# Supporting Statement for

# Vapor Control Systems for Facilities and Tank Vessels [w/ proposed changes per USCG-1999-5150]

#### A. Justification.

1) Circumstances that make the collection of information necessary.

To comply with various Federal and State environmental quality statutes and regulations, imposed by agencies other than the Coast Guard, many tank vessels and facilities involved in loading or unloading cargo from those vessels use vapor control systems (VCSs) to limit hydrocarbon emissions during tank vessel loading or unloading. The Coast Guard itself does not require any vessel or facility to use a VCS, but it regulates VCS safety, under the authority of 33 U.S.C. 1225 and 46 U.S.C. 3703, as delegated to the Coast Guard by the Secretary of Homeland Security in Department of Homeland Security Delegation No. 0170.1. Coast Guard VCS regulations promote the safety of life and property of facilities and marine vessels. The regulations, first issued in 1990 and compiled in 33 CFR Part 154 and 46 CFR Part 39, provide standards to protect facilities from fire and explosion, and to protect vessels from fire, explosion, over/under-pressurization, and overfilling. VCSs require approval, either directly from the Coast Guard or using the services of third-party certifying entities that have been recognized ("accepted") by the Coast Guard for that purpose.

The current Coast Guard regulations reflect the uses to which VCSs were put in 1990 and the technology and operating practices available at that time. Uses have expanded, in part in response to newer Federal and State environmental regulations imposed by agencies other than the Coast Guard, and technology and operating practices have improved, in the ensuing decades. Currently, to approve VCSs that are used in newer applications or that incorporate newer technology or operating practices, the Coast Guard must use a time-consuming special procedure to determine that such a VCS provides a level of safety that is at least equivalent to the level provided by the 1990 regulations. Coast Guard rulemaking project USCG-1999-5150 proposes updates to the 1990 regulations, so that such a VCS can be approved by demonstrating compliance with updated regulations and without needing a special exemption or equivalency determination. This will eliminate some regulatory uncertainty for vessel and facility owners and operators seeking VCS approval, and will expedite the approval process.

The proposed new regulations:

- Reflect the expanded number and scope of Federal and State regulations for VCSs since 1990;
- Reflect advances in VCS technology and operational practices since 1990, particularly in vapor-balancing operations, cargo line clearing operations, and multi-breasted tandem barge-loading operations;
  - Incorporate the policy guidance and reflect regulatory exemptions and

equivalency determinations that the Coast Guard has provided or granted since 1990;

- Provide new regulations for cargoes and operations, such as tank barge cleaning, that have become subject to Federal or State regulatory expansion since 1990:
- Provide for periodic operational reviews to ensure that VCSs are properly maintained and operated after they are certified;
- Provide an alternate test program for analyzers and pressure sensors, in addition to existing 24-hour pre-transfer/cleaning instrument testing requirements, to provide greater regulatory flexibility;
- Require certifying entities to be operated by currently licensed professional engineers, to ensure that certification is conducted by properly qualified professionals, and clarify the role of the certifying entity in VCS design, installation, and hazard reviews:
- Remove 33 CFR Part 154, Appendix B, which provides specifications for flame arresters, and requires flame arresters to meet third-party standards, because of apparent lack of public demand for these devices;
  - Attempt to achieve greater clarity through the use of tabular presentation;
- Update industry standards that are incorporated by reference into Coast Guard regulatory requirements;
- Phase in requirements for existing VCSs in order to moderate the economic impact of new requirements for those VCSs; and
- Make conforming changes and nonsubstantive changes intended to improve regulatory clarity or align with current Federal regulatory style guidance.\_

This information collection supports the following strategic goals:

#### <u>Department of Homeland Security</u>

- Prevention
- Protection

#### Coast Guard

- Maritime Safety
- Protection of the Natural Resources

#### Marine Safety, Security and Stewardship Directorate (CG-5)

- Safety: Eliminate deaths, injuries, and property damage associated with commercial maritime operations.
- Human and Natural Environment: Eliminate environmental damage associated with maritime transportation and operations on and around the nation's waterways.
- 2) By whom, how, and for what purpose the information is to be used.

The collection of information requirements would be used by the Coast Guard. The purpose of the information is (1) recording compliance actions, (2) documenting safety procedures (3) conveying training information and (4) labeling equipment to assure safe operations.

