



**U.S. COAST GUARD**



**Homeland Security**

# FACILITY HANDLING LIQUEFIED NATURAL GAS JOB AID

<b>Facility:</b>	<b>FIN:</b>
<b>MISLE Activity #:</b>	<b>Date:</b>
<b>Unit:</b>	<b>COTP Permit #:</b>
<b>FSO:</b>	<b>FSO Phone Number:</b>
<b>USCG Facility Inspector:</b>	<b>USCG Facility Inspector:</b>
<b>USCG Facility Inspector:</b>	<b>USCG Facility Inspector:</b>

*Guidance for completing the Liquefied Natural Gas Facility Job Aid* – Coast Guard facility inspectors shall complete the job aid by verifying the contents within are in line with the requirements as per **33 CFR 127**.

Administrative Items	Y	N	N/A
<b>Schedule Inspection</b>			
<b>Review Files</b>			
- Applicability of regulations			
- History of deficiencies			
- MISLE records			
- Changes since last exam			
<b>Review/Verify</b>			
- Alternatives <i>(if applicable)</i> 33 CFR 127.017			
- Emergency and Operations Manuals Submitted IAW 33 CFR 127.019			
- Operations Manual Contents 33 CFR 127.305			
- Emergency Manual Contents 33 CFR 127.307			
- Proper use of Emergency and Operations Manual 33 CFR 127.309			
- Hot work program 33 CFR 127.617			
<b>Prepare Inspection Plan</b>			
- Generate Facility Inspection Activity in MISLE; and select appropriate Sub-Activity type			
- Perform a risk assessment & review safe work practices for facility			
- Prior to departing for the Facility: Conduct safety brief & ready appropriate PPE			

Pre-Inspection Items	Y	N	N/A
<b>Is the facility MTSA Regulated per 33 CFR105?</b>			
- Record date of last MTSA Compliance Exam Date: _____			
- If exam is due; may perform exam utilizing the MTSA Facility Compliance Guide found in the NVIC 03-03 CH. 2, Encl. 7 <i>(Note: SSI when filled out)</i>			
- If not due; may perform Security Spot check utilizing the Facility Security Spot Check Guide found in NVIC 03-03 CH. 2, Encl. 11 <i>(Note: SSI when filled out)</i>			
<b>Is the facility a MARPOL Reception Facility per 33 CFR158?</b>			
- Record date of last MARPOL Exam; Date: _____			
- Record date of current COA: Date: _____			
- If exam is due; may perform exam utilizing the MARPOL Reception Facility Inspection/Investigation Job Aid			

<b>Administration Items on Location</b>	<b>33 CFR</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
<b>Verify the following:</b>				
- Persons In Charge Qualification and Certification	127.301			
- Declaration of Inspection Requirements	127.317			
- Testing Records on File as Required	127.409			
<b>Requirements for Marine Terminals Safety Training:</b>				
- Basic LNG Firefighting procedures	127.503(a)(1)			
- LNG properties and hazards	127.503(a)(2)			
- Advanced LNG firefighting procedures.	127.503(b)(2)			
- Security violations	127.503(b)(3)			
- LNG Vessel design and cargo transfer operations	127.503(b)(4)			
- LNG Release response procedures	127.503(b)(5)			
- First Aid procedures	127.503(b)(6)			
- Refresher training every 5 years	127.503(c)			
- OSHA Hazard Communication training 29 CFR 1910.1200				
<b>Inspect LNG Facility</b>	<b>33 CFR</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
<b>Verify Piers and Wharves</b>				
- Resist earthquake forces (if applicable)	127.103(a)			
- Verify substructure construction, location & fire endurance	127.103(b)			
- Verify volume of LNG/LPG storage tanks	127.103(c)			
<b>Layout &amp; Spacing of Marine Transfer Area for LNG</b>				
- Verify impounding space design and location	127.105(a)			
- Verify loading flanges	127.105(b)			
<b>Electrical Power Systems</b>				
- Electrical and emergency electrical systems power sources have built in redundancy and meet NFPA 70 code	127.107(a)			
- Verify emergency power source meets requirements	127.107(b)			
- Verify Auxiliary generator meets Section 700-12 of NFPA 70	127.107(c)			
<b>Lighting Systems</b>				
- Verify separate emergency lighting	127.109(a)			

