

Section 44

Life Safety Code Program

44.1 Scope

This section establishes the responsibilities and procedures for the Life Safety Code Program (Program) at all Bureau of Reclamation (Reclamation) owned and operated facilities, Reclamation operated construction sites, and at all transferred works as stipulated by the applicable contracts. The primary goal of this section is to support the comprehensive and consistent implementation of the Program across all regions within Reclamation.

44.2 General Requirements

The Program facilitates compliance with the Occupational Safety and Health Administration (OSHA) 1910 Subpart E, *Exit Routes and Emergency Planning*, National Fire Protection Association (NFPA) 101, *Life Safety Code* (LSC), and other applicable codes as required.

All Reclamation employees and contractors must use the latest edition of nationally recognized codes per U.S. Code Title 40, Subtitle II, Part A, Chapter 33, Section 3312, *Compliance with Nationally Recognized Codes*. The latest edition of LSC contains provisions for existing, renovated, and new buildings.

44.3 Responsibilities

44.3.1 Director of Policy and Programs

- 44.3.1.1** Shall be the executive sponsor for the Program.
- 44.3.1.2** Shall, as needed, assign the Authority Having Jurisdiction Team (AHJT) to perform special assignments.
- 44.3.1.3** Shall consult with regional directors and Denver directors to maintain appropriate representation on the AHJT.
- 44.3.1.4** Shall designate a facilitator for the AHJT.

44.3.2 Regional Directors

- 44.3.2.1** Shall assign the responsibility of Authority Having Jurisdiction (AHJ) for the Program within their region.
- 44.3.2.2** Shall delegate LSC authority by designating an AHJ for the region. The AHJ must be a senior management level position with expertise in engineering, architecture, or LSC. Reclamation permits no further delegation.

44.3.3 Denver Directors

- 44.3.3.1 Shall provide personnel and financial resources to maintain capabilities to support LSC subject matter experts.

44.3.4 Area and Facility Managers

- 44.3.4.1 Shall execute the Program and promote compliance with LSC within their area/facility.
- 44.3.4.2 Shall ensure qualified personnel conduct and report LSC inspections within the requirements of this section and Reclamation Safety and Health Standard (RSHS) Section 41, *Safety Inspection and Abatement*.
- 44.3.4.3 Shall engage the AHJ in LSC questions, concerns, or ambiguities as needed or as required by this section and the LSC.
- 44.3.4.4 Shall mitigate LSC deficiencies and findings within their area/facility.

44.3.5 Project Managers and Designers

- 44.3.5.1 Shall ensure each project is LSC compliant.
- 44.3.5.2 Shall engage the AHJ in LSC concerns as needed or as required by this section and LSC.
- 44.3.5.3 Shall ensure the design summary includes dates and list of codes used to address the LSC compliance.

44.3.6 Construction Engineers, Construction Inspectors, and Contract Officers

- 44.3.6.1 Shall ensure construction satisfies LSC aspects of design.
- 44.3.6.2 Shall coordinate any LSC changes with the AHJ and/or designer.

44.3.7 AHJ

- 44.3.7.1 Shall enforce the requirements of the LSC.
- 44.3.7.2 Shall interpret the LSC and issue determination memorandums as outlined by this section and NFPA 101 paragraph 4.6.1.
- 44.3.7.3 Shall develop a regional LSC report, if applicable, and provide the report to the regional safety manager for inclusion in annual safety reports.
- 44.3.7.4 Shall participate on the AHJT.
- 44.3.7.5 Shall complete training required by this section.
- 44.3.7.6 Shall serve as AHJ or code official for other codes as applicable.

44.3.8 AHJT

- 44.3.8.1 Shall conduct team meetings at least annually or more frequently as needed.

- 44.3.8.2** Shall maintain this section.
- 44.3.8.3** Shall advise on LSC related policies, guidelines, training, etc.
- 44.3.8.4** Shall propose outreach methods to increase Reclamation's LSC awareness.
- 44.3.8.5** Shall provide guidance to each regional AHJ for consistent interpretation of the LSC.
- 44.3.8.6** Shall form ad-hoc teams to address specific issues, as needed.
- 44.3.8.7** Shall complete training required by this section.

