1. Vessel Name Shipyard 2. Purpose: This form consolidates the information required for VCS approval. Entering the requested information required for VCS approval. Entering the requested submission for revision. 3. Tank Design: Raised Trunk Maximum Design Working Pressure: DSIg Flush Deck approval terr serial number and date which approved its MDWP 4. Requested Maximum Cargo Transfer Rates Dbl/hr loading bbl/hr discharging 5. Requested Maximum Cargo Transfer Rates Dbl/hr loading bbl/hr discharging 6. VCS Categories Requested (list):	Marine Safety Center Form for Tank Vessels Installing a Vapor Control System							
Official Number Hull # 2. Purpose: This form consolidates the information required for VCS approval. Entering the requested information will expedite your approval and significantly decrease the probability the MSC will return the submission for revision. 3. Tank Design: Rated Tunk Maximum Design Working Pressure:	1. Vessel Name			1	Shipyard		Propagation of the second s	
2. Purpose: This form consolidates the information required for VCS approval. Entering the requested information will expedite your approval and significantly decrease the probability the MSC will return the submission for revision. 3. Tank Design: Raised Trunk Maximum Design Working Pressure: psig Existing Raised Trunk Maximum Design Working Pressure: psig Flush Deck approval letter serial number and date which approval its MDWP 4. Requested Maximum Cargo Transfer Rates bbl/hr loading bbl/hr discharging 5. Requested Maximum Cargo-Air Mixture Vapor Density: List the requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo. a. Cargo Name a. Cargo Name b. Cargo Name bm/ht3 b. Cargo Name Cargo A Cargo B psi psi psi a. Most Remote Cargo Tank to P/V valve Cargo A Cargo B b. Most Remote Cargo Tank to VCS Facility Connection Cargo A Cargo B c. AP across Split Valve @ Cargoes Maximum Transfer Rate A across Vacuum P/V WITR of Max. Discharge Rate c. AP across Split Valve for Max. Density Cargo at MTR Settings in psig: Pressure vacuum-side Manufacturer Include the Manufacturer's ΔP versus Flow for both parts of P/V & Split Valve:	Official Number				Hull #			
3. Tank Design: Raised Trunk Maximum Design Working Pressure: psig Flush Deck approval letter serial number and date which approved its MDWP	2. Purpose: This form consolidates the information required for VCS approval. Entering the requested information will expedite your approval and significantly decrease the probability the MSC will return the submission for revision.							
Flush Dack Existing Raised Trunk Barges need MSC approval letter serial number and date which approved its MDWP 4. Requested Maximum Cargo Transfer Rates bb/hr loading bb/hr discharging 5. Requested Maximum Cargo-Air Mixture Vapor Density: List he requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo. a. Cargo Name ibm/ft3 b. Cargo Name ibm/ft3 c. Argo Tank to P/V valve psi b. Most Remote Cargo Tank to P/V valve psi b. Most Remote Cargo Tank to P/V valve psi b. Most Remote Cargo Tank to P/V valve psi b. Most Remote Cargo Tank to P/V valve Settings in psig: Model/Size Pressure Spill Valve for Max. Density Cargo at MTR 8. Pressure Vacuum P/V WRT or Max. Discharge Rate c. AP across Spill Valve for Max. Density Cargo at MTR Settings in psig: Manufacturer Inches Transverse Headers Inches 10. Closed Gaugi	3. Tank Design:	Raised Trunk Maximum Design Working Pressure: psig						
4. Requested Maximum Cargo Transfer Rates bbl/hr loading bbl/hr discharging 5. Requested Maximum Cargo-Air Mixture Vapor Density: List the requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo. a. Cargo Name lbm/ft3 b. Cargo Name lbm/ft3 c. VCS Categories Requested (list):		Flush Deck Existing Raised Trunk Barges need MSC approval letter serial number and date which approved its MDWP						
5. Requested Maximum Cargo-Air Mixture Vapor Density: List the requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo. a. Cargo Name b. Cargo Name correct of the cargo(es) from Section 5 for the following scenarios: Cargo A Cargo B psi psi b. Ab across P/V valve Density Cargo at the V/V valve b. Ap across Vacuum P/V @ MTR or Max. Discharge Rate Density Cargo at MTR c. AP across Vacuum P/V @ MTR or Max. Discharge Rate Pressure vacuum valve: Manufacturer Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 9. VCS Pipe Sizes: Longitudinal Header Inches 10. Closed Gauging Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm b. Overfill Control Shutdown Setting in psig Meets ASTM F1271 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank t	4. Requested Maxin	num Cargo Transfer F	Rates				bbl/hr loading bbl/hr discharging	
List the requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo. a. Cargo Name b. Cargo Name b. Cargo Name b. Cargo Name b. Cargo Name cargo. b. Cargo Name b. Cargo Name cargo. cargo A cargo B psi psi psi cargo A cargo B psi psi psi cargo A cargo B psi psi psi psi cargo A cargo B psi psi psi psi cargo A cargo B psi	5. Requested Maximum Cargo-Air Mixture Vapor Density:							
a. Cargo Name Ibm/ft3 b. Cargo Name Ibm/ft3 c. VCS Categories Requested (list): Ibm/ft3 7. Pressure Drop for the cargo(es) from Section 5 for the following scenarios: Cargo A Cargo A Cargo B psi psi b. Most Remote Cargo Tank to P/V valve Immediate Cargo Tank to P/V valve b. Most Remote Cargo Tank to VCS Facility Connection Immediate Cargo System Valve @ cargoes' Maximum Transfer Rate d. ΔP across Sylu Valve for Max. Density Cargo at MTR Immediate Cargo Tank to P/V @ MTR or Max. Discharge Rate e. ΔP across Spill Valve for Max. Density Cargo at MTR Settings in psig: Manufacturer Pressure-side Manufacturer Pressure-side Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: Pressure-side 9. VCS Pipe Sizes: Include the Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 10. Closed Gauging Inches Transverse Headers Inches 10. Closed Gauging Check the pox to signify the vessel will have closed gauging meeting 46 CFR 151.151.10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. Inches 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) A. High Level/Ta	List the requested cargoes with the (a) highest vapor density and (b) highest pressure drop. They are not always the same cargo.							
