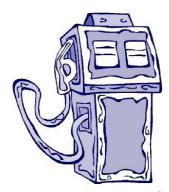
# 2021

# Virginia Compliance Calendar for Gasoline Dispensing Facilities (GDFs)



### **IMPORTANT NOTICE REGARDING STAGE II VAPOR RECOVERY**

Due to U.S. EPA approval of a change in Virginia air quality plans and regulations, Stage II vapor recovery systems are no longer required. However, any GDF equipped with a Stage II system shall continue to be maintained and comply with 9VAC5-40-5220 F, or decommission the system in accordance with 9VAC5-40-5220 F 8.

### CHANGES TO UNDERGROUND STORAGE TANK REQUIREMENTS

By **January 1, 2021** owners/operators of UST systems must begin performing system walkthrough inspections, testing of release detection, spill, and overfill equipment and containment sumps used for interstitial monitoring. See page 43 for details.





### How to contact us:

Virginia Department of Environmental Quality
Office of Small Business Assistance
PO Box 1105
Richmond, VA 23218-1105

Telephone: 804.698.4000

Or Toll-Free:

800.592.5482 ext. 4394 (in-state only)

Fax # 804.698.4178

Email: osba@deq.virginia.gov

If you have questions or comments about this calendar, please feel free to contact us.



# Welcome!

The Department of Environmental Quality's (DEQ) Virginia Small Business Assistance Office developed this calendar to help gasoline distributors (stations) comply with environmental requirements for the transfer of fuel. We hope you find this calendar to be a helpful tool for meeting your recordkeeping obligations; it can serve as your official record if you complete it each day. In order to keep all documents in one place, you should keep this calendar and maintain a file folder to store copies of submitted Facility Registration and Compliance Forms, training certificates, most recent test results (test every 5 years or as required) copies of repair and purchase orders and parts receipts. All records must be maintained for a period of **two years**.

### **Links to Important Forms and Documents**

Guidance for Decommissioning or Maintenance of Stage II Vapor Recovery Systems at Gasoline

Dispensing Facilities in the Northern Virginia & Richmond Volatile Organic Compound Control Emission

Control Areas (ACG-003)

<u>Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities (AQP-9)</u>

### **About the Virginia Small Business Assistance Program**

The <u>Virginia Small Business Assistance Program</u> (SBAP) was established to help small businesses understand and comply with the Clean Air Act and Virginia's environmental regulations. The Office of Small Business Assistance (OSBA) continues to be dedicated to helping business owners and operators learn about current regulatory requirements and recent regulatory changes, and understand the impact of these requirements on their operations.

### **National Small Business Environmental Assistance Program**

Virginia is a member of the <u>National Small Business Environmental Assistance Program</u>, which is a national network that can also provide basic environmental compliance and sustainable business information, including, but not limited to, industry-specific best practices, regulatory guidance, and funding opportunities for new environmental technologies.

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### STAGE II VAPOR RECOVERY INSPECTION TIPS

### **Inspection of Facility Information**

- 1. type of Stage II system
- 2. the manufacturer of the Stage II system
- 3. the number of gasoline dispensers
- 4. the number of nozzles per gasoline dispenser
- 5. the monthly throughput of gasoline

### **Inspection of Facility Records**

- 1. the Stage II Facility Registration and Compliance (FRC) Form
- 2. training documentation for at least one current, full time employee on the proper operation of the Stage II system
- 3. comprehensive maintenance records that include information about damaged equipment and repair.
- 4. results of Stage II system tests, which should be conducted every five years. Note that many manufacturers highly recommend that vapor recovery systems be tested annually to ensure proper function.
- 5. records of daily and monthly inspections of Stage II equipment. All records must be up-to-date, and must be maintained for at least 2 years, unless otherwise stated. Copies of source records are permitted, if the original documents are maintained at a central location for the source and are presented in a timely fashion.

### **Inspection of Storage Tanks**

- presence of locking cap(s) on all of the fill adapters and vapor poppets
- 2. whether the locking cap seals tightly on the fill pipe
- 3. whether the gasket on the locking cap is in good condition
- 4. whether the drop tube collar is tight and/or working properly
- 5. condition of the spill containment bucket and whether spill containment bucket is dry and free of debris
- 6. presence of a p/v valve on the vapor line
- 7. presence of a poppet on vapor pipe
- 8. whether the poppet is functioning properly
- 9. whether the fill adapters and vapor poppets tight

### **Inspection of Vent Pipes**

- 1. presence of the vent cap
- 2. any signs that the vent cap may have been tampered with that would prevent its proper functioning
- 3. vent caps are not emitting vapors on a continuous basis

### **Inspection of Gas Dispensers**

- 1. presence of the Stage II decal
- 2. correct information on the Stage II decal (i.e. instructions, with illustrations, on how to insert the nozzle, dispense gasoline, and how to remove the nozzle; a warning against attempts to continue refueling after automatic shutoff)
- 3. condition of the nozzle, whether the nozzle is damaged, loose, and/or leaking gasoline
- 4. whether the nozzle boots are torn, slit, taped, or loose
- 5. whether the vapor holes on the nozzle are clogged (if applicable)
- 6. whether the locking collar is loose and/or missing
- 7. condition of the hoses
- 8. length of the hose (It is recommended that the hose(s) not drag on the ground when nozzle is resting in cradle of the tank dispenser; allowing the hose(s) to drag on the ground will significantly reduce the life span of the hose and will result in higher operating costs)
- 9. breakaways and whether they are installed properly
- 10. presence of any vapor stains
- 11. excessive fumes
- 12. whether any of the dispensers/pumps were marked out of order
- 13. note the type of nozzles and type of dispensers being used and verify that the equipment being used is compatible

#### Note

Underground Storage Tank inspection and testing requirements begin on page  $\underline{\textbf{41}}$ .

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# **January 2021 Monthly** Inspection Perform Last Working Day of Each Month

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Inspected		pected Repaired		Repair Logged on Maintenance Record		Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)										
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N				
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N				
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N				
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N				
STAGE II VAPOR CONTROL SYSTEM for Gasoline D	ispensing F	acilities ret	taining those	systems						
Hose(s) proper length	Υ	N	Υ	N	Υ	N				
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N				
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N				
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N				
Nozzle-auto shutoff working properly *	Y	N	Υ	N	Υ	N				
Nozzle-vapor processing unit working properly	Y	N	Υ	N	Υ	N				
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled	Υ	N	Υ	N	Υ	N				

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems								
Problem/Solution (Pump #)	Part	Date	Manuf	acturer				
I certify the monthly inspection results to be accurate:	Print Name		Signature	Date				



# **JANUARY 2021**

		DEQ COMIT	HANCE CALLINDAR TOR	GASOLINE DISPLINSING	3 TACILITIES	
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
					Daily Inspection	Daily Inspection
3	4	5	6	7	8	9
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
10	11	12	13	14	15	16
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
17	18	19	20	21	22	23
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
24	25	26	27	28	29	30
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
31 Monthly Inspection – Stage						
II and UST System□						
systems must begin inspections, testing	ry 1, 2021 owners/op performing system w of release detection, ainment sumps used the 43 for details.	alkthrough spill, and overfill	NOT PLAN TO DECO	O KEEP YOUR STAGE MMISSION THE SYST ONTHLY, MAINTENAI	EM, YOU MUST CON	TINUE TO TRACK

# February 2021 Monthly Inspection

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Inspected		Inspected		ected Repaired		aired	Repair Logged on Maintenance Record		Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)													
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N							
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N							
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N							
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N							
STAGE II VAPOR CONTROL SYSTEM for Gasoline	Dispensing F	acilities re	taining those	systems									
Hose(s) proper length	Υ	N	Υ	N	Υ	N							
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N							
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N							
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Y	N	Υ	N	Υ	N							
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Υ	N							
Nozzle-vapor processing unit working properly	Υ	N	Υ	N	Υ	N							
Stage II decal on dispensers  * Some local municipal Fire Marchale require that HOLD OPEN LATCHES he removed or disable.	Y	N	Υ	N	Υ	N							

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems								
Problem/Solution (Pump #) Part Date Manufacturer								

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# FEBRUARY 2021

SUNDAY	DAY MONDAY TUESDAY		WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
	1	2	3	4	5	6	
	Daily Inspection □	Daily Inspection					
7	8	9	10	11	12	13	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵	
14	15	16	17	18	19	20	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
21	22	23	24	25	26	27	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
28 Monthly Inspection – Stage II and UST System□							
	IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.						

