

**Paperwork Reduction Act Notice**

Persons are not required to respond to this collection of information unless it displays a valid OMB control number. The Occupational Safety and Health Administration (OSHA) requires that State On-Site Consultation program Consultants assessing processes covered by the Process Safety Management of Highly Hazardous Chemicals (PSM) standard apply the PSM Evaluation Worksheet. The worksheet is supported by five (5) optional tables (i.e., Table C-1: Hazards of Highly Hazardous Chemicals (HHCs) Used at the Establishment; Table C-2: Relief System Design and Design Basis Used at the Establishment; Table D: Assessment of the Employer's Written Schedule for Implementing Process Hazard Analysis Recommendations; Table E: Review of Equipment Inspection Records; and Table M: Workers Training Review. (Note: The table lettering corresponds with the lettering of the PSM Program element in the PSM Evaluation Worksheet.)

Consultants must complete all PSM Evaluation Worksheet information before the Consultation Program Manager who oversees a State On-Site Consultation program recommends an applicant for participation in the Safety and Health Achievement Recognition Program (SHARP) or Pre-SHARP whenever the workplace includes one or more processes covered by OSHA or the State Plan's PSM standard.

In accordance with 29 CFR 1908.6(h)(1) and (2), Consultants must preserve the confidentiality of information obtained as a result of a consultative visit, including information that contains or might reveal a trade secret of the employer.

It is estimated that Consultants will take an average of 4 hours to complete 12-18 entries of the PSM Evaluation Worksheet for a limited-service consultation visit; and an average of 12 hours to complete all 53 entries of the worksheet for a full-service consultation visit or SHARP/Pre-SHARP evaluation. This includes the time for reviewing instructions, searching existing data sources, gathering relevant data, conducting an on-site evaluation, as well as completing the worksheet and any optional tables the Consultant chooses to use.

The application of these PSM tools for small business workplaces, will enhance the quality of Consultation services provided to employers who request technical assistance with PSM processes in their workplace.

Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Office of Small Business Assistance, Occupational Safety and Health Administration, Room N-3660, 200 Constitution Avenue, NW, Washington, DC 20210.

## **Appendix L-1: On-Site Consultation Program PSM Evaluation Worksheet**

### **PSM Program Elements**

- A. Compliance Audit
- B. Incident Investigation
- C. Process Safety Information (PSI)
- D. Process Hazard Analyses (PHA)
- E. Mechanical Integrity (MI)
- F. Operating Procedures
- G. Management of Change (MOC)
- H. Pre-Startup Safety Review (PSSR)
- I. Hot Work Permit
- J. Emergency Planning and Response
- K. Employee Participation
- L. Contractors
- M. Training
- N. Trade Secrets

### **Notes:**

- a. Text in italics represent *Employee Participation* or *Training requirements (outside the training element, 29 CFR 1910.119(g))* specified in various PSM Program elements.
- b. Consultants will assess worker protection and participation requirements in the PSM standard for all workers at a site (i.e., host employer's workers, contract workers, temporary workers, etc.).
- c. Consultants will apply appropriate technical resources.

Appendix L-1: On-Site Consultation Program PSM Evaluation Worksheet			
	Name of Establishment:	Visit Date(s):	Report Date:
	Describe the PSM covered process(es)/Selected Unit(s) evaluated at the establishment:		
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<b>A</b>	<b>Compliance Audit</b>		
1	a. Was a compliance audit completed at least every three years? (o)(1)		
	b. Does the audit include an evaluation of compliance with all the required paragraphs of the PSM standard? (o)(1)  <u>Evaluation Tip:</u> Compliance audit reports should be looked at closely for an understanding of how the PSM covered process functions, how adjacent processes or other operations near the PSM covered process interact, and potential safety impact.		
	c. Does the audit include a report of the findings? (o)(3)		
	d. <i>Was the compliance audit conducted by at least one person knowledgeable about the process?</i> (o)(2)		
	e. Did the employer retain the two most recent compliance audit reports? (o)(5)		
2	Were all deficiencies noted in the compliance audit report documented as corrected? (o)(4)  <u>Evaluation Tips:</u> Spot check during your walkthrough of the facility to determine if deficiencies were corrected as documented. Did the employer implement appropriate corrective measures? Did you find additional deficiencies that should have been identified during the compliance audit and corrected? The consultant should use technical resources such as consensus standards to make a determination.		
3	Additional evaluation findings?		
<b>B</b>	<b>Incident Investigation</b>		
4	a. Were <u>proper</u> incident investigations conducted for all incidents that resulted in or could reasonably have resulted in a catastrophic release of highly hazardous chemicals (HHCs) in the process area or Selected Unit; as soon as possible, but not later than 48 hours following an incident? (m)(1), (m)(2), (m)(4)		

