# Supporting Statement for

# Waterfront Facilities Handling Liquefied Natural Gas (LNG) and Liquefied Hazardous Gas (LHG)

## A. Justification.

### 1. Circumstances which make the collection of information necessary.

The Coast Guard has published regulations that provides safety standards for the design and construction, equipment, operations, maintenance, personnel training, and fire protection at waterfront facilities handling liquefied natural gas (LNG) and liquefied hazardous gases (LHG) (33 CFR, Part 127, Subparts A and C). These regulations implement the Ports and Waterways Safety Act of 1972 (PWSA), as amended by the Port and Tanker Safety Act of 1978 (33 U.S.C. 1225), and are necessary to prevent or mitigate the results of an accidental release of LNG or LHG at a waterfront facility. They would reduce the probability that an accident could occur, and would reduce the damage and injury to persons and property should an accident occur.

The regulations contain information collection requirements in the following sections:

A.	127.007			Letter of Intent.
B.	127.015			Appeals.
C.	127.017			Alternatives.
D.	127.019,	127.305,	127.1305	Operations Manual.
E.	127.019,	127.307,	127.1307	Emergency Manual.
F.	127.301,	127.1301		Certification of person in
				charge.
G.	127.317,	127.1317		Declaration of inspection.
H.	127.409,	127.1409		Records of maintenance.

This information collection supports the following strategic goals:

#### **Department of Homeland Security**

- Prevention
- Protection

#### U.S. Coast Guard

- Safety
- Protection of the Natural Resources

### Prevention Directorate (CG-3P)

- Reduce crewmember deaths and injuries on U.S. commercial vessels
- Reduce the amount of chemicals entering the environment
- Reduce the consequences of pollution incidents

- 2. Purpose for the information collection and consequences to the Federal program if the information is not collected.
- A. The Letter of Intent is needed to alert the Coast Guard Captain of the Port (COTP) that a waterfront facility plans to conduct transfers of LNG or LHG, in bulk. It also provides a point of contact at the facility. Once a letter has been received, the COTP can direct the necessary enforcement activity to ensure that the operator complies with the other requirements in 33 CFR 127. The Letter of Intent also provides the information used by the COTP to determine the suitability of the waterway, on which the waterfront facility is located, for LNG or LHG vessel traffic. Changes to the information in the Letter of Intent are required to be submitted whenever they occur. Without the Letter of Intent, COTPs would not learn of the opening or reopening of a waterfront facility handling LNG or LHG far enough in advance to allocate resources, to enforce construction and design standards, and to plan enforcement strategy. Also, COTPs would not have the information necessary to properly evaluate the suitability of a waterway for vessels carrying LNG or LHG.
- B. Any person directly affected by an action taken under these regulations may appeal that action to the District Commander. If still not satisfied with the Coast Guard's decision, that person may appeal the decision to the Assistant Commandant for Prevention, in Washington, DC. If the appeal is not made in writing, the operator's request for an appeal cannot be properly evaluated.
- C. If it is impractical for the operator of a waterfront facility handling LNG or LHG to comply with the requirements in these regulations, and an alternative is available that provides at least the same degree of safety as the regulations, the operator may request permission to use an alternative procedure, method, or equipment standard. The operator must submit the request for an alternative in writing to the COTP. Without a written request the COTP cannot properly evaluate the proposed alternative.
- D. The owner or operator of a waterfront facility handling LNG or LHG must develop and submit to the COTP two copies of the facility's <u>Operations Manual</u>. If the manual is found not to be in compliance with section 127.305 or 127.1305 of the regulations, transfer operations cannot be conducted at the facility. The <u>Operations Manual</u> is a critical part of the enforcement strategy. Without it, the COTP cannot determine if safe operating procedures and an effective training program are set up by the waterfront facility operator.
- E. The owner or operator of a waterfront facility handling LNG or LHG must develop and submit to the COTP two copies of the facility's <a href="Emergency Manual"><u>Emergency Manual</u></a>. If the manual is found not to be in compliance with section 127.307 or 127.1307 of the regulations, transfer operations cannot be conducted at the facility. The <a href="Emergency Manual"><u>Emergency Manual</u></a> is a critical part of the enforcement strategy. Without it, the COTP cannot determine if effective procedures have been set up by the waterfront facility operator to respond to emergencies (such as fires and releases of LNG or LHG) on the facility.
- F. The operator of an LNG or LHG waterfront facility must certify in writing that each person in charge of shoreside transfer operations meets the qualifications set forth in the