Table 1
Collection of Information Requirements for Facilities or Tank Vessels with a Vapor Control System: Subject and Affected Population, CFR, and Number of Respondents

	Respondents		
Item	Subject and Affected Population	CFR	Respondents
a.	Maintenance of records by VCS facilitiesEach facility operator for the life of the VCS.	33 CFR 154.2020 (formerly 154.740)	10 facilities will have VCS certified.
b.	Submission of plans, calculations, specifications and other related informationEach owner or operator of facility applying for vapor control system approval to a certifying entity.	33 CFR 154.2020 (formerly 154.804)	Same as a.
C.	Application for acceptance as a certifying entity. Each potential certifying entity.	33 CFR 154.2010, 2011 (formerly 154.806)	1 new certifying entity expected.
d.	Submission of vapor control system designs for an U.S and foreign-flag tank vesselEach owner or operator of a new tank vessel vapor control system.	46 CFR 39.1013 (formerly 39.10- 13)	2 tank vessels will install new vapor control systems.
e.	Create operations manualEach TBCF facility operator	33 CFR 154.2250	15 TBCFs
f.	LabelingEach TBCF facility operator	multiple	15 TBCFs
g.	Review facility ops manualEach facility operator	33 CFR 154.2020	234 facilities
h.	VBS – approval requestEach facility operator with VBS	33 CFR 154.2110	17 facilities
i.	VBS –compressor/blower applicationEach facility operator with VBS and compressor/blower	33 CFR 154.2110	3 facilities
j.	Training materials for cargo line clearingEach facility operator who pigs	33 CFR 154.2150	3 facilities
k.	Failure analysisEach facility operator who pigs	33 CFR 154.2104	3 facilities
I.	Op review letterEach facility operator	33 CFR 154.2020	84 facilities
m.	Relabeling hosesEach facility operator	multiple	234 facilities
n.	Tank Vessel Certification (addl material) Each tank	46 CFR 39.1013	2 TB
	barge owner or operator with VCS needing modification		owner/operator
0.	Future Certifications –Each TBCF facility operator	33 CFR 154.2200	1 TBCF
p.	Certifications – cargo line clearingEach facility operator who pigs	33 CFR 154.2020	3 facilities
q.	Recertifications Each facility operator	33 CFR 154.2022	12 facilities
r.	Recertifications Each TBCF facility operator	33 CFR 154.2022	1 TBCF
S.	Periodic ops review Each facility operator	33 CFR 154.2020	84 facilities
t.	Periodic ops review —Each TBCF facility operator	33 CFR 154.2020	5 TBCFs
u.	Submission of plans, calculations, specifications and other related information TBCF – certifications	33 CFR 154.2020	15 TBCFs
V.	Submission of plans, calculations, specifications and other related information. – facilities for recertifications	33 CFR 154.2022	12 facilities
W.	Submission of plans, calculations, specifications and other related information. – TBCFs for recertification	33 CFR 154.2022	15 TBCFs
Х.	Submission of plans, calculations, specifications and other related information. – facilities for POR	33 CFR 154.2020	84 facilities
у.	Submission of plans, calculations, specifications and other related information. – TBCF for POR	33 CFR 154.2020	5 TBCFs
Z.	Facility Vapor Connection approval request – Each facility operator who want to use a certain connection	33 CFR 154.2111	0 facility
aa.	Multi-breasted loading approval request – each operation who wants to perform multi-breasted loading	46 CFR 39.5000	0 TB owner/operator

Coast Guard-accepted certifying entities use plans and technical information for vapor control systems to determine if a facility's or tank vessel's vapor control system is designed in accordance with the applicable regulations. The plans and information submitted are those normally developed by a facility or tank vessel in designing a vapor control system. While compliance with most standards can be determined by examining a facility or tank vessel after completion of the vapor control system, it is much more efficient and cost effective to the public and to the facility to review the plans prior to construction. Frequency of submittals is on occasion. Submittals are made once prior to construction of a system and then before any alteration of the system.

It is estimated that every year ten new facilities will have vapor control systems certified and need to submit plans. The proposal rule would add new requirements for certification (for TBCFs), re-certifications for TBCFs and facilities, and periodic operational reviews for TBCFs and facilities. In addition, the proposal would issue requirements on labeling. TBCFs would have to develop operating manuals. There are approximately 15 TBCFs and a total of 234 facilities owning 253 VCS that would be impacted. As well, for facilities, other requirements would apply. For facilities who want to perform cargo line clearing ("pigging"), they must have a certification and failure analysis and prepare training materials for employees.

Coast Guard information in the Marine Information for Safety and Law Enforcement (MISLE) database provides data on submission of vapor control system designs for U.S.- and foreign-flag tank vessels. This analysis assumes that 2 tank vessels would install new vapor control systems annually. In addition, under the proposed rule (1999-5150), the Coast Guard estimates that two tank vessel owner/operators would need to make modifications; the proposal would call for additional paperwork to be submitted.

Retention of plans and certifying letter provides evidence to the Captain of the Port that the facility's or tank vessel's vapor control system meets the applicable regulations. Captain of the Port personnel compare the installed system with the certified plans when questions arise. Without retention of the certified plans and certifying letter, Captain of the Port personnel would have no way of verifying the compliance of the system.