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	b. Did the employer establish a system to promptly address and resolve the incident report findings and recommendations? (m)(5)		
	c. Did the employer document corrective actions from the report? (m)(5) Were the documented corrective actions implemented at the establishment?  <u>Evaluation Tips:</u> Verify during walkthrough if recommendations/document corrective actions were implemented; and if they are effective (e.g., through observations and interviews). Did incident investigations identify the factors that contributed to an incident (to accomplish this employers should focus on identifying root causes)? Are corrective actions adequate to prevent recurrence? Are catastrophic incidents addressed in the Process Hazard Analyses (PHA)?		
	d. Were incident investigation reports retained for five years? (m)(7)		
5	<i>Did incident investigation teams comprise at least one person knowledgeable about the process area/Selected Unit; a contractor employee if contractor work was involved; and other knowledgeable and experienced persons? (m)(3)</i>		
6	<i>a. Were incident investigation reports reviewed with all affected employees whose job tasks are relevant to the incident findings? (m)(6)</i>		
	<i>b. How did the employer review the report with affected employees (e.g., meetings to discuss the report – findings and corrective actions proposed/taken)? Did employees provide any input or feedback? Were employees input/feedback incorporated where relevant?</i> <u>Evaluation Tips:</u> Identify and interview affected employees, supervisors, and managers. Please note that consultants should assess if the report was reviewed with <u>all</u> affected employees (i.e., host employer's workers, contract employees, temporary workers, etc.).		

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7	Additional evaluation findings?		
<b>C</b>	<b>Process Safety Information (PSI)</b>		
8	<p>a. Did the written PSI include <u>information pertaining to hazards of the HHC</u> used in the process/Selected Unit:</p> <ul style="list-style-type: none"> <li>i. Toxicity information?</li> <li>ii. Permissible exposure limits?</li> <li>iii. Physical data?</li> <li>iv. Reactivity data?</li> <li>v. Corrosivity data?</li> <li>vi. Thermal and chemical stability data?</li> <li>vii. Hazardous effects of inadvertently mixing different materials that could foreseeably occur?</li> </ul> <p>(d)(1) through (d)(1)(vii)</p>		
	<p>b. Collect and review the following information:</p> <ul style="list-style-type: none"> <li>i. List of HHCs used</li> <li>ii. Maximum intended inventory</li> <li>iii. Quantity of HHC present</li> </ul> <p>May use Table C-1 as a guide.</p> <p><u>Note:</u> Safety Data Sheets (SDSs) meeting the requirements of 29 CFR 1910.1200(g) may be used to comply with this requirement if they contain the information required by 29 CFR 1910.119(d).</p>		
9	a. Did the PSI include <u>information pertaining to the technology</u> of the process/Selected Unit? (d)(2)		
	b. Were block flow diagrams available and accurate? (d)(2)(i)(A)		
	<p>c. Process chemistry? (d)(2)(i)(B)</p> <p><u>Evaluation Tips:</u> Where chemical mixing is done: Are there controls in place to ensure that process chemicals are not impure or contaminated? Are there procedures in place to prevent mixing wrong chemicals or mixing chemicals with the wrong concentration?</p>		
	d. Maximum intended inventory? (d)(2)(i)(C)		

