Attachment L EMISSIONS UNIT DATA SHEET STORAGE TANKS

Provide the following information for <u>each</u> new or modified bulk liquid storage tank as shown on the *Equipment List Form* and other parts of this application. A tank is considered modified if the material to be stored in the tank is different from the existing stored liquid.

IF USING US EPA'S TANKS EMISSION ESTIMATION PROGRAM (AVAILABLE AT <u>www.epa.gov/tnn/tanks.html</u>), APPLICANT MAY ATTACH THE SUMMARY SHEETS IN LIEU OF COMPLETING SECTIONS III, IV, & V OF THIS FORM. HOWEVER, SECTIONS I, II, AND VI OF THIS FORM MUST BE COMPLETED. US EPA'S AP-42, SECTION 7.1, "ORGANIC LIQUID STORAGE TANKS," MAY ALSO BE USED TO ESTIMATE VOC AND HAP EMISSIONS (<u>http://www.epa.gov/tnn/chief/</u>).

I. GENERAL INFORMATION (required)

1. Bulk Storage Area Name	2. Tank Name
3. Tank Equipment Identification No. (as assigned Equipment List Form)	ed on 4. Emission Point Identification No. (as assigned on Equipment List Form)
5. Date of Commencement of Construction (for ex	xisting tanks)
6. Type of change 🗌 New Construction	New Stored Material Other Tank Modification
7. Description of Tank Modification (if applicable)	
7A. Does the tank have more than one mode of op (e.g. Is there more than one product stored in t	eration? Yes No he tank?)
7B. If YES, explain and identify which mode is completed for each mode).	covered by this application (Note: A separate form must be
7C. Provide any limitations on source operation aff variation, etc.):	fecting emissions, any work practice standards (e.g. production
II. TANK IN	FORMATION (required)
 Design Capacity (specify barrels or gallons). height. 	Use the internal cross-sectional area multiplied by internal
9A. Tank Internal Diameter (ft)	9B. Tank Internal Height (or Length) (ft)
10A. Maximum Liquid Height (ft)	10B. Average Liquid Height (ft)
11A. Maximum Vapor Space Height (ft)	11B. Average Vapor Space Height (ft)
12. Nominal Capacity (specify barrels or gallons). liquid levels and overflow valve heights.	This is also known as "working volume" and considers design

13A. Maximum annual throughput (gal/yr)	13B. Maximum daily throughput (gal/day)
14. Number of Turnovers per year (annual net throughpu	t/maximum tank liquid volume)
15. Maximum tank fill rate (gal/min)	
16. Tank fill method	Splash Bottom Loading
17. Complete 17A and 17B for Variable Vapor Space Tar	nk Systems Does Not Apply
17A. Volume Expansion Capacity of System (gal)	17B. Number of transfers into system per year
 18. Type of tank (check all that apply): Fixed Roofverticalhorizontalother (describe) External Floating Roofpontoon roof Domed External (or Covered) Floating Roof Internal Floating Roofvertical column su Variable Vapor Spacelifter roof Pressurizedsphericalcylindrical Underground Other (describe) 	flat roof cone roof dome roof double deck roof pport self-supporting diaphragm
III. TANK CONSTRUCTION & OPERATION INFORM	ATION (optional if providing TANKS Summary Sheets)
19. Tank Shell Construction:	
Riveted Gunite lined Epoxy-coated	d rivets 🗌 Other (describe)
20A. Shell Color 20B. Roof Color	r 20C. Year Last Painted
21. Shell Condition (if metal and unlined):	
22A. Is the tank heated? YES NO	
22B. If YES, provide the operating temperature (°F)	
22C. If YES, please describe how heat is provided to the	ank.
23. Operating Pressure Range (psig): to	
24. Complete the following section for Vertical Fixed Ro	of Tanks Does Not Apply
24A. For dome roof, provide roof radius (ft)	
24B. For cone roof, provide slope (ft/ft)	
25. Complete the following section for Floating Roof Tar	nks Does Not Apply
25A. Year Internal Floaters Installed:	
25B. Primary Seal Type: Metallic (Mechanical) (check one) Vapor Mounted Resil	Shoe Seal Liquid Mounted Resilient Seal ient Seal Other (describe):
25C. Is the Floating Roof equipped with a Secondary S	Seal? YES NO
25D. If YES, how is the secondary seal mounted? (che	eck one) Shoe Rim Other (describe):
25E. Is the Floating Roof equipped with a weather shie	əld? 🗌 YES 🗌 NO

