those that may be covered in whole or in part by ice; and

"(2) include procedures and resources for responding to such discharge in the plan."

STANDARDS TO IMPLEMENT NTSB RECOMMENDATIONS

Pub. L. 109–468, §19, Dec. 29, 2006, 120 Stat. 3498, as amended by Pub. L. 110–244, title III, §302(j), June 6, 2008, 122 Stat. 1618, provided that: "Not later than June 1, 2008, the Secretary of Transportation shall issue standards that implement the following recommendations contained in the National Transportation Safety Board's report entitled 'Supervisory Control and Data Acquisition (SCADA) in Liquid Pipelines' and adopted November 29, 2005:

- "(1) Implementation of the American Petroleum Institute's Recommended Practice 1165 for the use of graphics on the supervisory control and data acquisition screens.
- "(2) Implementation of a standard for pipeline companies to review and audit alarms on monitoring equipment.
- "(3) Implementation of standards for pipeline controller training that include simulator or noncomputerized simulations for controller recognition of abnormal pipeline operating conditions, in particular, leak events."

STATE PIPELINE SAFETY ADVISORY COMMITTEES

Pub. L. 107–355, §24, Dec. 17, 2002, 116 Stat. 3011, provided that: "Within 90 days after receiving recommendations for improvements to pipeline safety from an advisory committee appointed by the Governor of any State, the Secretary of Transportation shall respond in writing to the committee setting forth what action, if any, the Secretary will take on those recommendations and the Secretary's reasons for acting or not acting upon any of the recommendations."

§ 60103. Standards for liquefied natural gas pipeline facilities

- (a) LOCATION STANDARDS.—The Secretary of Transportation shall prescribe minimum safety standards for deciding on the location of a new liquefied natural gas pipeline facility. In prescribing a standard, the Secretary shall consider the—
 - (1) kind and use of the facility;
 - (2) existing and projected population and demographic characteristics of the location;
 - (3) existing and proposed land use near the location;
 - (4) natural physical aspects of the location;
 - (5) medical, law enforcement, and fire prevention capabilities near the location that can cope with a risk caused by the facility;
 - (6) need to encourage remote siting; and
 - (7) national security.
- (b) DESIGN, INSTALLATION, CONSTRUCTION, INSPECTION, AND TESTING STANDARDS.—The Secretary of Transportation shall prescribe minimum safety standards for designing, installing, constructing, initially inspecting, and initially testing a new liquefied natural gas pipeline facility. When prescribing a standard, the Secretary shall consider—
 - (1) the characteristics of material to be used in constructing the facility and of alternative material;
 - (2) design factors;
 - (3) the characteristics of the liquefied natural gas to be stored or converted at, or transported by, the facility; and
 - (4) the public safety factors of the design and of alternative designs, particularly the ability

- to prevent and contain a liquefied natural gas spill.
- (c) NONAPPLICATION.—(1) Except as provided in paragraph (2) of this subsection, a design, location, installation, construction, initial inspection, or initial testing standard prescribed under this chapter after March 1, 1978, does not apply to an existing liquefied natural gas pipeline facility if the standard is to be applied because of authority given—
 - (A) under this chapter; or
 - (B) under another law, and the standard is not prescribed at the time the authority is applied.
- (2)(A) Any design, installation, construction, initial inspection, or initial testing standard prescribed under this chapter after March 1, 1978, may provide that the standard applies to any part of a replacement component of a liquefied natural gas pipeline facility if the component or part is placed in service after the standard is prescribed and application of the standard.
 - (i) does not make the component or part incompatible with other components or parts; or
 - (ii) is not impracticable otherwise.
- (B) Any location standard prescribed under this chapter after March 1, 1978, does not apply to any part of a replacement component of an existing liquefied natural gas pipeline facility.
- (3) A design, installation, construction, initial inspection, or initial testing standard does not apply to a liquefied natural gas pipeline facility existing when the standard is adopted.
- (d) OPERATION AND MAINTENANCE STANDARDS.—The Secretary of Transportation shall prescribe minimum operating and maintenance standards for a liquefied natural gas pipeline facility. In prescribing a standard, the Secretary shall consider—
 - (1) the conditions, features, and type of equipment and structures that make up or are used in connection with the facility;
 - (2) the fire prevention and containment equipment at the facility;
 - (3) security measures to prevent an intentional act that could cause a liquefied natural gas accident;
 - (4) maintenance procedures and equipment;
 - (5) the training of personnel in matters specified by this subsection; and
 - (6) other factors and conditions related to the safe handling of liquefied natural gas.
- (e) EFFECTIVE DATES.—A standard prescribed under this section is effective on the 30th day after the Secretary of Transportation prescribes the standard. However, the Secretary for good cause may prescribe a different effective date when required because of the time reasonably necessary to comply with the standard. The different date must be specified in the regulation prescribing the standard.
- (f) CONTINGENCY PLANS.—A new liquefied natural gas pipeline facility may be operated only after the operator submits an adequate contingency plan that states the action to be taken if a liquefied natural gas accident occurs. The Secretary of Energy or appropriate State or local authority shall decide if the plan is adequate.

