

**Loss Prevention and Emergency Response  
Audit Protocol**

<b>Audit Information</b>
<b>Facility Name:</b>
<b>Date(s) of Audit:</b>
<b>Auditor's Name:</b>
<b>Period Under Review:</b>

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**A. Introduction**

1. Review background information obtained from the facility to develop a general understanding of potential sources of loss of property or lives as a result of fire, releases, or other catastrophic events.
2. Tour the facility to gain a general understanding of loss prevention and emergency response concerns. (Use Table 1 as appropriate for this and for subsequent tours.)

**Table 1: Tour Checklist**

This checklist is provided as a reference for things to look for during the “orientation tour.” The list is not all inclusive; it is meant to serve as an aid or tool to remind the auditor of the major considerations during the tour.

**Safety Equipment**

- Stationary fire protection
- Mobile fire protection
- Fire alarms
- Fire extinguishers/inspection tags
- Solvent safety cans
- Emergency lighting

**Storage Areas**

- Stacking and storage
- Incompatibility
- Combustibles/flammable storage
- Gas cylinder storage
- Bulk cylinder storage

**B. Step 1: Understand Management Systems**

***Note:** The purpose of Step 1: Understand Management Systems is to develop a detailed understanding of the facility’s overall approach to managing its regulatory obligations. After completing this section of the protocol, the auditor should understand:*

- *How and why the facility has evaluated the applicability of existing regulatory standards to facility operations.*
- *Types of facility procedures that exist to implement compliance activities, and the general scope of such procedures.*
- *Methods used by the facility to assist in the implementation of compliance programs.*
- *Whether compliance management roles and responsibilities are clearly understood.*

- *Types of programs or activities engaged in to familiarize staff with loss prevention and emergency response information.*
- *How the facility maintains and documents the effectiveness of its loss prevention and emergency response program activities.*

**C. Step 2: Assess Strengths and Weaknesses of Management Systems**

**Note:** *Once the auditor has developed an understanding of how the facility manages its loss prevention and emergency response programs, the next step is to evaluate the soundness of these management and control systems in the context of the potential environmental, health, and safety impacts. The purpose of this assessment is to determine verification priorities for Step 3: Gather Audit Evidence activities. Spending the time to evaluate priorities will enable the auditor to maximize the effectiveness and efficiency for gathering the evidence needed to achieve the objectives of the audit.*

3. Determine the range of potential impacts if a particular loss prevention and emergency response issue is not managed appropriately.
4. Evaluate the management systems and controls to determine if they are designed soundly, i.e. consider if the systems, coupled with the control systems, are appropriate given the potential impacts.
5. Set verification priorities so as to provide the optimum allocation of available team resources to ensure that issues representing high risk and weak management/control systems receive sufficient attention. That is, complete the matrix provided in Table 2 that links the management systems assessment with potential impacts to determine your prioritization scheme.

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Table 2: Determining Verification Priorities**

For each protocol topic listed below, graph the strength of the management system on the y axis against the potential impacts on the x axis.

- Fire prevention and emergency action plans
- Fire protection training
- Means of egress

The completed matrix will be the basis for prioritizing your time for the balance of the audit, with those protocol topics in Area 1 receiving highest priority and those in Area 4 lowest priority.

		Potential Impacts	
		Low	High
y a x i s	Management Systems		
	Weak	3	1
	Strong	4	2

x axis

#### D. Step 3: Gather Audit Evidence

**Note:** *The results of Step 2: Assess Strengths and Weaknesses of Management Systems activities (i.e., setting the verification priorities) provide the basic framework for the auditor to use in developing a sound and defensible verification strategy. Once the auditor has determined where the audit priorities lie for their protocol assignment(s), he/she develops a verification strategy based on available resources, what needs to be done, how to gather the information, where to apply verification testing, and what sampling strategies to employ. It is important to remember that the auditor develops this strategy in general to help ensure that the verification strategy is representative of the assessment made in Step 2: Assess Strengths and Weaknesses of Management Systems, and that the types of information gathered are appropriate for the protocol topics being examined. When gathering audit evidence, each auditor should ensure that the most appropriate type(s) of information will be representative and will be sufficient to verify compliance, as well as to substantiate noncompliance.*

#### **Fire Prevention and Emergency Action Plans**

6. Review the facility's fire prevention plan and determine whether it contains the following elements (place a check [√] on the line if the element is included):

\_\_\_ List of major workplace fire hazards and their proper handling and storage procedures, potential ignition sources and control procedures, and the type of fire protection equipment or systems that can control them.

\_\_\_ Names or regular job titles of personnel responsible for maintenance of equipment and systems installed to prevent or control fires.

\_\_\_ Names or regular job titles of those personnel responsible for control of fuel source hazards.

\_\_\_ Housekeeping procedures to minimize fire risk and ease evacuation.

\_\_\_ Designation of "Smoking" and "Non-Smoking" areas.

\_\_\_ Maintenance procedures for equipment and systems installed on heat-producing equipment to prevent accidental ignition of combustible materials.

Note the date of the plan: \_\_\_\_\_

Note any discrepancies in your working papers.

7. Verify that employees are apprised of the fire hazards of the materials and processes to which they are exposed, and that all employees have received instruction in the fire prevention plan. Confirm that training is provided:

- 1) During initial assignment.
  - 2) When roles/responsibilities change.
8. Confirm that the written plan is maintained within the workplace and is accessible to employees.
9. Review the facility's emergency action plan and confirm that it includes the following elements (place a check [✓] on the line if the element is included):

\_\_\_ Emergency escape procedures and emergency escape route assignments.

\_\_\_ Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.

\_\_\_ Procedures to account for all employees after emergency evacuation has been completed.

\_\_\_ Rescue and medical duties for those employees who are to perform them.