Organizations or persons that desire acceptance as certifying entities must submit applications containing their qualifications to the Coast Guard. The Coast Guard reviews the qualifications of the applicants, and authorizes those with the necessary qualifications to be certifying entities. The submittal of applications is necessary in order for the Coast Guard to retain control over the qualifications of certifying entities. It is estimated that there will be one application to become a certifying entity each year.

# 3) Consideration of the use of improved information technology.

The information required is particular and unique to each facility, tank barge cleaning facility, tank vessel, or certifying entity. The information is a one-time or on-occasion preparation and/or submittals. Submittals for facilities and vessels generally take the

form of plans, training manuals or operating manuals. The information may be submitted by mail, fax or electronically via e-mail to the Coast Guard.

USCG estimates that approximately 50% of the reporting and recordkeeping requirements can be done electronically. At this time, USCG estimates that approximately 15% of the responses are collected electronically.

4) Efforts to identify duplication. Why similar information cannot be used.

The Coast Guard monitors State and local regulatory activity in this field. To date, USCG has identified no equivalent State or local programs that require equivalent information. No other Federal agencies have similar or equivalent regulatory requirements.

5) Methods to minimize the burden to small businesses if involved.

There are only a few small organizations that own or operate applicable facilities. Moreover, small entities usually have fewer facilities and vessels and simpler vapor control systems. This results in a lesser burden. It may be easier for small entities to describe their qualifications when asking to be accepted as a certifying entity. No particular format is specified for either plan submittal or application to become a certifying entity.

6) Consequences to the Federal program if collection were conducted less frequently.

If companies did not submit plans and information for vapor control systems for certification, the Coast Guard would not have the means to ensure that such systems met the applicable regulations for design and safety. This would pose a threat to public safety and the environment. Regulations mandate that companies submit plans once before construction; they only mandate that companies submit plans after construction if alterations are made to the system. Companies could not submit plans less frequently than current regulations mandate.

Without requiring certifying entities who want to be accepted by the Coast Guard to submit an application, the Coast Guard would be unable to ensure that companies had the necessary qualifications to properly review and certify plans for vapor control systems. This would allow the possibility of unqualified personnel reviewing plans. This, in turn, would also allow the possibility of plans being certified that do not meet the applicable requirements. Such plans would pose a threat to the safety and security of the public and the facility.

7) Explain any special circumstances that would cause the information collection to be conducted in a manner inconsistent with guidelines.

This information collection is conducted in manner consistent with the guidelines in 5 CFR 1320.5(d)(2). With one exception, this information collection is consistent with

the guidelines in 5 CFR 1320.6. The exception is the requirement of recordkeeping beyond three years. The certified plans and certifying letter must be retained for the life of the vapor control system. This information is needed to demonstrate the acceptability of the system, and is particularly pertinent with new personnel that are not familiar with the system's history. It is also needed to make sure that repairs to the system do not alter the system from what was previously found to be in compliance.

## 8) Consultation.

The Coast Guard will publish a Notice of Proposed Rulemaking (NPRM) entitled "Marine Vapor Control Systems" [USCG-1999-5150]. The rulemaking proposes to revise the existing safety regulations for facility and vessel vapor control systems (VCSs). The proposed changes would make VCS requirements more compatible with new Federal and State environmental requirements, regulate industry advancements in VCS technology, and codify the standards for the design and operation of a VCS at a tank barge cleaning facility. These changes would increase the safety of operations by regulating the design, installation, and use of VCSs, but would not require anyone to install or use VCSs. The public will be afforded the opportunity to comment on the NPRM when it is published.

9) Explain any decision to provide any payment or gift to respondents.

There is no offer of monetary or material value for this information collection.

10) Describe any assurance of confidentiality provided to respondents.

There are no assurances of confidentiality provided to the respondents for this information collection.

11) Additional justification for any questions of a sensitive nature.

There are no questions of sensitive language.

12) Estimates of reporting and recordkeeping hour and cost burdens of the collection of information.

USCG maintains a database of facilities and vessels with VCS. That information was used to derive information that follows in this section. In addition, various previous OMB approved collections of information were used to estimate burden hours for similar activities; these included 1625-0022, 1625-0101, 1625-0097, 1625-0041 and 1625-0057.

The new proposed Vapor Control System standard would require additional information to be submitted under certain circumstances and would expand applicability of existing standard to new organizations.

In addition to developing the recordkeeping burden, USCG researched wage rates for various positions. These positions and wage rates<sup>1</sup> are presented in the table which follows.

