



**U.S. COAST GUARD**



**Homeland  
Security**

# **BULK LIQUID FACILITY INSPECTION JOB AID**

## **Bulk Liquid Facility List of Acronyms**

ANSI	American National Standards Institute
APHIS	Animal Plant Health Inspection Service
ASP	Alternative Security Plan
ASTM	American Society for Testing and Materials
COA	Certificate of Adequacy
COTP	Captain of the Port
DWT	Dead Weight Tons
EPA	Environmental Protection Agency
FSO	Facility Security Officer
FSP	Facility Security Plan
L/O	Lube Oil
LHG	Liquefied Hazardous Gas
MARSEC	Maritime Security
MAWP	Maximum Allowable Working Pressure
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MT	Metric Tons
NFPA	National Fire Protection Association
NLS	Noxious Liquid Substances
PIC	Person In Charge
SPCC	Spill Prevention, Control, and Countermeasures (EPA Regs)
SSI	Sensitive Security Information

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# Bulk Liquid Facility

## Task 1: Complete Administrative Items

Note:

<b>Step</b>	<b>Action</b>
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- |     |   |
|-----|---|
| 1.1 | <input type="checkbox"/> Schedule Inspection.   |
| 1.2 | <input type="checkbox"/> Review Files. <ul style="list-style-type: none"><li>• Applicability of regulations</li><li>• History of deficiencies</li><li>• MISLE records</li><li>• Changes since last exam</li></ul> |

## Task 2: Complete Pre-Inspection Items

<b>Step</b>	<b>Action</b>
-------------	---------------

- |           |   |       |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
|-----------|---|-------|-----|----|-------|-----|----|-----------|-----|----|-------|-----|----|-------|-----|----|-----------|-----|----|
| 2.1       | Review COA. <ul style="list-style-type: none"><li><input type="checkbox"/> Applicability.<table border="0"><tbody><tr><td>• Oil</td><td>yes</td><td>no</td></tr><tr><td>• NLS</td><td>yes</td><td>no</td></tr><tr><td>• Garbage</td><td>yes</td><td>no</td></tr></tbody></table><p>33 CFR 158.110-135</p></li><li><input type="checkbox"/> Application for COA.<table border="0"><tbody><tr><td>• Oil</td><td>yes</td><td>no</td></tr><tr><td>• NLS</td><td>yes</td><td>no</td></tr><tr><td>• Garbage</td><td>yes</td><td>no</td></tr></tbody></table><p>33 CFR 158.140</p></li><li><input type="checkbox"/> Waivers and Alternatives (if applicable.)<ul style="list-style-type: none"><li>• Letter of application      Date:</li><li>• COTP waiver letter      Date:</li></ul><p>33 CFR 158.150</p></li><li><input type="checkbox"/> Termination of COA.<ul style="list-style-type: none"><li>• Reason (suspended, revoked, not applicable)</li><li>• COTP letter                      Date:</li></ul><p>33 CFR 158.600</p></li></ul> | • Oil | yes | no | • NLS | yes | no | • Garbage | yes | no | • Oil | yes | no | • NLS | yes | no | • Garbage | yes | no |
| • Oil     | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
| • NLS     | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
| • Garbage | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
| • Oil     | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
| • NLS     | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |
| • Garbage | yes   | no    |     |    |       |     |    |           |     |    |       |     |    |       |     |    |           |     |    |

Notes:





## Task 2: Complete Pre-Inspection Items (Continued)

Note:

### Step

### Action

2.4 Review COA Form C (Garbage).

- Receive within 24 hours of notice (APHIS regulated garbage).

#### EXCEPTIONS

- Ships operate exclusively within navigable waters of U.S.
  - Ships operate exclusively between ports/terminals in the continental U.S.
  - Ships operate exclusively between continental U.S. ports/terminals and Canadian ports/terminals
  - Reception facilities for a ship repair yard does not have to meet the requirement 33 CFR 158.410(a)(1), if it has the capability of handling the transfer of garbage from a ship before it departs the yard
- Receive medical waste or hazardous waste, or provide list of alternative transporters.
  - Does not interfere with terminal operations.
  - Conveniently located.
  - Garbage cannot enter water.
  - Holds all required local, state, and Federal permits.