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	<u>Evaluation Tips:</u> Is the maximum intended inventory documented? Is the process operating above the documented maximum inventory? Are inventory limit controls functioning properly to prevent exceeding the maximum intended inventory?		
	e. Were safe upper/lower design and operational limits for such items as pressures, temperatures, flow rates and compositions documented? (d)(2)(i)(D)  <u>Evaluation Tips:</u> How were the design and operational limits identified (e.g., manufacturer's recommendations, Recognized and Generally Accepted Good Engineering Practices (RAGAGEP)?) Are workers knowledgeable about the limits? What measures are implemented to operate within set limits?		
	f. Were the consequences of deviation documented? (d)(2)(i)(E)  <u>Evaluation Tips:</u> What emergency procedures are in place to mitigate (if feasible) or respond to a failure/deviation?		
	g. Where original technical information no longer exists, was technical information developed in conjunction with the PHA in sufficient detail to support the hazard analysis? (d)(2)(ii)		
10	Did the PSI include <u>information pertaining to equipment used</u> in the process/Selected Unit such as: (d)(3)		
	a. Materials of construction? (d)(3)(i)(A)		
	b. Were Piping and Instrumentation Diagrams (P&IDs) available and accurate? (d)(3)(i)(B)		
	c. Electrical classification? (d)(3)(i)(C)		
	d. Relief system design and design basis? (d)(3)(i)(D)  May use Table C-2 as a guide.		
	e. Ventilation system design? (d)(3)(i)(E)		
	f. Design codes and standards employed? (d)(3)(i)(F)		

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	g. Material and energy balances for processes built after May 26, 1992? (d)(3)(i)(G)		
	h. Safety systems (e.g., interlocks, detection or suppression systems) (d)(3)(i)(H)		
	i. Does equipment comply with Recognized and Generally Accepted Good Engineering Practices (RAGAGEP)? (d)(3)(ii)		
	j. Is existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in use?  If yes, how did the employer determine that the equipment is designed, maintained, inspected, tested, and operating in a safe manner (this information must also be documented by the employer)? (d)(3)(iii)  <u>Evaluation Tips:</u> Are safety systems for equipment adequate? Is there impact from adjacent equipment or operation? Are equipment and wiring used in the process area of the proper electrical classification for the process area? Is equipment in deficient condition used? Is equipment operated outside of its normal operating limit?		
11	Additional evaluation findings?		
<b>D</b>	<b>Process Hazard Analyses (PHA)</b>		
12	Has a PHA been performed for the process/Selected Unit such that it:		
	a. Addresses <u>all hazards</u> of the process/Selected Unit? (e)(3)(i)  <u>Evaluation Tips:</u> Process hazard evaluations should include an assessment of how deviations from the design plan could occur, such as, high/low/no flow, high/low/no pressure, high/low temperature.		
	b. Uses an appropriate methodology or combination of methodologies to evaluate hazards (e.g., what-ifs, checklists, what-ifs/checklists, hazards and operability study (HAZOP), failure mode and effects analysis		

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	(FMEA), fault tree analysis, or an appropriate equivalent method)? (e)(2) through (e)(2)(vii)		
	c. Identifies previous incidents which had a likely potential for catastrophic consequences in the workplace? (e)(3)(ii)		
	d. Identifies engineering (i.e., safety systems) and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases? Are work practices and PPE addressed? (e)(3)(iii); (f)(4); (f)(1)(iii)(B)  <u>Evaluation Tip:</u> Are engineering and administrative controls, safe work practices, and PPE adequate to prevent workers exposure to identified hazards?		
	e. Identifies the consequences of failure of engineering and administrative controls? (e)(3)(iv)		
	f. Includes a qualitative evaluation of a range of possible safety and health effects of the failure of control measures on employees? (e)(3)(vii)  <u>Evaluation Tip:</u> Is the qualitative evaluation adequate?		
	g. Adequately assesses facility siting? (e)(3)(v)		
	h. Properly assess human factors? (e)(3)(vi)  <u>Evaluation Tip:</u> Were measures taken to eliminate or reduce the frequency and/or consequences/severity of potential incidents involving human factor issues?		
13	a. Did the employer consult with employees and their representatives on the conduct and development of the PHA [and all other information required to be developed by the PSM standard (29 CFR 1910.119)]? (c)(2)		
	b. Were the original PHA and revalidations conducted by a team that included at least one employee with experience and knowledge specific to the process evaluated? Was at		