**Table 2: Labor Categories and Wage Rates** 

	Unloaded	Loaded	o una vvuge ruites
	Hourly	Hourly	
Labor Category	Wage	Wage	Source
			Bureau of Labor Statistics (BLS)
Secretary	\$19.24	\$28.86	Occupational Employment Statistics
Engineering Technician	\$28.38	\$42.57	Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-09
- · · · · · · · · · · · · · · · · · · ·	****	4=0.40	Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-09 (Industrial
Engineer (General)	\$33.64	\$50.46	Engineer)
			Bureau of Labor Statistics (BLS)
Person in Charge	\$30.22	\$45.33	Occupational Employment Statistics
Dock Worker/Crew			Bureau of Labor Statistics (BLS)
Member	\$16.21	\$24.32	Occupational Employment Statistics
Chemical Engineer	\$38.65	\$57.99	Bureau of Labor Statistics, Occupational Outlook Handbook, 2008-09
			Bureau of Labor Statistics (BLS)
Operations Manager	\$73	\$109.50	Occupational Employment Statistics
			Bureau of Labor Statistics, Occupational
Lead Engineer	\$57.43	\$86.15	Outlook Handbook, 2008-09
			Bureau of Labor Statistics, Occupational
Maintenance Worker	\$12.20	\$18.30	Outlook Handbook, 2008-09

To calculate the burden, USCG reviewed the population of facilities with VCS. The number of facilities which have been certified has increased over the years. For this reason, USCG has updated its estimates for facilities VCS. USCG estimates that there are 234 facilities and vessels with VCS. Previously, USCG had calculated burden estimates based on 65 facilities vessels.

In addition, the proposed rule would expand applicability of the standards. TBCFs would become covered by the regulations. There are approximately 15 TBCFs.

The population of tank barges has been declining. USCG data indicate that there are now 216 tank barge owners. Previous estimates were that there were 310 tank barge owners. The table which follows presents the estimated number of reporting entities. Total annual responses are estimated at 936.

Table 3: Reporting Entities

-

Wages are inflated using a compensation load factor of 1.50. This load factor is calculated specifically for production, transportation and material moving occupations, full-time, private industry (Series ID: CMU2010000520610D, 2009, 1<sup>st</sup> Quarter. Total cost of compensation per hour worked: \$25.16, of which \$16.82 is wages, resulting in a load factor of 1.4958 (\$25.16/\$16.82). USCG rounded this factor to 1.5. (Source: http://data.bls.gov/cgi-bin/dsrv). Using similar applicable industry groups and time periods results in the same estimate of load factor.

Reporting Entity - Group		Count
Facilities with VCS		234
Certifying Entities		25
Tank Barge Cleaning Facilities		15
U.SFlagged Tank Barge Owners		216
Foreign-flagged Tank Barge Owners		338 <sup>2</sup>
	Total	828

The table which follows presents a summary of the collection of information requirements. Readers may consult the appendix for a detailed description of these tasks.

Table 4
Summary of Collection of Information Requirements
for Facilities or Tank Vessels with a Vapor Control System

CFR	Related Task	Annual	Cost per				
	Troidiod Tuon	Burden	Requirement				
		(Hours)	rtoquii oiii oii				
Existing ICR activi	ties (as approved in 2008) 292 2723.75 <sup>3</sup>	2,724	\$277,822.50				
Proposed Rule's C	Changes with Existing Burden Recalculation						
Existing ICR activi	ties (updated) <sup>4</sup>						
		352.5	\$39,480				
Initial Implementat	Initial Implementation Actions Burden						
33 154.2020	Certifications	639	\$228,724				
33 154.2104	Failure Analysis	153	\$7,887				
33 154.2110	VBS	873	\$82,925				
33 154.2150	Training	23	\$3,220				
33 154.2020	Operations Manual (due to proposal's changes)	2,974	\$281,690				
33 154.2022	Re-certifications	253.5	\$87,190				
33 154.2020	Periodic Operational Review	1,468.5	\$468,118				
Multiple	Relabeling⁵	755.38	\$30,265				
46 39.1013	Tank Vessel Certification (add'l material)	24	\$2,072				
154.2250	General Requirements for Inspections and Tests	3	\$28,015				
156.170	Alternative Test Program (facilities)	N/A	N/A				
154.2250	Alternative Test Program Application	N/A	N/A				
46 39.5001	Multi-breasted loading application	N/A	N/A				
33 154.2111	Approval request – FVC	N/A	N/A				
Subtotal – Initial In	 nplementation Actions Burden	7166.38	\$1,220,201				

Owners and operators of those tank barges may be able to reduce their reporting burden through an alternative compliance program for vessel certification procedures for VCS designs (39.1015). U.S. Coast Guard assumes there will be no change to these entities from the previous ICR.

The burden formerly was calculated at 2,724 hours (rounded from 2,723.75 hours) for 4440 responses. This is based on 8 facilities having VCS certified and 57 facilities modifying existing VCS (34.75 hours each); 0 certifying entities applying for acceptance at 2 hours each; and 310 tank vessels installing a new VCS at 1.5 hours each.