# **March 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Inspected Repaired		Logg Maint	pair jed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)								
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N		
Caps locked on, with gaskets in place	Υ	N	Υ	N	Y	N		
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N		
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N		
STAGE II VAPOR CONTROL SYSTEM for Gasoline	Dispensing F	acilities ret	taining those	systems				
Hose(s) proper length	Υ	N	Y	N	Υ	N		
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N		
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N		
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N		
Nozzle-auto shutoff working properly *	Υ	N	Y	N	Υ	N		
Nozzle-vapor processing unit working properly	Y	N	Y	N	Υ	N		
Stage II decal on dispensers	Y	N	Y	N	Υ	N		

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Problem/Solution (Pump #)	Part	Date	Manufacturer				

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **MARCH 2021**

45-3		DEC COMPETANCE CALLINDAR FOR GASOLINE DISPENSING PACIFIES					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
	1	2	3	4	5	6	
	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
7	8	9	10	11	12	13	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
14	15	16	17	18	19	20	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
21	22	23	24	25	26	27	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
28	29	30	31				
Daily Inspection □	Daily Inspection	Daily Inspection	Monthly				
			Inspection – Stage II and UST				
			System□				
			-				
			IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO				
			NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.				
	AND REEL DAILI, MONTHEI, MAINTENANCE AND TESTING RECORDS.						

### **April 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair ed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSI	NG EQUIPM	ENT (includ	des Stage I va	apor control	system)		
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline D	ispensing F	acilities ret	taining those	systems			
Hose(s) proper length	Y	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Y	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Y	N	Y	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Υ	N	
Nozzle-vapor processing unit working properly	Υ	N	Υ	N	Υ	N	
Stage II decal on dispensers	Y	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Manufacturer
_

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **APRIL 2021**

A (2-20)		DEQ COMP	IPLIANCE CALENDAR FOR GASOLINE DISPENSING FACILITIES					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY		
				1	2	3		
				Daily Inspection	Daily Inspection	Daily Inspection		
4	5	6	7	8	9	10		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
11	12	13	14	15	16	17		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
18	19	20	21	22	23	24		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
25	26	27	28	29	30			
Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Monthly Inspection – Stage II and UST System□			
	IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AN NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO T AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.				TINUE TO TRACK			

# **May 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point		Inspected		Repaired		enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)							
Spill containment buckets clean and dry	Y	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Y	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline	Dispensing F	acilities re	taining those	systems			
Hose(s) proper length	Υ	N	Υ	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Y	N	Y	N	Υ	N	
Nozzle-vapor processing unit working properly	Υ	N	Υ	N	Υ	N	
Stage II decal on dispensers	Υ	N	Y	N	Υ	N	

Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Problem/Solution (Pump #) Part Date Manufacturer							

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **MAY 2021**

		DEQ COMPL	DMPLIANCE CALENDAR FOR GASOLINE DISPENSING FACILITIES					
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY		
						1		
						Daily Inspection		
2	3	4	5	6	7	8		
Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
9	10	11	12	13	14	15		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
16	17	18	19	20	21	22		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
23	24	25	26	27	28	29		
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection		
30	31 Monthly							
Daily Inspection	Inspection –							
zamy mopeonem =	Stage II and UST							
	System□							
	1	1			II SYSTEM UP AND R			
					EM, YOU MUST CON			
			AND KEEP DAILY, M	ONTHLY, MAINTENAL	NCE AND TESTING RE	CORDS.		
			l .					

# **June 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair jed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENS	UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)						
Spill containment buckets clean and dry	Y	N	Y	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Y	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Y	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline I	Dispensing F	acilities ret	taining those	systems			
Hose(s) proper length	Υ	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Y	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Y	N	Υ	N	
Nozzle-vapor processing unit working properly	Y	N	Y	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.	Y	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Part	Date	Manufacturer					

I certify the monthly inspection results to be accurate	<b>):</b>			
	Print Name	· · ·	Signature	Date



# **JUNE 2021**

400		DEQ COM E	HANCE CALLINDAR TOR	GASOLINE DIST ENSING	O TACILITIES		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
		1	2	3	4	5	
		Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection	Daily Inspection	Daily Inspection	
6	7	8	9	10	11	12	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
13	14	15	16	17	18	19	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵	
20	21	22	23	24	25	26	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
27	28	29	30				
Daily Inspection	Daily Inspection	Daily Inspection	Monthly				
			Inspection – Stage II and UST				
			System□				
			IE VOLL CONTINUE T	O KEED VOLID STAGE	II SYSTEM LID AND D	LINNING AND DO	
			IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK				
	AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.						

### **July 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair ed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSING EQUIPMENT (includes Stage I vapor control system)							
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline D	ispensing F	acilities ret	taining those	systems			
Hose(s) proper length	Y	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Y	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Y	N	Y	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Y	N	Y	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Υ	N	
Nozzle-vapor processing unit working properly	Y	N	Υ	N	Υ	N	
Stage II decal on dispensers  * Same local municipal Fire Marchala require that HOLD OPEN LATCHES he removed or displied	Y	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Problem/Solution (Pump #)	Part	Date	Manufacturer				

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **JULY 2021**

100		214 00		GASOLINE DIST ENSING		
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1	2	3
				Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection
4	5	6	7	8	9	10
Daily Inspection □	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
11	12	13	14	15	16	17
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
18	19	20	21	22	23	24
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
25	26	27	28	29	30	31
Daily Inspection □	Daily Inspection	Daily Inspection □	Daily Inspection □	Daily Inspection	Daily Inspection	Monthly Inspection – Stage II and UST System□
IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.					TINUE TO TRACK	

### **August 2021 Monthly Inspection**

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair ed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENS	SING EQUIPM	ENT (includ	des Stage I v	apor control	system)		
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline	Dispensing F	acilities re	taining those	systems			
Hose(s) proper length	Υ	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Y	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Y	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Y	N	Υ	N	
Nozzle-vapor processing unit working properly	Y	N	Y	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disable	Y	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Problem/Solution (Pump #) Part Date Manufacturer							

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **AUGUST 2021**

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4	5	6	7
Daily Inspection ☐	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
8	9	10	11	12	13	14
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
15	16	17	18	19	20	21
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
22	23	24	25	26	27	28
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
29	30	31				
Daily Inspection □	Daily Inspection	Monthly Inspection – Stage II and UST System□				
IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AN NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TO AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.					TINUE TO TRACK	

# **September 2021 Monthly Inspection**

<b>Perform</b>	Last	Working	Day o	f Each	Month
----------------	------	---------	-------	--------	-------

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair jed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENS	ING EQUIPM	ENT (includ	des Stage I va	apor contro	l system)		
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline	STAGE II VAPOR CONTROL SYSTEM for Gasoline Dispensing Facilities retaining those systems						
Hose(s) proper length	Υ	N	Υ	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Y	N	
Nozzle-vapor processing unit working properly	Y	N	Υ	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disable	Υ	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems							
Problem/Solution (Pump #) Part Date Manufacturer							

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **SEPTEMBER 2021**

40-30	DEG COMPENNET ON GASCENE DISPENSING PACIENTES						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
			1	2	3	4	
			Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection	Daily Inspection	
5	6	7	8	9	10	11	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
12	13	14	15	16	17	18	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
19	20	21	22	23	24	25	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
26	27	28	29	30			
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Monthly Inspection –			
				Stage II and UST			
				System□			
			IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK				
				ONTHLY, MAINTENAL	•		

# October 2021 Monthly Inspection

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Perform L	.ast \	Working	Day	of	Each	Month

Inspection Point	Insp	Inspected		Repaired		pair ed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENS	SING EQUIPMI	ENT (includ	des Stage I va	apor control	system)		
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Y	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline	Dispensing F	acilities re	taining those	systems			
Hose(s) proper length	Y	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Y	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Y	N	Υ	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Y	N	Y	N	Υ	N	
Nozzle-auto shutoff working properly *	Y	N	Υ	N	Υ	N	
Nozzle-vapor processing unit working properly	Υ	N	Y	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disable	Υ	N	Y	N	Υ	N	

Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems								
Problem/Solution (Pump #)	Part	Date	Manufacturer					

I certify the monthly inspection results to be accurate	<u>):</u>		
r corm, and morning map control recurs to the december	·		
	Print Name	Signature	Date
		-	



# **OCTOBER 2021**

45-3		DEQ COMITE	IANCE CALENDAN TON	GASOLINE DIST ENSING	3 TACILITIES	
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2
					Daily Inspection	Daily Inspection
3	4	5	6	7	8	9
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🗅
10	11	12	13	14	15	16
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵
17	18	19	20	21	22	23
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵
24	25	26	27	28	29	30
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection □
31 Monthly						
Inspection – Stage II and UST						
System□						
			IF YOU CONTINUE T	O KEEP YOUR STAGE	II SYSTEM UP AND R	UNNING AND DO
				MMISSION THE SYST		
			AND KEEP DAILY, M	ONTHLY, MAINTENAI	NCE AND TESTING RE	CORDS.