(g) EFFECT ON OTHER STANDARDS.—This section does not preclude applying a standard prescribed under section 60102 of this title to a gas pipeline facility (except a liquefied natural gas pipeline facility) associated with a liquefied natural gas pipeline facility.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1307; Pub. L. 114–183, §27(a), June 22, 2016, 130 Stat. 531.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
60103(a)	49 App.:1674a(a) (1)(A), (d)(1), (e).	Aug. 12, 1968, Pub. L. 90-481, 82 Stat. 720, §6; added Nov. 30, 1979, Pub. L. 96-129, §152(a), 93 Stat. 999.
60103(b)	49 App.:1674a(a) (1)(B), (2), (d)(2), (e).	
60103(c)(1), (2).	49 App.:1674a(c)(1).	
60103(c)(3)	49 App.:1674a(c)(3).	
60103(d)	49 App.:1674a(b), (d)(3), (e).	
60103(e) 60103(f) 60103(g)	49 App.:1674a(f).	

In subsections (a), (b), and (d), the words "general safety" are omitted as surplus. The text of 49 App.:1674a(e) is omitted for consistency in the revised title and with other titles of the United States Code.

In subsections (a) and (b), before each clause (1), the words "Not later than 180 days after November 30, 1979" are omitted as executed. The word "prescribe" is substituted for "establish by regulation" for consistency in the revised title and with other titles of the Code.

In subsection (a), before clause (1), the words "with respect to standards relating to the location of any new LNG facility" are omitted because of the restatement. In clause (2), the word "involved" is omitted as surplus. In clause (4), the words "meteorological, geological, topographical, seismic, and other" are omitted as surplus. In clause (5), the word "existing" is omitted as surplus.

In subsection (b), before clause (1), the text of 49 App.:1674a(a)(2) (1st sentence) is omitted as executed. The text of 49 App.:1674a(a)(2) (last sentence) is omitted as surplus. The words "with respect to standards applicable to the design, installation, construction, initial inspection, and initial testing of any new LNG facility" are omitted because of the restatement. In clause (1), the words "thermal resistance and other" are omitted as surplus. In clause (2), the words "(such as multiple diking, insulated concrete, and vapor containment barriers)" are omitted as surplus. In clause (3), the words "(for example, whether it is to be in a liquid or semisolid state)" are omitted as surplus. In clause (4), the words "under such a design" are omitted as surplus. In subsection (c)(1) and (2), the word "prescribed" is

In subsection (c)(1) and (2), the word "prescribed" is substituted for "issued" for consistency in the revised title and with other titles of the Code.

In subsection (c)(1), before clause (A), the words "if the standard is to be applied" are added for clarity. The word "either" is omitted as surplus. In clause (B), the word "Federal" is omitted as surplus. The words "the authority is applied" are substituted for "such authority was exercised" for clarity.