<sup>33</sup> CFR 2020 (formerly 154.740), 33 CFR 2020 (formerly 154.804); 33 CFR (formerly 154.806); 46 CFR 39.1013 (formerly 39.10-13)

<sup>&</sup>lt;sup>5</sup> 154.2101, 154.2102, 39.2001, 39.5000, 39.2009, 39.6001, 39.6003.

Subsequent Actio	Subsequent Actions Burden				
33 154.2020	8.825	\$3,125			
33 154.2020 Future Operations Manual (TBCFs)		21.25	\$1,993		
Subtotal – Subsequent Actions Burden		30.08	\$5,170		
Total for Proposed Rule (Initial and Subsequent)		7,197	\$1,225,371		
Net Total Reques	4,825.5				

#### 13) Estimates of annualized capital and start-up costs.

There are no annualized capital and start-up costs.

#### 14) Estimates of annualized Federal government costs.

The Federal burden covered by this supporting statement is borne mainly by the USCG Office of Environmental Standards. The office is responsible for the review and processing of VCS documentation including the approval recommendation of various applications. USCG has also included an estimate for burden for the Commandant (or his designee) to actually approve the requests.

For the review of CE applications and for the review of tank vessel applications, USCG estimates it takes approximately 3 hours, at \$67 per hour, for a Coast Guard officer to review an application from a person or organization wishing to be a certifying entity or from a tank vessel to have its VCS approved. The labor wage is the equivalent of O-3 Coast Guard personnel per Enclosure (2) to COMDTINST 7310.1L.

It is expected that the Coast Guard will conduct 216 reviews annually for tank vessels.

The table which follows presents the estimated costs of labor,

Table 5: Labor Categories and Wage Rates

rabic of Euror Categories and Wage Rates						
	Unloaded	Loaded				
	Hourly	Hourly				
Labor Category	Wage	Wage	Source			
			Bureau of Labor Statistics (BLS)			
Secretary	\$19.24	\$28.86	Occupational Employment Statistics			
			Bureau of Labor Statistics, Occupational			
			Outlook Handbook, 2008-09 (Industrial			
Engineer (General)	\$33.64	\$50.46	Engineer)			
			Bureau of Labor Statistics, Occupational			
Chemical Engineer	\$38.65	\$57.99	Outlook Handbook, 2008-09			
Operations Manager	\$73	\$109.50	Bureau of Labor Statistics (BLS)			

There would be prep work for the certification and the actual certification.

This total includes a reduction in population due to a correction in population estimates for tank vessels and facilities. This results in a decrease in burden hours from the previous estimate of 2,724 hours to 352.5 hours.

This figure is the difference between the existing inventory and the recalculated existing using the latest population figures and the burden from the proposed rule's new requirements for the initial and subsequent periods.

<sup>(352.5 + 7,197) - 2,724 = 4,825.5</sup> hours (4,826 rounded)

			Occupational Employment Statistics
			Bureau of Labor Statistics, Occupational
Lead Engineer	\$57.43	\$86.15	Outlook Handbook, 2008-09
			Estimate based on publicly available data
Commandant (or			of Federal executive salaries as reported to
designee)	\$74.67	\$112	Congress by the White House <sup>9</sup>

The burden and cost are as follows:

Table 6 Collection of Information Requirements for Federal Government

Itom	CFR	· · · · · · · · · · · · · · · · · · ·				Coot nor
Item	CFR	Number of	Number of	Burden per	Annual	Cost per
		Respondents	Responses	Response	Burden	Requirement <sup>†</sup>
				(Hours)	(Hours)	
Existing	g Burden					
a.	CG to review an application from					
	a person or organization wishing					
	to be a certifying entity	1	1	3	310	\$201
b.	CG to review an application from					
	a tank vessel to have its VCS					
	approved. 11	2	2	3	6	\$402
Subtota	al Existing Burden	3	3	6	9	\$603
Initial I	mplementation Burden due to Propos	sal				
C.	154.310 Review & Approve					
	Operations Manual (TBCFs)	15	15	7.2512	108.75	\$9,969
d.	154.2020 Review and Approve					
	Applications (cargo line clearing)	3	3	7.25 <sup>13</sup>	21.75	\$1,994
e.	154.2110 VBS Approval	17	1714	7.25	123.25	\$11,298
g.	154.2110 VBS					
_	Blower/Compressor Approval	3	3	7.25	21.75	\$1,994
h.	154.2250 Application for					
	Alternative Test Program	0	0	7.25	0	\$0

http://www.socrata.com/Government/2009-Report-to-Congress-on-White-House-Staff/pc5g-zfsx For items a and b, the labor wage is the equivalent of O-3 Coast Guard personnel per Enclosure (2) to COMDTINST 7310.1L which is \$67 per hour.

The population of tank barge owner/operators has declined over the years. As of the end of CY 2009, there were approximately 216 U.S.-flagged tank barge owner/operators. The provision applies to all tank vessels; however, only two new VCS approvals for them are expected annually.