44.3.9 AHJT Facilitator

- 44.3.9.1** Shall chair, coordinate, and facilitate AHJT meetings.
- 44.3.9.2** Shall maintain collection of AHJ determinations and code interpretation documentation.
- 44.3.9.3** Shall provide an annual program briefing to the Director, Policy and Programs.
- 44.3.9.4** Shall maintain a list of the current AHJs on Reclamation's Safety website.
(<https://www.usbr.gov/safety/directory/ahj.html>)

44.3.10 Regional Safety Managers

- 44.3.10.1** Shall engage the AHJ in LSC concerns as needed.
- 44.3.10.2** Shall provide LSC status updates, as applicable, in the annual safety report.
- 44.3.10.3** Shall complete training required by this section.

44.3.11 Area Safety Managers

- 44.3.11.1** Shall complete the LSC inspection checklist while completing facility safety inspections.
- 44.3.11.2** Shall engage the AHJ in LSC concerns as needed.
- 44.3.11.3** Shall attend an NFPA 101 implementation course either online or in a classroom setting.
- 44.3.11.4** Shall enter LSC inspection and LSC assessment findings in Safety Management Information System (SMIS) Inspection Abatement System (IAS).
- 44.3.11.5** Shall track and update the status of LSC findings in IAS.
- 44.3.11.6** Shall complete training required by this section.

44.3.12 Safety Professionals

- 44.3.12.1** Shall complete the LSC inspection checklist while completing facility safety inspections.
- 44.3.12.2** Shall engage the AHJ in LSC concerns as needed.
- 44.3.12.3** Shall complete training required by this section.

44.4 Training Requirements

44.4.1 Initial

44.4.1.1 AHJs, AHJT, and Regional Safety Managers. The AHJs, AHJT members, and regional safety managers shall attend the multi-day NFPA 101 LSC Essentials live virtual or in-person training course or equivalent multi-day LSC course.

44.4.1.2 Area Safety Managers and Safety Professionals. Area safety managers and safety professionals shall attend a LSC implementation course either online or in a classroom setting, such as the NFPA 101 LSC Essentials online training series.

44.4.2 Refresher/Recertification

44.4.2.1 AHJs and AHJT. The AHJs and AHJT members shall attend the multi-day NFPA 101 LSC Essentials live virtual or in-person training course or equivalent multi-day LSC course every second LSC update cycle (every 6 to 8 years).

44.4.3 Recordkeeping

Reclamation shall keep records in the Department of the Interior's approved repository and manage records in accordance with the Information Management Handbook as referenced in Reclamation Manual Directive and Standard, Information Management (RCD 05-01).

44.5 Safe Practices

44.5.1 Inspections

44.5.1.1 Facilities and Frequency. The area manager shall ensure qualified personnel conduct and document LSC inspections for all facilities under their control on the following frequency:

- occupied facilities annually, and
- normally unoccupied facilities every 5 years.

44.5.1.2 Conducting Inspections. The safety professional shall conduct a LSC inspection when conducting facility safety inspections in accordance with the requirements of RSHS 41.

44.5.1.3 Inspection Checklist. The safety professional shall use the IAS LSC inspection category for all LSC inspections to provide consistency. Appendix 44A, *Life Safety Code Questions*, of this RSHS, includes the IAS LSC inspection category questions for reference.

44.5.1.4 Disputed Findings. The safety professional and facility personnel shall make every effort to reach consensus on any disputed LSC inspection findings. If they

cannot reach a consensus, facility personnel shall elevate the disputed LSC inspection finding(s) to the AHJ.

44.5.2 Assessments

- 44.5.2.1 Requesting Assessments.** The AHJ, area manager, facility manager, project manager, or regional safety manager shall, as needed, request subject matter experts to conduct and document LSC assessments of Reclamation facilities or design projects in response to an incident, LSC inspection, changes to facility occupancy or construction, project design requirements, or a specific concern.
- 44.5.2.2 Conducting Assessments.** Subject matter experts shall conduct and document requested LSC assessments.
- 44.5.2.3 Compliance with LSC.** Subject matter experts shall conduct LSC assessments based upon LSC requirements in NFPA 101.
- 44.5.2.4 Findings.** Subject matter experts shall discuss LSC assessment findings with facility management or project management prior to leaving the facility and/or finalizing the assessment report. The area manager shall ensure hazards identified at existing facilities are mitigated in accordance with the requirements of RSHS 41.
- 44.5.2.5 Disputed Findings.** Subject matter experts and facility or project personnel shall make every effort to reach consensus on any disputed LSC assessment findings. If they cannot reach a consensus, facility or project personnel shall elevate the disputed LSC assessment finding(s) to the AHJ.
- 44.5.2.6 Assign Risk Assessment Codes (RAC).** Subject matter experts shall assign a RAC for each LSC assessment finding to assist management with prioritization of resources to abate the most critical findings. The subject matter experts shall follow the requirements of RSHS 41 when assigning a RAC for each LSC assessment finding.
- 44.5.2.7 Report.** The subject matter expert shall distribute the LSC assessment report and any associated documentation to the AHJ, area manager, facility manager, project manager, regional safety manager, area safety manager, AHJT facilitator, and Reclamation Safety and Occupational Health Office electronically within 120 calendar days of the last day of the assessment site visit, unless justifiable delays exist and are documented with the assessment requestor.
- 44.5.2.8 Record Findings in IAS.** The area safety manager shall, as needed, enter the LSC assessment findings identified at existing facilities into IAS by updating existing