In subsection (c)(2)(A), before clause (i), the words

In subsection (c)(2)(A), before clause (i), the words "design, installation, construction, initial inspection, or initial testing standard prescribed under this chapter after March 1, 1978" are substituted for "Any such standard (other than one affecting location)" for clarity. In clause (i), the words "of the facility involved" are omitted as surplus. In clause (ii), the word "otherwise" is omitted as surplus.

In subsection (d), before clause (1), the words "Not later than 270 days after November 30, 1979" are omitted as executed. The words "with respect to standards for the operation and maintance [sic] of any LNG facil-

ity" are omitted because of the restatement. In clause (3), the words "to be used with respect to the operation of such facility" and "sabotage or other" are omitted as surplus.

In subsection (e), the text of 49 App.:1674a(f) (related to 49 App.:1672(a)(1) (8th, last sentences), (c), and (d)) is omitted as surplus because those provisions apply to all standards prescribed under the Natural Gas Pipeline Safety Act of 1968 (Public Law 90-481, 82 Stat. 720).

In subsection (f), the words "Secretary of Energy" are substituted for "Department of Energy" because of 42:7131. The words "or local" are added for clarity. The words "in the case of any facility not subject to the jurisdiction of the Department under the Natural Gas Act" are omitted as surplus.

Editorial Notes

AMENDMENTS

2016—Subsec. (a)(7). Pub. L. 114-183 added par. (7).

Statutory Notes and Related Subsidiaries

SAVINGS CLAUSE

Pub. L. 114–183, §27(c), June 22, 2016, 130 Stat. 532, provided that: "Nothing in this section [amending this section and enacting provisions set out as a note below] shall be construed to limit the Secretary's authority under chapter 601 of title 49, United States Code, to regulate liquefied natural gas pipeline facilities."

UPDATES TO STANDARDS FOR LIQUEFIED NATURAL GAS FACILITIES

Pub. L. 116-260, div. R, title I, §110, Dec. 27, 2020, 134 Stat. 2224, provided that:

"(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act [Dec. 27, 2020], the Secretary [of Transportation] shall—

"(1) review the minimum operating and maintenance standards prescribed under section 60103(d) of title 49, United States Code; and

"(2) based on the review under paragraph (1), update the standards described in that paragraph applicable to large-scale liquefied natural gas facilities (other than peak shaving facilities) to provide for a riskbased regulatory approach for such facilities, consistent with this section.

"(b) SCOPE.—In updating the minimum operating and maintenance standards under subsection (a)(2), the Secretary shall ensure that all regulations, guidance, and internal documents—

"(1) are developed and applied in a manner consistent with this section; and

"(2) achieve a level of safety that is equivalent to, or greater than, the level of safety required by the standards prescribed as of the date of enactment of this Act under—

 $\mbox{``(A)}$ section $60103(\mbox{d})$ of title 49, United States Code; and

"(B) part 193 of title 49, Code of Federal Regulations (as in effect on the date of enactment of this Act)

"(c) REQUIREMENTS.—The updates to the operating and maintenance standards required under subsection (a)(2) shall, at a minimum, require operators—

"(1) to develop and maintain written safety information identifying hazards associated with—

"(A) the processes of liquefied natural gas conversion, storage, and transport;

"(B) equipment used in the processes; and

"(C) technology used in the processes;

"(2) to conduct a hazard assessment, including the identification of potential sources of accidental releases:

"(3)(A) to consult with employees and representatives of employees on the development and execution of hazard assessments under paragraph (2); and

"(B) to provide employees access to the records of the hazard assessments and any other records required under the updated standards;