# November 2021 Monthly Inspection

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Υ	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		pair ed on enance cord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENS	ING EQUIPM	ENT (includ	des Stage I va	apor control	system)		
Spill containment buckets clean and dry	Υ	N	Υ	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Υ	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Υ	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Υ	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline I	Dispensing F	acilities re	taining those	systems			
Hose(s) proper length	Υ	N	Υ	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Υ	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Υ	N	
Nozzle-vapor processing unit working properly	Y	N	Y	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshale require that HOLD OPEN LATCHES be removed or disabled.	Υ	N	Y	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems								
Problem/Solution (Pump #)	Part	Date	Manufacturer					

I certify the monthly inspection results to be accurate:			
	Print Name	Signature	Date



# **NOVEMBER 2021**

100	DEC COMMETANCE CALENDAR FOR GASOLINE DIST ENSING FACILITIES						
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	
	1	2	3	4	5	6	
	Daily Inspection 🖵	Daily Inspection 🖵	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵	
7	8	9	10	11	12	13	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection 🖵	
14	15	16	17	18	19	20	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
21	22	23	24	25	26	27	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	
28	29	30					
Daily Inspection	Daily Inspection	Monthly					
		Inspection – Stage II and UST					
		System□					
			IF YOU CONTINUE T	O KEEP YOUR STAGE	II SYSTEM UP AND R	UNNING AND DO	
				MMISSION THE SYST	•		
			AND KEEP DAILY, M	ONTHLY, MAINTENAI	NCE AND TESTING RE	CORDS.	

# **December 2021 Monthly Inspection**Perform Last Working Day of Each Month

Reminders		
Is the Facility Registration and Compliance Form (FRC) up to date?	Υ	N
Are the Training Certificates up-to-date for your current employees?	Y	N
Do you have a copy of your most recent test results on site?	Υ	N

Inspection Point	Insp	Inspected		Repaired		air ed on nance ord	Inspected By (initials)
UNDERGROUND STORAGE TANKS AND GASOLINE DISPENSIN	G EQUIPMI	ENT (includ	des Stage I va	apor control	system)		
Spill containment buckets clean and dry	Υ	N	Y	N	Υ	N	
Caps locked on, with gaskets in place	Υ	N	Y	N	Υ	N	
Fill tube/adapter not damaged, or loose	Υ	N	Y	N	Υ	N	
Pressure vacuum vent installed, not damaged	Υ	N	Y	N	Υ	N	
STAGE II VAPOR CONTROL SYSTEM for Gasoline Di	spensing F	acilities ret	taining those	systems			
Hose(s) proper length	Υ	N	Y	N	Υ	N	
Hose(s) no kinks, flat spots, tears, or cuts	Υ	N	Y	N	Υ	N	
Nozzle bellows (1/4' rod test)	Υ	N	Υ	N	Υ	N	
Nozzle faceplates/facecones-No tears or rips, not loose from nozzle	Υ	N	Υ	N	Υ	N	
Nozzle-auto shutoff working properly *	Υ	N	Υ	N	Υ	N	
Nozzle-vapor processing unit working properly	Υ	N	Υ	N	Υ	N	
Stage II decal on dispensers  * Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.	Υ	N	Υ	N	Υ	N	

<sup>\*</sup> Some local municipal Fire Marshals require that HOLD OPEN LATCHES be removed or disabled.

Maintenance Records for Stage I and Stage II Systems								
Problem/Solution (Pump #)	Part	Date		Manufacturer				
	•		•					
certify the monthly inspection results to be accura	te:							
	Print Name		Signature	Date				



# **DECEMBER 2021**

### DEQ COMPLIANCE CALENDAR FOR GASOLINE DISPENSING FACILITIES

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
			Daily Inspection	Daily Inspection 🖵	Daily Inspection	Daily Inspection
5	6	7	8	9	10	11
Daily Inspection 🛚	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
12	13	14	15	16	17	18
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
		,	,		,	
19	20	21	22	23	24	25
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection
26	27	28	29	30	31	
Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Daily Inspection	Monthly	
					Inspection – Stage II and UST	
					System□	
			IF YOU CONTINUE TO KEEP YOUR STAGE II SYSTEM UP AND RUNNING AND DO			
			NOT PLAN TO DECOMMISSION THE SYSTEM, YOU MUST CONTINUE TO TRACK AND KEEP DAILY, MONTHLY, MAINTENANCE AND TESTING RECORDS.			
			AND REEP DAILY, IVI	ONTRILI, WAINTENAL	NCE AIND TESTING RE	CUND3.

Create a file folder & transfer all records accordingly – you must keep each respective year for 2 years.

### **DEFINITIONS FOR STAGE I AND II FACILITIES**

**Average Monthly Throughput (AMT)** - average monthly amount of gasoline pumped at a gasoline dispensing facility during the two most recent consecutive calendar years, or some other two-year period which is representative of normal source operation. Downtime, such as a full or significant shutdown of a facility's operation due to construction, shall not be included when calculating average monthly throughput.

**Certified Stage II Vapor Recovery System** - any system certified by California Air Resources Board (CARB) as having a vapor recovery or removal efficiency of at least 95% and approved under the provisions of AQP-9, (also see; 9VAC5-20-121).

**Defective Equipment** - any absence, disconnection, or malfunctioning of a Stage II vapor recovery system component required by this article including, but not limited to, the following:

- a. A vapor return line that is crimped, flattened, blocked, or that has any hole, or slit that allows vapors to leak out;
- b. A nozzle bellow that has any hole large enough to allow a 1/4 inch diameter cylindrical rod to pass through it or any slit one inch or more in length;
- c. A nozzle faceplate or cone that is torn or missing over 25% of its surface;
- d. A nozzle with no automatic overfill control mechanism, or an inoperable overfill control mechanism; and
- e. An inoperable or malfunctioning vapor processing unit, vacuum generating device, pressure, or vacuum relief valve, vapor check valve, or any other equipment normally used to dispense gasoline or is required by Article 37.

Environmental Compliance Device - see Vapor Escape Guard.

Face Cone/Faceplate - see Splash Guard.

**Gasoline** - any petroleum distillate having a Reid vapor pressure of four pounds per square inch or greater.

Gasoline Dispensing Facility - any site where gasoline is dispensed to motor vehicle tanks from stationary storage tanks.

**Independent Small Business Gasoline Marketer (ISBGM)** - a person engaged in the marketing of gasoline who owns one, or more gasoline dispensing facilities, and is required to pay for procurement and installation of vapor recovery equipment, unless such owner;

- a. Is a refiner; controls, or is controlled by, or is under common control with, a refiner; or is otherwise directly or indirectly affiliated with a refiner, or with a person who controls, is controlled by, or is under a common control with a refiner (unless the sole affiliation is by means of a supply contract, or an agreement, or contract to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner or any such person); or
- b. Receives less than 50% of his annual income from refining, or marketing of gasoline.

**Inspector** - any VA Department of Environmental Quality (DEQ) employee designated as having the authority to conduct official compliance evaluations (a.k.a. inspections).

Major System Modification - the replacement, repair or upgrade of 75% of a facility's Stage II vapor recovery system equipment.

### **DEFINITIONS FOR STAGE I AND II FACILITIES (CONTINUED)**

**Nozzle -** the spout at the end of the gasoline hose used to dispense and control the flow of gasoline from a stationary gasoline storage tank into motor vehicle fuel tanks.

**Nozzle Bellows** - a flexible component of a nozzle on a Stage II Balance System that is compressed to establish a seal between the nozzle faceplate and filler neck of the motor vehicle fuel tank.

**Operator** - a dealer, or other person who is responsible for the daily operation and maintenance of a gasoline dispensing facility and who is subject to the inspection, training, and reporting requirements.

**Owner** - any person, including bodies politic or corporate, associations, partnerships, personal representatives, trustees and committees, as well as individuals who own, lease, operate, control or supervise an operation involving the storage, or transfer of petroleum liquids, or both.

**Splash Guard** - a flexible disk that fits over a nozzle spout. The sole purpose of a splash guard is to minimize the customers expose to gasoline that may splash out of the vehicle during the fuel transfer process. The disk slides over the nozzle spout and is not required to demonstrate compliance with Virginia's regulations because it does not affect the control efficiency of the vapor recovery system.

**Stage II Vapor Recovery System** - any equipment designed and used to collect, recover, or destroy, or any combination of those, gasoline vapors displaced during the transfer of gasoline into a motor vehicle fuel tank.

**Tag Out Of Service** - to place out of service by use of a conspicuously located tag, or sign on a nozzle that prohibits the use of any nozzle associated with defective equipment.

