



## SAFETY, SECURITY & ENVIRONMENTAL SERVICES LIQUEFIED NATURAL GAS INDUSTRY



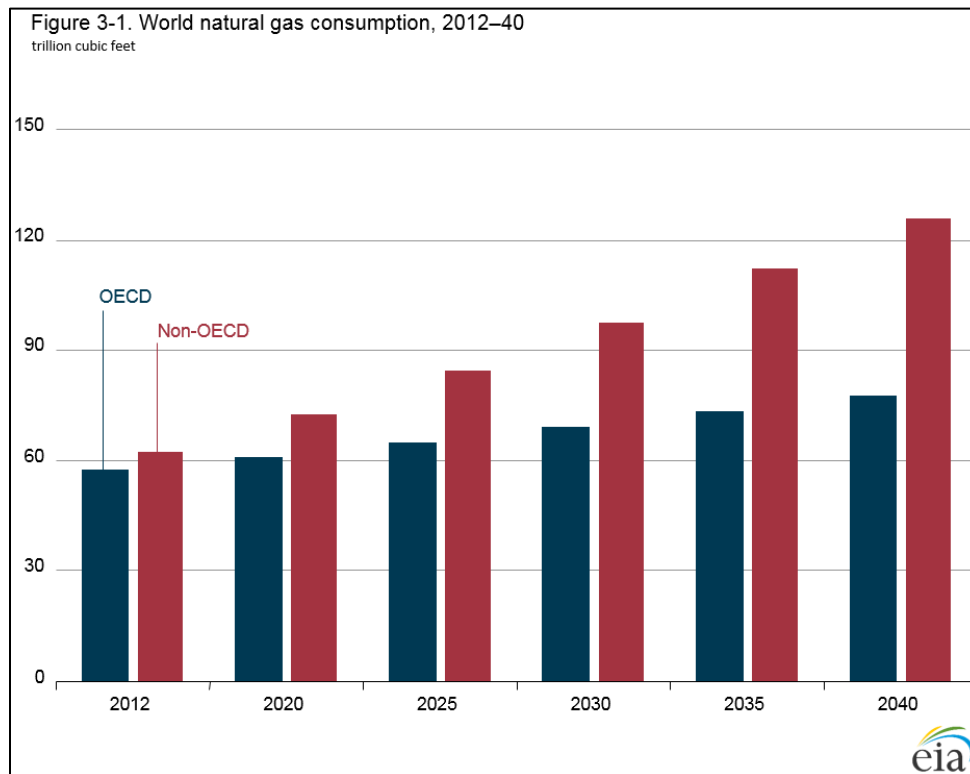
### OVERVIEW

Meridian is pleased to support the liquefied natural gas industry in achieving their goals for promoting safety, security, and environmental protection by providing these prevention and response services:

- Operational Risk Management;
- Security Services;
- Safety and Environmental Management Systems Improvement;
- Contingency Preparedness;
- Incident Response Management;
- Post-incident Support; and
- Organizational Safety, Security, and Environmental Culture Assessment.

