

osha psm audit checklist

osha psm audit checklist is an essential tool for ensuring compliance with OSHA's Process Safety Management (PSM) standards. These standards are designed to prevent the release of hazardous chemicals and protect workers in industries such as chemical manufacturing, oil and gas, and refining. An effective OSHA PSM audit checklist helps organizations systematically evaluate their processes, identify gaps, and implement corrective measures to maintain workplace safety. This article provides a comprehensive guide to creating and utilizing a detailed OSHA PSM audit checklist, covering key components such as process hazards analysis, operating procedures, training, mechanical integrity, and emergency planning. By understanding the core elements of the audit, companies can improve their safety programs and reduce the risk of accidents. The following sections outline the main areas to focus on during an OSHA PSM audit and offer practical advice for compliance.

- Understanding OSHA PSM Requirements
- Key Components of the OSHA PSM Audit Checklist
- Step-by-Step Guide to Conducting an OSHA PSM Audit
- Common Findings and How to Address Them
- Best Practices for Maintaining Ongoing PSM Compliance

Understanding OSHA PSM Requirements

The OSHA Process Safety Management (PSM) standard, codified at 29 CFR 1910.119, applies to facilities that handle highly hazardous chemicals. The purpose of the regulation is to prevent unwanted releases of toxic, reactive, flammable, or explosive chemicals that could cause catastrophic incidents. Understanding the requirements of OSHA PSM is the foundation for creating an effective audit checklist.

Scope and Applicability

The PSM standard applies to processes involving more than a threshold quantity of specific hazardous chemicals. Facilities such as chemical plants, refineries, pharmaceutical manufacturers, and water treatment plants often fall within the scope. Knowing whether the standard applies is the first step in compliance.

Key Elements of the PSM Standard

OSHA PSM includes 14 interconnected elements that form the basis of a comprehensive safety management system. These elements include process safety information, process hazard analysis, operating procedures, training, mechanical integrity, management of change, incident investigation, and emergency planning, among others. Each element is critical to preventing

chemical accidents.

Key Components of the OSHA PSM Audit Checklist

An OSHA PSM audit checklist must cover all significant components of the standard to ensure thorough evaluation. The checklist serves as a practical tool to verify compliance and identify areas requiring improvement. Below are the primary categories to include in the audit checklist.

Process Safety Information

Verify that comprehensive process safety information is documented and maintained. This includes chemical properties, process limits, equipment data, and safety systems. Accurate and up-to-date information supports effective hazard analysis and operational controls.

Process Hazard Analysis (PHA)

Confirm that a formal PHA has been conducted and updated regularly. The PHA identifies potential hazards, evaluates risks, and recommends safeguards. The audit should check for proper documentation, team composition, and follow-up on recommendations.

Operating Procedures

Ensure that written operating procedures are clear, accessible, and cover all phases of operation including startup, normal operation, shutdown, and emergency conditions. Procedures should be reviewed and updated periodically.

Training and Competency

Assess whether employees involved in PSM-covered processes receive initial and refresher training. Training must cover safe operation, emergency response, and awareness of hazards. Training records should be maintained and verified.

Mechanical Integrity

Evaluate the mechanical integrity program for critical equipment such as pressure vessels, piping systems, relief devices, and controls. The checklist should verify inspection, testing, maintenance schedules, and documentation.

Management of Change (MOC)

Check that changes to process chemicals, technology, equipment, or procedures are managed through a formal MOC process. This process must assess potential impacts and include necessary approvals before implementation.

Incident Investigation

Confirm that incidents, near misses, and process safety events are promptly investigated to identify root causes and prevent recurrence. Documentation and corrective actions must be part of the audit.

Emergency Planning and Response

Review the emergency action plan to ensure it addresses potential releases and includes coordination with local emergency responders. Regular drills and employee training on emergency procedures are essential.

Step-by-Step Guide to Conducting an OSHA PSM Audit

Conducting an OSHA PSM audit involves a systematic approach to evaluating each element of the PSM standard. The following steps outline how to perform a comprehensive audit using the checklist.

Preparation and Planning

Before starting the audit, gather relevant documents such as process safety information, previous audit reports, incident logs, and training records. Define the audit scope and assemble a qualified audit team with expertise in process safety.

Document Review

Review all PSM-related documentation to assess compliance and identify preliminary issues. This phase helps auditors understand the facility's processes and controls.

On-Site Inspection

Conduct a thorough walkthrough of the facility to observe operations, equipment condition, and employee practices. Verify that procedures are followed and mechanical integrity is maintained.

Interviews and Discussions

Interview employees, supervisors, and management to evaluate understanding of PSM requirements and assess training effectiveness. Open communication can reveal hidden issues not evident from documentation alone.

Audit Reporting

Compile findings into a detailed report highlighting compliance status,

nonconformities, and recommendations for corrective actions. Prioritize issues based on risk to guide management decisions.

Common Findings and How to Address Them

OSHA PSM audits often reveal recurring issues that companies must address to achieve compliance and improve safety. Recognizing these common findings helps focus corrective efforts effectively.

Incomplete or Outdated Documentation

One frequent finding is incomplete or outdated process safety information and operating procedures. Facilities should establish document control systems and schedule regular reviews to maintain accuracy.

Insufficient Training and Awareness

Lack of adequate employee training on PSM processes is a common gap. Organizations should implement comprehensive training programs and maintain detailed records to ensure workforce competency.

Mechanical Integrity Deficiencies

Failures in inspection, testing, or maintenance of critical equipment can pose serious hazards. Implementing rigorous mechanical integrity programs with scheduled preventive maintenance is necessary to mitigate risks.

Management of Change Process Lapses

Improper handling of process changes can introduce unforeseen hazards. Facilities must enforce strict MOC procedures requiring thorough hazard evaluations and approvals prior to implementation.

Best Practices for Maintaining Ongoing PSM Compliance

Maintaining compliance with OSHA PSM standards is an ongoing process that requires dedication and continuous improvement. Implementing best practices ensures sustained safety performance and regulatory adherence.

Regular Audits and Self-Assessments

Conducting periodic internal audits and self-assessments allows organizations to identify and address emerging issues proactively. Using a comprehensive OSHA PSM audit checklist facilitates consistent evaluations.

Employee Engagement and Training

Fostering a safety culture where employees are actively engaged and well-trained enhances compliance and incident prevention. Encourage feedback and continuous learning related to process safety management.

Continuous Improvement and Corrective Action

Implementing corrective actions promptly and tracking their effectiveness contributes to continuous improvement. Management commitment and resource allocation are key to sustaining PSM programs.