**Type 1 Safety Vest** - an orange safety vest that is designed for use in parking areas where speeds do not exceed 25 miles per hour.

**Vacuum Assist System** - an assist system designed to enhance vapor recovery at the nozzle/fill pipe interface by drawing in vapors using a vacuum. This design allows assist systems to recover vapors effectively without a tight seal at the nozzle/fill pipe interface.

Vapor Balance System - operates on the principle of positive displacement during gasoline transfer operations. Balance systems use pressure created in the vehicle fuel tank by the incoming liquid gasoline and the slight negative pressure created in the storage tank by the departing liquid to transfer the vapors through the combustion fuel dispensing/vapor collection nozzle, through the vapor passage, and into the service station tank. Because a slight pressure is generally created at the nozzle/fill pipe interface, effective operation requires that a tight seal be made at the interface during vehicle fueling to minimize vapor leakage into the atmosphere.

Vapor Escape Guard (VEG or ECD) - a small flexible cone shaped boot installed on the nozzle spout. VEG's and ECD's are an integral part of the vapor collection system and can easily be identified because they are required to be a9secured to the nozzle by a mechanical clasp or seal.

### **AVAILABLE EXEMPTIONS FROM STAGE I AND II REQUIREMENTS**

### **Available Exemptions from Stage I and II Requirements**

You are exempt from Stage I and II regulatory requirements if:

• your average monthly throughput (AMT-see definition on page 28) is **less than 10,000 gallons** and has never been 10,000 gallons or more since January 1, 1993,

### AND/OR

• your storage tank is less than 250 gallons in capacity.

In either case, owners are **required** to maintain adequate records of AMT and furnish these records to DEQ upon request.

Regulatory citation: <u>9VAC5-40-5220 E3(a)</u>

You can be exempt from Stage II regulatory requirements if:

- You are a gasoline dispensing facility with an average monthly throughput of 10,000 gallons or less.
- You are a gasoline dispensing facility owned by an independent small business gasoline marketer (ISBGM, see definition on page 28) with
  an average monthly throughput of 50,000 gallons or less and you, as an owner/operator, are not affiliated with a refinery and 50% or
  more of your annual income comes from the sale of gasoline.

Regulatory citation: <u>9VAC5-40-5220 F(4-6)</u>

### DETERMINING WHICH STAGE I AND STAGE II REGULATIONS APPLY

### **Determining if Stage I Requirements Apply**

You are required to follow Stage I requirements, if your AMT is 10,000 gallons or more, and your station is located in:

Arlington County	Alexandria City
Charles City County	Chesapeake City
Chesterfield County	Colonial Heights City
Fairfax City	Fairfax County
Falls Church City	Gloucester County
Hampton City	Hanover County
Henrico County	Hopewell City
Isle of Wight County	James City County
Loudoun County	Manassas City
Manassas Park City	Newport News City
Norfolk City	Petersburg City
Poquoson City	Portsmouth City
Prince George County	Prince William County
Richmond City	Roanoke City
Roanoke County	Salem City
Stafford County	Suffolk City
Virginia Beach City	Williamsburg City
York County	

See Stage I fact sheet on page 34.

### **Determining if Stage II Requirements Apply**

If you are subject to Stage I requirements and your AMT is 10,000 gallons or more, first determine if you are exempt as an ISBGM. If you are not considered an ISBGM, and the owner has not filed an ISBGM affidavit with your regional DEQ office, then you are required to follow Stage I requirements and Stage II requirements if you do not choose to properly decommission.

You are required to follow Stage I and maintain Stage II requirements if you chose to not to properly decommission, if your AMT is 10,000 gallons or more and you are not an ISBGM, and your station is located in:

Arlington County	Alexandria City	
Charles City County	Chesterfield County	
Colonial Heights City	Fairfax City	
Fairfax County	Falls Church City	
Hanover County	Henrico County	
Hopewell City	Loudoun County	
Manassas City	Manassas Park City	
Prince William County	Richmond City	
Stafford County		

Regulatory citation: <u>9VAC5-40-5200</u> (Rule 4-37). <u>See Stage I fact sheet on page 34 and Stage II fact sheet on pages 35-36.</u>

PLEASE NOTE: Although Virginia Stage I Regulations only apply to facilities in the specified locations above, the U.S. Environmental Protection Agency, (U.S. EPA) rule, 40 CFR part 63, subpart CCCCC (National Emission Standards for Hazardous Air Pollutants from Gasoline Dispensing Facilities) applies state-wide.

### FACT SHEET - REQUIREMENTS FOR STAGE I VAPOR CONTROL SYSTEMS

# Stage I Vapor Control System Requirements Regulation Citation: 9VAC5-40-5220 (E); 9VAC5-40-5230 (E)

- No gasoline from any delivery truck can be transferred into a stationary storage tank unless the tank is equipped with a vapor control system. The vapor control system must be able to remove, destroy, or prevent 90% (by weight) of any discharge of gasoline vapors (volatile organic compound emissions).
- 2. Before gasoline can be transferred from a delivery truck to the tank the owner must ensure that the vapor control system consists of:
  - A. A submerged fill pipe.
  - B. A vapor recovery system that includes:
    - 1. A vapor tight return line from the storage container to the tank truck must be connected before gasoline is transferred from the truck to the tank.
    - 2. Any adsorption or condensation system
    - 3. A system that has equal to or better control efficiency this must be approved by DEQ.
  - C. The vapor balancing system must meet the following requirements:
    - 1. NO LEAKS during loading or unloading in the tank trucks pressure vacuum relief valves and hatch covers, the truck tank, the storage tank, or vapor return lines.
    - 2. Pressure Relief Valves on the storage tank and the tank truck should be set to release at no less than .7 psi or at the highest possible pressure allowed by the National Fire Prevention Association of Standards: Standard for Tank Vehicles for Flammable and Combustible Liquids; Flammable and Combustible Liquids Code; Code for Motor Fuel Dispensing Facilities and Repair Garages. (NFPA, Batterymarch Park, Quincy Mass. [617] 770-3000).
    - **3.** Pressure in the vapor collection lines should not exceed the tank truck pressure relief valve settings.
    - All loading and vapor lines must be equipped with fittings which make vapor tight connections and which close when disconnected.

### Recommended Daily Checklist

Regulation Citation: Air Quality Policy 9 (AQP-9)

### Spill buckets clean and dry

Make sure no liquid is in the bottom of the bucket. Remove it if present. Spill buckets must be vapor tight

Check for other foreign debris, and removed if present.

### Caps locked on with gaskets in place

Make sure that the locking caps on the fill and vapor tubes are locked in place and that the gasket is in place and secure.

### Fill tube not damaged, bent or loose

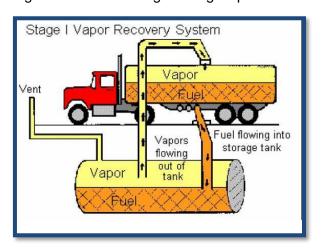
Make sure the UST fittings on the product fill tubes and vapor tubes are secure in place without any sign of damage or leaks.

### Pressure Vacuum (PV) Valves installed, not damaged

Visually inspect PV Valves to see if product vapors are escaping from the vent tubes.

Make sure pipes are not bent or damaged, or obstructed by any objects.

Please DO NOT SMOKE during daily & monthly inspections. Guard against static discharge during inspections.



### **FACT SHEET - REQUIREMENTS FOR STAGE II VAPOR CONTROL SYSTEMS**

### Regulation Citation: <u>9VAC5-40-5220</u> (F); <u>9VAC5-40-5230</u> (F)

- Gasoline stations in a designated Stage II area may not pump any gasoline into a gas tank of any motor vehicle unless the transfer is made using a certified Stage II Vapor Recovery System. The Vapor Recovery System must be able to remove, destroy, or prevent discharge of at least 95% (by weight) of all gasoline vapors (volatile organic compound emissions).
- All Stage II Vapor Recovery Systems must be approved as described in the conditions found in <u>Air Quality Policy 9</u> (AQP-9), Procedures for Implementation of Regulations Covering Stage II Vapor Recovery Systems for Gasoline Dispensing Facilities.
- 3. AQP-9 requires Stage II Vapor Recovery Systems that use coaxial hoses and vapor check valves in the nozzle or remote vapor check valves to be certified by the California Air Resources Board. A list of approved systems is available in the appropriate DEQ Regional Office. The use of any dual vapor recovery hoses or remote check valves that would impede the performance of the required functional tests (see below) must be replaced.

### Registration

A facility owner will register the Stage II System with the appropriate DEQ Regional Office at least 90 days prior to installation of the equipment. The submittal must include the equipment specifications. Use the Facility Registration and Compliance Form.

