
Table 7.1-4	$h_{le}$ is evaluated per the applicable case above	$h_{le} = h_l$
Table 7.1-6	“ <b>New</b> ”	“ <b>Good</b> ”

Location	Text	Change
Table 7.1-6	<p><b>New:</b> For paint, paint <b>still retains the fresh shine of having been recently applied; for mill-finish aluminum, surface is shiny. This was previously labeled “Good.”</b></p> <p>Average: For <b>paint, paint is in good condition, but the initial shine has faded; for mill-finish aluminum, surface is oxidized but still bright.</b> The value given in each case is the average of the <b>New</b> and the Aged values for that case, and does not represent new data.</p> <p>Aged: For paint, paint is noticeably faded and dull; for mill-finish aluminum, surface is dull. <b>This was previously labeled “Poor.”</b></p>	<p><b>Good:</b> For paint, paint <b>is in good condition.</b></p> <p>Average: For mill-finish aluminum, surface is oxidized but still bright. The value given in each case is the average of the <b>Good</b> and the Aged values for that case, and does not represent new data.</p> <p>Aged: For paint, paint is noticeably faded and dull; for mill-finish aluminum, surface is dull.</p>
Table 7.1-6	Reference 22: Evaporative Loss Reference Information and Speciation Methodology, Manual of Petroleum Measurement Standards, Chapter 19.4, Third Edition, Addendum <b>2</b> , American Petroleum Institute, Washington, D.C., <b>June 2017.</b>	Reference 22: Evaporative Loss Reference Information and Speciation Methodology, Manual of Petroleum Measurement Standards, Chapter 19.4, Third Edition, Addendum <b>3</b> , American Petroleum Institute, Washington, D.C., <b>October 2023.</b>
Table 7.1-7	<b>lb/in<sup>2</sup></b>	<b>psia</b>
Table 7.1-7		Removed hourly from footnote
Table 7.1-7	Reference 14. Data for this table are 20-year averages for the years 1991 through 2010, prepared by the National Renewable Energy Laboratory and compiled in the National Solar Radiation Database. Only Class I sites are summarized in this table, but similar meteorological data for several hundred Class II sites may be obtained from this reference. Similar historical averages of meteorological data from nearby National Weather Service sites or site-specific data may also be used. NOTE: The current table reflects the <b>hourly</b> average minimum and maximum ambient temperatures <b>while this table in the previous version of Chapter 7 contained the average daily minimum and maximum ambient temperatures.</b>	Reference 14. Data for this table are 20-year averages for the years 1991 through 2010, prepared by the National Renewable Energy Laboratory and compiled in the National Solar Radiation Database. Only Class I sites are summarized in this table, but similar meteorological data for several hundred Class II sites may be obtained from this reference. Similar historical averages of meteorological data from nearby National Weather Service sites or site-specific data may also be used. NOTE: The current table reflects the average minimum and maximum ambient temperatures.
Table 7.1-14	External Floating Roof Tanks: Typical Number Of <b>Roof</b> Legs, N <sub>l</sub> <sup>a</sup>	External Floating Roof Tanks: Typical Number Of <b>Deck</b> Legs, N <sub>l</sub> <sup>a</sup>

Location	Text	Change
7.1-209		Added: “Note that $C_{sf}$ is set to 1.0 for subsequent vapor space purges that follow ventilation having been shut off overnight.”