Leveraging Technology and Automation

Utilizing digital tools for document management, training tracking, and equipment monitoring can streamline compliance efforts and reduce human error. Automated systems support real-time data collection and analysis for better decision-making.

- Understand the full scope of OSHA PSM requirements before starting an audit.
- Develop a detailed checklist covering all 14 PSM elements.
- Plan and execute systematic audits including document review, site inspection, and interviews.
- Address common compliance gaps such as documentation, training, and mechanical integrity deficits.
- Adopt best practices like regular audits, employee engagement, and leveraging technology for ongoing compliance.

Frequently Asked Questions

What is an OSHA PSM audit checklist?

An OSHA PSM audit checklist is a tool used to evaluate compliance with the Process Safety Management standard set by OSHA, ensuring that facilities handling hazardous chemicals follow safety protocols to prevent accidents.

Why is an OSHA PSM audit checklist important?

The checklist helps identify gaps in safety practices, ensures regulatory compliance, reduces the risk of chemical accidents, and promotes a safer working environment for employees.

What are the key elements included in an OSHA PSM audit checklist?

Key elements include process safety information, process hazard analysis, operating procedures, training, mechanical integrity, management of change, incident investigation, emergency planning, and compliance audits.

How often should an OSHA PSM audit be conducted using the checklist?

OSHA requires employers to conduct compliance audits at least every three years to evaluate adherence to the PSM standard and update safety measures accordingly.

Who should perform an OSHA PSM audit using the checklist?

Audits should be conducted by qualified personnel knowledgeable in PSM standards, such as internal safety professionals, third-party auditors, or consultants with expertise in process safety.

Can an OSHA PSM audit checklist be customized for different industries?

Yes, while the core elements remain consistent, the checklist can be tailored to address specific hazards, processes, and regulatory requirements relevant to different industries.

What are common findings during an OSHA PSM audit checklist review?

Common findings include incomplete process safety information, inadequate training documentation, outdated operating procedures, insufficient mechanical integrity checks, and improper management of change practices.

How does an OSHA PSM audit checklist help in emergency preparedness?

The checklist ensures that emergency action plans, employee training, and response procedures are in place and effective, helping facilities respond promptly and effectively to incidents.

What documentation should be reviewed during an OSHA PSM audit checklist process?

Documentation such as process safety information, hazard analyses, training records, maintenance logs, incident reports, and management of change records should be reviewed for compliance.

Where can I find a reliable OSHA PSM audit checklist

template?

Reliable OSHA PSM audit checklist templates can be found on OSHA's official website, industry safety organizations, or through professional safety consulting firms specializing in process safety management.

Additional Resources

1. *OSHA PSM Audit Checklist Guide: A Comprehensive Approach*

This book offers a detailed walkthrough of the OSHA Process Safety Management (PSM) audit checklist, providing practical tips for compliance and safety improvements. It is designed for safety professionals and auditors seeking to understand every element of the checklist. The guide includes real-world examples and strategies to identify and mitigate process hazards effectively.

2. *Mastering OSHA PSM Audits: Best Practices and Compliance Strategies*

Focused on mastering the nuances of OSHA PSM audits, this book presents best practices for preparing, conducting, and following up on audits. It highlights common compliance pitfalls and how to avoid them, making it a valuable resource for plant managers and safety officers. The book also covers the integration of PSM with other safety management systems.

3. *Process Safety Management Auditing Made Easy*

This user-friendly manual simplifies the complex requirements of PSM auditing, breaking down the checklist into manageable sections. It includes checklists, templates, and tips to streamline the audit process and ensure thorough compliance. The book is ideal for new auditors or those seeking a refresher on PSM requirements.

4. *Practical OSHA PSM Audit Checklist for Chemical Plants*

Targeted at chemical plant operators and safety personnel, this book adapts the OSHA PSM audit checklist to the specific challenges of chemical manufacturing environments. It provides insights into hazard analysis, mechanical integrity, and emergency planning tailored to chemical process safety. The practical approach helps facilities maintain compliance and improve safety culture.

5. *PSM Audit Checklist Workbook: Tools for Effective Safety Management*

This workbook-style resource includes interactive checklists, audit forms, and case studies designed to facilitate hands-on learning and application of PSM audit principles. It encourages active participation by guiding readers through self-assessment exercises. The book is useful for both individual auditors and safety teams looking to enhance their audit skills.

6. *Comprehensive Guide to OSHA PSM Compliance and Auditing*

Covering the full scope of OSHA's PSM standard, this guide offers an in-depth explanation of each audit checklist item along with compliance tips and regulatory insights. It is geared toward compliance officers, safety consultants, and auditors who need a thorough understanding of PSM requirements. The book also discusses recent updates and how to stay ahead of regulatory changes.

7. *Effective PSM Auditing: Strategies to Ensure OSHA Compliance*

This book focuses on developing effective auditing strategies that help organizations achieve and maintain OSHA PSM compliance. It discusses risk-based auditing techniques, documentation review, and employee interview methods. The strategic focus aids organizations in prioritizing audit efforts and improving overall process safety performance.

8. *OSHA PSM Audit Checklist for Petroleum and Refining Industries*

Specifically tailored for the petroleum and refining sectors, this book addresses the unique process safety challenges faced by these industries. It provides a sector-specific PSM audit checklist with examples and case studies relevant to refineries and petrochemical plants. The resource helps industry professionals ensure compliance while enhancing operational safety.

9. *Internal Auditing of Process Safety Management Systems*

This book emphasizes the role of internal audits within the PSM framework, offering guidance on planning, executing, and reporting audit findings. It explores the relationship between internal audits and continuous safety improvement. The practical advice and audit checklist templates make it a valuable tool for internal auditors and safety managers alike.

[Osha Psm Audit Checklist](#)

OSHA PSM Audit Checklist: Your Comprehensive Guide to Process Safety Management Compliance

Are you facing hefty fines, potential workplace disasters, and crippling insurance costs due to inadequate Process Safety Management (PSM) practices? Do you dread the next OSHA audit, fearing non-compliance will expose your company to significant legal and financial repercussions? You're not alone. Many companies struggle to navigate the complexities of OSHA PSM regulations. This comprehensive guide provides the tools and knowledge you need to confidently face any OSHA audit.

This eBook, "OSHA PSM Audit Checklist: A Practical Guide to Compliance," provides a structured approach to ensure your PSM program meets OSHA's stringent standards.

Contents:

Introduction: Understanding OSHA PSM and its importance.

Chapter 1: Pre-Audit Preparation: Developing an effective audit strategy and gathering necessary documentation.