### **Testing**

- To ensure the proper functioning of the automatic shut-off mechanisms and flow prohibiting mechanisms, if applicable, the facility must perform the following tests prior to initial operation of the system and before use by the public, testing may also be required or requested periodically:
  - a. Pressure decay/leak test with a vapor space tie test where applicable.
  - b. Pressure Drop vs. Flow/Liquid Blockage Test.
  - c. Ensure proper functioning of the automatic nozzle shutoff mechanisms. Alternative tests must be approved by DEQ.

- 2. Perform a pressure decay/leak test and a pressure drop vs. flow/liquid blockage test at least every 5 years.
- 3. A/L Ratio) be conducted at the frequency <u>as specified by the appropriate CARB Executive Order.</u>

### **Notifications**

- No later than 15 days after initial system testing, periodic testing or requested testing submit the test results to the appropriate Regional DEQ Office.
- Notify your DEQ Regional Office at least 2 days prior to Stage II Vapor Recovery system testing.
- Post Operating Instruction Labels for the vapor recovery system on each gasoline pump. A sample label at the end of the calendar. The Instructions must include:
  - a. The following statement: This gasoline dispenser is fitted with special nozzles to protect you from breathing gasoline vapors and to reduce air pollution.
  - b. A description of how to correctly dispense gasoline with the particular nozzle on the pump.
  - c. A warning that repeated attempts to pump gasoline after the system has automatically shut off may result in a spill or recirculation of gasoline.
  - d. A telephone number to report problems to the DEQ Stage II Vapor Recovery System Requirements

### **Training**

At least one full time facility employee must be trained and certified in the operation and maintenance of Stage II Vapor Recovery Systems. A trained facility operator can train and certify other employees.

Certified training must include:

- the purpose of the vapor recovery system
- the equipment operation
- the maintenance schedules for the equipment
- how to perform daily inspections
- how to record and maintain Stage II Systems information and records.

### FACT SHEET - REQUIREMENTS FOR STAGE II VAPOR CONTROL SYSTEMS (CONT.)

### Recordkeeping

# The following records must be kept at this facility at all times:

### 1. Facility Registration and Compliance Form (FRC)

You were required submit a FRC to DEQ when your Stage II Vapor Recovery System was installed. It includes information: facility's name, address, phone number, required signatures, Stage II system information and DEQ information.

### 2. Updated Facility Registration and Compliance Form

You must submit an **updated** FRC Form when any changes are made at the facility, which change any of the information found on the form. The change form should be submitted within 30 days of any change. Submit to the appropriate DEQ Regional Office. **Keep a copy of the most current FRC form on site at all times**. Additional blank forms are available upon request.

### 3. Training Certificate

Keep on file a verification of employee training, such as a certificate of attendance and training from a certified training program, or certified instructor.

### 4. Inspection and Maintenance Log

Record the results of the daily and monthly maintenance inspections. Also, record any maintenance conducted on any part of the Stage II Vapor Recovery System. This maintenance record should include a general part description and the date repaired or replaced. Keep all maintenance records for at least 2 years.

#### 5. Test Results

Keep a copy of the **most recent** test results for the Stage II Vapor Recovery System. Common tests include, but are not limited to, Pressure Decay/Leak; Dynamic; Liquid Blockage/ Wet; Healy Line Vacuum Test; Air to Liquid/Vapor to Liquid. **Records, or a copy, must be kept on site and current.** They should be kept in a file box or other easily accessible location. Facility employees must be aware of these requirements and know the location of the records. They must be available on request or your facility will be considered

out of compliance. If testing has been conducted, you must submit testing results to your DEQ regional office no later than 15 days after testing was completed or your facility will be considered out of compliance.

### **Inspections**

### **Daily Inspection**

Perform an inspection of Stage II equipment and pumps. Daily inspections include a visual check of the condition of the nozzles and hoses and proper function of the cutoff mechanisms.

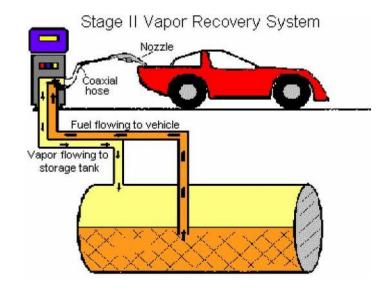
### **Monthly Inspection**

Perform the monthly inspection on the last day of the month. The monthly inspection must include the elements of the daily inspection as well as a check for the following defects:

- 1. A vapor return line that is crimped, flattened, blocked, or that has a hole or slit. Inspect breakaways and swivels.
- 2. A nozzle bellows that has a hole larger than " or a slit larger than 1".
- A nozzle faceplate or face-cone that is torn or missing more than 25% of its surface.
- 4. A nozzle without an automatic overfill control mechanism or one that is not operating properly.
- 5. A broken of malfunctioning vapor processing unit-defects of the process unit include:
  - a. Leaking return line
  - b. Intermittent process interruptions
  - c. Low vapor pressure in the return to tank line
  - d. Inoperable Stage I control, e.g. pressure vacuum vent.

# RECOMMENDED DAILY INSPECTION CHECK LIST FOR STAGE II DISPENSERS

_	No signs of vapor or liquid leaks					
Pumps	Approved operating warning labels are present and visible					
	Spouts not bent, worn loose or leaking					
	Vapor Recovery holes clear and unblocked					
Nozzles	Auto shutoff operates correctly					
	Nozzle vapor guard on and not torn; no holes (if required by you system)	<b>V</b>				
Bellows	No rips, tears, or loose from nozzle	$\sqrt{}$				
(if applicable)	Faceplate not torn	$\sqrt{}$				
Hoses	No kinks, flat spots, tears, cuts or holes					
Breakaways	Secure and tight, with no signs of leaks	<b>V</b>				
	Firmly attached and moves freely					
Swivels	No signs of leaks	V				



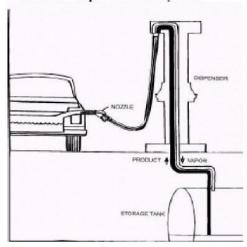
**DID YOU KNOW?:** Treat any dispenser fuel filters, rags, or absorbent materials used to clean up dispenser spills as hazardous waste and handle accordingly, unless test proves material non-hazardous.

Please **DO NOT SMOKE** during daily and monthly inspections.

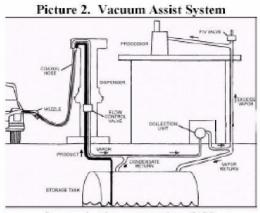
Guard against static discharge during inspections

# TYPES OF STAGE II SYSTEMS, HOSES AND POPPETS

Picture 1. Vapor Balance System



Reprinted with permission from CARB.



Reprinted with permission from CARB.

Picture 3. Vapor Recovery Hoses



Reprinted with permission from CARB.

#### POPPETS

CORRECT

This is an example of a properly functioning poppet



Reprinted with permission from CARB

#### INCORRECT

Poppet valve is stuck in down position and cap is missing.



Reprinted with permission from MD DEP

# **EXAMPLES OF HOSES WITH PROBLEMS**

INCORRECT Hose is crimped and has a hole in it.



Reprinted with permission from MD DEP.

# INCORRECT Cracked hose.



Source of Photo Unknown.

<u>INCORRECT</u> Abrasions present on hose.



Source of Photo Unknown

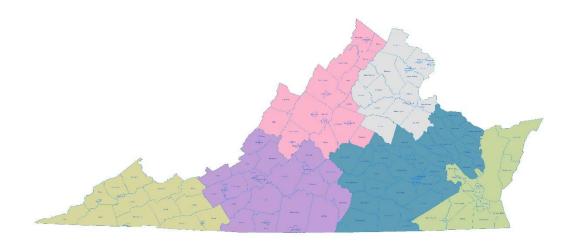


Deterioration of Stage II Connection hose, courtesy of VA DEQ Piedmont Office.