15 TBCFs \* [(3 hours \* (1 senior engineer \* \$86.15/hour + 1 lead engineering manager \* \$109.50/hour )) + (0.5 hour COTP \* \$112/hour) + (0.75 hour administrative support time \* \$28.86/hour)]

15 reviews \* [(3 hrs \* (1 senior engr + 1 engineering mgr)) + 0.5 hr COTP + 0.75 hour 1 administrative staff)]

For items d, g and h, the burden was calculated by: 3 applications \* [(3 hours \* (1 senior engineer \* \$86.15/hour + 1 engineering manager \* \$109.50/hour )) + (0.5 hour Commandant or designee \* \$112/hour) + (0.75 hour administrative support time \* \$28.86/hour)]

3 replies to applications \* [(3 hours \* (1 senior engineer + 1 engineering manager)) + (0.5 hour Commandant or designee) + (0.75 hour administrative support time)]

17 VBS \* [(3 hours \* (1 senior engineer \* \$86.15/hour + 1 engineering manager \* \$109.50/hour)) + (0.5 hour Commandant's designee \* \$112/hour) + (0.75 hour administrative staff time \* \$28.86/hour)]

17 letters \* [( 3 hrs \* (1 senior engineer + 1 engineering mgr) + 0.5 hr Commandant + 0.75 hr 1 administrative staff)]

10 of 16

13

10

11

12

	(TBCFs) 15						
i.	39.5000 Approval re: Multi-						
	Breasted Loading <sup>16</sup>	0	0	7.25	0	\$0	
j.	154.2111 Approval Request for						
	VCS Connections <sup>17</sup>	0	0	7.25	0	\$0	
Subtot	tal for Initial Implementation Burden	38	38	29	275.5	\$25,255	
j.	Subsequent TBCF Review &						
	Approve Operations Manual <sup>18</sup>	1	1	7.25	1.8125	\$166	
	tal for Proposal (Initial						
Implementation and Subsequent Years)		39	39	36.25	277.3125	\$25,421	
Total	(Existing and Proposed) Burden	42	42	42.25	286.3125	\$26,024	

#### 15) Explain the reasons for the change in burden.

The change (i.e., increase) in burden is both a PROGRAM CHANGE and an ADJUSTMENT.

A PROGRAM CHANGE results from the "Marine Vapor Control Systems" NPRM. The Coast Guard proposes to revise the existing safety regulations for facility and vessel vapor control systems (VCSs). The proposed changes would make VCS requirements more compatible with new Federal and State environmental requirements, regulate industry advancements in VCS technology, and codify the standards for the design and operation of a VCS at a tank barge cleaning facility. These changes would increase the safety of operations by regulating the design, installation, and use of VCSs, but would not require anyone to install or use VCSs.

The ADJUSTMENT results from a change in the population of VCS-related facilities and tank vessels.

#### 16) For collections of information whose results are planned to be published for

The proposal would establish a procedure for TBCFs to apply for an alternative testing program. That program would have to be approved by the Commandant. USCG has not calculated a burden for the approval of an alternative testing program for TBCFs since the proposal is codifying existing voluntary procedures.

USCG has not computed a cost nor a burden for this proposed provision because the current system of exemption requests has cover most, if not all, potential applicants. An approval request is estimated to take 7.25 hours ([( 3 hrs \* (1 senior engineer + 1 engineering mgr) + 0.5 hr Commandant + 0.75 hr 1 administrative staff)]).

The proposal would require that a facility that wants to connect a facility vapor line, which collects vapor from other plant processing areas that are not related to tank vessel operations, to a marine VCS, must receive approval in writing from the Commandant. USCG has not computed a burden for this provision. There have been few exemption requests in the past; USCG has recorded only three such exemptions in the last 20 years. This pattern is not expected to increase in the future. With the expected few, if any, instances in which such an approval request would be filed when the final rule becomes effective, USCG did not calculate into the total burden estimate this provision. An approval request is estimated to take 7.25 hours.

1 entity \* 1/4 \* [(3 hours \* (1 senior engr + 1 engineering mgr)) + 0.5 hour COTP + 0.75 hour 1 administrative staff)] This event is expected to occur once every four years; as such, USCG has included a smoothing factor (1/4) to this calculation.

statistical use, outline plans for tabulation, statistical analysis and publication.

This information collection will not be published for statistical purposes.

17) Explain the reasons for seeking not to display the expiration date for OMB approval of the information of collection.

The Coast Guard will display the expiration date for OMB approval of this information collection.

18) Explain each exception to the certification statement.

The Coast Guard does not request an exception to the certification of this information collection.

# B. Collection of Information Employing Statistical Methods.

This information collection does not employ statistical methods.

## **Appendix**

19

20

21

22

24

The following table provides details on USCG's calculations of information collection activities for facilities and tank vessels as summarized in Table 4.