Chapter 2: Process Hazard Analysis (PHA): Reviewing and validating your PHA methods and findings.

Chapter 3: Operating Procedures: Assessing the effectiveness and adherence to operating procedures.

Chapter 4: Training and Competency: Evaluating the adequacy of employee training programs.

Chapter 5: Mechanical Integrity: Verifying compliance with equipment inspection, testing, and maintenance procedures.

Chapter 6: Emergency Planning and Response: Assessing preparedness for emergencies and response capabilities.

Chapter 7: Contractor Management: Reviewing contractor safety management practices.

Chapter 8: Compliance Audits and Corrective Actions: Implementing and tracking corrective actions

from audit findings.

Conclusion: Maintaining ongoing PSM compliance and preparing for future audits.

OSHA PSM Audit Checklist: A Practical Guide to Compliance

Introduction: Understanding OSHA PSM and its Importance

Process Safety Management (PSM) is a crucial aspect of workplace safety, particularly in industries handling hazardous chemicals. The Occupational Safety and Health Administration (OSHA) mandates PSM regulations (29 CFR 1910.119) to prevent catastrophic incidents, such as explosions, fires, and releases of toxic substances. These regulations aim to minimize the risk of major accidents and protect worker safety, public health, and the environment. Understanding the nuances of OSHA PSM is paramount for any company handling hazardous chemicals. Non-compliance can lead to substantial fines, legal repercussions, reputational damage, and, most importantly, potential loss of life. This guide provides a step-by-step approach to conducting thorough PSM audits, ensuring your company remains compliant and minimizing the risk of accidents.

Chapter 1: Pre-Audit Preparation: Developing an Effective Audit Strategy and Gathering Necessary Documentation

Before the audit begins, meticulous preparation is key. This involves several critical steps:

Define the Scope: Clearly identify the specific processes, facilities, and areas to be audited. This should be tailored to your facility's operations and the specific hazards involved.

Assemble the Audit Team: Form a multi-disciplinary team with members possessing expertise in various aspects of PSM, such as process engineering, safety, operations, and maintenance.

Develop an Audit Checklist: A comprehensive checklist based on OSHA's 29 CFR 1910.119 requirements is crucial. This checklist should cover all aspects of PSM, including PHA, operating procedures, training, mechanical integrity, emergency planning, and contractor management. (This eBook provides a detailed sample checklist).

Gather Necessary Documentation: Collect all relevant documentation, including process hazard analyses (PHAs), operating procedures, training records, maintenance logs, emergency response plans, and contractor agreements. Ensure documentation is up-to-date, accurate, and readily accessible.

Schedule the Audit: Coordinate with OSHA or your internal audit team to schedule the audit at a

convenient time that allows for thorough examination.

Failing to adequately prepare can significantly hamper the audit process and may lead to missed deficiencies. A thorough preparation ensures a smoother audit and minimizes the risk of non-compliance findings.

Chapter 2: Process Hazard Analysis (PHA): Reviewing and Validating Your PHA Methods and Findings

Process Hazard Analysis (PHA) is the cornerstone of any effective PSM program. It's a systematic method to identify potential hazards associated with a process, evaluate their risks, and recommend appropriate risk-reduction measures. OSHA requires the use of a suitable PHA methodology. During the audit, the following aspects will be scrutinized:

PHA Methodology: The chosen PHA method (e.g., HAZOP, What-If, FMEA) must be appropriate for the complexity of the process and the hazards involved. The methodology used should be clearly documented and justified.

Team Composition: The PHA team should have members with diverse expertise and knowledge of the process.

Hazard Identification: The PHA should thoroughly identify all potential hazards, including those related to equipment failures, human error, and external events.

Risk Evaluation: The identified hazards should be evaluated in terms of their likelihood and severity. A clear risk matrix or similar tool should be utilized.

Recommendations and Implementation: The PHA should clearly outline recommended risk-reduction measures and their implementation status. The audit will focus on whether these measures are implemented effectively.

Documentation: All PHA documents, including the team roster, hazard identification, risk assessment, and recommendations, must be well-documented and readily available.

Chapter 3: Operating Procedures: Assessing the Effectiveness and Adherence to Operating Procedures

Operating procedures are critical for ensuring safe and consistent operation of hazardous processes. The audit will examine whether operating procedures are:

Comprehensive: Covering all aspects of the process, including startup, normal operation, shutdown, and emergency procedures.

Clear and Concise: Written in a clear, easy-to-understand language, free from ambiguity.

Up-to-Date: Reflecting any changes in the process or equipment.

Accessible: Readily available to all personnel involved in the process.

Adhered To: Evidence of consistent adherence to the procedures through observations, inspections,

and records reviews.

Reviewed Regularly: A system for regular review and update of the procedures is in place and is demonstrably followed.

Chapter 4: Training and Competency: Evaluating the Adequacy of Employee Training Programs

OSHA PSM requires that all employees involved in hazardous processes receive adequate training. The audit will assess the adequacy of training programs in terms of:

Curriculum: The training curriculum must cover all aspects of PSM, including hazard identification, safe operating procedures, emergency response, and the use of personal protective equipment (PPE).

Frequency: Training should be conducted regularly to ensure that employees maintain their competency.

Documentation: Training records must be maintained to demonstrate that employees have received the required training.

Competency Assessment: Methods for assessing employee competency should be implemented and documented.

Refresher Training: Provisions for regular refresher training to maintain employee competence in handling hazardous substances.

Chapter 5: Mechanical Integrity: Verifying Compliance with Equipment Inspection, Testing, and Maintenance Procedures

Maintaining the mechanical integrity of process equipment is critical to prevent equipment failures and accidents. The audit will verify:

Inspection and Testing Programs: Well-defined inspection and testing programs are in place for all critical equipment. This includes a documented schedule of inspections, tests and planned maintenance activities.

Maintenance Records: Adequate records of all inspections, tests, and maintenance activities are maintained.

Corrective Actions: Appropriate corrective actions are taken promptly to address any deficiencies identified during inspections or tests.

Compliance with Standards: All equipment is properly maintained and meets applicable industry standards.

Documentation of Procedures: Comprehensive documentation of the inspection, testing, and maintenance procedures.

Chapter 6: Emergency Planning and Response: Assessing Preparedness for Emergencies and Response Capabilities

A robust emergency plan is essential for responding effectively to process incidents. The audit will review:

Emergency Response Plan: A comprehensive emergency response plan is in place and regularly updated.

Emergency Procedures: Clearly defined emergency procedures are in place for various types of incidents.

Training and Drills: Employees are adequately trained on emergency procedures, and regular drills are conducted to test preparedness.