- "(4) to establish a system to respond to the findings of a hazard assessment conducted under paragraph (2) that addresses prevention, mitigation, and emergency responses:
- "(5) to review, when a design change occurs, the most recent hazard assessment conducted under paragraph (2) and the response system established under paragraph (4);
- "(6) to develop and implement written operating procedures for the processes of liquefied natural gas conversion, storage, and transport;
- "(7)(A) to provide written safety and operating information to employees; and
- "(B) to train employees in operating procedures with an emphasis on addressing hazards and using safe practices:
- "(8) to ensure contractors and contract employees are provided appropriate information and training;
- "(9) to train and educate employees and contractors in emergency response;
- "(10) to establish a quality assurance program to ensure that equipment, maintenance materials, and spare parts relating to the operations and maintenance of liquefied natural gas facilities are fabricated and installed consistent with design specifications;
- '(11) to establish maintenance systems for critical process-related equipment, including written procedures, employee training, appropriate inspections, and testing of that equipment to ensure ongoing mechanical integrity:
- "(12) to conduct pre-start-up safety reviews of all newly installed or modified equipment:
- "(13) to establish and implement written procedures to manage change to processes of liquefied natural gas conversion, storage, and transport, technology, equipment, and facilities; and
- '(14)(A) to investigate each incident that results in, or could have resulted in-
 - "(i) loss of life;
 - "(ii) destruction of private property; or
 - "(iii) a major accident; and
 - "(B) to have operating personnel-
- "(i) review any findings of an investigation under subparagraph (A); and
- "(ii) if appropriate, take responsive measures. "(d) SUBMISSION AND APPROVAL.
- "(1) IN GENERAL.—The Secretary shall require that operators that are subject to the regulations under subsection (a)(2) submit to the Secretary for approval a plan for the implementation of the requirements described in subsection (c).
- "(2) REQUIREMENT.—The implementation plan described in paragraph (1) shall include-
- "(A) an anticipated schedule for the implementation of the requirements described in subsection (c); and
- "(B) an overview of the process for implementation.
- "(e) INSPECTION AND COMPLIANCE ASSURANCE.-
- "(1) DETERMINATION OF INADEQUATE PROGRAMS.—If the Secretary determines during an inspection carried out under chapter 601 of title 49, United States Code, that an operator's implementation of the requirements described in subsection (c) does not comply with the requirements of that chapter (including any regulations promulgated under that chapter), has not been adequately implemented, is inadequate for the safe operation of a large-scale liquefied natural gas facility, or is otherwise inadequate, the Secretary may conduct enforcement proceedings under that chapter.
- (2) SAVINGS CLAUSE.—Nothing in this section shall affect the authority of the Secretary to carry out inspections or conduct enforcement proceedings under chapter 601 of title 49. United States Code.
- '(f) Emergencies and Compliance.—Nothing in this section may be construed to diminish or modify
- "(1) the authority of the Secretary under this title fenacting sections 60142, 60143, and 60303 of this title. amending sections 6107, 60102, 60108, 60109, 60117, 60118,

- 60122, 60125, 60129, 60130 and 60134 of this title, enacting provisions set out as notes under this section and sections 60101, 60102, 60108, and 60109 of this title, and amending provisions set out as notes under sections 60101 and section 60109 of this title] to act in the case of an emergency; or
- "(2) the authority of the Secretary under sections 60118 through 60123 of title 49, United States Code.
- "(g) CIVIL PENALTIES.—A person violating the standards prescribed under this section, including any revisions to the minimum operating and maintenance standards prescribed under 60103 of title 49, United States Code, shall be liable for a civil penalty that may not exceed \$200,000 for each violation pursuant to section 60122(a)(1) of that title."