# **STAGE II CONTACTS**

Location	Title	Name	Phone Number
Northern Regional Office	Air Compliance Manager	Dave Hartshorn	(703) 583-3800
Piedmont Regional Office	Air Compliance Manager	Dave Robinett	(804) 527-5128
Central Office	Small Business Assistance Ombudsman	Mike Dowd	(804) 698-4394
Central Office	Resource and Procedural Coordinator	Amy Kasper*	(804) 698-4053

<sup>\*</sup>All Stage II Decommissioning Notices should be sent to Amy Kasper



Color Code	Regional Office	Address	Phone #	Fax #				
	Blue Ridge Regional Office	911 Russell Drive, Salem, VA 24153	(540) 562-6700	(540) 562-6725				
	Northern Regional Office	13901 Crown Court, Woodbridge, VA 22193	(703) 583-3800	(703) 583-3821				
	Piedmont Regional Office	4949-A Cox Road, Glen Allen, VA 23060	(804) 527-5020	(804) 527-5106				
	Southwest Regional Office	355 Deadmore Street, Abingdon, VA 24212	(276) 676-4800	1+(276) 676-4899				
	Tidewater Regional Office	5636 Southern Blvd, Virginia Beach, Va. 23462	(757) 518-2000	(757) 518-2009				
	Valley Regional Office	4411 Early Road, Harrisonburg, VA 22801	(540) 574-7800	(540) 574-7878				
	Visit: https://www.deq.virginia.gov/get-involved/about-deq/about-us							

# UNDERGROUND STORAGE TANK (UST) REGULATORY BACKGROUND

**Notice:** On July 15, 2015 EPA published in the Federal Register a final rule titled "Revising Underground Storage Tank Regulations - Revisions to Existing Requirements and New Requirements for Secondary Containment and Operator Training." This federal rule modified regulatory requirements concerning Underground Storage Tanks found in 40 CFR Part 280. These federal regulations were adopted in response to the federal Energy Policy Act (EPAct) of 2005.

Prior to revising federal regulations, EPA issued guidance to states concerning the requirements found in the EPAct of 2005. Pursuant to this guidance, the State Water Control Board promulgated amendments to Virginia's UST regulation that became effective on September 15, 2010 that addressed operator training, delivery prohibition and secondary containment requirements. These amendments were subsequently reviewed by EPA.

Effective January 1, 2018, DEQ amended Virginia's Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) and Virginia's Petroleum Underground Storage Tank Financial Responsibility Requirements (9VAC25-590) to include changes made to the federal UST regulation in 2015.

Amendments to Virginia's Underground Storage Tanks: Technical Standards and Corrective Action Requirements (9VAC25-580) have been made to be consistent with the modifications in 40 CFR Part 280 as follows:

- Secondary containment requirements for new and replaced tanks and piping;
- Compatibility requirements;
- Notification changes;
- Periodic operation, inspection and maintenance requirements for UST systems;
- UST systems deferred in the 1988 UST regulation;
- Inclusion of new release prevention and detection technologies;
- · Updating codes of practice; and
- · Editorial corrections and technical amendments.

Additionally, <u>40 CFR 280 Subpart H</u> - Financial Responsibility requirements were also revised as part of EPA's July 15, 2015 final rule. In Virginia, financial assurance requirements for underground storage tanks are located in a separate regulation from the technical standards for underground storage tanks. Virginia's Petroleum Underground Storage Tank Financial Responsibility Requirements (9VAC25-590) were revised as well, effective January 1, 2018. USTs previously deferred from regulation, airport hydrant fuel distribution systems, field constructed tanks and USTs that are temporarily closed are now required to comply with financial responsibility requirements. (See Important Changes to Underground Storage Tank Requirements -2018 and 2021 below.)

# Important Changes to Underground Storage Tank Requirements 2018 and 2021

Changes to Virginia's Underground Storage Tank Technical regulation and Financial Responsibility regulation became effective on **January 1, 2018**. Some requirements will become effective immediately, while others will become effective on **January 1, 2021**.

# Requirements effective on January 1, 2018

#### **Overfill Prevention**

Ball float valves (flow restrictors) will no longer be an option for new USTs or as replacements when a ball float valve fails. Owners must install a different type of overfill prevention device, such as a shut off valve in fill pipes or alarms and test it upon installation and every 3 years thereafter.

#### **Spill Prevention and Containment Sumps**

Spill buckets will need to be tested for tightness at the time of installation and every 3 years thereafter. Containment sumps (including UDCs) used as part of an interstitial monitoring system must also be tested for tightness at the time of installation and every 3 years thereafter.

#### **Release Detection**

• Site assessments conducted after January 1, 2018 for groundwater or vapor monitoring release detection methods must be signed by a professional engineer or geologist.

#### **Corrosion Protection**

- Tanks and piping that are not protected against corrosion by January 1, 2018 will need to be permanently closed.
- A tank owner/operator must permanently close any tank with an internal liner that is no longer performing in accordance with the original design specifications and the liner cannot be repaired in accordance with industry standards.

#### **Secondary Containment**

• All newly installed tanks and piping must be secondarily contained; there will no longer be a community water supply distance exemption.

#### Repairs

- Repaired equipment must be tested following the repair.
- Repair records must be kept until the UST system is permanently closed or undergoes a change in service.

#### Compatibility

- Tank owners will need to notify DEQ at least 30 days prior to storing biofuels containing greater than 10% ethanol or greater than 20% biodiesel.
- Tank owners must demonstrate that their equipment is compatible with the fuel stored if storing biofuels.

#### **Temporarily Closed Tanks**

• Tank owners must demonstrate financial responsibility for temporarily closed tanks.

### Airport Hydrant Fuel Systems (AHFS) and Field Constructed USTs

- Effective immediately: Release reporting and closure requirements, if applicable.
- AHFS's and Field Constructed USTs installed after January 1, 2018 must submit notification and financial responsibility documentation at installation.

# Requirements effective on January 1, 2021

#### **Release Detection**

- Emergency generator tanks installed prior to 9/15/2010 will need to perform release detection. Those installed on or after 9/15/2010 must meet all applicable requirements at installation.
- Release detection equipment must be tested for proper operation annually.
- Tank owners must annually test the operation of electronic automatic line leak detectors by simulating a leak and ensuring the leak detector can detect leaks of three gallons per hour at 10 psi within one hour.
- Site assessment records required for groundwater and vapor monitoring release detection must be retained as long as the methods are used.

#### **Equipment Testing**

- By 1/1/21 and every 3 years thereafter, tightness testing must be conducted on secondary containment sumps used for interstitial monitoring, unless they are double-walled and interstitially monitored every 30 days.
- By 1/1/21 and every 3 years thereafter, tightness testing must also be conducted on spill prevention devices (buckets) unless they are double-walled and interstitially monitored.
- By 1/1/21 and every 3 years thereafter, a functionality test must be conducted on overfill prevention devices.

#### **Walkthrough Inspections**

- Every 30 days, tank owners/operators must inspect for damage and proper operation spill buckets, fill pipes and caps, interstitial areas of double-walled spill buckets, and release detection equipment.
  - Note: If deliveries occur at intervals greater than every 30 days, the spill buckets only need to be checked prior to each delivery.
- Annually, tank owners/operators must inspect all containment sumps, under-dispenser containment, interstitial areas of double-walled containment sumps, and handheld release detection equipment for damage, operability, and leaks (if applicable).

#### Airport Hydrant Fuel Systems (AHFS) and Field Constructed Tanks

- Airport hydrant fuel distribution systems (AHFS) and field constructed tanks (FCTs) must begin conducting release detection.
- AHFS's and FCTs must be protected against corrosion.
- Operator Training requirements become applicable.
- A one-time notification form (Form 7530) must be filed with DEQ.
- Financial Responsibility must be demonstrated.
- Other operability requirements become effective.

The <u>final regulation</u> 9VAC25-580-10 *et seq.* can be found on Virginia's Legislative Information System. Underground Storage Tank regulatory <u>guidance</u> can be found on Virginia Town Hall under the Department of Environmental Quality/State Water Control Board.

#### For additional information please submit questions to tank@deq.virginia.gov or call:

	produce constitute discourse to the transfer of the transfer o
Central Office	(540) 562-6729 Alicia Meadows
Central Office	(804) 698-4269 Russ Ellison

Northern Regional Office	(703) 583-3800
Valley Regional Office	(540) 574-7800
Piedmont Regional Office	(804) 527-5020
Tidewater Regional Office	(757) 518-2000
Blue Ridge Regional Office	(540) 562-6700
Southwest Regional Office	(276) 676-4800

# Why are the U.S. EPA and Virginia regulating Underground Storage Tanks (USTs)?

### **Background**

Underground storage tanks are regulated to protect the environment (soil, ground water and surface water) from being contaminated by releases. Federal and state regulations require tank owners/operators to install upgraded tanks, maintain the tanks and follow certain procedures. Until the mid-1980s, most USTs and piping were made of bare steel, which is likely to corrode over time and allow UST contents to leak into the environment. Faulty installation or inadequate operating and maintenance procedures also can cause USTs to release their contents into the environment. Releases have also been caused by leaks, spills, and overfills from UST systems.