Communication Systems: Effective communication systems are in place to alert employees and emergency responders.

Emergency Equipment: Necessary emergency equipment (e.g., fire extinguishers, spill control equipment) is readily available and properly maintained.

Evacuation Procedures: Clear and efficient evacuation procedures are established and well understood by employees.

Chapter 7: Contractor Management: Reviewing Contractor Safety Management Practices

When contractors work on your site, their safety management practices must also align with OSHA PSM. The audit will assess:

Contractor Selection: Criteria for selecting contractors with adequate safety programs.

Safety Training and Procedures: Ensuring contractors receive proper training on site-specific hazards and procedures.

Communication: Effective communication between your company and the contractor regarding safety matters.

Safety Performance: Monitoring the contractor's safety performance on your site.

Documentation: Maintaining records of contractor safety training, inspections, and performance.

Chapter 8: Compliance Audits and Corrective Actions: Implementing and Tracking Corrective Actions from

Audit Findings

Regular internal audits are crucial for identifying and addressing potential PSM deficiencies before an OSHA inspection. The audit will examine your:

Internal Audit Program: A documented program for conducting regular internal audits of the PSM system.

Corrective Action System: A system for identifying, investigating, and correcting any deficiencies found during audits.

Follow-Up: Procedures for ensuring that corrective actions are implemented effectively and followed up on.

Documentation: Maintaining thorough documentation of all internal audits, corrective actions, and follow-up activities.

Conclusion: Maintaining Ongoing PSM Compliance and Preparing for Future Audits

Maintaining ongoing PSM compliance is a continuous process that requires commitment and vigilance. Regular internal audits, employee training, and proactive maintenance are essential. By following the guidelines in this guide, you can build a strong PSM program and confidently face any OSHA audit. This ensures a safer workplace, reduces the risk of accidents, and minimizes the potential for costly fines and legal repercussions.

FAQs:

1. What is the purpose of an OSHA PSM audit? To verify compliance with OSHA's Process Safety Management (PSM) standard (29 CFR 1910.119).
2. Who conducts OSHA PSM audits? OSHA compliance officers conduct inspections, but companies should also perform regular internal audits.
3. What are the penalties for non-compliance? Significant fines, legal action, and potential criminal charges.
4. How often should I conduct internal PSM audits? The frequency depends on the complexity of your processes and risk level, but regular audits are recommended.
5. What if I find deficiencies during my internal audit? Implement corrective actions promptly and document the process.
6. What documentation is required for an OSHA PSM audit? Comprehensive documentation of all

aspects of your PSM program, as outlined in this guide.

7. Can I use this checklist for other regulatory audits? This checklist focuses on OSHA PSM, but elements may be adaptable to other regulations.

8. What if I need more detailed guidance? Consult with a PSM expert or safety professional.

9. Where can I find the official OSHA PSM standard? The official text is available on the OSHA website (www.osha.gov).

Related Articles:

1. OSHA PSM Standard 29 CFR 1910.119 Explained: A detailed breakdown of the OSHA PSM standard.
2. Process Hazard Analysis (PHA) Methods: Comparison of various PHA methodologies (HAZOP, What-If, FMEA).
3. Developing Effective Operating Procedures for Hazardous Processes: Guidance on creating clear and concise operating procedures.
4. Employee Training for PSM Compliance: Best practices for employee training in PSM.
5. Mechanical Integrity Programs: Best Practices: Guidance on establishing effective equipment maintenance programs.
6. Emergency Planning and Response for Hazardous Processes: Creating a comprehensive emergency response plan.
7. Contractor Safety Management in PSM: Best practices for managing contractor safety.
8. Implementing an Effective Internal Audit Program for PSM: Guidance on creating and implementing an effective internal audit program.
9. Corrective Actions in PSM: Investigation and Implementation: Best practices for investigating and implementing corrective actions.

osha psm audit checklist: Guidelines for Auditing Process Safety Management Systems CCPS (Center for Chemical Process Safety), 2011-11-30 This book discusses the fundamental skills, techniques, and tools of auditing, and the characteristics of a good process safety management system. A variety of approaches are given so the reader can select the best methodology for a given audit. This book updates the original CCPS Auditing Guideline project since the implementation of OSHA PSM regulation, and is accompanied by an online download featuring checklists for both the audit program and the audit itself. This package offers a vital resource for process safety and process development personnel, as well as related professionals like insurers.

osha psm audit checklist: Guidelines for Risk Based Process Safety CCPS (Center for Chemical Process Safety), 2011-11-30 Guidelines for Risk Based Process Safety provides guidelines for industries that manufacture, consume, or handle chemicals, by focusing on new ways to design, correct, or improve process safety management practices. This new framework for thinking about process safety builds upon the original process safety management ideas published in the early 1990s, integrates industry lessons learned over the intervening years, utilizes applicable total quality principles (i.e., plan, do, check, act), and organizes it in a way that will be useful to all organizations - even those with relatively lower hazard activities - throughout the life-cycle of a company.

osha psm audit checklist: Guidelines for Auditing Process Safety Management Systems American Institute of Chemical Engineers. Center for Chemical Process Safety, 1992-11-15 A variety of approaches are given so the reader can select the methodology best suited. It discusses the

fundamental skills, techniques, and tools of auditing, and the characteristics of a good process safety management system. And, since information needed for review in the audit may be scattered or undocumented, it offers suggestions on what to look for and where. Whether your company is large or small, whether you are experienced with auditing or just developing a system, consistent use of the techniques presented can significantly improve your audit and your process safety management.

osha psm audit checklist: Guidelines for Process Safety Documentation CCPS (Center for Chemical Process Safety), 2010-09-09 The process industry has developed integrated process safety management programs to reduce or eliminate incidents and major consequences, such as injury, loss of life, property damage, environmental harm, and business interruption. Good documentation practices are a crucial part of retaining past knowledge and experience, and avoiding relearning old lessons. Following an introduction, which offers examples of how proper documentation might have prevented major explosions and serious incidents, the 21 sections in this book clearly present aims, goals, and methodology in all areas of documentation. The text contains examples of dozens of needed forms, lists of relevant industry organizations, sources for software, references, OSHA regulations, sample plans, and more.