NATIONAL CENTER OF EXCELLENCE FOR LIQUEFIED NATURAL GAS SAFETY

- Pub. L. 116-260, div. R, title I, §111, Dec. 27, 2020, 134 Stat. 2226, provided that:
- '(a) DEFINITIONS.—In this section:
 "(1) CENTER.—The term 'Center' means the National Center of Excellence for Liquefied Natural Gas Safety that may be established under subsection (b).
- "(2) LNG.—The term 'LNG' means liquefied natural gas.
- "(3) LNG SECTOR STAKEHOLDER.—The term 'LNG sector stakeholder' means a representative of—
 "(A) LNG facilities that represent the broad
- array of LNG facilities operating in the United States:
- '(B) States, Indian Tribes, and units of local government;
 - '(C) postsecondary education:
 - "(D) labor organizations;
- "(E) safety organizations: or
- "(F) Federal regulatory agencies of jurisdiction, which may include-
- "(i) the [Pipeline and Hazardous Materials Safety] Administration;
- (ii) the Federal Energy Regulatory Commission:
- "(iii) the Department of Energy;
- "(iv) the Occupational Safety and Health Administration;
- '(v) the Coast Guard; and
- "(vi) the Maritime Administration.
- "(b) ESTABLISHMENT.—Only after submitting the report under subsection (c) to the committees of Congress described in that subsection, and subject to the availability of funds appropriated by Congress for the applicable purpose, the Secretary [of Transportation], in consultation with LNG sector stakeholders, may establish a center, to be known as the 'National Center of Excellence for Liquefied Natural Gas Safety'.
 - '(c) Report.-
 - "(1) IN GENERAL.—Not later than 18 months after the date of enactment of this Act [Dec. 27, 2020], the Secretary shall submit to the Committees on Commerce, Science, and Transportation and Appropriations of the Senate and the Committees on Transportation and Infrastructure, Energy and Commerce, and Appropriations of the House of Representatives a report on-
 - "(A) the resources necessary to establish the Center: and
 - "(B) the manner in which the Center will carry out the functions described in subsection (d).
 - (2) REQUIREMENT.—The report under paragraph (1) shall include an estimate of all potential costs and appropriations necessary to carry out the functions described in subsection (d).
- '(d) FUNCTIONS.—The Center shall, for activities regulated under section 60103 of title 49, United States Code, enhance the United States as the leader and foremost expert in LNG operations by-
 - "(1) furthering the expertise of the Federal Government in the operations, management, and regulatory practices of LNG facilities through-
 - '(A) the use of performance-based principles;

- ``(B) experience and familiarity with LNG operational facilities; and
- "(C) increased communication with LNG experts to learn and support state-of-the-art operational practices;
- "(2) acting as a repository of information on best practices for the operation of LNG facilities; and
- "(3) facilitating collaboration among LNG sector stakeholders.
- "(e) LOCATION.—
- "(1) IN GENERAL.—The Center shall be located in close proximity to critical LNG transportation infrastructure on, and connecting to, the Gulf of Mexico, as determined by the Secretary.
- "(2) CONSIDERATIONS.—In determining the location of the Center, the Secretary shall—
- "(A) take into account the strategic value of locating resources in close proximity to LNG facilities: and
- "(B) locate the Center in the State with the largest LNG production capacity, as determined by the total capacity (in billion cubic feet per day) of LNG production authorized by the Federal Energy Regulatory Commission under section 3 of the Natural Gas Act (15 U.S.C. 717b) as of the date of enactment of this Act [Dec. 27, 2020].
 "(f) COORDINATION WITH TQ TRAINING CENTER.—In
- "(f) COORDINATION WITH TQ TRAINING CENTER.—In carrying out the functions described in subsection (d), the Center shall coordinate with the Training and Qualifications Training Center of the Administration in Oklahoma City, Oklahoma, to facilitate knowledge sharing among, and enhanced training opportunities for, Federal and State pipeline safety inspectors and investigators.
- "(g) JOINT OPERATION WITH EDUCATIONAL INSTITUTION.—The Secretary may enter into an agreement with an appropriate official of an institution of higher education—
 "(1) to provide for joint operation of the Center;
- "(1) to provide for joint operation of the Center and
- "(2) to provide necessary administrative services for the Center."