Table A1
Collection of Information Requirements for Facilities or Tank Vessels with a
Vapor Control System: Subject and Affected Population, CFR, and Number of
Respondents

CFR	Number of Respondents	Number of Responses	Burden per Response (Hours)	Annual Burden (Hours)	Cost per Requirement
Existing ICR activitie					
33 CFR 154.2020 (formerly 154.804)	10 facilities will have certifications	10	34.5 <sup>19</sup>	345	\$38,640
33 CFR 154.2020 (formerly 154.740)	10 facilities <sup>20</sup> will have vapor control systems certified annually and must maintain records,	10	0.25	2.5	\$280 <sup>21</sup>
46 CFR 39.1013 (formerly 39.10-13)	2 tank vessels install new vapor control systems and will submit of VCS designs <sup>22</sup>	2	1.50	3	\$336
33 CFR (formerly 154.806)	1 new certifying entity will apply to be a CE.	1	2.00 <sup>23</sup>	2	\$224
	Subtota	al for Existing IC	R activities	352.5	\$39,480
Certifications <sup>24</sup>					
33 CFR 154.2031	Prep Work – Certifications – TBCF	15	2.5	37.5	\$3,103
33 CFR 154.2031	CertificationsEach TBCF facility operator (via CE)	15	33	495	\$187,500
33 CFR 154.2020	Prep Work – Certifications for cargo line clearing – each facility operator who pigs	3	2.5	7.5	\$621
33 CFR 154.2020	Certifications – cargo line clearing Each facility operator who pigs (via CE)	3	33	99	\$37,500
33 CFR 154.2031	Future Prep Work – Certifications – TBCF	1	2.5	0.625	\$52
33 CFR 154.2031	Future CertificationsEach TBCF facility operator (via CE)	1	33	8.25	\$3,125
	Certification	ons (Initial Imple	ementation)	639	\$228,776
	Ce	rtifications (Fut	ure Annual)	8.25	\$3,125

This is composed of 1.5 hours to assemble/transmit the plans by facility owners, and of 33 hours for review and preparation of response/certifying letter by certifying entity.

USCG data demonstrates that there are approximately 234 facilities but only ten are expected to need a certification each year. With the proposed rule, the former 154.740 ICR requirements for resubmittal for recertification would be removed and replaced with a recertification requirement.

For items a, b, c and d, \$112 per hour is used. This is the equivalent of an O-5 Coast Guard personnel out of government per Enclosure (2) to COMDTINST 7310.1L.

The requirement applies to all tank vessels but only 2 tank vessels are expected to annually install new VCS.

One hour to draft and one hour to assemble and send the application.

Certifications for facilities are existing requirements under (154.804 which will become 33 CFR 2020) and are noted in the Existing ICR activities category.

		Subtotal for Co	ertifications	647.875	\$231,901
Failure Analysis					
33 CFR 154.2104	Failure analysisEach facility operator who pigs	3	51	153	\$7,887
VBS					
33 154.2110	VBS – approval requestEach facility operator with VBS	17	50	850	\$80,806
33 154.2110	VBS –compressor/blower application Each facility operator with VBS and using compressor/blower	3	7.75	23.25	\$2,119
Subtotal for VBS				873	\$82,925
Training					
33 CFR 154.2150	Training materials for cargo line clearingEach facility operator who pigs <sup>25</sup>	3	7.75	23.25	\$3,220
Operations Manual					
33 CFR 154.2250	Create operations manualEach TBCF operator	15	85	1,275	\$119,555
33 CFR 154.2020	Review facility ops manualEach facility operator; update facility ops manual—59 facilities <sup>26</sup>	293	11 <sup>27</sup>	1,699	\$162,135
33 CFR 154.2250	Create operations manualFuture Each TBCF operator <sup>28</sup>	1	21.25	21.25	\$1,993
	Operations Manu	ials (Initial Imple	ementation)	2,974	\$281,690
	Operation	ıs Manuals (Futı	ure Annual)	21.25	\$1,993
	•	otal for Operation		2995.25	\$283,683
Re-certifications					
33 CFR 154.2022	Prep work for re-certifications – each facility operator	12	2.5	30	\$2,483
33 CFR 154.2022	Re-certificationsEach facility operator (via CE)	12	17	204	\$78,000
33 CFR 154.2022	Prep work for re-certification – each TBCF	1	2.5	2.5	\$207
33 CFR 154.2022	Re-certificationsEach TBCF operator (via CE)	1	17	17	\$6,500
Subtotal for Re-certifications					\$87,190
Periodic Operationa	I Review				
33 CFR 154.2020	Prep work for POR – Each TBCF <sup>29</sup>	5	2.5	12.5	\$621
33 CFR 154.2021	Periodic op reviewEach TBCF	5	13	65	\$25,000

25

29

The proposal would create new tasks for facility operators who pig (certifications, training materials, failure analyses). These tasks would be one time only events.