LSC inspection findings or entering the findings as nonquestion-based discoveries within 30 calendar days after receiving the LSC assessment report.

44.5.2.9 Track Findings. The area safety manager shall track and update the LSC assessment findings identified at existing facilities in accordance with requirements of RSHS 41.

44.5.3 Determination Memorandum

44.5.3.1 Request Memorandum. The area manager, facility manager, project manager, or regional safety manager shall request an AHJ determination memorandum when an LSC requirement is being mitigated through a method that does not meet all compliance requirements of the LSC and/or through a method that is not detailed in the LSC.

44.5.3.2 Request Submittal. The facility manager, area manager, project manager, or regional safety manager shall submit a determination memorandum request to the AHJ in writing. The request should include the following information:

- facility information,
- code reference (if known),
- issue,
- mitigation plan, and
- attachments (e.g., drawings, photos, incident report, etc.).

44.5.3.3 AHJ Evaluation. The AHJ shall evaluate the request to determine if it requires additional information, a determination memorandum, or an assessment.

44.5.3.4 Risk Evaluation. The AHJ shall complete a risk evaluation when the request requires a determination memorandum.

44.5.3.5 Memorandum Content. The AHJ shall as needed issue a determination memorandum that includes the following information:

- facility information,
- code references with edition year,
- statement of problem,
- mitigation methods,
- risk evaluation,
- expiration date, and
- attachments (e.g., drawings, photos, supporting data, etc.).

44.5.3.6 Distribution. The AHJ shall issue the determination memorandum to the requestor with a copy sent to the area manager, facility manager, project manager, regional safety manager, area safety manager, AHJT facilitator, and Reclamation Safety and Occupational Health Office.

44.5.3.7 Record Findings in IAS. The area safety manager shall, as required, enter the determination memorandum findings identified at existing facilities that require a corrective action into IAS by updating existing LSC inspection findings or entering the findings as nonquestion-based discoveries within 30 calendar days after receiving the determination memorandum.

44.5.3.8 Tracking Findings. The area safety manager shall track and update the determination memorandum findings identified at existing facilities in accordance with requirements of RSHS 41.

44.5.4 Cost

44.5.4.1 Inspections. The area manager or facility manager shall provide funding for LSC inspections.

44.5.4.2 Assessments. The regional director through the AHJ, area manager, facility manager, project manager, or regional safety manager shall establish the funding source and provide funding for LSC assessments.

44.5.4.3 Determination Memorandums. The area manager, facility manager, project manager, or regional safety manager shall provide funding for determination memorandum work.

44.5.4.4 Findings. The regional director through the AHJ, area manager, facility manager, project manager, or regional safety manager shall provide funding for LSC finding mitigations and improvements through extraordinary maintenance funding or other funding as appropriate.

44.6 Definitions

Authority Having Jurisdiction (AHJ) NFPA 101 (2018) 3.2.2 defines AHJ as, “An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.” A single AHJ is designated from each region.

The Authority Having Jurisdiction Team (AHJT) A Reclamation team that oversees and advises on application of the LSC and is comprised of the AHJ for each region, an AHJT facilitator from Safety and Occupational Health Office and representatives from the Technical Service Center.

AHJT Facilitator The safety engineer from the Safety and Occupational Health Office who chairs, coordinates, and facilitates the AHJT meetings.