osha psm audit checklist: Field Operations Manual United States. Occupational Safety and Health Administration, 1974

osha psm audit checklist: Guidelines for Performing Effective Pre-Startup Safety Reviews CCPS (Center for Chemical Process Safety), 2011-11-30 This book provides guidance to those with responsibility for scheduling and executing a Pre-Startup Safety Review (PSSR). It outlines a protocol and tool for use by project or turnaround teams, to effectively and efficiently schedule and execute a PSSR. Integrates PSSR throughout the project/turnaround phases, with a verification check at the traditional PSSR step Supports a right first time and check only once project philosophy to eliminate surprises Features how-to checklists, hazard assessment, batch and continuous processes, validation, and documentation Includes a CD with PSSR checklists and PSSR management system examples. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

osha psm audit checklist: PSM/RMP Auditing Handbook David Einolf, Luverna Menghini, 1999 This book provides facility managers with an easy-to-use annotated guide to completing a Process Safety Management/Risk Management Planning (PSM/RMP) audit and determining compliance. Using this reference, you'll learn how to evaluate current regulatory thinking and interpretations and develop a compliant and functioning PSM/RMP program. To simplify your process, the authors provide detailed examples of materials used in compliance audits, extensive examples of compliant programs, and relevant sample documents. PSM/RMP Auditing Handbook presents compliance audit guidelines in a question-and-answer format with the authors' interpretive answers to each. The PSM checklists examine such issues as employee participation, process-safety information, process-hazards analysis, operating procedures, training, contractors, pre-startup safety reviews, hot work permits, incident investigation, and trade secrets. The RMP checklists include worst-case analysis, five-year accident history, management responsibility, document management, safety information, hazard review, operating procedures, training, maintenance, and incident investigations. Special features include a detailed summary of each paragraph of both standards; the complete text of the Code of Federal Regulations (CFR) Title 40 Part 68 and CFR Title 29 Part 1910.119; and where practical, references to Internet addresses or web pages containing pertinent rules or requirement information.

osha psm audit checklist: Introduction to Process Safety for Undergraduates and Engineers CCPS (Center for Chemical Process Safety), 2016-06-27 Familiarizes the student or an engineer new to process safety with the concept of process safety management Serves as a comprehensive reference for Process Safety topics for student chemical engineers and newly graduate engineers Acts as a reference material for either a stand-alone process safety course or as supplemental materials for existing curricula Includes the evaluation of SACHE courses for application of process safety principles throughout the standard Ch.E. curricula in addition to, or as

an alternative to, adding a new specific process safety course Gives examples of process safety in design

osha psm audit checklist: Guidelines for Chemical Process Quantitative Risk Analysis , 1985

osha psm audit checklist: Surviving an OSHA Audit Frank R. Spellman, 1998-04-08 This text is about survival-about surviving an OSHA audit. It's a road map through the process, a template, a user-friendly how-to-do-it manual that should be part of any OSHA-regulated facility's survival package. Will it help you survive an OSHA audit? It can't hurt-and if you follow it, it will help.

osha psm audit checklist: ANSI/IIAR Standard 2-2014 International Institute of Ammonia Refrigeration, 2014 The new and improved IIAR 2 is the definitive design safety standard of the ammonia refrigeration industry - IIAR 2 has undergone extensive revision since the 2008 (with Addendum B) edition was published on December 3, 2012. A major focus of changes made to this edition has been incorporating topics traditionally addressed in other codes and standards so that IIAR 2 can eventually serve as a single, comprehensive standard covering safe design of closed-circuit ammonia refrigeration systems.

osha psm audit checklist: *A Guide to Compliance for Process Safety Management/Risk Management Planning (PSM/RMP)* Frank R. Spellman, 1998-06-03 Establishing, maintaining and refining a comprehensive Process Safety Management (PSM) and Risk Management Program (RMP) is a daunting task. The regulations are complicated and difficult to understand. The resources available to manage your program are limited. Your plant could be the target of a grueling PSM and RMP compliance audit by OSHA and/or the EPA, which could scrutinize your facility according to their stringent audit guidelines. Ask yourself some questions. . . * Is your municipal plant or industrial facility ready to meet new OSHA and EPA PSM/RMP regulations? * Do you understand OSHA's and EPA's requirements? * Do you know how OSHA/EPA are interpreting PSM/RMP requirements? * Are you prepared for a possible audit? * Is your existing PSM/RMP comprehensive, maintainable and cost-effective? If you answered no to any of these, you need the expert guidance provided by *A Guide to Compliance for Process Safety Management/Risk Management Planning (PSM/RMP)* In recent years, chemical accidents that involved the release of toxic substances have claimed the lives of hundreds of employees and thousands of others worldwide. In order to prevent repeat occurrences of catastrophic chemical incidents, OSHA and the USEPA have joined forces to bring about the OSHA Process Safety Management Standard (PSM) and the USEPA Risk Management Program (RMP). Chemical disaster situations can occur due to human error in system operation and/or a malfunction in system equipment. Other emergency situations that must also be considered and planned for include fire, floods, hurricanes, earthquakes, tornadoes, snow/ice storms, avalanches, explosions, truck accidents, train derailments, airplane crashes, building collapses, riots, bomb threats, terrorism, and sabotage. Be prepared! * Determine the differences and similarities between OSHA's PSM and EPA's RMP regulations * Survey your facility to determine your needs * Plug your site-specific data into regulation templates * Prepare your data records for your PSM compliance package * Calculate your Worst Case scenarios * Assemble a viable PSM program in a logical, sequential, and correct manner * Supervise program implementation elements with the overall management system This user friendly, plain English, straightforward guide to new EPA and OSHA regulations describes, explains and demonstrates a tested, proven, workable methodology for installation of complete, correct safety and risk programs. It provides the public administrator, plant manager, plant engineer, and organization safety professionals with the tool needed to ensure full compliance with the requirements of both regulations. Those with interests in HazMat response and mitigation procedures will also find it of use. This guidebook is designed to be applicable to the needs of most operations involved in the production, use, transfer, storage, and processing of hazardous materials. It addresses Process Safety Management and Risk Management Planning for facilities handling hazardous materials, and describes the activities and approach to use within U.S. plants and companies of all sizes. From the Author This guidebook is designed to enable the water, wastewater, and general industry person who has been assigned the task of complying

with these new rules to accomplish this compliance effort in the easiest most accurate manner possible. A Guide to Compliance for Process Safety Management/Risk Management Planning (PSM/RMP) is user-friendly. This How-To-Do-It guide will assist those who are called upon to design, develop, and install PSM and RMP systems within their companies or plants. It describes, explains, and demonstrates a proven methodology: an example that actually works and has been tested. More than anything else, this guidebook really is a Template. It provides a pattern that can be used to devise a compliance package that is accurate. Simply stated: like the standard template, this guidebook can provide the foundation, the border, the framework from which any covered organization's PSM and RMP effort can be brought into proper compliance. The user simply plugs in site specific information into the model presented in this guidebook. This guidebook first shows that PSM and RMP are similar and are interrelated in many ways and different in only a few ways. Many of the processes listed in PSM are also listed in RMP; the additional RMP processes are in industry sectors that have a significant accident history. Along with showing the similarities and interrelationships between PSM and RMP, the requirements of RMP that are in addition to those listed in PSM are discussed. This guidebook also discusses the RMP requirement for off-site consequence analysis and the methodology that can be utilized in performing it. If the PSM project team follows this format, it will be able to assemble a viable PSM program in a logical, sequential, and correct manner.