<b>Inspect LNG Facility (continued)</b>	<b>33 CFR</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
- Verify lighting does not interfere with ATON or navigation	127.109(b)			
- Verify illumination requirements	127.109(c)			
- Verify emergency lighting requirements	127.109(d)			
<b>Communication Systems</b>				
- Verify transfer area has ship-to-shore communications and emergency back up	127.111(a)			
- Verify systems are dedicated to allow voice communications between PIC & control room	127.111(b)			
<b>Warning signs</b>				
- Signs can be seen from shore & water	127.113(a)(2)			
- Signs contain required text	127.113(a)(3)			
- Sign lettering meets requirements	127.113(b)			
<b>Sensing and Alarm systems</b>				
- Fixed sensors have audio & visual alarms	127.201(a)			
- Fixed sensors that monitor for vapors meet requirements	127.201(b)			
- Fixed sensors that continuously monitor for flame, heat or combustion meet requirements	127.201(c)			
<b>Portable Gas Detectors</b>				
- Verify the transfer areas has at least 2 which meet requirements	127.203			
<b>Emergency Shutdown</b>				
- Verify each transfer system has an emergency shutdown system that can be activated manually and automatically when fixed sensors under 33 CFR 201(b) measure LNG concentrations exceeding 40% of the lower flammable limit	127.205			
<b>Warning Alarms</b>				
- Verify warning alarms meet requirements (light/siren/location)	127.207			
<b>Motor Vehicles Procedures</b>				
- Verify designated parking spaces	127.311(a)			
- Verify no parking procedures during transfer operations	127.311(b)			
<b>Bulk Storage Areas</b>				
- Verify only authorized flammable liquids are stored in the transfer area	127.313(a)			
- Verify flammable liquids are stored in accordance with CH 4,	127.313(b)			

NFPA 30				
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<b>Inspect LNG Facility (continued)</b>	<b>33 CFR</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
<b>Maintenance</b>				
- All equipment required under this part is properly maintained	127.401			
- Verify inspections (once each calendar year not to exceed 15 months)	127.403			
- Verify all repairs	127.405			
- Verify all required tests are conducted	127.407			
- Verify all required tests and maintenance are recorded	127.409			
<b>Fire Equipment</b>				
- Verify fire equipment is red or some other conspicuous color (accessible)	127.601(b)			
- Verify fire equipment bears the required approval markings	127.601(c)			
<b>Portable Fire Extinguishers</b>				
- Verify each transfer area has portable fire extinguishers that meet 9.6.1 of NFPA 59A and Chapter 3 of NFPA 10	127.603(a)			
- Verify each parking lot has 1 portable extinguisher	127.603(b)			
<b>Emergency Outfits</b>				
- Verify Emergency outfits meet the required number and equipment	127.605(a)			
- Verify Emergency outfits are readily accessible	127.605(b)			
<b>Fire Main Systems</b>				
- Verify system provides at least 2 water streams to each part of the LNG transfer area	127.607(a)			
- Verify fire main system has isolation valves	127.607(b)			
- Verify fire main system meets capacity requirements	127.607(c)			
- Verify requirements of pressure relief valves	127.607(d)			
- Verify hose requirements	127.607(e)			
- Verify each length of hose meets standards	127.607(f)			

<b>Inspect LNG Facility (continued)</b>	<b>33 CFR</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
- Verify dry chemical system to the area surrounding the loading arms meets requirements	127.609(a)			
- Verify the dry chemical system meets the capacity requirements	127.609(b)			
- Verify the dry chemical system hose requirements are met	127.609(c)			
<b>International Shore Connection</b>				
- Verify shore connection meets requirements	127.611			

<b>Document Inspection Results</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
Complete Inspection report			
Review the report with facility representatives			
Explain inspection results/discrepancies			
Discuss possible enforcement options (if necessary)			
Obtain signatures of representative			

<b>Post Inspection Items</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
Complete all required MISLE entries (as per MISLE user guides)			
Initiate enforcement actions (if necessary)			
Schedule follow-up inspection (if necessary)			
Update Facility File			