regulations. A copy of each certification must be made available for inspection at the facility. During routine inspections of the facility, the COTP examines these certifications to ensure that the persons in charge of shoreside transfer operations are qualified. Without these certifications, the COTP would have to develop and administer tests or would have to observe qualification training in order to verify that the person in charge is properly qualified. Both of these means would create a greater burden than operator certification.

- G. Before LNG or LHG transfer operations begin, the person in charge of shoreside transfer operations must complete, with the person in charge of vessel transfer operations, a Declaration of Inspection. The Declaration of Inspection is a check-off list of transfer requirements which helps to reduce human error and equipment failure, thereby preventing accidental releases of LNG and LHG. It identifies each person in charge, who must sign it, and places the responsibility for safely conducting the transfer on that person. The Declaration of Inspection must be retained for 30 days after completion of the transfer. During routine inspections of the facility, the COTP will examine these Declarations of Inspection to ensure that they have been completed properly before each transfer. The COTP also uses this information to identify the responsible person in charge when a violation of the requirements occurs. Without the Declaration of Inspection, the COTP could not verify that persons in charge are following proper transfer procedures and the probability of human errors or equipment failures resulting in LNG or LHG releases will increase.
- H. Tests and inspections of the LNG and LHG transfer system must be conducted on a regular basis to ensure that these systems will not fail and release LNG or LHG. Records of these tests and inspections must be retained at the facility for 24 months. During routine inspections of the facility, the COTP examines these records to ensure that the required tests have been completed. Without these records the operator would have to wait for a Coast Guard inspector to witness the tests to verify that they were done, thereby increasing the burden on both the operator and the Coast Guard. If the tests and inspections are not conducted, the incidence of LNG and LHG releases due to equipment failures will increase.

## 3. Considerations of the use of improved information technology.

The information required is unique to each individual waterfront facility. We estimate that 60% of the reporting and recordkeeping requirements can be accomplished electronically. At this time, we estimate that 0% is done electronically.

#### 4. Efforts to identify duplication.

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

#### 5. Methods to minimize the burden to small businesses or small entities.

The Coast Guard believes that these requirements do not have a significant economic impact on small entities. Few, if any, small entities are involved in the costly and highly technical operations of LNG and LHG waterfront facilities. All the existing LNG waterfront facilities are owned and operated by multi-million dollar corporations. Most LHG waterfront facilities are also operated by large entities. Those LHG facilities operated by small entities generally handle small quantities of LHG and can avoid the burdens of this regulation by receiving packaged shipments of LHG instead of bulk shipments.

The appeal and alternatives requirements are intended to reduce the burden on small entities by allowing them to request less burdensome procedures where justified by small scale or simplified operations at a small waterfront facility.

## 6. <u>Consequences to the Federal program if collection were conducted less frequently.</u>

A,D,E,F. The Letter of Intent, the <u>Operations Manual</u>, and the <u>Emergency Manual</u> are submitted only once, before the facility begins transferring LNG or LHG. The certification for persons in charge is completed each time a new individual is qualified as a person in charge.

Less frequent collection of this information would have the same consequences as not collecting the information.

- B,C. Appeals and alternatives are submitted whenever the operator makes a request. Less frequent collection would prevent the waterfront facility operator's requests from being considered.
- G. Declarations of Inspection are collected for each transfer. Less frequent collection would prevent the COTP from verifying that persons in charge are following proper transfer procedures for each transfer. This would increase the probability of human errors or equipment failures resulting in LNG or LHG releases will increase. It would also make identification of the responsible person in charge more difficult when a discharge does occur.
- H. The recordkeeping requirements are recorded whenever each event occurs. If they were reported and recorded less frequently, facility operations would be delayed until the COTP sent his representative to obtain the information needed to verify compliance, evaluate the request, or witness the procedure.