osha psm audit checklist: Hazardous Waste and Emergency Response United States. Occupational Safety and Health Administration, 1989

osha psm audit checklist: Guidelines for the Management of Change for Process Safety CCPS (Center for Chemical Process Safety), 2011-09-20 Guidelines for the Management of Change for Process Safety provides guidance on the implementation of effective and efficient Management of Change (MOC) procedures, which can be applied to improve process safety. In addition to introducing MOC systems, the book describes how to design an initial system from scratch, including the scope of the system and the applications over a plant life cycle and the boundaries and overlaps with other process safety management systems. Note: CD-ROM/DVD and other supplementary materials are not included as part of eBook file.

osha psm audit checklist: OSHA and EPA Process Safety Management Requirements Mark S. Dennison, 1994 A practical reference designed to guide plant safety personnel through the requirements of OSHA's Process Safety Management Standard and EPA's new Chemical Accident Release Prevention regulations. The author explains the regulations in nontechnical language and provides practical methods for achieving compliance. Includes compliance checklists as well as appendices including lists of regulated substances and threshold quantities, important government contacts, and OSHA's PSM Compliance Directive CPL 2-2.45A. Annotation copyright by Book News, Inc., Portland, OR

osha psm audit checklist: HAZOP: Guide to Best Practice Frank Crawley, Brian Tyler, 2015-04-08 HAZOP: Guide to Best Practice, 3rd Edition describes and illustrates the HAZOP study method, highlighting a variety of proven uses and approaches. This updated edition brings additional experience with which to assist the reader in delivering optimum safety and efficiency of performance of the HAZOP team. HAZOP is the most widely-used technique in the process industries for the identification of hazards and the planning of safety measures. This book explains how to implement HAZOP techniques in new facilities and apply it to existing facilities. The content covers many of the possible applications of HAZOP and takes you through all the stages of a study. This simple, easily digestible book is a favorite in the chemical and process industries. - A concise and clear guide to the do's and don'ts in HAZOP - New edition brings additional experience to help you deliver optimum safety and efficiency of performance. - Updated material includes a section on HAZOP study of a procedure with a detailed example, new sections on pre-meeting with the client auditing a study, human factors and linking HAZOP study to LOPA. A section on start-up and shutdown has been added to the chapter on specific applications of HAZOP.

osha psm audit checklist: Evaluating the Effectiveness of Offshore Safety and Environmental

Management Systems United States. Committee on the Effectiveness of Safety and Environmental Management Systems for Outer Continental Shelf Oil and Gas Operations, 2012 This report recommends that the Bureau of Safety and Environmental Enforcement (BSEE) take a holistic approach to evaluating the effectiveness offshore oil and the Safety and Environmental Management Systems (SEMS) programs of gas industry operators. According to the report, this approach should, at a minimum, include inspections, audits by the operator and BSEE, key performance indicators, and a whistleblower program. SEMS is a safety management system (SMS) aimed at shifting from a completely prescriptive regulatory approach to one that is proactive, risk based, and goal oriented in an attempt to improve safety and reduce the likelihood that events similar to the April 2010 Macondo incident will reoccur. According to the committee that produced the report, it is not possible for a regulator to create a culture of safety in an organization by inspection or audit; that culture needs to come from within the organization. To be successful, the tenets of SEMS must be fully acknowledged and accepted by workers, motivated from the top, and supported throughout the organization and must drive worker actions. The report also notes that BSEE can encourage and aid industry in development of a culture of safety by the way it measures and enforces SEMS. The committee believes BSEE should seize this opportunity to make a step change in safety culture by adopting a goal based holistic approach to evaluating the effectiveness of SEMS programs. In recommending a holistic approach to evaluating the effectiveness of SEMS programs, the report explores in detail the role of SEMS in helping to develop a culture of safety, highlights the pros and cons of various methods of assessing the effectiveness of a SEMS program, and investigates existing approaches for assessing the SMS programs of various U.S. and international regulatory agencies whose safety mandates are similar to that of BSEE.

osha psm audit checklist: OSHA Field Inspection Reference Manual , 1995 Learn where OSHA inspectors will look, what they'll look for, how they'll evaluate your working conditions, and how they'll actually proceed once inside your facility. This manual, used by OSHA, gives you insight into OSHA's views on abatement, fatality/catastrophe investigations, citations, imminent danger investigations, penalties, construction inspections, review commission, and federal agency inspections.

osha psm audit checklist: Chemical Process Safety Daniel A. Crowl, Joseph F. Louvar, 2001-10-16 Combines academic theory with practical industry experience Updated to include the latest regulations and references Covers hazard identification, risk assessment, and inherent safety Case studies and problem sets enhance learning Long-awaited revision of the industry best seller. This fully revised second edition of Chemical Process Safety: Fundamentals with Applications combines rigorous academic methods with real-life industrial experience to create a unique resource for students and professionals alike. The primary focus on technical fundamentals of chemical process safety provides a solid groundwork for understanding, with full coverage of both prevention and mitigation measures. Subjects include: Toxicology and industrial hygiene Vapor and liquid releases and dispersion modeling Flammability characterization Relief and explosion venting In addition to an overview of government regulations, the book introduces the resources of the AIChE Center for Chemical Process Safety library. Guidelines are offered for hazard identification and risk assessment. The book concludes with case histories drawn directly from the authors' experience in the field. A perfect reference for industry professionals, Chemical Process Safety: Fundamentals with Applications, Second Edition is also ideal for teaching at the graduate and senior undergraduate levels. Each chapter includes 30 problems, and a solutions manual is now available for instructors.

osha psm audit checklist: Compliance Guidance and Model Risk Management Program for Water Treatment Plants Peter S. Puglionesi, 1998

osha psm audit checklist: Occupational Health & Safety Management Systems - Specification , 2002

osha psm audit checklist: Risk Management Program Guidance for Offsite Consequence Analysis , 1999

osha psm audit checklist: Guidelines for Integrating Process Safety into Engineering Projects CCPS (Center for Chemical Process Safety), 2018-12-11 There is much industry guidance on implementing engineering projects and a similar amount of guidance on Process Safety Management (PSM). However, there is a gap in transferring the key deliverables from the engineering group to the operations group, where PSM is implemented. This book provides the engineering and process safety deliverables for each project phase along with the impacts to the project budget, timeline and the safety and operability of the delivered equipment.