6. VCS Categories Requested (list):	a. (b. (Cargo Name					lbm/ft3 lbm/ft3	
6. VCS Categories Requested (list):						-		
7. Pressure Drop for the cargo(es) from Section 5 for the following scenarios: Cargo A Cargo B psi psi psi a. Most Remote Cargo Tank to P/V valve psi psi b. Most Remote Cargo Tank to VCS Facility Connection psi psi c. ΔP across P/V valve @ cargoes' Maximum Transfer Rate d. ΔP across Vacuum P/V @ MTR or Max. Discharge Rate d. ΔP across Spill Valve for Max. Density Cargo at MTR 8. Pressure Vacuum Valve:	6. VCS Categories Requested (list):							
a. Most Remote Cargo Tank to P/V valve	7. Pressure Drop fo	r the cargo(es) from S	Section 5 for	the follow	ing scenar Care p	ios: go A si	Cargo B psi	
 d. ΔP across Vacuum Valve MAX. Discharge Rate e. ΔP across Spill Valve for Max. Density Cargo at MTR 8. Pressure Vacuum Valve: Manufacturer Model/Size Model/Size	 a. Most Remote Carg b. Most Remote Carg c. ΔP across P/V valid 	Rate						
8. Pressure Vacuum Valve: Manufacturer Model/Size CG Approval Number Include the Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 9. VCS Pipe Sizes: Longitudinal Header Inches Transverse Headers Inches 10. Closed Gauging Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm b. Overfill Control Shutdown c. Spill Valve d. Rupture Disk If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	a. ΔP across vacuum P/V @ MTR or Max. Discnarge Rate e. ΔP across Spill Valve for Max. Density Cargo at MTR							
Manufacturer Settings in psig: Model/Size Pressure-side CG Approval Number Vacuum-side Include the Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 9. 9. VCS Pipe Sizes: Inches Longitudinal Header Inches Transverse Headers 10. Closed Gauging Inches Transverse Headers Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. a. High Level/Tank Overfill Alarm Setting in psig b. Overfill Control Shutdown Meets ASTM F1271 d. Rupture Disk Meets ASTM F1271 If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	8. Pressure Vacuum Valve:							
CG Approval Number Vacuum-side Include the Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 9. VCS Pipe Sizes: Longitudinal Header Inches Transverse Headers Inches 10. Closed Gauging Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm Setting in psig b. Overfill Control Shutdown Meets ASTM F1271 d. Rupture Disk Meets ASTM F1271 If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	Manufacture Model/Size	r		-	Settings in	1 psig: Ssure-side		
Include the Manufacturer's ΔP versus Flow for both parts of P/V & Spill Valve: 9. VCS Pipe Sizes: Longitudinal Header Inches Transverse Headers Inches 10. Closed Gauging Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements. 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm b. Overfill Control Shutdown Setting in psig Meets ASTM F1271 d. Rupture Disk Meets ASTM F1271 If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	CG Approval Numbe	r		1	Va	acuum-side		
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 11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm b. Overfill Control Shutdown c. Spill Valve d. Rupture Disk If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5. 	Check the box to signify the vessel will have closed gauging meeting 46 CFR 151.151-10(c). MSC Electrical Branch and the OCMI will verify the closed gauging meets these requirements.							
 c. Spill Valve d. Rupture Disk If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2). 12. Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	11. Tank Overfill Protection System (check appropriate box or boxes and list make/model) a. High Level/Tank Overfill Alarm b. Overfill Control Shutdown							
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12 . Submittal Includes a Graph or Table showing the ΔP through the VCS piping from the most remote cargo tank to the facility connection as a function of liquid transfer rate for both cargoes in Section 5.	If applicalble, Calculations demonstrate compliance with 39.20-9(b)(2).							
13. Submittal Includes a Graph or Table showing the Facility Pressure @ the vessel's vapor connect versus allowable transfer rate. This graph demonstrates the barge can satisfy 46 CFR 39.30-1(d)(3). See MSC "Guidelines" at www.msc.uscg\hq\msc for an example.								
14. Previous VCS approval letters:	14. Previous VCS ap							