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	least one team member knowledgeable in the specific PHA methodology used? (e)(4)		
	c. Is the PHA updated and revalidated at least every five years? (e)(6)		
	d. Are all initial PHAs, updates or revalidations and documented resolution of recommendations kept for the life of the process? (e)(7)		
14	<p>a. Does the employer have a system (written or otherwise) for promptly addressing PHA findings and recommendations? (e)(5)</p> <p>May use Table D-1 as a guide.</p> <p><u>Evaluation Tips:</u> What is the employer's system – interview employees, supervisors and managers; review relevant documentation? Is there a written schedule of when actions are to be completed? <i>Are actions/recommendations communicated to maintenance and other employees whose job tasks are in the process and who may be affected by the actions/recommendations?</i> (e)(5)</p>		
	b. Does the system properly address PHA findings?		
15	Can workers and their representatives request and receive access to PHA and other information required by the PSM standard? (c)(3)		
<b>E</b>	<b>Mechanical Integrity (MI)</b>		
16	<p>Are there written MI procedures to ensure that process equipment is maintained in good working condition, including the following:</p> <ul style="list-style-type: none"> <li>i. Pressure vessels and storage tanks</li> <li>ii. Piping systems, components, valves</li> <li>iii. Relief and vent systems and devices</li> <li>iv. Emergency shutdown systems</li> <li>v. Controls (including monitoring devices and sensors, alarms, and interlocks)</li> <li>vi. Pumps</li> </ul> <p>(j)(1)&amp;(2)</p> <p><u>Evaluation Tips:</u></p>		



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	Spot check safety systems identified in the PHA for written and implemented MI procedures. Check for proper installation of insulation, moisture and/or ice formation on insulated lines, evidence of corrosion, name plates for relief valves and pressure vessels, leakages, machine room equipment and condition, and ventilation system condition?		
17	a. Did the employer implement procedures for proper inspections and testing of process equipment? (j)(4)(i)		
	b. Are required tests/inspections performed on process equipment as recommended by the manufacturer and RAGAGEP? (j)(4)(ii)		
	c. Is the frequency of tests/inspections performed on process equipment as recommended by the manufacturer and RAGAGEP, and more frequently if determined to be necessary due to previous operating occurrence(s)? (j)(4)(iii)		
	d. Did the employer document each inspection and test conducted on process equipment (i.e., date of the inspection/test, name of the person that did it, equipment serial number/other identifier, description of the inspection/test performed, and the results)? (j)(4)(iv)		
	<p>e. Did the employer correct equipment deficiencies that are outside acceptable operating limits (as defined by the PSI), before further use; or in a safe and timely manner when protective measures are implemented to assure safe operation? (j)(5)</p> <p>May use Table E as a guide.</p> <p><u>Evaluation Tips:</u> Review testing and inspection records for process equipment (this should include associated safety systems) for the process/Selected Unit.</p> <p><u>Note:</u> Testing and inspection are different. Testing and inspection must be performed on process equipment, using procedures that follow recognized and generally accepted good engineering practices. The frequency of tests and</p>		

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	<p>inspections of process equipment must conform to manufacturers' recommendations and good engineering practices, or more frequently if determined to be necessary by prior operating experience. Each test and inspection on process equipment must be documented, identifying the date of the test or inspection, the name of the person who performed the test or inspection, the serial number or other identifier of the equipment on which the test or inspection was performed, a description of the test or inspection performed, and the results.</p> <p>Request and review work orders for controls in the process/Selected Unit to assess control deficiencies that exist.</p> <p>Inspect equipment during the walkthrough (this should include associated safety systems):                  Does it appear that equipment is being maintained in good working condition? Is there evidence that corrective actions were implemented and effective? Are associated control measures/safety systems inspected, tested, and maintained in good operating conditions?</p> <p>Were metal thickness measurements adequately addressed? Assess the frequency of metal thickness measurements and indications (e.g., wall thinning could result in rupture or leak) in the process/Selected Unit – do spot checks.</p>		
18	Did the employer have a Quality Assurance program for the process/Selected Unit to verify the following:		
	a. New equipment is suitable for process application? (j)(6)(i)		
	b. Appropriate checks and inspections are performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions? (j)(6)(ii)		
	c. Spare parts, maintenance materials, and equipment are suitable for the process application for which they will be used? (j)(6)(iii)		
19	<i>Are workers involved in maintaining the ongoing integrity of process equipment trained in an overview of the process</i>		

