



*U.S. Geological Survey Manual*

**SM 445-2-H CHAPTER 49**

**Large Vessel Safety Program Management**

**Instruction:** Chapter 49 is a newly created chapter established to address bureau safety requirements for large vessels over 26 feet.

**49.1 Purpose.** To specify requirements for: the safe operation of the Department of the Interior (Department or DOI) and U.S. Geological Survey (Bureau or USGS) large vessels that are defined as vessels greater than or equal to 26 feet “length over all” (LOA); and for the training, and certification of USGS large vessel operators and crew.

**49.2 References.** The Large Vessel Safety program conforms to the Code of Federal Regulations (CFR) standards of 46 CFR, sub-Chapter C part 28, “Requirements for Commercial Fishing Industry Vessels” and other appropriate regulations and standards. This policy supplements existing requirements or regulations established by the U.S. Coast Guard (USCG), Code of Federal Regulations (CFR), Department of Transportation (DOT), Executive Orders (EO) Department of the Interior (DOI), Occupational Safety and Health Administration (OSHA), National Institute for Occupational Safety and Health (NIOSH), American National Standards Institute (ANSI), and National Fire Protection Association (NFPA). Deviations from the requirements of this chapter are not permitted except as specifically described in this chapter.

28 CFR

29 CFR 1910 through 1919

33 CFR Navigation and Navigable Waters Subchapter F, S

46 CFR Subchapters C, T, S, U, I

46 U.S.C. 8104(f), 8304, 8702, 8104

47 CFR, Wireless Telecommunications

410 DM, DOI Property Management, Physical Security handbook

485 DM, Department Manual - Chapter 22 - Watercraft Safety

ANSI Z41-1991, Z87.1-1989, Z89.1-1986

EO 12196

NFPA 51B, 306, 326

NVIC 5-86, 1 (F) Design and Stability – Lifting

SM 412, USGS Manual, Personal Property Management, Watercraft.

SM 445-2-H, USGS Manual, Occupational Safety and Health

SM 445-1-H, USGS Manual, Environmental

SOLAS, Safety of Life at Sea, 1980

USCG COMDTINST M16672.2C, Department of Transportation, Navigation Rules, International-Inland.

UNOLS, Research Vessel Safety Standards, 2003

American Bureau of Shipping (ABS) Classification Society Standards

USGS Large Vessel Safety Management System

### 49.3 Requirements

#### A. Large Vessel Safety Management System.

(1) All USGS Cost Center's that support Large Vessels shall implement a local Large Vessel Safety Management System that provides sufficient information and guidance to mitigate hazards encountered during field operations while at sea and at the dock, and describes policies and procedures that, when implemented properly, will help ensure the safety and health of employees and passengers. The local Large Vessel Safety Management System is designed to be used as both a manager's reference, and maintained onboard as a reference for any vessel that requires a United States Coast Guard (USCG) licensed operator.

(2) Local Large Vessel Safety Management Systems shall be tailored after the following chapters/contents and meet/exceed requirements established within the USGS Large Vessel Safety Management System (SMS) Manual:

Chapter 1	Introduction
Chapter 2	Safety and Environmental Protection Policy
Chapter 3	Center Responsibility and Authority
Chapter 4	Designated Persons
Chapter 5	Master's Responsibility
Chapter 6	Resources and Personnel
Chapter 7	Vessel Operating Procedures (VOP)
Chapter 8	Emergency Preparedness (EP)
Chapter 9	Reporting Procedures
Chapter 10	Maintenance Inspection Criteria References (ICR)
Chapter 11	Documentation
Chapter 12	Science Center Verification and Reviews

#### B. Exceptions to Safe Large Vessel Operation Requirements

(1) Deviation from the requirements of Large Vessel Written Policy may be permitted for special mission requirements such as emergency response or special law enforcement operations.

(2) Emergency Policy Deviations shall be authorized by the Center Director, documented in writing, with a copy forwarded to the Bureau and Regional Large Vessel Program Managers.

(3) Non-emergent Policy Deviations shall be requested in writing by the respective Center Director and forwarded to the Bureau Large Vessel Program Manager for approval, inclusive of justification and alternate/equivalent safety measures to be taken. A copy should also be forwarded to the Regional Large Vessel Program Manager.

#### C. Operators:

(1) Operators of DOI and USGS Large Vessels shall hold a USCG Master's License for vessel size tonnage and route.

(2) Each Large Vessel shall have, in writing, a designated Master.

#### 49.4 Responsibilities

**A. Bureau Designated Safety and Health Official (DASHO).** Provides appropriate personnel and budgetary resources to establish a Bureauwide large vessel safety program.