Life Safety Code (LSC)	NFPA 101 is a consensus standard widely adopted in the United States. The LSC is administered, trademarked, copyrighted, and published by the NFPA and, like many NFPA documents, is systematically revised on a 3-year cycle.
Determination Memorandum	AHJ's documentation of a decision to apply an exemption, exception, modification, equivalency, mitigations, non-compliance, and code application modification.
Assessment	A comprehensive review of facility compliance with the LSC and other applicable codes.
Inspection	A physical examination of facility compliance with the LSC and other applicable codes conducted in conjunction with other Reclamation inspections.
Occupied	A facility occupied by people on a regular basis
Subject Matter Expert (SME)	A person with documented education, training, certification, knowledge, or on-the-job experience in interpreting and applying the LSC or conducting LSC compliance assessments.

44.7 References

- National Fire Protection Association. NFPA 101, *Life Safety Code*.
- Occupational Safety and Health Administration. 29 C.F.R. 1910, Subpart E, *Exit Routes and Emergency Planning*. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartE>
- Occupational Safety and Health Administration. 29 C.F.R. 1910, Subpart L, *Fire Protection*. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartL>
- Occupational Safety and Health Administration. 29 C.F.R. 1910, Subpart N, *Materials Handling and Storage*. <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartN>
- Reclamation Safety and Health Standards. Section 41, *Safety Inspection and Abatement*. <https://www.usbr.gov/safety/rshs/index.html>
- U.S. Code Title 40, Subtitle II, Part A, Chapter 33, *Acquisition, Construction, and Alteration*. <https://www.govinfo.gov/app/details/USCODE-2009-title40/USCODE-2009-title40-subtitleII-partA-chap33/summary>

Appendix 44A: Life Safety Code Questions

Table 44-1. Life Safety Code Inspection Questions

Question Number	Question
1	<p>Has the building usage, occupancy, or fire loading remained the same since the last inspection? Example:</p> <ul style="list-style-type: none">• new offices, increased or changed classification of storage commodities including chemicals, tours, public access, etc.,• storage to office, office to assembly, visitor center to office, etc.,• increased fire loading, and/or• unnecessary storage. <p>Requirements:</p> <ul style="list-style-type: none">• NFPA 101, Chapters 4 and 6• OSHA 1910 Subparts E and L• RSHS 10• RSHS 44
2	<p>Has the building construction remained the same since the last inspection? Example:</p> <ul style="list-style-type: none">• additions, remodels, new or removed walls, wall penetrations, new windows, etc.,• interference/impact/impairment of fire detection and/or suppression systems, and/or• new vertical or horizontal openings in walls, floors, or ceilings (e.g., cable trays, conduits, pipe, vents, ducts). <p>Requirements:</p> <ul style="list-style-type: none">• NFPA 101, Chapters 4, 8, 9, and 43• OSHA 1910 Subpart L• RSHS 10• RSHS 44
3	<p>Are the means of egress readily visible/recognizable, clear, unobstructed, and illuminated? Required:</p> <ul style="list-style-type: none">• not hampered by security measures during occupancy,• exit discharge clear and free from snow and ice, rock fall, or other obstructions or trip and fall hazards, and/or• stairwells and evacuation routes are free and clear of obstructions. <p>Requirements:</p> <ul style="list-style-type: none">• NFPA 101, Chapter 7• OSHA 1910 Subpart E• RSHS 10• RSHS 44
4	<p>Do means of egress doors function and swing in the proper direction? Required:</p> <ul style="list-style-type: none">• stairwell doors swing in direction of egress,• if occupancy greater than 50 people, exterior doors swing in direction of egress,

Question Number	Question
	<ul style="list-style-type: none">• stairwell and hallway fire doors are kept in the closed position or equipped with automatic closure system connected to fire alarm,• doors open without excessive force, and/or• doors properly latch when closed. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 7• OSHA 1910 Subpart E• RSHS 10• RSHS 44
5	Are evacuation diagrams posted in assembly occupancies? Requirements: <ul style="list-style-type: none">• NFPA 101, Chapters 7, 12, and 13• OSHA 1910 Subpart E• RSHS 10• RSHS 44
6	Do means of egresses appear compliant with requirements of Occupational Safety and Health Administration (OSHA) 1910 Subpart E, <i>Exit Routes and Emergency Planning</i> , and National Fire Protection Association (NFPA) 101, <i>Life Safety Code</i> ? <ul style="list-style-type: none">• Yes, compliant.• No, further evaluation is required. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 7• OSHA 1910 Subpart E• RSHS 10• RSHS 44
7	Is emergency lighting provided and in good, operable condition per requirements of Occupational Safety and Health Administration (OSHA) 1910 Subpart E, <i>Exit Routes and Emergency Planning</i> , and National Fire Protection Association (NFPA) 101, <i>Life Safety Code</i> ? <ul style="list-style-type: none">• Spot check operability. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 7• OSHA 1910 Subpart E• RSHS 10• RSHS 44
8	Are exit signs provided, clearly visible, and in good, operable condition per requirements of Occupational Safety and Health Administration (OSHA) 1910 Subpart E, <i>Exit Routes and Emergency Planning</i> , and National Fire Protection Association (NFPA) 101, <i>Life Safety Code</i> ? Required: <ul style="list-style-type: none">• illuminated signs are functioning, and/or.