### 7. Special circumstances due to inconsistency.

This information is collected in manner that is consistent with guidelines.

## 8. Efforts to consult with persons outside the agency.

On January 9, 2007, USCG published a 60 day notice in the Federal Register at 72 FR 970 requesting comments from the public. USCG has not received any comments for this information collection.

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

No payments or gifts of any kind are provided to respondents.

## 10. <u>Describe any assurance of confidentiality provided to respondents</u>.

No assurance of confidentiality is provided to respondents.

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

There are no issues of a sensitive nature involved in this information collection.

#### 12. Estimates of information collection burden.

There are currently 107 facilities in the United States that handle LNG and LHG. Many of these facilities also handle dangerous cargos or oil in bulk, and are therefore also regulated under 33 CFR 126 or 154, respectively. The annualized costs and burden to the respondents for the collection of information is based upon the following assumptions:

- a wage of \$105 per hour<sup>1</sup> for management personnel (the equivalent of O-5 rate)
- a wage of \$79 per hour for technicians (the equivalent of O-3 rate)
- a wage of \$40 per hour for clerical personnel (the equivalent of E-4 rate).

Table 12.1 provides, for each element of this collection, the annual number of respondents and responses, as well as the estimated annual hour burden and cost. The paragraph letters appearing under the total burden rows in the table below correspond to the letters preceding each paragraph below, containing a description of the assumptions used for each element of this collection.

A. Letter of Intent: Only one letter of intent is required during the lifetime of the facility unless the owner or operator plans new changes on an existing facility or the facility is deactivated or the owner /operator changes. Past experience with bulk liquid facilities indicates that approximately 6% of the facilities will be required to submit a new or resubmit a Letter of Intent each year.

B. Appeals: Appeals are very rare, but to account for their possibility, we assume an average of one appeal per year.

<u>C. Alternatives:</u> Past experience with bulk liquid transfer facilities indicates that approximately 10% of the facilities request an alternative during the lifetime of the facility. Approximately double that rate (20%) is expected for LNG and LHG facilities during the assumed 25 year lifetime. The annual number of responses is therefore conservatively estimated at 1% per year (20%/25 years) of the total population. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Hourly wage rates taken from COMDTINST 7310.1I

Table 12.1							Management Ho	•		
		i					Technician Hour	•		
	107	Population	n of LHG and L	NG Facilities =	# Respondent	\$40	Clerical Hourly F	Rate		
	Letter of			-	•	-	-	Person In Charge		
	Intent					Development		Quals and Certs		Records
% Population responding annually	6%	1%	1%	3%	6%	3%	6%	100%	100%	100%
# Annual Responses	6	1	1	3	6	3	6	143	2,782	107
# Annual Respondents	6	1	1	3	6	3	6	107	107	107
# Management Hours per response		8	_	_		15		2		
Management Hourly Rate	\$105	\$105	\$105	\$105	\$105	\$105	\$105	\$105	\$105	\$105
# Technician Hours per Response	0	0	0	0	0	0	0	0	0	8
Technician Hourly Rate	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79	\$79
# Clerical Hours per Response	0.5	2	2	5	1	5	1	0.5	0.5	0.5
Clerical Hourly Rate	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40
									0	
Total Hours per Response	2.5			20		20		2.5	0.5	
Total Cost per Response	\$230	\$920	\$920	\$1,775	\$145	\$1,775	\$145	\$230	\$20	\$652
Total Burden Hours	15	10				60		358		910
Total Burden Cost	\$1,380	\$920	\$920	\$5,325	\$870	\$5,325	\$870	\$32,890	\$55,640	\$69,764
assumptions	Α	В	С	D	E	F	G	Н	1	J
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
	107	Total N	umber of A	nnual Respo	ndents					
		ii.		•						
	3,059 Total Number of Annual Responses									
	2,838 Total Annual Burden Hours									
	\$173,904 Total Annual Burden Cost									