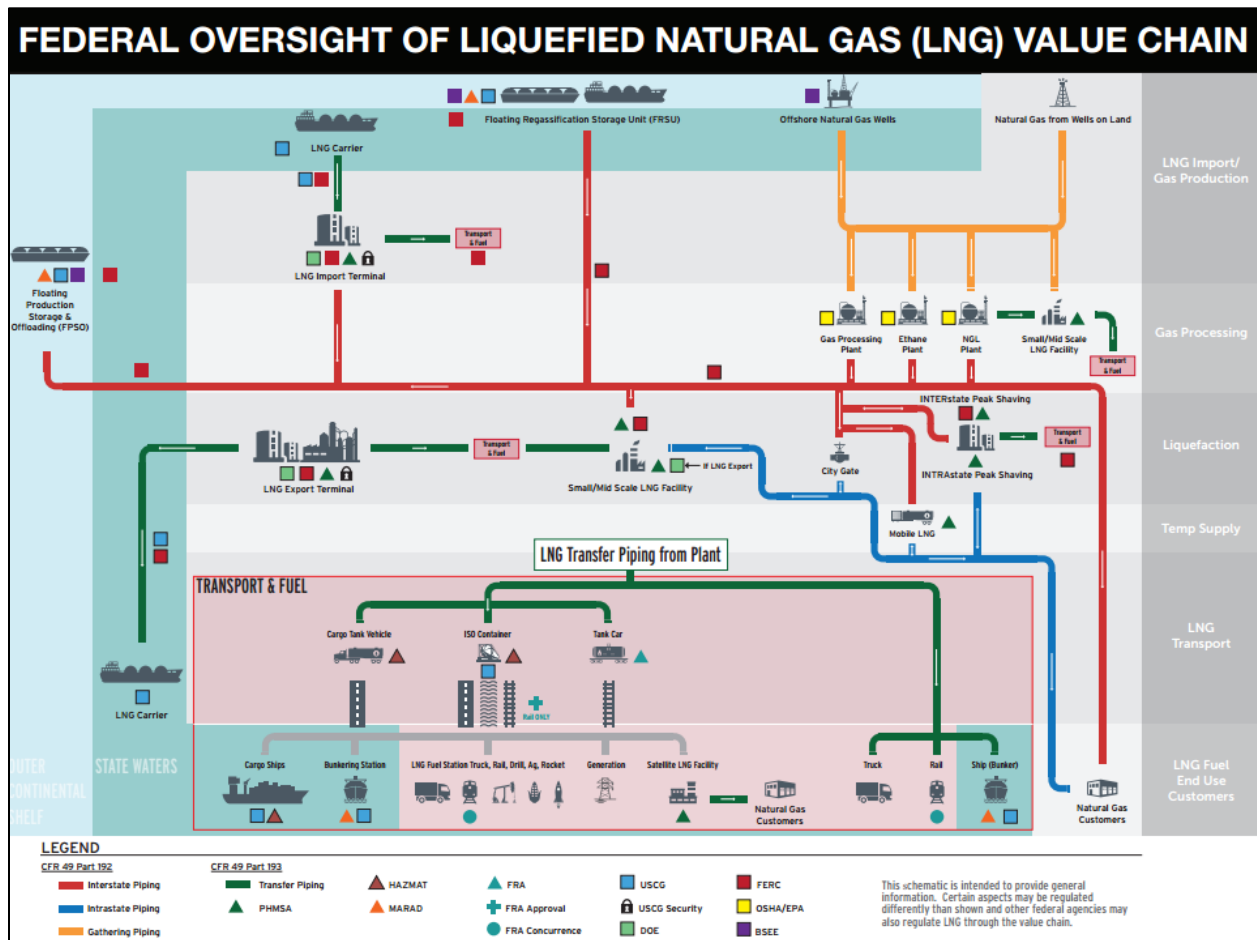
### BACKGROUND

Consumption of natural gas worldwide is projected to increase from 120 trillion cubic feet (Tcf) in 2012 to 203 Tcf in 2040 in the *International Energy Outlook 2016*. By energy source, natural gas accounts for the largest increase in world primary energy consumption.



(Source: [https://www.eia.gov/outlooks/ieo/nat\\_gas.cfm](https://www.eia.gov/outlooks/ieo/nat_gas.cfm))

In the U.S., the liquefied natural gas industry is heavily regulated. As seen in the below example, there are many aspects that are regulated by federal agencies.



(Source: <https://www.phmsa.dot.gov>)

To operate, facilities and vessels must be strictly designed and operated in compliance with domestic regulations and international standards, e.g., 33 CFR 127—Waterfront Facilities Handling Liquefied Natural Gas and Liquefied Hazardous Gas.

Because of resource limitations or the need for an independent assessment, owners and operators may employ service providers, such as Meridian, to assist with ensuring regulatory compliance and enhancing effectiveness of safety, security, and environmental management programs.

## OUR COMPANY

In 2009, Meridian was formed to provide a cost-effective solution to combating piracy. We provide armed security for commercial, as well as Military Sealift Command, transiting high-risk waters. Our teams are led by combat decorated U.S. Marines and Army Special Forces operators who have been through extensive training regarding escalation of force procedures and the use of the weapons employed on vessels. We also provide unarmed security for shore facilities and flotel working in the Gulf of Mexico.

We were the first US-based, ISO 28007-certified maritime security firm. Since then we have also achieved ISO 9001 certification and today Meridian provides comprehensive services that promote safety, security, and environmental protection.