osha psm audit checklist: The Safety Professional's Role Edward Tokarski, 2013-12-30 The Safety Professional's Role: In Support of Industrial Facilities Operations and Maintenance (O&M) discusses how the safety professional, in direct support of a manager (or management group) of an industrial facility, can provide the advice and support needed to control hazards, minimize risk and maximize workplace safety at these inherently dangerous locations and during potentially dangerous operations. Chemical processing, in one form or another, serves as the engine of a global economy. Raw materials, whether extracted by drilling and mining, grown and cultivated in crops, or recovered from reusable materials, must be refined and processed into useful bulk materials and chemicals. These processes usually involve work around or with chemicals that possess hazardous qualities such as flammability, explosiveness, toxicity, or reactivity. These refined materials and bulk chemicals are then delivered to in the next stage of manufacture where they are used responsibly to produce the goods and products that make modern day living more comfortable and enjoyable. It is this process of chemical refinement and safe use and handling of these chemicals in manufacturing that is explored in this text, particularly the practice of assessing and controlling the risk associated with the industrial use of these highly hazardous chemicals (HHCs). You may know this policy and practice as "Process Safety Management". Work with HHCs clearly increases the risks and hazards at the job site where they are being stored, used and processed. Facility managers responsible for managing the complexities of Maintenance and Operations (O&M) associated with industrial facilities, turn to trained, educated, and experienced safety professionals for reliable safety advice, training and management support. Industrial Safety professionals, be they General Safety Practitioner, or specialists such as Industrial Hygienist, Environmental Affairs Manager, Hazardous Waste Coordinator, Chemical Hygiene Officer, Project Safety Manager, or Occupational Health Nurse can benefit from the findings and suggestions presented in this text. The Safety Professional's Role: In Support of Industrial Facilities Operations and Maintenance (O&M) essentially serves as a roadmap of recommendations that a Safety Professional, engaged in O&M support, can use to be more responsive to the many needs of his or her process plant.

osha psm audit checklist: Safety Made Easy John R. Grubbs, Sean M. Nelson, 2007-03-06 If you're new to the safety field, or if you've just been given safety responsibilities, making sense of your compliance responsibilities can be overwhelming! This newly updated and easy-to-read guide is your key to understanding and complying with the Title 29 Code of Federal Regulations (CFR) Parts 1900-1910.END. It addresses common OSHA regulations in alphabetical order and helps eliminate the regulatory circles that make compliance difficult. Filled with illustrations, recommendations, and sample documents, this reference contains 34 sections on selected topics from the CFRs that all general-industry safety professionals must understand, including the forklift, personal protective equipment, and respiratory standards; workplace ergonomic standard; and Hazardous Waste Operations and Emergency Response (HAZWOPER). New features included in this edition include terms and definitions within each section, section summaries to help you quickly locate needed information, and new 'Best Practice' recommendations for achieving compliance. Other features in this book include a description of the authority and mechanics of the OSHA inspection; addresses, telephone numbers, and fax numbers for the OSHA Regional Offices; a list of published resources; useful references; and a self-inspection checklist featuring 19 pages of requirements.

osha psm audit checklist: *Guidance Manual for Developing Best Management Practices (BMP)*. , 1993

osha psm audit checklist: *Guidelines for Implementing Process Safety Management* CCPS

(Center for Chemical Process Safety), 2016-06-30 The 2nd edition provides an update of information since the publication of the first edition including best practices for managing process safety developed by industry as well as incorporate the additional process safety elements. In addition the book includes a focus on maintaining and improving a Process Safety Management (PSM) System. This 2nd edition also provides how to information to determine process safety performance status, implement one or more new elements into an existing PSM system, maintain or improve an existing PSM system, and manage future process safety performance.

osha psm audit checklist: Federal acquisition regulation supplement (NASA/FAR supplement). United States. National Aeronautics and Space Administration, 1984

osha psm audit checklist: Process Risk and Reliability Management Ian Sutton, 2018-11-13 In the last twenty years considerable progress has been made in process risk and reliability management, particularly in regard to regulatory compliance. Many companies are now looking to go beyond mere compliance; they are expanding their process safety management (PSM) programs to improve performance not just in safety, but also in environmental compliance, quality control and overall profitability. Techniques and principles are illustrated with numerous examples from chemical plants, refineries, transportation, pipelines and offshore oil and gas. This book helps executives, managers and technical professionals achieve not only their current PSM goals, but also to make the transition to a broader operational integrity strategy. The book focuses on the energy and process industries- from refineries, to pipelines, chemical plants, transportation, energy and offshore facilities. The techniques described in the book can also be applied to a wide range of non-process industries. The book is both thorough and practical. It discusses theoretical principles in a wide variety of areas such as management of change, risk analysis and incident investigation, and then goes on to show how these principles work in practice, either in the design office or in an operating facility. The second edition has been expanded, revised and updated and many new sections have been added including: The impact of resource limitations, a review of some recent major incidents, the value of story-telling as a means of conveying process safety values and principles, and the impact of the proposed changes to the OSHA PSM standard. Learn how to develop a thorough and complete process safety management program. Go beyond traditional hazards analysis and risk management programs to explore a company's entire range of procedures, processes and management issues. Understand how to develop a culture of process safety and operational excellence that goes beyond simple rule compliance. Develop process safety programs for both onshore facilities (EPA, OSHA) and offshore platforms and rigs (BSEE) and to meet Safety Case requirements.

osha psm audit checklist: Guidelines on Occupational Safety and Health Management Systems International Labour Office, 2001 These guidelines have been prepared by the International Labour Office in order to assist employers and national organisations with practical advice on implementing and improving occupational safety and health (OSH) management systems, in order to reduce work-related injuries, occupational ill health and diseases and unsafe working conditions. The guidelines may be applied on two levels: they provide a national OSH framework for legal and voluntary regulatory standards; and encourage the integration of OSH management principles with overall policy management at the organisational level.