Today in Virginia there are approximately 18,000 active USTs, at approximately 5,800 facilities. Gasoline or other hazardous substance, leaking from service stations, is one of the most common sources of groundwater pollution. The leaking material seeps into the soil and contaminates the groundwater. Approximately one-half of the population of the United States relies on groundwater as their source of drinking water. Groundwater pollution is a serious problem. Approximately 12,000 releases have been documented in Virginia since the Underground Storage Tank Program began. Each one of these releases had the potential to affect drinking water supplies. Many municipal and private wells have had to be shut down as the result of contamination caused by releases from UST systems. In addition, fumes and vapors from releases can travel beneath the ground and collect in areas such as basements, utility vaults, and parking garages where they can pose a serious threat of explosion, fire, and asphyxiation or other adverse health effects.

Prevention and cleanup of releases are the two primary goals of the programs that regulate USTs. Cleaning up petroleum releases is difficult and usually expensive; it is much easier and less costly to prevent releases before they happen. The old adage of "an ounce of prevention being worth a pound of cure" is particularly relevant to UST systems.

This calendar and its supplemental section(s) are intended to assist a tank owner/operator to properly operate and maintain the tanks and meet other requirements associated with these tanks.

#### Does this apply to you – is your business affected?

#### The following USTs do not need to meet federal/state requirements for USTs:

- Farm and residential tanks of 1,100 gallons or less capacity holding motor fuel used for noncommercial purposes;
- Tanks storing heating oil used on the premises where it is stored;
- Tanks on or above the floor of underground areas, such as basements or tunnels that are not connected to another UST;
- Flow-through process tanks;
- Emergency spill and overfill tanks that are emptied (emptied within 24 hours of capturing the product)

TANK INFORMATION FOR YOUR FACILITY										
	Tan	k #	Tar	nk#	Tank #		Tank #		Tank #	
Tank Capacity (gallons)										
Substance Stored (if hazardous include CERCLA name and/or CAS number)										
Material of Construction (check all that apply)	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping	Tank	Piping
- Fiberglass Reinforced Plastic										
- Coated & Cathodically Protected/STI-P3®										
- Double-Walled										
- Impressed Current System Steel										
- Composite (Steel Clad w/Fiberglass)/ACT100®										
- Lined Interior										
- Polyethylene Tank Jacket										
- Concrete										
- Excavation Liner										
- Asphalt Coated, or Bare Steel										
- Secondary Containment										
- Polyflexible Piping										
- Galvanized Steel										
Other (specify)										
Has tank or piping been repaired?										
Piping Type:										
- Safe Suction (No check valve at tank)										
- U.S. Suction (Check valve at tank)										
- Pressure-										
- Gravity Fed-										

UST BASIC COMPLIANCE REQUIREMENTS													
Circle Y	Circle Yes or No												
Yes	No	1.	Has/have the tank(s) been registered by the tank owner?										
Yes	No	2.	_	Are you storing fuels that contain greater than 10% ethanol or 20% biodiesel? If so, complete the UST Compatibility Form located on DEQ's website.									
Yes	No	3.	Has all	of the fo	ollowing equipment been tested in the past three years?								
		3a.	Yes	No	Spill buckets								
		3b.	Yes	No	Overfill prevention devices (for example, shutoff valves, alarms, or ball float valves)								
		3c.	Yes	No	Containment sumps used for interstitial monitoring								
		3d.	Yes	No	Cathodic Protection System (if applicable)								
Yes	No	4.	Does the facility have release detection for tanks and pipes?										
		4a.	Yes No Do you have the monthly monitoring/inspection records available?										
		4b.	Yes	es No Do you have line tightness test results? (if applicable)									
		4c.	Yes	No	Do you have automatic line leak detector test results? (if applicable)								
		4d.	Yes	No	Has the leak detection equipment been tested in the past year?								
Yes	No	5.	Have w	/alkthrou	igh inspections been conducted every 30 days and once a year?								
Yes	No	5.	Does th	Does the facility meet the financial responsibility requirements?									
Yes	No	6.	Are the	Are there any tanks not in use/closed?									
Yes	No	7.	If there	If there are tanks no longer in use, have they been properly closed (physical closure, permits, etc.)?									
Yes	No	8.		•	perators trained? (Class A, B and C)								
Yes	No	9.		•	s or piping installed or repaired after 9/15/2010? If so they <u>must</u> have secondary containment and use interstitial eak detection.								

# **UST Records to Keep On File for Facility Inspection**

#### **Corrosion Protection for Tanks, Piping, and Metallic Piping Connectors**

### **Cathodically Protected Tanks and/or Piping**

- 1. The last two cathodic protection system test reports
- 2. The last three 60 day rectifier inspection records (impressed current systems only)
- 3. Verification that any changes to the cathodic protection system made since the last inspection were designed by a corrosion expert (field installed systems only)

### Tanks with only an Internal Lining

1. The most recent internal lining inspection certifications

#### **Release Detection for Tanks**

1. The previous 12 months of release detection records (all regulated USTs)

Example(s): Automatic Tank Gauging (ATG), Statistical Inventory Reconciliation (SIR), Interstitial Monitoring (double-walled tanks only), Groundwater Monitoring, Vapor Monitoring, Inventory Control + Tank Tightness Tests, or Manual Tank Gauging (MTG)

- 2. The ATG system set-up records, if you use an automatic tank gauging system for your release detection method(which can be printed directly from the tank monitor)
- 3. Release detection equipment tests must be kept for 3 years.

# **Release Detection for Piping**

### **Pressurized Piping**

- 1. Annual line leak detector test results, and
- 2. One other method of release detection results.

#### Example(s) (choose one):

- a. Annual line tightness test results
- b. Automatic Tank Gauge 0.1gph annual test
- c. 12 months of monthly Automatic Tank Gauge 0.2gph piping test
- d. 12 months of Interstitial monitoring records (double-walled piping only)
- e. 12 months of SIR
- f. 12 months of Groundwater Monitoring
- g. 12 months of Vapor Monitoring

#### **Suction Piping with a Valve at the Tank**

- 1. Line tightness test results (required every three years),
- 2. 12 months of SIR records, or
- 3. 12 months of Interstitial monitoring records

#### **Operator Training**

- 1. Designation of Operators
- 2. Certifications for the Class A and Class B operators
- 3. Documentation of training for Class C operators
- 4. Emergency Response Procedures

### Spill Prevention, Overfill Prevention, and Containment Sumps (used for interstitial monitoring) Test Records

- 1. Installation testing records if installed on or after January 1, 2018.
- 2. Most recent 3-year test?
- 3. Keep testing records for three years.

### **Walkthrough Inspection Checklist**

- 1. 12 months of monthly walkthrough inspections
- 2. The most recent annual inspection

#### Tank Installation, Repair, and/or Closure Records (if applicable)

### Compatibility

For any tank systems storing more than a biofuel (more than 10% ethanol and 20% biodiesel):

- 1. Completed DEQ Compatibility form (or a form with comparable information)
- 2. All documentation necessary to demonstrate that the tank system is compatible with the substance stored

# REQUIREMENTS FOR RELEASE DETECTION

Any tanks or pipes installed or replaced on or after 9/15/2010 **MUST** have secondary containment. You must use interstitial monitoring as your method of release detection on the tanks and/or piping.

#### **Tanks**

• Monthly Monitoring

Monthly Monitoring includes Automatic Tank Gauging; Vapor Monitoring; Groundwater Monitoring; Statistical Inventory Reconciliation; Interstitial Monitoring and other methods approved by DEQ. **OR if applicable** 

• Manual Tank Gauging

Tanks 2,000 gallons and smaller may be able to use manual tank gauging (stick measure).

### **Pressurized Piping**

Must have an Automatic Line Leak Detector (Shutoff, Flow Restrictor, or Continuous Alarm)
 AND

• You must perform either Monthly Monitoring or Annual Line Tightness Test

### **Suction Piping**

 No Requirements for certain types of suction systems (those that have a single check valve at the dispenser and a line slope back to tank that meets technical specifications)
 OR

You must perform Line Tightness testing every 3 years.

<u>OR</u>

• You must perform Monthly Monitoring

#### **Release Detection Equipment Testing**

• Release detection equipment for tanks and piping must be tested for functionality every year.

# REQUIREMENTS FOR SPILL AND OVERFILL PROTECTION

#### **Tanks**

Spill and Overfill protection does not apply to tanks that are filled with 25 gallons or less of a liquid at one time.

- Must Have Spill Protection = Catchment Basins (spill buckets)
   AND
- Must Have Overfill Protection = Either Automatic Shutoff Device, or Overfill Alarm, or Ball Float Valve (ball float valves may not be installed on a new tank or installed on a tank to replace an existing overfill prevention device. If a ball float fails an integrity test or stops functioning, the entire assembly must be removed and either an automatic shutoff device or overfill alarm installed).
- Spill and Overfill Protection Devices must be tested every three years. Newly installed devices must be tested at installation.