Meridian personnel have extensive experience in security, law enforcement, critical energy infrastructure, incident and crisis management, and regulatory compliance in the government and private sectors (see Appendix A). Our team members have served in senior security and regulatory roles with government agencies and Fortune 500 companies. Our subject matter experts have demonstrated the technical expertise and ability to deliver the best performance while serving in such leadership positions as:

<b>LEADERSHIP &amp; MANAGEMENT EXPERIENCE</b>	
<ul style="list-style-type: none"> <li>▪ Captain of the Port</li> <li>▪ Officer in Charge, Marine Inspection</li> <li>▪ Federal Maritime Security Coordinator</li> <li>▪ Federal On-Scene Coordinator</li> <li>▪ Federal Security Director</li> </ul>	<ul style="list-style-type: none"> <li>▪ Chief Executive Officer</li> <li>▪ Chief Operating Officer</li> <li>▪ Corporate Marine Operations Director</li> <li>▪ Corporate Health, Safety, and Environmental Director</li> <li>▪ Corporate Security Director</li> </ul>

Additionally, our personnel have the following certifications:

<b>PROFESSIONAL CERTIFICATIONS</b>	
<ul style="list-style-type: none"> <li>▪ Transportation Senior Executive Service</li> <li>▪ Professional Engineer</li> <li>▪ Type 1 Incident Management Team</li> <li>▪ ISM and ISO 9001 &amp; 14001 Lead Auditor</li> <li>▪ ICS Instructor</li> </ul>	<ul style="list-style-type: none"> <li>▪ Homeland Security Exercise Evaluator</li> <li>▪ ISPS/MTSA Instructor and Auditor</li> <li>▪ Marine Inspector</li> <li>▪ Marine Casualty Investigator</li> <li>▪ Criminal Investigator</li> </ul>

## **OUR OPERATIONAL EXPERIENCE**

Meridian has extensive experience in the compliance and enforcement of federal maritime safety, security and environmental protection laws and regulations, and international standards, including:

<b>COMPLIANCE &amp; ENFORCEMENT</b>	
<ul style="list-style-type: none"> <li>▪ 33 Code of Federal Regulations (CFR) 104 Maritime Security: Vessels</li> <li>▪ 33 CFR 105 Maritime Security: Facilities</li> <li>▪ 33 CFR 126 Handling of Dangerous Cargo at Waterfront Facilities</li> <li>▪ 33 CFR 127 Waterfront Facilities Handling Liquefied Natural Gas and Liquefied Hazardous Gas</li> <li>▪ 33 CFR 154 Facilities Transferring Oil or Hazardous Materials in Bulk</li> <li>▪ 33 CFR 155 Oil or Hazardous Material Pollution Prevention Regulations for Vessels</li> </ul>	<ul style="list-style-type: none"> <li>▪ Safety of Life At Sea Convention (SOLAS)</li> <li>▪ International Safety Management (ISM) Code</li> <li>▪ Code for the Investigation of Marine Casualties</li> <li>▪ International Convention for the Prevention of Pollution from Ships (MARPOL)</li> <li>▪ International Ship and Port Facility Security (ISPS) Code</li> <li>▪ International Maritime Dangerous Goods (IMDG) Code</li> </ul>

<b>COMPLIANCE &amp; ENFORCEMENT (cont.)</b>	
<ul style="list-style-type: none"> <li>▪ 33 CFR 156 Oil and Hazardous Material Transfer Operations</li> <li>▪ 33 CFR 158 Reception Facilities for Oil, Noxious Liquid Substances, and Garbage</li> <li>▪ 49 CFR 172 - 177 Hazardous Materials Transportation</li> <li>▪ 49 CFR 193 - 194 Pipeline Security and Response</li> <li>▪ 40 CFR Protection of the Environment</li> </ul>	<ul style="list-style-type: none"> <li>▪ International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW)</li> <li>▪ ISO 9001 Quality Management Systems</li> <li>▪ ISO 14001 Environmental Management System</li> <li>▪ Environmental Compliance Plan</li> <li>▪ P and I Clubs</li> <li>▪ Hull and Machinery Insurance</li> </ul>

Our team's major accomplishments include:

- Implementation of ISM Code and Code for the Investigation of Marine Casualties for Texas
- Implementations of MTSA and ISPS for Minnesota, Wisconsin, and Michigan
- Coast Guard investigation of the MODU Deepwater Horizon serious marine casualty
- Establishment of a large publicly traded tanker company and the largest independent commercial vessel vetting company in the world
- Advisor at the International Maritime Organization (IMO) for the second largest flag administration
- Development of a functional performance improvement plan to address Transocean's injunctive relief consent decree to the Department of Justice resulting from the BP Macondo spill event
- Support of major responses to Hurricane Katrina and BP Macondo Oil Spill.