\_\_\_ The preferred means of reporting fires and other emergencies.

\_\_\_ Names or regular job titles of persons or departments that can be contacted for further information or explanation of duties under the plan.

\_\_\_ Types of evacuation to be used in emergency circumstances.

\_\_\_ Designation and training of specific personnel to assist in the safe and orderly emergency evacuation of employees.

Note the date of the plan: \_\_\_\_\_

Note any discrepancies in your working papers.

***Fire Protection Training***

10. From your understanding of fire protection training conducted at the facility, select a representative number of employees responsible for fire protection and emergency response activities and review training records to verify that training has been conducted and at the frequency required. As applicable to fire fighting arrangements at the site, confirm that:
  - a. Fire brigade members are provided training and education annually commensurate with the duties and functions they are to perform. In addition, fire brigade members who are expected to perform interior structural fire fighting are provided training quarterly.
  - b. Annual fire extinguisher training is provided for employees designated to respond to incipient fires in the workplace to familiarize them with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.
  - c. Annual training is provided for employees who inspect, test, and maintain fixed extinguishing systems.
11. Determine whether emergency team drills are conducted, at what frequency, and who participates.

***Means of Egress***

12. By touring the facility, determine whether there is adequate means of egress to ensure employee safety in the event of a fire or other emergency. (Use Table 3 to assist in this evaluation.)

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Table 3: Means of Egress Checklist**

Criteria	Yes	No/Describe Discrepancy	Location
Sufficient unobstructed exits are available such that all employees can escape quickly.			
Aisles leading to an exit are unobstructed.			
There are alternative exits if one is mechanically damaged and will not open.			
The use of locks or other fastening devices that would prevent free escape from the inside of a building when it is occupied is prohibited.			
Exits are clearly visible (i.e., provided with illumination, including backup systems in the event of a power failure), and every path of escape is arranged and marked such that the way to safety is unmistakable.			
All battery powered emergency lights are tested for operability and are inspected monthly, and the inspection is recorded.			
Access to exits is marked by a readily visible sign.			
Exits are marked by a readily visible illuminated sign.			
Doors leading to an exit are the free-swinging hinge type and are maintained in an operable condition.			
Any door, passage, or stairway which is not intended to be an exit nor a way of exit access is so marked by a sign reading "Not an Exit."			
Exit stairways and exit stairwell barriers are maintained to prevent exit traffic from ascending or descending.			
Areas designated for occupant discharge, dispersal, or refuge are maintained unobstructed and clear of storage.			
Aisle way space is maintained.			
Exits, approaches to the exit, and areas outside the exit into the street are maintained free of all obstructions at all times (this includes work in progress).			
All exits discharge directly to the street or other open space that gives safe access to a public way.			

**E. Step 4: Evaluate Audit Findings**

13. Review actions taken to complete each step of the protocol. For each protocol step assigned, summarize your conclusions regarding the facility's compliance status. (Use Table 4 to summarize your opinion regarding the level of compliance being achieved for each topical area.)
14. Review and discuss any unresolved compliance issues with appropriate facility personnel. Note explanations and disposition of such issues in the working papers.
15. Develop a written list of your exceptions and observations and use as a basis for discussion with other team members prior to the exit conference. As a team, evaluate the data used to substantiate the audit results and identify any patterns or trends in the results. In addition, evaluate your findings and observations based on the information gathered during Step 1: Understand Management Systems.
16. As a team, develop a complete list of exceptions and observations, which are clearly and concisely written and substantiated by audit data gathered.

**F. Step 5: Report Audit Findings**

17. Review all exceptions and observations with the facility environmental, health, and safety contact, and present them to facility management during the close-out meeting.

**Table 4: Audit Opinion**

For each protocol topic under Step 3: Gather Audit Evidence, develop an opinion as to the compliance status of the facility using the guidance provided below. Place a check (✓) in the most appropriate category or record N/A (not applicable). Document your opinion in your working papers.

Protocol Topic	Audit Opinion				
	Meets	Substantially Meets	Generally Meets	Requires Improvement to Meet	Requires Significant Improvement to Meet
Fire Prevention and Emergency Action Plans					
Fire Protection Training					
Means of Egress					
Description of Audit Opinion Categories					
<p><b>Meets Governmental and Internal Requirements</b> This opinion applies when, based on the audit team's review, the facility is judged to be in compliance with all (or virtually all) of the applicable requirements included in the audit scope. For those very few requirements where isolated exceptions are noted, these departures are determined to be occasional and anomalous, and are considered to be inconsequential in comparison to the overall level of compliance achieved. It is intended for locations that are found to be in full compliance with applicable requirements.</p> <p><b>Substantially Meets Governmental and Internal Requirements</b> This opinion is given when the audit results substantiate a high degree of compliance. It applies when, based on the audit team's review, the facility is in compliance with most of the applicable requirements reviewed but only a few requirements were not satisfied. These departures are considered to represent isolated exceptions in an otherwise effective compliance program.</p> <p><b>Generally Meets Governmental and Internal Requirements Except as Noted</b> This opinion applies when, based on the audit team's review, several exceptions to applicable requirements are noted. These exceptions are more than isolated anomalies and reflect weaknesses in the design and/or implementation of compliance programs.</p> <p><b>Requires Improvement to Meet Governmental and Internal Requirements</b> This opinion applies when, based on the audit team's review, several exceptions to applicable requirements are noted and some of the exceptions reflect the absence of required programs, significant departures from established criteria, or lapses in program implementation.</p> <p><b>Requires Significant Improvement to Meet Governmental and Internal Requirements</b> This opinion applies when, based on the audit team's review, many exceptions to applicable requirements are noted, including several significant departures from established criteria, the absence of several required programs, or prolonged inattention to the resolution of previously identified compliance or liability issues.</p>					