BEST AVAILABLE TECHNOLOGIES OR PRACTICES

Pub. L. 116-260, div. R, title I, §114(d), Dec. 27, 2020, 134 Stat. 2232, provided that:

- "(1) REPORT OF THE SECRETARY.—Not later than 18 months after the date of enactment of this Act [Dec. 27, 2020], the Secretary [of Transportation] shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committees on Transportation and Infrastructure and Energy and Commerce of the House of Representatives a report—
 - "(A) discussing—
 - "(i) the best available technologies or practices to prevent or minimize, without compromising pipeline safety, the release of natural gas when making planned repairs, replacements, or maintenance to a pipeline facility;
 - "(ii) the best available technologies or practices to prevent or minimize, without compromising pipeline safety, the release of natural gas when the operator intentionally vents or releases natural gas, including blowdowns; and
 - "(iii) pipeline facility designs that, without compromising pipeline safety, mitigate the need to intentionally vent natural gas; and
- "(B) recommending a timeline for updating pipeline safety regulations, as the Secretary determines to be appropriate, to address the matters described in subparagraph (A).
 "(2) RULEMAKING.—Not later than 180 days after the
- "(2) RULEMAKING.—Not later than 180 days after the date on which the Secretary submits the report under this subsection, the Secretary shall update pipeline safety regulations that the Secretary has determined are necessary to protect the environment without compromising pipeline safety."

PIPELINE SAFETY MANAGEMENT SYSTEMS

Pub. L. 116–260, div. R, title II, §205, Dec. 27, 2020, 134 Stat. 2240, provided that:

- "(a) IN GENERAL.—Not later than 3 years after the date of enactment of this Act [Dec. 27, 2020], the Secretary [of Transportation] shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committees on Transportation and Infrastructure and Energy and Commerce of the House of Representatives a report describing—
 - "(1) the number of operators of natural gas distribution systems who have implemented a pipeline safety management system in accordance with the standard established by the American Petroleum Institute entitled 'Pipeline Safety Management System Requirements' and numbered American Petroleum Institute Recommended Practice 1173;
 - "(2) the progress made by operators of natural gas distribution systems who have implemented, or are in the process of implementing, a pipeline safety management system described in paragraph (1); and
 - "(3) the feasibility of an operator of a natural gas distribution system implementing a pipeline safety management system described in paragraph (1) based on the size of the operator as measured by—
 - "(A) the number of customers the operator has; and
 - $\mbox{``(B)}$ the amount of natural gas the operator transports.
- "(b) Requirements.—As part of the report required under subsection (a), the Secretary shall provide guidance or recommendations that would further the adoption of safety management systems in accordance with the standard established by the American Petroleum Institute entitled 'Pipeline Safety Management System Requirements' and numbered American Petroleum Institute Recommended Practice 1173.
- "(c) EVALUATION AND PROMOTION OF SAFETY MANAGEMENT SYSTEMS.—The Secretary and the relevant State authority with a certification in effect under section 60105 of title 49, United States Code, as applicable, shall—
 - "(1) promote and assess pipeline safety management systems frameworks developed by operators of natural gas distribution systems and described in the report under subsection (a), including—
 - "(A) if necessary, using independent third-party evaluators; and
 - ''(B) through a system that promotes self-disclosure of—
 - "(i) errors; and
 - "(ii) deviations from regulatory standards; and "(2) if a deviation from a regulatory standard is identified during the development and application of a pipeline safety management system, certify that—
 - "(A) due consideration will be given to factors such as flawed procedures, honest mistakes, or lack of understanding; and
 - "(B) the operators and regulators use the most appropriate tools to fix the deviation, return to compliance, and prevent the recurrence of the deviation, including—
 - "(i) root cause analysis; and
 - "(ii) training, education, or other appropriate improvements to procedures or training programs."

UPDATE TO MINIMUM SAFETY STANDARDS

Pub. L. 114–183, §27(b), June 22, 2016, 130 Stat. 532, provided that: "The Secretary of Transportation shall review and update the minimum safety standards prescribed pursuant to section 60103 of title 49, United States Code, for permanent, small scale liquefied natural gas pipeline facilities."

§ 60104. Requirements and limitations

(a) OPPORTUNITY TO PRESENT VIEWS.—The Secretary of Transportation shall give an interested person an opportunity to make oral and written presentations of information, views, and arguments when prescribing a standard under this chapter.