25F. Describe deck fittings; indicate the number of each type of fitting:				
	ACCESS	S НАТСН		
BOLT COVER, GASKETED:	UNBOLTED COVI	ER, GASKETED:	UNBOLTED COVER, UNGASKETED:	
	1 1 1			
BOLT COVER GASKETED		FR GASKETED	UNBOLTED COVER UNGASKETED	
			SNBOLTED GOVER, SNOKOKETED.	
	COLUM	N WELL		
BUILT-UP COLUMN - SLIDING	BUILT-UP COLU	JMN – SLIDING	PIPE COLUMN – FLEXIBLE	
COVER, GASKETED:	COVER, UNGASP	ETED:	FABRIC SLEEVE SEAL:	
	•			
	LADDE	R WELL		
PIP COLUMN – SLIDING COVER, G	ASKETED:	PIPE COLUMN -	SLIDING COVER, UNGASKETED:	
	GAUGE-HATCH	: /SAMPLE PORT		
SLIDING COVER. GASKETED:		SLIDING COVER.	UNGASKETED:	
,		,		
		, , ,		
	ROOF LEG OR	HANGER WELL		
WEIGHTED MECHANICAL			SAMPLE WELL-SLIT FABRIC SEAL	
ACTORTION, GASKETED.	ACTOATION, ON	SAGRETED.		
	•			
	VACUUM	BREAKER		
WEIGHTED MECHANICAL ACTUAT	ION, GASKETED:	WEIGHTED MECHA	ANICAL ACTUATION, UNGASKETED:	
	RIM			
WEIGHTED MECHANICAL ACTUAT	ION GASKETED:	WEIGHTED MECHA	ANICAL ACTUATION, UNGASKETED:	
	DECK DRAIN (3-I	NCH DIAMETER)		
OPEN:		90% CLOSED:		
	STUB	DRAIN		
1-INCH DIAMETER:				
UTHER (DESCH	CIDE, ATTACH ADL	JITIONAL PAGES I	F NECESSARI)	

26. Complete the following section for Internal FI	oating Roof Tanks	s 🛛 🗌 Does Not Apply	/
26A. Deck Type: Dolted Weld	led		
26B. For Bolted decks, provide deck construc	tion:		
26C. Deck seam:			
Continuous sheet construction 5 feet wide	9		
Continuous sheet construction 7 feet wide	9		
Continuous sheet construction 5×7.5 fee	et wide		
Other (describe)	i wide		
		· · · · · · · · · · · · · · · · · · ·	
26D. Deck seam length (ft)	26E.	Area of deck (ft ²)	
For column supported tanks:	26G.	Diameter of each column:	
IV. SITE INFORMANTION (c	potional if providing	g TANKS Summary Shee	ts)
27. Provide the city and state on which the data	in this section are	based.	
28. Daily Average Ambient Temperature (°F)			
29. Annual Average Maximum Temperature (°F)			
30. Annual Average Minimum Temperature (°F)			
31. Average Wind Speed (miles/hr)			
32. Annual Average Solar Insulation Factor (BTL	J/(ft²·day))		
33. Atmospheric Pressure (psia)			
V. LIQUID INFORMATION (optional if providin	g TANKS Summary Shee	ets)
34. Average daily temperature range of bulk liqu	id:		
34A. Minimum (°F)	34B.	Maximum (°F)	
35. Average operating pressure range of tank:			
35A. Minimum (psig)	35B.	Maximum (psig)	
36A. Minimum Liquid Surface Temperature (°	F) 36B.	Corresponding Vapor Pre	essure (psia)
37A. Average Liquid Surface Temperature (°F) 37B.	Corresponding Vapor Pre	ssure (psia)
38A. Maximum Liquid Surface Temperature (°F) 38B.	Corresponding Vapor Pre	ssure (psia)
39. Provide the following for each liquid or gas to	be stored in tank	. Add additional pages if	necessarv.
39A. Material Name or Composition			
39B. CAS Number			
39C. Liquid Density (lb/gal)			
39D. Liquid Molecular Weight (lb/lb-mole)			
39E. Vapor Molecular Weight (lb/lb-mole)			

Maximum Vapor Pres	sure				
39F. True (psia)					
<u>39G. Reid (psia)</u>	oor				
39H. From	eai				
391 To					
	VI. EMISSIONS A			DATA (required)	
40. Emission Control	Devices (check as many	/ as apply):	Does No	ot Apply	
Carbon Adsorp	otion ¹				
Condenser ¹					
Conservation \	/ent (psig)				
Vacuum S	Setting		Pressure Se	etting	
Emergency Re	lief Valve (psig)			-	
Inert Gas Blan	ket of				
Insulation of Ta	ank with				
Liquid Absorpt	ion (scrubber) ¹				
Refrigeration o	fTank				
Rupture Disc (psig)				
Vent to Inciner	ator ¹				
Other ¹ (describ	be):				
¹ Complete approp	oriate Air Pollution Cont	rol Device S	heet.		
41. Expected Emissio	n Rate (submit Test Dat	ta or Calcula	ations here	or elsewhere in the ap	plication).
41. Expected Emissio	n Rate (submit Test Dat Breathing Loss	a or Calcula Workin	ations here g Loss	or elsewhere in the ap Annual Loss	pplication).
41. Expected Emissio Material Name & CAS No.	n Rate (submit Test Dat Breathing Loss (lb/hr)	a or Calcula Workin Amount	ations here g Loss Units	or elsewhere in the ap Annual Loss (lb/yr)	Estimation Method ¹
41. Expected Emissio Material Name & CAS No.	n Rate (submit Test Dat Breathing Loss (lb/hr)	a or Calcula Workin Amount	ations here g Loss Units	or elsewhere in the ap Annual Loss (lb/yr)	Estimation Method ¹
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41. Expected Emissio Material Name & CAS No.	n Rate (submit Test Dat Breathing Loss (lb/hr)	a or Calcula Workin Amount	ations here of g Loss Units	or elsewhere in the ap Annual Loss (Ib/yr)	pplication). Estimation Method ¹

 1 EPA = EPA Emission Factor, MB = Material Balance, SS = Similar Source, ST = Similar Source Test, Throughput Data, O = Other (specify)

Remember to attach emissions calculations, including TANKS Summary Sheets if applicable.