osha psm audit checklist: Risk Assessment Georgi Popov, Bruce K. Lyon, Bruce D. Hollcroft, 2016-06-27 Covers the fundamentals of risk assessment and emphasizes taking a practical approach in the application of the techniques Written as a primer for students and employed safety professionals covering the fundamentals of risk assessment and emphasizing a practical approach in the application of the techniques Each chapter is developed as a stand-alone essay, making it easier to cover a subject Includes interactive exercises, links, videos, and downloadable risk assessment tools Addresses criteria prescribed by the Accreditation Board for Engineering and Technology (ABET) for safety programs

osha psm audit checklist: NASA System Safety Handbook Homayoon Dezfuli, 2012-02-27 System safety is the application of engineering and management principles, criteria, and techniques

to optimize safety within the constraints of operational effectiveness, time, and cost throughout all phases of the system life cycle. System safety is to safety as systems engineering is to engineering. When performing appropriate analysis, the evaluation is performed holistically by tying into systems engineering practices and ensuring that system safety has an integrated system-level perspective. The NASA System Safety Handbook presents the overall framework for System Safety and provides the general concepts needed to implement the framework. The treatment addresses activities throughout the system life cycle to assure that the system meets safety performance requirements and is as safe as reasonably practicable. This handbook is intended for project management and engineering teams and for those with review and oversight responsibilities. It can be used both in a forward-thinking mode to promote the development of safe systems, and in a retrospective mode to determine whether desired safety objectives have been achieved. The topics covered in this volume include general approaches for formulating a hierarchy of safety objectives, generating a corresponding hierarchical set of safety claims, characterizing the system safety activities needed to provide supporting evidence, and presenting a risk-informed safety case that validates the claims. Volume 2, to be completed in 2012, will provide specific guidance on the conduct of the major system safety activities and the development of the evidence.

osha psm audit checklist: *Accident/Incident Prevention Techniques* Charles D. Reese, 2011-10-25 Published more than ten years ago, the first edition of *Accident/Incident Prevention Techniques* provided clear, comprehensive guidance on how to mitigate the cost, in personnel and to the bottom line, of accidents/incidents in the workplace. Significantly revised and updated, this Second Edition takes its place as the A to Z hands-on guide to the r

osha psm audit checklist: *Contractor and Client Relations to Assure Process Safety* William F. Early, II, 2010-09-07 Written and edited by engineering contractors and industry project/maintenance managers as an easy-to-use guide for other industry professionals, this book identifies important process safety issues in the contractor-client relationship, which are not addressed by other groups and publications. While the issues may arise at any point in the life cycle of a plant, they should be resolved early in the relationship to permit a clearer focus on process safety issues. Topics covered are a general discussion of contractor safety programs; EPC (engineering, procurement, construction) contractual bases and work division as they address regulatory PSM issues; subcontractor relationships; and managing contractor-client risks.

osha psm audit checklist: *What Went Wrong?* Trevor A. Kletz, 1985

osha psm audit checklist: *Safe Work Practices for Wastewater Treatment Plants* Frank R. Spellman, Kathern D. Welsh, 2018-10-08 This book details how to start and maintain a successful safety program in a municipal or industrial water or wastewater plant with special emphasis on the practical implementation. This new edition provides the latest OSHA regulations and recommendations, and each chapter has been updated with new information, including the latest innovations related to all types of successfully proven health and safety protocols. Coverage includes safety programs, recordkeeping, safety training, safety equipment, and safe work practices for wastewater treatment facilities. In addition, much of the text should be relevant to safety and health professionals in almost any industrial setting.

osha psm audit checklist: *Guidelines for Chemical Process Quantitative Risk Analysis* CCPS (Center for Chemical Process Safety), 2010-08-27 Chemical process quantitative risk analysis (CPQRA) as applied to the CPI was first fully described in the first edition of this CCPS Guidelines book. This second edition is packed with information reflecting advances in this evolving methodology, and includes worked examples on a CD-ROM. CPQRA is used to identify incident scenarios and evaluate their risk by defining the probability of failure, the various consequences and the potential impact of those consequences. It is an invaluable methodology to evaluate these when qualitative analysis cannot provide adequate understanding and when more information is needed for risk management. This technique provides a means to evaluate acute hazards and alternative risk reduction strategies, and identify areas for cost-effective risk reduction. There are no simple answers when complex issues are concerned, but CPQRA2 offers a cogent, well-illustrated guide to

applying these risk-analysis techniques, particularly to risk control studies. Special Details: Includes CD-ROM with example problems worked using Excel and Quattro Pro. For use with Windows 95, 98, and NT.

osha psm audit checklist: Guidelines for Preventing Human Error in Process Safety CCPS (Center for Chemical Process Safety), 2010-08-13 Almost all the major accident investigations--Texas City, Piper Alpha, the Phillips 66 explosion, Feyzin, Mexico City--show human error as the principal cause, either in design, operations, maintenance, or the management of safety. This book provides practical advice that can substantially reduce human error at all levels. In eight chapters--packed with case studies and examples of simple and advanced techniques for new and existing systems--the book challenges the assumption that human error is unavoidable. Instead, it suggests a systems perspective. This view sees error as a consequence of a mismatch between human capabilities and demands and inappropriate organizational culture. This makes error a manageable factor and, therefore, avoidable.

osha psm audit checklist: Worker Health and Safety on Offshore Wind Farms National Research Council (U.S.). Transportation Research Board. Committee on Offshore Wind Farm Worker Safety, 2013 TRB Special Report 310: Worker Health and Safety on Offshore Wind Farms examines the hazards and risks to workers on offshore wind farms on the outer continental shelf as compared with the hazards and risks to workers on offshore oil and gas operations. The report explores gaps and overlaps in jurisdictional authority for worker health and safety on offshore wind farms and evaluates the adequacy of--and recommends enhancements to--the existing safety management system (SMS) requirement published in 30 CFR 585.810. The study committee recommends that the U.S. Department of the Interior's Bureau of Ocean Energy Management (BOEM) adopt a full SMS rule for workers on offshore wind farms at a level of detail that includes the baseline elements identified in this report. An enhanced SMS rule should require the use of human factors engineering elements in the design process and should encompass all activities that the lessee and its contractors undertake. In collaboration with other regulatory agencies and industry stakeholders, BOEM should clearly define roles and responsibilities and indicate which standards could apply for all phases of wind farm development, regardless of jurisdiction. Also, with the help of stakeholders, BOEM should support the development of guidelines and recommended practices that could be used as guidance documents or adopted by referen-

osha psm audit checklist: Developing Process Safety Indicators , 2006 Describes a six-stage process which can be adopted by organisations wishing to implement a programme of performance monitoring for process safety risks.

Related Articles

- [oxidation and reduction pogil answers](#)
- [pathophysiology final exam](#)
- [perro coje chica](#)

[Back to Home](#)