

Vapor Control System Appendix

Person in Charge has training that covers the following:	33 CFR 154	Y	N	N/A
- Purpose, principles, and components of the Vapor Control System (VCS)	.2030(a)(1-3)			
- Hazards associated with the VCS	.2030(a)(4)			
- Coast Guard Regulations in this subpart	.2030(a)(5)			
- Operating Procedures	.2030(a)(6)			
- Transfer, Testing, and inspection requirements	.2030(a)(6)(i)			
- Pre-transfer Procedures	.2030(a)(6)(ii)			
- Chemicals approved for collection	.2030(a)(6)(iii)			
- Material Safety Data Sheet Review	.2030(a)(6)(iv)			
- Connection Procedures	.2030(a)(6)(v)			
- Startup procedures	.2030(a)(6)(vi)			
- How to handle deviations from normal operations	.2030(a)(6)(vii)			
- Normal shutdown procedures	.2030(a)(6)(viii)			
- Operating procedures for cargo line clearing if such a system is installed IAW 33 CFR 154.2104	.2030(a)(6)(ix)			
- Emergency procedures	.2030(a)(7)			
- Personnel supervising VCS maintenance is familiar with inspection of detonation arrestors & equipment testing procedures as required	.2030(b)			
- PIC of transfer operations qualified and designated IAW 33 CFR 154.710 and records maintained IAW 33 CFR 154.740(b)	.2030(c)			

Facility VCS maintenance test & inspection requirements	33 CFR	Y	N	N/A
- Hose, collection arm, vacuum relief valve & pressure sensor inspected IAW paragraphs (b), (c), and (f) of this section	156.170(g)(1)			
- Remote operating or indicating device tested as required	156.170(g)(2)			
- Each required detonation arrester or flame arrester has been inspected internally within the year, or sooner if use requires it.	156.170(g)(3)			
- Each required hydrocarbon and oxygen analyzer is calibrated within the previous two weeks or within 24 hrs prior to operation if VCS is used less than once a week.	156.170(g)(4)			
- Anti-flashback burners (if installed) must be inspected every 5 years and verified by CE (See CG-ENG Policy Letter No. 02-16)	154.2021(a) & 154.2109(3)(i)			
- Each vapor collection arm properly marked and meets the standards as required in subpart p of 33 CFR 154	154.2101(f)			

Vapor Control System Appendix (Continued)

Facility VCS valve requirements	33 CFR	Y	N	N/A
- A remotely operated cargo vapor shutoff valve must be installed as required.	154.2101(a)			
- Valve closes within 30 seconds after detecting a component shutdown condition	154.2101(a)(1)			
- Valve closes automatically if the control system or electrical power to the system is interrupted	154.2101(a)(2)			
- Valve activates an alarm when signal to shut down is received from a component.	154.2101(a)(3)			
- Valve capable of manual activation.	154.2101(a)(4)			
- Valve has a local position indicator or is designed so that valve position is readily determined from the valve handle or stem position.	154.2101(a)(5)			
- If the valve seat is fitted with resilient material, it must meet requirements and not allow leakage when the material is damaged or destroyed.	154.2101(a)(6)			

Facility VCS Piping and Hose Requirements	33 CFR	Y	N	N/A
- Vapor piping is painted in proper sequence of red/yellow/red	154.2101(b)(1)			
- Vapor piping is labeled with the word "VAPOR" as required	154.2101(b)(2)			
- Vapor collection flange face has a permanent stud as required	154.2101(c)(1)			
- Hose has a design pressure of at least 25 psig	154.2101(d)(1)			
- Hose has a MAWP no less than 5 psig	154.2101(d)(2)			
- Hose is capable of withstanding at least 2 psig vacuum.	154.2101(d)(3)			
- Hose is electrically continuous as required.	154.2101(d)(4)			
- Hose is supported so as to avoid kinking or contact with metal	154.2101(e)			
- Fixed vapor collection arms meet the requirements of 33 CFR 154.2101(d)(1-5)	154.2101 (f)(1)			
- Fixed vapor collection arms are painted in proper sequence of red/yellow/red	154.2101 (f)(2)			