**B. Bureau Safety Manager.**

(1) Provides for establishment of a Large Vessel Safety Committee which advises the Bureau DASHO through ad hoc membership on the Bureau Safety, Health, and Environmental Council to address all large vessel issues.

(2) Provides administrative support to the Large Vessel Safety Program Manager and Large Vessel Safety Committee as appropriate.

**C. Bureau Large Vessel Safety Program Manager (BLVSPM).**

(1) Serves as the Bureau's technical expert on Large Vessel safety issues.

(2) Serves as the Bureau Large Vessel Safety Program Committee (LVSPC) Chair. The Large Vessel Safety Program Committee serves as a forum for peer group discussion of large vessel safety issues and to provide policy and program recommendations and other input to the Bureau OSH Council and DASHO. The LVSPC chair is responsible for coordination of meetings and agendas and publishing minutes.

(3) Participates on the USGS Occupational Safety and Health (OSH) Council.

(3) Maintains a high level of technical proficiency regarding Large Vessel safety, health and environmental issues.

(4) Serves as representative for USGS on Large Vessel issues requiring coordination with the Department and other bureaus or agencies.

(5) Conducts regional and local program reviews to assess compliance with the SMS and documents within the USGS Inspection and Abatement System.

(6) Coordinates with the LVSPC to compile a fiscal year large vessel program action/ accomplishment plan and submits annually to the Bureau Safety Manager.

(7) Maintains program management and document control for the USGS Safety Management System (SMS).

(8) Completes an annual large vessel safety program self-assessment.

(9) Serves as lead investigator for large vessel accidents involving serious injury or major property damage. Reviews large vessel watercraft-related accident reports to identify any trends and make recommendations for control.

(10) Provides final written concurrence on "non emergency" deviations or waivers to large vessel or SMS requirements and provides the Bureau OSH Program Manager and local cost center manager with a copy.

**D. Large Vessel Safety Program Committee (LVSPC).**

(1) Develops, maintains and recommends basic large vessel safety program standards for USGS.

(2) Develops or endorses specialized training curricula specific to USGS large vessel-based operations

(3) Reviews and evaluates DOI and USCG instructions and regulations for impact on USGS operations and develops recommendations and propose alternatives for implementing compliance programs.

(4) Evaluates and recommends safety equipment for operating both basic and specialized large vessels and for performing large vessel-based tasks.

(5) Provides a forum to ensure communication and resource sharing between Bureau, regional, and science program personnel.

#### **E. Regional Director.**

(1) Designates a Regional Large Vessel Program Manager in coordination with the Regional Executives, to serve on the Bureau Large Vessel Safety Program Committee (LVSPC).

(2) Provide appropriate budgetary resources to ensure regional oversight of the large vessel program, inclusive of participation in the Bureau LVSPC and field audits of cost centers with large vessels.

#### **F. Regional Large Vessel Safety Program Manager (RLVSPM).**

(1) Serves as the Regional technical expert on Large Vessel safety issues.

(2) Participates on the Bureau Large Vessel Safety Program Committee and Regional OSH Committee.

(3) Maintains a high level of technical proficiency regarding Large Vessel safety and health issues.

(4) Conducts regional cost center program reviews to assess compliance with the SMS and documents within the USGS Inspection and Abatement System.

(5) Compiles annual regional large vessel safety accomplishments and upcoming year initiatives and forwards to the Bureau LVSPM and Regional Safety Manager for inclusion into their respective annual program submittals to the Bureau Safety and Health Program Manager.

(6) Maintains regional SMS program management and document control.

#### **G. Cost Center Directors**

(1) Provide appropriate personnel and budgetary resources to ensure establishment of a local large vessel safety program inclusive of:

(a) Operator training

(b) Periodic inspection and maintenance

- (c) Personal protective and other equipment as necessary for the safe operation of large vessel in all expected conditions, and,
- (d) Local Large Vessel Licensed Operator, Master, Captain, Large Vessel Coordinator, or Designated Person (DP) participation as a member of the Bureau Large Vessel Safety Committee.

(2) Authorizes and documents “emergency only” deviations/waiver to SMS policy for special mission requirements such as emergency response or special law enforcement operations. Provides a copy of the deviation/waiver to the Bureau LVSPC.

**H. Large Vessel Licensed Operator, Master, Captain, Large Vessel Coordinator, or Designated Person (DP).**

- (1) Will implement the Vessel Safety Management System Manual as the minimum operational guideline for vessels 26’ LOA or greater.
- (2) Has authority to make overriding decisions with regards to the safety of the vessel and crew.
- (3) Serves on the Bureau Large Vessel Safety Committee (See SM 308.66 and 308.66 Appendix F).