### INSTRUCTIONS

**Department of Environmental Quality**  
**Division of Air Quality**  
**195 N. 1950 W.**  
**Salt Lake City, UT 84116**  
**Telephone (801) 536-4000**

**Storage Vessel ID**  
Provide the identification number the company associates with the tank.

**SCC**  
Enter the appropriate Source Classification Code (SCC). See page 18 of the General Instructions for explanation.

**Type of Material Stored**  
List the type of liquid stored in the tank (i.e., gasoline, crude oil, jet naphtha, etc.). Please make sure that the products stored are listed in Tables 7.1-2,3&5 of AP-42, 5th edition. If they are not listed, use the Supplement Form 18-19 to provide data for TANKS 4.09D (see Note).

**Storage Capacity**  
Storage capacity should be in $10^3$ gal.

**Tank Diameter**  
Tank diameter should be in feet.

**Shell Condition**  
Describe the condition of the tank shell (i.e., light rust, dense rust, or gunite lining).

**Paint Color/Shade**  
Describe the color and shade combination of the paint on the shell of the tank (i.e., white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, and red/primer).

**Paint Condition**  
Describe the condition of the paint on the sides (shell) of the tank (i.e., good or poor).

**Tank Construction**  
Enter either welded or riveted.

**Roof Type**  
Enter pontoon or double deck.

**Roof Fitting Category**  
Enter typical, controlled, or detail.

**Primary Seal**  
Report the type of primary rim seal (i.e., vapor-mounted, liquid-mounted, or mechanical shoe).

**Secondary Seal**  
Choose weather shield, or rim-mounted, or none.

**Avg. Surface Temp. (optional)**  
Enter average surface temperature of the liquid in °F.

**Surface Vapor Press. (optional)**  
Provide average vapor pressure of the liquid in pounds per square inch absolute (Psia).

**Molecular Weight**  
Provide the molecular weight of the liquid stored in the tank.
<table>
<thead>
<tr>
<th><strong>Annual Turnovers</strong></th>
<th>Calculate the number of the turnovers per year by dividing the net throughput by the storage capacity.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Annual Total</strong></td>
<td>Provide annual total throughput in $10^3$ gal.</td>
</tr>
<tr>
<td><strong>Standing Loss</strong></td>
<td>Report all standing losses which include rim seal and roof fitting losses in tons per year.</td>
</tr>
<tr>
<td><strong>Withdrawal Loss</strong></td>
<td>Report withdrawal loss in tons per year.</td>
</tr>
<tr>
<td><strong>Total Loss</strong></td>
<td>Enter the sum of standing loss and withdrawal loss.</td>
</tr>
<tr>
<td><strong>Estimate Code</strong></td>
<td>Provide the method code for quantifying actual emissions of each pollutant. The valid method codes are listed in Table 6, page 26 of the General Instructions. If estimate code 8 (EPA Emission Factor) is used, also include the specific AP-42 section used in the Comments field; see page 15 for a link to AP-42.</td>
</tr>
<tr>
<td><strong>Vapor Recovery % Control Efficiency</strong></td>
<td>Provide vapor recovery efficiency if the tank has a recovery system.</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Provide any additional information necessary for calculation of emissions.</td>
</tr>
</tbody>
</table>

**Note:**
The U.S. EPA recommends the use of the latest version of TANKS (currently version 4.09D) for the estimation of emissions from storage tanks. TANKS is designed for use by local, state, and federal agencies, environmental consultants, and others who need to calculate VOC emissions from organic liquid storage tanks.

TANKS is a Windows-based computer software program that computes estimates of volatile organic compound (VOC) emissions from fixed- and floating-roof storage tanks. TANKS is based on the emission estimation procedures from Chapter 7 of EPA’s Compilation Of Air Pollutant Emission Factors (AP-42), plus recent updates from the American Petroleum Institute. A user's manual, included with the program, explains the many features and options of TANKS. The program includes on-line help for every screen.

The software can be downloaded from the EPA web page in a ZIP format from: [http://www.epa.gov/ttn/chief/software/tanks/index.html](http://www.epa.gov/ttn/chief/software/tanks/index.html) or provide the necessary data on Supplement Form 18-19, and DAQ will run the software to estimate the emissions.

Be aware that if you choose to run TANKS 4.09D, you must include the full output of TANKS 4.09D with your emissions inventory submittal.