**OUR APPROACH**

In delivering a scalable and cost-effective solution that meets or exceeds client expectations, Meridian uses a risk-based approach and employs highly experienced subject matter experts. We have developed work processes that utilize lessons learned and best practices. We determine areas of emphasis by examining client's compliance status, industry trends, and regulator's priorities. We deploy senior consultants who have a broad understanding of the maritime and oil and gas industry safety net and the necessary knowledge, skills, and judgment to solve your immediate issues and to generate a quality performance improvement plan tailored to the client's needs.

**OUR SERVICES** (see Appendix B)

For normal operations, we can help protect vessels, onshore and offshore facilities by deploying teams of multi-skilled personnel to provide prevention and response measures. When comprehensive support is needed for ensuring an effective threat assessment, contingency preparedness, and/or management systems, our highly-experienced project managers and subject matter experts are ready to assist.

Our response teams are geographically and strategically located to enable response personnel to be on scene within just a few short hours in almost all cases. Our emergency on call personnel are available 24/7/365.

## Appendix A – MERIDIAN.us SENIOR LEADERSHIP

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**Jonathan McConnell, esq.**  
**President**

Jonathan served as an infantry officer in the United States Marine Corps. On his first deployment to Iraq, he commanded 3D Platoon (reinforced) Lima Company, 3D Battalion 2D Marines. Jonathan was charged with quelling the insurgency on the outskirts of Fallujah, Iraq and received personal combat decorations. On his second deployment to Iraq, Jonathan was the Executive Officer of Weapons Company 3D Battalion 2D Marines as well as 1ST Mobile Assault Platoon Commander. During this deployment, he maintained Battle Position Da’Nang in the Al Anbar Province near the Syrian border. His company was co-located with an Iraqi Army infantry company in which he was charged with training and conducting joint operations.

Upon completing his second tour in Iraq, Jonathan earned his law degree from the University of Alabama Law School and passed the Alabama Bar. In response to the attack on the Maersk Alabama in 2009, Jonathan, with his fellow Marines, sought a cost-effective solution to combating piracy. In 2009, Jonathan formed Meridian.US and began positioning embarked security teams on U.S. flagged vessels.



**Captain Hung M. Nguyen, USCG (ret)**  
**Chief Operating Officer**

Captain Nguyen has over 30 years of experience in operational risk management and regulatory compliance. He successfully led the implementation of the International Safety Management Code, the Maritime Transportation Security Act, and the International Ship and Port Facility Security Code.

As a Co-chairman of the Joint Department of the Homeland Security and the Department of the Interior Deepwater Horizon Casualty Investigation, he identified many safety improvement recommendations that have been enacted by the U.S. Coast Guard and the International Maritime Organization.

Captain Nguyen’s awards include Legion of Merit, four Meritorious Service Medals, two Coast Guard Commendation Medals, Department of Transportation 911 Medal, and four Coast Guard Achievement Medals. He also received the Congressman James Sener Award for Excellence in Marine Investigations.



**Jason Wilbur**  
**Vice President, Corporate and Regulatory Security**

Jason served with Meridian as a maritime security team leader since 2012 until transitioning into a senior management position. He leads Meridian’s Executive Protection, Crowd and Protest Management, and Facility and Vessel Security Programs. Before joining Meridian full time, Jason successfully operated his own safety & security company as well as a firearms training academy.

Jason served in the United States Marine Corps Infantry from 2005-2009 with Weapons Company, 3D Battalion 2D Marines. During Jason’s first deployment to Iraq, he served as the Fire Direction Center (FDC) Chief for the Battalion’s 81mm Mortar Platoon as well as a turret gunner in a Mobile Assault Platoon. He also participated in mounted and dismounted patrols conducting cordon-knocks, searches, raids and gathering intelligence. Jason deployed to a Iraq a second time as a section leader for a mobile assault platoon, leading over 100 combat mobile patrols on top the numerous personal security details and quick-reaction missions.