#### CAPACITY and EXCEPTIONS:

- Receive all garbage ship desires to discharge, EXCEPT:
  - Large quantities of spoiled or damaged cargoes not normally discharged
  - From ships not having commercial transaction with that port/terminal

Notes:









### Task 3: Complete Administrative Items on Location (Continued)

Note:

#### Step

#### Action

- 3.9  Ensure drills have been conducted in the last three months.  
**Record Security Information in Appendix A**  
33 CFR 105.220  
**Note:** If drills have not been conducted in the last 3 months, require a drill to be conducted.
- 3.10  Ensure an exercise has been conducted at least once in the past year.  
**Record Security Information in Appendix A**  
33 CFR 105.220  
**Note:** If exercise has not been conducted in the last year, require the facility to conduct an exercise.
- 3.11 Review records to ensure all of the following are recorded.  
**Record Security Information in Appendix A**  
33 CFR 105.225
- Review Drill log.
  - Review Exercise log.
  - Incidents and breaches of security.
  - Annual Audit of FSP.
  - Changes in Maritime Security (MARSEC) Levels.
  - Maintenance, calibration, and testing of security equipment.
  - Security threats.
  - Training records from facility personnel with security duties.
    - Date of each training session
    - Duration
    - Description of training
    - List of attendees
  - All records must be maintained for at least 2 years.
  - FSP/ASP undergoes an annual audit.
    - Documents signed by FSO certifying the annual audit
    - Past audits findings are addressed
  - Verify Declaration of Security procedures.
    - Maintain for 90 days
    - DoS is valid for a specific MARSEC level
    - The effective period at MARSEC Level 1 does not exceed 90 days
    - The effective period at MARSEC Level 2 does not exceed 30 days

Notes:





### Task 3: Complete Administrative Items on Location (Continued)

Note:

#### Step

#### Action

3.16 Security measures for monitoring.

**Record Security Information in Appendix A**

33 CFR 105.275

- Verify procedures at MARSEC Level 1 to ensure that security measures relating to delivery of monitoring are implemented as outlined in the FSP which include:
  - Monitoring the facility area, including shore and waterside access.
  - Capability of monitoring access points, barriers, and restricted areas
  - Capability of monitoring access and movement adjacent to vessels using the facility, including augmentation of lightering utilized by vessels
  - When automatic intrusion detection devices are used, activates an audible or visual alarm, or both, at a location that continuously attended or monitored
  - Ability to function continually, including consideration of the possible effects of weather or of a power disruption
- Review procedures for MARSEC Level 2 to ensure that security measures relating to delivery of monitoring can be implemented as outlined in the FSP.
- Review procedures for MARSEC Level 3 to ensure that security measures relating to delivery of vessel monitoring can be implemented as outlined in the FSP.

3.17 Security incident procedures.

**Record Security Information in Appendix A**

33 CFR 105.280

- Verify procedures for responding to security threats and breaches of security and maintaining critical facility and vessel-to-facility interface.
- Review procedures for reporting security incidents.
- Evacuate the facility in case of security threats or breaches of security.
- Report security incidents as required.
- Brief all facility personnel on possible threats and the need for vigilance soliciting their assistance in reporting suspicious persons, objects, or activities.
- Secure non-critical operations in order to focus response on critical operations.

Notes:

### Task 3: Complete Administrative Items on Location (Continued)

Note:

- | <b>Step</b> | <b>Action</b>  |  |
|-------------|--|--|
| 3.18        | <input type="checkbox"/> Verify Facility Copy of Operations manual contains same information as unit file copy.  |  |
| 3.19        | <input type="checkbox"/> Verify Facility Response Plan contains same information as unit file copy.  |  |
| 3.20        | <input type="checkbox"/> Review the following procedures with facility representative.<br>33 CFR 154.735 <ul style="list-style-type: none"><li>• Firefighting equipment maintenance</li><li>• Access controls</li><li>• Material handling equipment</li><li>• Smoking policy and areas</li><li>• Rubbish and waste handling</li><li>• Vehicle parking locations</li></ul>  |  |
|             | If facility handles dangerous cargo not in transport units:  |  |
|             | <input type="checkbox"/> Inspect portable fire extinguishers (if applicable).  |  |
|             | <input type="checkbox"/> Inspect heating equipment (if applicable).  |  |
|             | <input type="checkbox"/> Inspect maintenance stores and supplies (if applicable).  |  |
| 3.21        | <input type="checkbox"/> Requirements for marine terminals safety training. <ul style="list-style-type: none"><li>• Properties and hazards of each material being transferred to or from the facility</li><li>• Basic firefighting procedures, including the use of the portable fire extinguishers required by Sec. 154.710</li><li>• Content and use of the examined Operations Manual and examined Facility Response Plan</li><li>• Vessel transfer control systems of vessels in general</li><li>• Procedures for transferring bulk liquid to and from vessels</li><li>• Procedures for response to a release of the oil or hazardous material being handled by the facility</li><li>• First aid for persons</li><li>• Restrictions on access to the marine transfer area for Oil or Bulk Liquid Hazardous materials</li></ul> |  |
| 3.22        | <input type="checkbox"/> Verify transfer hoses annually tested at 1.5 MAWP.  |  |
| 3.23        | <input type="checkbox"/> Verify loading arm meets ANSI B31.3 (for those placed in service after 30 Jun 1973).<br><input type="checkbox"/> Verify annually tested at 1.5 MAWP.  |  |