The proposal would create tasks which should occur in the first year of implementation only.

The proposal would proposition all (224) facilities to review their facility operating

The proposal would necessitate all (234) facilities to review their facility operating manuals and some facilities would need to update their manuals as a result of that review. USCG estimates a total of 6 hours to review manuals and a total of 5 hours to update manuals. Only 59 facilities are expected to update manuals.

One new TBCF is estimated for every four years.

Periodic operational reviews would be required within three years of a certification or the last periodic operational review. For TBCFs, because they would not have had a certification until the final rule becomes effective, they would not begin to have periodic operational reviews until the third year of the final rule's enactment.

# 1625-0060

30

	operator (via CE)				
33 CFR 154.2021	Maintain periodic ops review letter –	5	1	5	\$288
	each TBCF operator				
33 CFR 154.2020	Prep work for POR –each facility	84	2.5	210	\$17,379
	operator				
33 CFR 154.2020	Periodic ops reviewEach facility	84	13	1,092	\$420,000
	operator (via CE)				
33 CFR 154.2020	Maintain ops review letterEach facility	84	1	84	\$4,830
	operator				
Subtotal for Periodic	Operational Review			1,468.5	\$468,118
Relabeling	•				
33 CFR 154.2101,	Relabeling hoses Each facility	253	2.5	632.5	\$24,282
154.2102, 46 CFR	operator <sup>30</sup>				
39.2001, 39.2009,	'				
39.6001					
46 CFR 39.6003,	LabelingEach TBCF facility operator	15	2.0	30	\$1,233
39.6007					,
46 CFR 2001, 5000	Relabeling and labeling – Each TB	216	0.43	92.88	\$4,750
, , , , , , , , , , , , , , , , , , , ,	owner/operator				. ,
		Subtotal for	Relabeling	747.88	\$30,265
Tank Vessel Certifica	ation		<u> </u>	1	,
46 CFR 39.1013	Tank Vessel Certification (addl material)	2	12	24	\$2,072
	Each tank barge owner or operator				, , ,
	with VCS needing modification				

These tasks would be one time only events. (253 VCS \* (2 hours \* 1 maint. worker + 0.5 hour \* 1 ops mgr)

General Requirements for Inspections and Tests					
33 CFR 154.2250	Evaluation of Cargoes – Each TBCF for	1	3	3	\$28,015
	polymerizing cargoes <sup>31</sup>				
Miscellaneous Other					
33 CFR 156.170	Alternative Test Program (facilities) <sup>32</sup>	N/A	N/A	N/A	N/A
33 CFR 154.2250	Alternative Test Program Application 33	N/A	N/A	N/A	N/A
46 CFR 39.5001	Multi-breasted loading application <sup>34</sup>	N/A	N/A	N/A	N/A
33 CFR 154.2111	Approval request - FVC <sup>35</sup>	N/A	N/A	N/A	N/A
Total <sup>36</sup>				7,197	\$1,225,276

31

The proposed rule would require that the cargo be evaluated (e.g., the cargo's manifest or other documentation reviewed for polymerizing chemicals) for the potential to polymerize and that adequate precautions taken to prevent and detect polymerization of the cargo vapors. Most potential cargoes do not possess the potential to polymerize.

32

The proposal would amend the existing regulation and would amend the requirement for the approval process. The proposal would change the approval authority from the COTP to the Commandant. USCG has not calculated a burden estimate for the provision because of (1) the alternative methods approval process is a reissuance of the existing regulation but includes a change of the deciding official (2) these provisions are expected to have limited applicability in the future. An approval request is estimated to take 7.75 hours.

33

The proposal would require several actions related to tests and inspections. The proposed section also would establish a procedure for TBCFs to apply for an alternative testing program. That program would have to be approved by the Commandant. USCG has not estimated a burden for this proposed provision since it is not anticipated to be requested frequently if at all. The proposal is based on existing voluntary standards which were developed based on industry input for that reason, USCG believes few TBCFs would need an alternative testing program.

34

Most, if not all, tank barge owner/operators who would use multi-breasted loading have already gone through the exemption process. USCG has computed neither a cost, cost savings nor COI burden for the provision. The burden would be (3.5 hours \* (1 lead engineer + 1 operations manager) + (0.75 hour \* 1 administrative staff) per application

35

The proposal would require that a facility that wants to connect a facility vapor line, which collects vapor from other plant processing areas that are not related to tank vessel operations, to a marine VCS, must receive approval in writing from the Commandant. Because of the limited applicability of this proposed change, USCG has not calculated a burden for it. One application's burden would be (3.5 hours \* (1 lead engineer + 1 operations manager) + (0.75 hour \* 1 administrative staff)

36

Total does not include Existing ICR burden estimate adjustments of 352.5 hours and corresponding cost.