# REQUIREMENTS FOR CORROSION PROTECTION

#### **Tanks - Options**

• Fiberglass Reinforced Plastic (FRP) tank

<u>OR</u>

• Jacketed Tank (Perma-tank, Titan Tank)

<u>OR</u>

- Polyurethane Coated Tank (ACT-100 and ACT-100U)
- Cathodically Protected Steel Tank (corrosion protection testing required every 3 years)

<u>OR</u>

• Tank Interior Lining (lining must be inspected after 10 years and every 5 years thereafter)
OR

• Tank Interior Lining and Cathodic Protection (cathodic protection system must be maintained and tested every 3 years)

### **Piping - Options**

• Fiberglass Reinforced Plastic (FRP)

OR

 Coated and Cathodically Protected Steel OR

• Must use Another Approved Material (i.e. flexible pipe)

# **NEW REQUIREMENTS FOR EQUIPMENT TESTING**

By **January 1, 2021**, tank owners/operators must have tested release detection equipment, spill prevention devices, overfill prevention devices, containment sumps used for interstitial monitoring, and under-dispenser containment sumps used for interstitial monitoring.

### **Release Detection Equipment Testing**

# Conduct annual tests for proper operation of applicable equipment:

- Automatic Tank Gauge system (ATG): Test alarms, verify set-up, test battery backup (if applicable). Ensure alarms communicate.
- Test Probes and Sensors.
- All Automatic Line Leak Detector tests must simulate a leak.
- Interstitial Monitoring: Vacuum pumps and pressure gauges: ensure proper communication with sensors and controller.
- Groundwater and Vapor Monitoring: ensure proper operation of handheld electronic sampling equipment.
- Electronic line leak detectors must initiate positive STP shutdown at unmanned facilities or remotely notify operator in event of release. An unmanned facility is one where petroleum is dispensed at any time without an operator on site.

### Spill, Overfill, and Containment Sump Equipment Testing

Initial 3-year test must be performed before 1/1/21 on existing equipment OR upon installation of new equipment.

- Spill buckets (test for liquid tightness)
- Overfill Devices (test for proper operation)
  - o Ball floats can no longer be replaced or installed (after 1/1/18)
- Containment Sumps used for interstitial monitoring (test for liquid tightness)
- Under-dispenser Containment (UDC) used for interstitial monitoring (test for liquid tightness)

**Note:** Tightness testing of spill buckets, containment sumps and UDCs is NOT required if this equipment is double- walled and you monitor it every 30-days with interstitial monitoring.

# **UST SYSTEM WALK-THROUGH INSPECTIONS**

By January 1, 2021 all UST system owners/operators must begin conducting monthly and annual walkthrough inspections. You should conduct basic walk-through inspections of your facility to make sure that your essential equipment is working properly in order to prevent and detect releases to the environment.

#### Check (at the minimum) the following every 30 days:

- ✓ Release Detection System: Are there any alarms on your ATG? Are there any failed or inconclusive results? Is your release detection equipment working properly? For example, did you run a quick "self-test" of the ATG to verify it is working properly? Or did you check your manual dip stick to make sure it is not warped or worn? Is there more than two inches of water in the tank? Are there any other unusual operating conditions? Do you have a release detection test result? Did any tanks fail the release detection test for the month? If so, contact DEQ within 24 hours to report a suspected release.
- ✓ **Spill Buckets:** Are spill buckets clean, empty, and in good shape? Remove any debris and/or liquid.
- ✓ Overfill Alarm, if you have one: Is your overfill alarm working and easily seen or heard?
- ✓ Impressed Current Cathodic Protection System, if you have one: Is your cathodic protection system turned on? Are you checking your rectifier at least every 60 days?
- ✓ **Fill and Monitoring Ports:** Are covers and caps tightly sealed and locked? Are there any obstructions in your fill pipe such as a stick?

### Check the following annually:

- ➤ Containment (i.e., Piping) Sumps: Any signs of leaking? Are the sumps clean and empty? Are the penetration boots in good shape? If the containment sumps are used for interstitial monitoring then they must be kept clean and dry and repaired when necessary.
- ➤ Hand-held Release Detection Equipment: If you use groundwater monitoring, is your bailer or other measuring device working? If you use vapor monitoring, is your vapor monitor calibrated and working properly? If you use Statistical Inventory Reconciliation (SIR) and manually check your liquid levels, is your measuring stick in good condition?

If you find any problems during the inspection, you, or your UST contractor need to take action quickly to resolve the problems and avoid serious releases!

# **UST System Walk-Through Inspection Checklist**

Date Of Inspection												
Required Every 30 Days (exception: if your UST sy	rotom	rocci	oo do	livorio	o ot in	torvo	o aro	otor th	on 20	dovo	VOLLE	201/
check your spill prevention equipment prior to each			es de	liverie	s at II	ileivai	is grea	ater tri	an su	uays,	you n	lay
Visually check spill prevention equipment for		l y.					<u> </u>					
damage. Remove liquid or debris.												
Check for and remove obstructions in fill pipe.												
Check fill cap to ensure it is securely on fill pipe.												
For double-walled spill prevention equipment with												
interstitial monitoring, check for a leak in the												
interstitial area.												
Check release detection equipment to ensure it is												
operating with no alarms or unusual operating												
conditions present.												
Review and keep current release detection												
records.												
Required Annually	1	1		ı		ı	1				ı	
Visually check containment sumps for damage												
and leaks to the containment area or releases to												
the environment.												
Remove liquid in contained sumps or debris.												
For double-walled containment sumps with												
interstitial monitoring, check for leaks in the												
interstitial area.												
Check hand-held release detection equipment,												
such as groundwater bailers and tank gauge sticks, for operability and serviceability.												
Recommended Activities												
Fill and monitoring ports: Inspect all fill or												
monitoring ports and other access points to make												
sure that the covers and caps are tightly sealed												
and locked.												
Spill and overfill response supplies: Inventory and												
inspect the emergency spill response supplies. If												
the supplies are low, restock the supplies. Inspect												
supplies for deterioration and improper functioning.												
Containment sump areas: Look for significant												
corrosion on the UST equipment.												
Dispenser hoses, nozzles, and breakaways:												
Inspect for loose fittings, deterioration, obvious signs of leaks, and improper functioning.												
signs of leaks, and improper functioning.		]					]					

Your initials in each box below the date of the inspection indicate the device or system was inspected and satisfactory on that date.

In the following table, explain actions taken to fix issues.

in the fellewing table,								
Date	Action Taken							

Keep this record for at least one year after last inspection date on the form.

# **UST RESOURCES AND CONTACTS**

Russ Ellison, UST Program Coordinator (804) 698-4269 and Alicia Meadows, UST Compliance Coordinator (540) 562-6729

Additional UST DEQ Contacts									
Office	Petroleum Program Manager	Phone	Tank Compliance Program Leader	Phone					
Northern	Randy Chapman	(703) 583-3816	Riaz Syed	(703) 583-3915					
Piedmont	Robyne Bridgman	(804) 527-5057	Mike Kelly	(804) 527-5023					
Tidewater	Melinda Woodruff	(757) 518-2174	Melinda Woodruff	(757) 518-2174					
Blue Ridge	David Miles	(540) 562-6741	Tim Petrie	(540) 562-6794					
Valley	Todd Pitsenberger	(540) 574-7847	Michael Asma	(540) 574-7803					
Southwest	Dan Manweiler	(276) 676-4837	Courtney Brummitt	(276) 676-4820					

#### **Online Resources**

DEQ Petroleum Program <a href="https://www.deq.virginia.gov/land-waste/petroleum-tanks">https://www.deq.virginia.gov/land-waste/petroleum-tanks</a>

DEQ Underground Storage Tank https://www.deq.virginia.gov/land-waste/petroleum-tanks/storage-tanks/underground-storage-tanks

EPA Office of Underground Storage Tanks <a href="https://www.epa.gov/ust">https://www.epa.gov/ust</a>

### **ALERT – Owners of Pre-1985 Fiberglass Tanks – Voluntary Activity to Prevent Tank Failures**

Fiberglass tanks that were manufactured and installed prior to 1985 have occasionally resulted in releases of massive quantities of fuel and significant environmental damage in Virginia. Many of these older tanks did not have protective "strike plates" or "deflection plates" under all openings (or a designated fill opening) as UL standards recommend. These older fiberglass tanks are subject to punctures from the repetitive insertion of the inventory stick.

Using a strong magnet on a stick/string you can easily determine if your tank's bottom already contains a metal strike plate under the fill opening. Several vendors provide low cost easy to install devices that fit in the drop tube to protect the tank bottom. It is anticipated that a release from an unprotected tank due to penetration of the tank bottom by inventory sticking may be considered negligence on the part of the owner and would disqualify the release from cleanup reimbursement from the Petroleum Storage Tank Fund.