#### 12. Estimates of information collection burden (cont'd).

- <u>D. Operations Manual Development</u>: Operations Manuals only need to be developed once during the lifetime of a facility. Based on our more extensive experience with bulk liquid transfer facilities, we assume that approximately 3% of facilities will be replaced by newer facilities in a given year.
- <u>E. Operations Manual Amendments</u>: Certain changes to facility systems will require facility owners to amend their Operations Manual. We assume that 6% of facilities will update their Operations Manual annually.
  - F. Emergency Manual Development: same as paragraph D.
  - G. Emergency Manual Amendment: same as paragraph E.
- H. Person in Charge Qualification and Certification: An employee need only demonstrate the required qualification and be certified as a Person in Charge once for the duration of his or her employment with a facility. New qualification and certification must therefore only be conducted to for the new employees. Large facilities, operating with three shifts, will typically employ three Persons in Charge plus one alternate. Using the conservative estimate of employee turnover at 33%, facilities must recertify, on average, one-third of their four Persons in Charge. Restated, each facility will, on average, conduct certification of 1.33 Persons in Charge each year. Each facility is a respondent, and the number of responses is the population of LNG and LHG facilities multiplied by 1.33.
- <u>I. Declaration of Inspection</u>: The Coast Guard has historically estimated that these facilities will, on average, each conduct approximately 26 transfers per year. Each facility is therefore a respondent, and the number of responses may be calculated by multiplying the population of LNG and LHG facilities by 26.
- J. Maintenance Records: Each LHG and LNG facility must conduct and record a series of tests and inspections. Both the number of respondents and the number of responses is therefore equal to the population of LNG and LHG facilities.
- 13. Estimates of annualized capital and start-up costs.

There are no annualized capital and start-up costs.

#### 14. Estimates of Federal Government costs.

This wage rates<sup>2</sup> for officers was derived by averaging the standard "in government" rates for pay grades O-3 and O-2. The rate for enlisted time uses the average standard "in government rates for pay grades E-6 and E-5. Table 14.1 details these costs. <sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Hourly wage rates taken from COMDTINST 7310.1I

Table 14.1

\$61	O-3 "In Government" Rate
\$48	O-2 "In Government" Rate
\$44	E-6 "In Government" Rate
\$39	E-5 "In Government" Rate

\$55 Average Officer Rate \$42 Average Enlisted Rate

Letter of Intent
Appeals
Alternatives
Ops Manual Development
Ops Manual Amendment
Emergency Manual Development
Emergency Manual Amendment
Person in Charge Quals and Certs
Declaration of Inspection
Maintenance Records

	· · · · · · · · · · · · · · · · · · ·	# of Officer Hours Required per Review		TOTAL COAST GUARD HOURS	
. 6	100%	1	0	6	\$330
1	100%	8	1	9	\$482
1	100%	8	1	9	\$482
3	100%	15	1	48	\$2,601
6	100%	1	0.5	9	\$456
3	100%	15	1	51	\$2,783
6	100%	1	0.5	9	\$456
143	100%	0	0.25	36	\$1,502
2,782	25%	0	0.25	174	\$7,303
107	100%	0	0.25	27	\$1,124

GRAND TOTALS	378	\$17,519
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#### 15. Reasons for the change in burden.

The change in burden is an ADJUSTMENT due to a decreased population of LHN and LHG facilities, from 194 to 107. This change is attributable to a change in the methodology for identifying this data triggered by the Coast Guard's shift of databases from the Marine Safety Information System (MSIS) to the Marine Information for Safety and Law Enforcement (MISLE) system. We have also increased our estimate of the number of annual responses by 2,535. This increase is due to a more accurate reporting of the number of Declarations of Inspection (DOI), one of the elements of this collection. Because this DOI is a minimally burdensome aspect of the collection, the increase in hour burden triggered by the increased number of DOIs is more than offset by the decrease in the number of the other, more labor intensive aspects of the collection that decreased proportionally with the decrease in population size.

All changes are considered to be adjustments based on agency estimate.

## 16. Plans for tabulation, statistical analysis, and publication.

There are no plans to use statistical analysis or to publish this information.

## 17. Approval to not display expiration date.

We are not seeking such approval.

## 18. Exception to the certification statement.

There are no exceptions to the certification statement.

# B. Collection of Information Employing Statistical Methods.

This information collection does not employ statistical methods.