## Appendix A – MERIDIAN.us SENIOR LEADERSHIP

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**Captain Eric Clarke**  
**Senior Consultant**

With 35 years' experience in the maritime industry, both at sea then ashore, Captain Clarke has a passion for and deep understanding of our industry. Currently serving as the CEO of Underwater Mariner Services, he holds significant experience in strategy, business management, operations, and leadership, combined with over 10 years of P/L experience leading large teams.

Captain Clarke has worked for small and large companies, private as well as public. He was instrumental in starting Euronav, helping put the initial infrastructure, policies, and procedures in place, allowing the company to grow and become one of the largest publicly traded tanker companies in the world. More recently, Eric started RightShip in the Americas for shareholders BHP Billiton and Rio Tinto, heading the expansion into the Americas and growing this niche consultancy into the largest independent vetting company in the world. He has served as an advisor at the International Maritime Organization (IMO) for the second largest flag administration in the world and is a frequent speaker at international conferences.



**D. Troy Vickers, PE**  
**Senior Consultant**

Mr. Vickers has forty years of experience in various oil and gas refining, exploration and production and alternative energy operations. Major areas of experience and expertise include: environmental and safety regulatory monitoring and development, advocacy, legal support as expert witness and corporate representative, personnel management, contractor management, compliance, auditing and inspection, integration of HSSE into daily operations and projects, onshore and offshore production operations, all phases of drilling,

engineering design, field operations, management, and strategic and business planning.

Mr. Vickers represented Amoco and BP on the API Upstream E&P Executive Committee for Environmental Conservation serving as Chairman for over 10 years and was appointed by the US Secretary of the Interior to serve on a Wind Turbine Guidelines Federal Advisory Committee. He also served as a member of the Louisiana Oilfield Site Restoration Commission and the Interstate Oil and Gas Compact Commission.



**Jerry Canducci**  
**Senior Consultant**

Mr. Canducci has over 30 years in the offshore drilling industry. His early experiences were based in the North Sea on harsh environment, moored drilling rigs where he specialized in the maintenance and operation of subsea blowout preventers. Having developed those skills and competencies, he then transitioned to a staff engineering role assigned to design, build, install, and operate Multiplex-Controlled Blowout Prevention Systems for dynamically positioned ultra-deepwater drilling rigs. Mr. Canducci then took on management

roles in the operation of offshore drilling units, subsequently moving to management of safety systems.

Based on his experience and specialties, Mr. Canducci was asked to work with Transocean's Chief Compliance Officer to develop a functional performance improvement plan to address Transocean's injunctive relief consent decree to the DoJ resulting from the BP Macondo spill event.

Mr. Canducci's specific skills are based in an engineer's perspective on the safe and economical running of a complex offshore operating system. His experience provides recognition when operating systems or safety systems need to be adjusted or revised.

## Appendix B – MERIDIAN.us SERVICES – LIQUEFIED NATURAL GAS INDUSTRY

CATEGORY	MERIDIAN SERVICES
<b>OPERATIONAL RISK MANAGEMENT</b>	Contractor Vessel Risk Assessment <ul style="list-style-type: none"> <li>▪ Pre-Port State Control Inspections</li> <li>▪ OCIMF-SIRE Inspections</li> <li>▪ Pre-Chartering Safety and Condition Inspections</li> </ul>
	Contractor Management
<b>SAFETY, SECURITY, AND ENVIRONMENTAL MANAGEMENT SYSTEMS</b>	ISM Code Compliance <ul style="list-style-type: none"> <li>▪ Management Review</li> <li>▪ Master’s Review</li> <li>▪ Internal Audits</li> </ul>
	MARPOL Compliance <ul style="list-style-type: none"> <li>▪ Oil Record Book Review</li> <li>▪ Ballast Water Management</li> <li>▪ Waste Streams Management</li> </ul>
	MTSA / ISPS Code Compliance <ul style="list-style-type: none"> <li>▪ Security Threat Assessment</li> <li>▪ Security Plan Preparation</li> <li>▪ Drills and Exercises</li> </ul>
<b>CONTINGENCY PREPAREDNESS</b>	Regulatory Plans Preparation <ul style="list-style-type: none"> <li>▪ Ballast Water Management Plan</li> <li>▪ Emergency Response Action Plans</li> <li>▪ Facility and Vessel Security Plans</li> <li>▪ Garbage Management Plan</li> <li>▪ Integrated Contingency Plans</li> <li>▪ Integrity Management Plans</li> <li>▪ Oil Spill Response Plans</li> <li>▪ Operations Manuals (docks, pipelines, platforms)</li> <li>▪ Protest Plans</li> <li>▪ Spill Prevention Control and Countermeasure Plans</li> <li>▪ Tactical Plans</li> <li>▪ Vessel and Facility Response Plans</li> </ul>