Question Number	Question
	<ul style="list-style-type: none">• clear indication of exit direction. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 7• OSHA 1910 Subpart E• RSHS 10• RSHS 44
9	<p>Are fire extinguishers provided, charged, and inspected monthly or are fire extinguishers not required? Required:</p> <ul style="list-style-type: none">• hanging at designated location, and/or• inspection tag attached and current. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 9• OSHA 1910 Subpart L• RSHS 10• RSHS 44
10	<p>Are fire suppression systems inspected, tested, maintained and unobstructed? Required:</p> <ul style="list-style-type: none">• maintain 18 in. clear space below sprinkler for storage height 12 ft. or less,• maintain 3 ft. clear space below sprinkler for storage higher than 12 ft,• records of annual fire alarm and fire suppression systems inspection and testing available upon request,• sprinklers, tanks, piping, and supports appear in good condition, and• fire hose cabinets/standpipes in working order, visible, accessible, and tested/inspected annually? Note: removal of hoses must be documented with AHJ/local fire department. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 9• OSHA 1910 Subpart L• RSHS 10• RSHS 44
11	<p>Does fire suppression appear compliant with requirements of Occupational Safety and Health Administration (OSHA) 1910 Subpart E, <i>Exit Routes and Emergency Planning</i>, and National Fire Protection Association (NFPA) 101, <i>Life Safety Code</i>?</p> <ul style="list-style-type: none">• Yes, compliant.• No, further evaluation is required. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 9• OSHA 1910 Subpart L• RSHS 10• RSHS 44
12	<p>Is the emergency action plan established and current? Required:</p> <ul style="list-style-type: none">• annual fire drills are conducted and documented,

Question Number	Question
	<ul style="list-style-type: none">• emergency action plan training documented, and• emergency contact numbers conspicuously posted and made available to staff. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 4• OSHA 1910 Subpart E• RSHS 10• RSHS 44
13	<p>Is housekeeping and storage throughout the facility well maintained and orderly? Required:</p> <ul style="list-style-type: none">• excess trash and combustible materials removed in a timely manner,• Chemicals stored in proper cabinets,• oily rags disposed in approved containers,• flammable liquids stored in closed fire rated cabinets,• storage areas maintained in an orderly manner,• no storage in egress paths or under stairs, and• no storage near electrical panels, mechanical equipment, or heating equipment. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapter 4• OSHA 1910 Subpart N• RSHS 10• RSHS 44
14	<p>Are the grounds surrounding the facility clear of combustible storage and dry vegetation? Required:</p> <ul style="list-style-type: none">• combustible storage is at least 20 ft away from facilities,• waste disposal dumpsters at least 20 ft away from facilities,• flammable gas tanks at least 25 ft away from facilities, and• dry vegetation around facilities is maintained at low height or removed. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapters 4 and 8• OSHA 1910 Subparts E and L• RSHS 10• RSHS 44
15	<p>Is fire service access and equipment maintained and clear? Required:</p> <ul style="list-style-type: none">• fire lane roads clear and accessible, and• fire hydrants, fire control valves, and Fire Department Connections (FDC) are visible, accessible, and operable. Requirements: <ul style="list-style-type: none">• NFPA 101, Chapters 4 and 9• OSHA 1910 Subparts E and L• RSHS 10• RSHS 44

Question Number	Question
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| 16 | <p>Is there a local fire department that will respond during a fire emergency? Required:</p> <ul style="list-style-type: none">• name of responding department. <p>Requirements:</p> <ul style="list-style-type: none">• NFPA 101, Chapters 4 and 9• OSHA 1910 Subparts E and L• RSHS 10• RSHS 44 |
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