Notes:





## Task 4: Inspect Bulk Liquid Facility

Note:

### Step

### Action

- 4.1 Verify facility personnel responsible for security duties have knowledge, through training or equivalent job experience, in the following, as appropriate:

#### Record Security Information in Appendix A

33 CFR 105.210

- Knowledge of current security threats and patterns.
- Testing, calibration, operation, and maintenance of security equipment and systems.
- Security related communications (including the handling of SSI).
- Methods of physical screening of persons, personal effects, baggage, cargo, and vessel stores.
- Knowledge of emergency of procedures and contingency plans.
- Techniques used to circumvent security measures.
- Recognition of characteristics and behavioral patterns of persons who are likely to threaten security.
- Recognition and detection of dangerous substances and devices.
- Inspect, control, and monitoring techniques.
- The meaning and consequential requirements of the different MARSEC levels.
- Crowd management and control techniques.
- Operation of security equipment and systems.
- Relevant provisions of the Facility Security Plan (FSP).

- 4.2 Verify that all other personnel, including contractors, whether part-time, full-time, temporary, or permanent have knowledge of, through training or equivalent job experience in the following as appropriate:

#### Record Security Information in Appendix A

33 CFR 105.210, 33 CFR 105.215

- Relevant provisions of the FSP & meaning of different MARSEC levels.
- Recognition & detection of dangerous substances and devices.
- Recognition of characteristics and behavioral patterns of persons who are likely to threaten security.
- Techniques used to circumvent security measures.

Notes:

## Task 4: Inspect Bulk Liquid Facility (Continued)

Note:

### Step

### Action

- 4.3  Inspect primary and secondary communications systems procedures allowing effective and continuous communications between the facility security personnel, vessels, interfacing w/facility, the COTP and authorities w/security responsibilities.
- Record Security Information in Appendix A**  
33 CFR 105.235
- 4.4  Inspect that each active facility access point provides a means of contacting police, security control, or an emergency operations center.
- Record Security Information in Appendix A**
- 4.5 Verify procedures at MARSEC Level 1 to ensure that security measures relating to access to control are implemented as outlined in the FSP including:
- Record Security Information in Appendix A**  
33 CFR 105.255
- Screen person, baggage personal effects, and vehicles, for dangerous substances and devices at the rate specified in the approved FSP.
  - Conspicuously post signs stating that entering the facility is deemed valid consent to screening or inspection, and that failure to consent or submit to screening or inspection will result in denial or revocation of authorization to enter.
  - Check the identification of any persons seeking to enter the facility, including vessel passengers and crew, facility employees, vendors, visitors.
  - Identify access points that must be secured or attended to deter unauthorized access.
  - Screen by hand or device, such as x-ray, all unaccompanied baggage prior to loading onto a vessel.
  - Secure unaccompanied baggage after screening in a designated restricted area and maintain security control during transfers between facility and vessel.
  - Review procedures for MARSEC Level 2 to ensure that security measures relating to access control can be implemented as outlined in the FSP.

Notes:





## Task 4: Inspect Bulk Liquid Facility (Continued)

Note:

- | Step | Action  |
|------|---|
| 4.9  | <ul style="list-style-type: none"><li><input type="checkbox"/> Examine transfer hose condition.<br/>33 CFR 156.170</li><li><input type="checkbox"/> Verify no unrepaired kinks, bulges, soft spots, loose covers, other defects.</li><li><input type="checkbox"/> Verify no cuts, slashes, or gouges that penetrate the first layer of hose reinforcement.</li><li><input type="checkbox"/> Verify no external/internal deterioration.</li><li><input type="checkbox"/> Verify annually tested at 1.5 MAWP, does not burst, bulge, leak, or abnormally distort.</li></ul> |
| 4.10 | <ul style="list-style-type: none"><li><input type="checkbox"/> Examine loading arms: design &amp; markings.<br/>33 CFR 154.510</li><li><input type="checkbox"/> Verify meets ANSI B31.3 (for those placed in service after 30 Jun 1973).</li><li><input type="checkbox"/> Verify manufacturer's certification permanently marked or recorded elsewhere.</li><li><input type="checkbox"/> Verify means of draining or closing before disconnect.</li></ul>   |
| 4.11 | <ul style="list-style-type: none"><li><input type="checkbox"/> Verify loading arms: tests &amp; conditions.<br/>33 CFR 156.170</li><li><input type="checkbox"/> Verify no defects that would permit the discharge of oil or hazardous material.</li><li><input type="checkbox"/> Verify annually tested at 1.5 MAWP does not leak.</li></ul>  |
| 4.12 | <ul style="list-style-type: none"><li><input type="checkbox"/> Examine transfer pipe system.<br/>33 CFR 156.170</li><li><input type="checkbox"/> Verify no defects that would permit the discharge of oil or hazardous material.</li><li><input type="checkbox"/> Verify annually tested at 1.5 MAWP, or approved alternative; does not leak.</li><li><input type="checkbox"/> Verify extent of pipe test.</li><li><input type="checkbox"/> To first valve inside secondary containment area, or other approved procedure.</li></ul>                                      |
| 4.13 | <ul style="list-style-type: none"><li><input type="checkbox"/> Verify transfer system relief valves and pressure valves have been tested.<br/>33 CFR 156.170</li><li><input type="checkbox"/> Verify TSRVs open at or below pressure setting.</li><li><input type="checkbox"/> Verify pressure gauges show pressure within 10% of actual pressure.</li></ul>  |

Notes:

## Task 4: Inspect Bulk Liquid Facility (Continued)

Note:

### Step

### Action

- 4.14  Examine emergency shutdown, remotely operated valves, and tank level alarms.  
33 CFR 156.170
- Verify operating properly.
- Examine closure devices.  
33 CFR 154.520
- Verify enough to blank off ends of each hose and loading arm not connected for transfer (new, unused hose and hose that has been cleaned and gas freed are exempt).
- Examine small discharge containment.  
33 CFR 154.530
- Verify location of each handling or loading arm area hose connection manifold, each hose connection during coupling, uncoupling, and transfer (fixed or portable).
- Verify required capacity.

If hose loading arm diameter	Then fixed capacity required
1.0-6.0	2 BBLS
6.1-11.9	3 BBLS
12+	4 BBLS
COTP finds above not feasible	½ BBL (portable)

- Examine small discharge removal.  
33 CFR 154.540
- Determine means to safely remove within 1 hour of completion of transfer.

Notes:

## Task 4: Inspect Bulk Liquid Facility (Continued)

Note:

### Step

### Action

- 4.15
- Examine discharge containment equipment for oil and hazardous liquids.  
33 CFR 154.545
  - Verify booming equipment if required for oil or hazmat transfer.
  - Verify adequate amount of equipment.
  - Inspect condition of equipment stored at facility (if applicable).
  - Examine emergency shutdown.  
33 CFR 154.550
  - Verify discharge containment equipment enables vessel PIC to stop flow from facility to vessel, or direct facility to do the same.
  - Verify type.
    - Electric
    - Pneumatic
    - Mechanical
  - Ensure electronic voice communication system continuously operated.
  - Verify in the vicinity of dock manifold connection.
  - Verify meets time requirements.

If...	And operating...	Then...
Oil facility	After 1 November 1980	30 seconds.
Oil facility	On or before 1 November 1980	60 seconds.
Hazardous liquid facility	On or after 4 October 1990	30 seconds.
Hazardous liquid facility	Before 4 October 1990	60 seconds.

Notes:

## Task 4: Inspect Bulk Liquid Facility (Continued)

Note:

### Step

### Action

4.16 Means of communication.  
33 CFR 154.560

- Verify continuous two-way voice communication between vessel and facility PICs.
  - Means to signal use of communications
  - Usable in all conditions of weather and operations

If...	And Items Being Transferred...	Then communications must meet the following...
Portable Radio	Flammable or Combustible Liquids	1. Marked or documented as intrinsically safe. 2. Certified as intrinsically safe by national testing labor certification organization recognized by COMDT.
Voice	→	1. Be audible.

- Test communications, record results in remarks.

- 4.17
- Complete inspection results prior to leaving the facility.
    - Inspection report
    - Review the report with facility representatives
    - Explain inspection results/discrepancies
    - Discuss possible enforcement options (if necessary)
    - Obtain signatures of representative

Notes:





Appendix A

# SSI Information

**Name of Facility**

**Date of Inspection**

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**Checklist Number**

**Notes**

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Appendix A

# SSI Information

**Name of Facility**

**Date of Inspection**

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**Checklist Number**

**Notes**

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