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CATEGORY	MERIDIAN SERVICES
<b>CONTINGENCY PREPAREDNESS (cont.)</b>	Non-regulatory Plans Preparation <ul style="list-style-type: none"> <li>▪ Business Continuity Plans</li> <li>▪ Crisis Management Plans</li> <li>▪ Hurricane Plans</li> </ul>
	Training <ul style="list-style-type: none"> <li>▪ Facility, Vessel, and Corporate Security Officer</li> <li>▪ Firearms</li> <li>▪ Hostile Environment Awareness Training (HEAT)</li> <li>▪ Incident Command System (ICS 300, 320, 400, 410, 420, 440, Executive Level, and Section Specific)</li> <li>▪ Security Awareness</li> <li>▪ TWIC Escort</li> <li>▪ USCG, EPA, BSEE, and DOT Qualified Individual</li> </ul>
	Drills & Exercises <ul style="list-style-type: none"> <li>▪ Tabletop</li> <li>▪ Functional</li> <li>▪ Full Scale</li> </ul>
	GPS Surveying <ul style="list-style-type: none"> <li>▪ Endangered Species and Wildlife Habitats and Refuges</li> <li>▪ Equipment Deployment and Staging Areas</li> <li>▪ Evacuation Routes</li> <li>▪ National/State Parks &amp; Forests</li> <li>▪ Native-American Lands</li> <li>▪ Pipeline and Facility Maps</li> <li>▪ Socio-Economic Sensitivities</li> <li>▪ Transportation Systems</li> <li>▪ Utilities</li> </ul>
	Spill Trajectories <ul style="list-style-type: none"> <li>▪ Contingency Planning</li> <li>▪ Spill Management</li> <li>▪ Response Exercises</li> </ul>



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CATEGORY	MERIDIAN SERVICES
<b>CONTINGENCY PREPAREDNESS (cont.)</b>	Physical Security <ul style="list-style-type: none"> <li>▪ Armed Vessel Security</li> <li>▪ Crowd and Protest Management</li> <li>▪ Direct Asset Response Team</li> <li>▪ Executive Protection</li> <li>▪ Fixed Asset Security</li> <li>▪ Route/Convoy Security</li> <li>▪ Travel and Journey Management</li> </ul>
	Cybersecurity
<b>INCIDENT RESPONSE MANAGEMENT</b>	<ul style="list-style-type: none"> <li>▪ Spill Management Team full or partial augmentation</li> <li>▪ Qualified Individuals</li> <li>▪ Operations/Planning/Finance/</li> <li>▪ Auditing/Documentation</li> <li>▪ Government Liaison/Public Information/Safety</li> <li>▪ GIS and trajectories</li> </ul>
<b>POST-INCIDENT SUPPORT</b>	Incident Investigation <ul style="list-style-type: none"> <li>▪ Root Cause Analysis</li> </ul>
	Environmental Compliance Program <ul style="list-style-type: none"> <li>▪ Environmental Compliance Plan Development</li> <li>▪ HSE Programs Improvement</li> <li>▪ Third Party Auditor</li> <li>▪ Court Appointed Monitor</li> </ul>
<b>OTHERS</b>	Organizational Safety, Security and Environmental Culture Assessment

## **Appendix D – ACRONYMS**

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BSEE – Bureau of Safety and Environmental Enforcement

CFR – Code of Federal Regulations

ICS – Incident Command System

IMDG – International Maritime Dangerous Goods Code

IMO – International Maritime Organization

IMS – Incident Management System

ISM – International Safety Management Code

ISO – International Organization for Standardization

ISPS – International Ship and Port Facility Security Code

MARPOL – International Convention for the Prevention of Pollution from Ships

SOLAS – Safety of Life At Sea Convention

STCW – Standards of Training, Certification and Watchkeeping for Seafarers Convention

USCG – U.S. Coast Guard