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	<i>and its hazards, as well as in the procedures applicable to their job tasks to assure that each worker can perform the job tasks in a safe manner? (j)(3)</i>		
20	Additional evaluation findings?		
<b>F</b>	<b>Operating Procedures</b>		
21	a. Did the employer develop and implement written operating procedures with clear instructions for safely conducting activities consistent with the PSI for the process/Selected Unit? (f)(1)		
	b. Are operating procedures readily accessible to employees who work in or maintain a process? (f)(2)		
	c. Are operating procedures reviewed as often as necessary to reflect current operating practices, including changes that result from changes in process chemicals, technology, equipment and facilities? (f)(3)		
	d. Does the employer certify annually that operating procedures are current and accurate? (f)(3)		
22	Do operating procedures for the process/Selected Unit address at least the following:		
	a. Steps of each operating phase, including: <ul style="list-style-type: none"> <li>i. Initial startup</li> <li>ii. Normal operations</li> <li>iii. Temporary operations</li> <li>iv. Emergency shutdowns</li> <li>v. Emergency operations</li> <li>vi. Normal shutdown</li> <li>vii. Startups following a turnaround or emergency shutdown</li> </ul> (f)(1)(i)(A) through (G)		
	b. Operating limits, including consequences of deviation, and steps required to correct or avoid deviation? (f)(1)(ii)(A)&(B) (d)(2)(i)(E)  <u>Evaluation Tips:</u> Interview operators – Do workers know the consequences of deviation identified in the PSI? Do workers know the steps to avoid deviation? Do workers know what is required to correct deviation?		

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	<p>c. Safety and health considerations, including the following:</p> <ul style="list-style-type: none"> <li>i. Chemical properties and hazards of chemicals used in the process</li> <li>ii. Precautions necessary to prevent exposure</li> <li>iii. Control measures to take when there is physical contact or airborne exposure</li> <li>iv. Quality control for raw materials and control of hazardous chemical inventory levels</li> <li>v. Any special or unique hazards?</li> </ul> <p>(f)(1)(iii)(A) through (E)</p> <p><u>Evaluation Tips:</u> Interview workers to determine if they are aware of safety and health considerations? Observe workers – are they performing their tasks safely?</p>		
	<p>d. Safety Systems and their functions? (f)(1)(iv)</p> <p><u>Evaluation Tips:</u> Review operating procedures and PSI: Was PSI incorporated into operating procedures? Do procedures incorporate safety mechanisms, i.e., engineering and administrative controls and PPE?</p> <p>Do workers know the proper procedures to safely do their work? For example, confirm workers understanding of the process, procedures, and how they do their work (e.g., via interviews, observation). Do workers accounts deviate from the written procedures?</p>		
23	<p><i>Are operating procedures easily accessible to employees who work in the process, including maintenance workers?</i> (f)(2)</p> <p><u>Evaluation Tips:</u> Where are operating procedures kept? How do workers access them? Do workers know the operating procedures to follow?</p>		
24	Did the employer develop and implement safe work practices that apply to its employees and contractor		

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	employees to:		
	a. Control hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping?		
	b. Control entrance into the facility by maintenance, contractor, laboratory, or other support personnel? (f)(4)  <u>Evaluation Tip:</u> Consultants should assess worker protection and participation requirements specified in the PSM standard for all workers at a site (i.e., host employer's workers, contract workers, temporary workers, etc.).		
25	Additional evaluation findings?		
<b>G</b>	<b>Management of Change (MOC)</b>		
26	Are there written procedures for managing change (except for "replacements in kind") to process chemicals, technology, equipment, and procedures, as well as changes to facilities that affect the covered process/Selected Unit? (l)(1)  <u>Evaluation Tips:</u> Review procedures that address responsibilities, steps for assessing risks and approving changes, requirements for reviewing designs for temporary and permanent changes, steps needed to verify that modifications have been made as designed, variance procedures, time limit authorizations for temporary changes, and steps required to return the process to status quo after temporary changes. <u>Inquire how changes are evaluated on short notice and communicated to employees.</u>  <u>Note:</u> Temporary changes have caused a number of catastrophes over the years, and employers must establish ways to detect both temporary, and permanent changes. It is important that a time limit for temporary changes be established and monitored since otherwise, without control, these changes may become permanent. Temporary changes are subject to the management of change provisions. In addition, the management of change		

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	procedures are used to ensure that equipment and procedures are returned to their original or designed conditions at the end of the temporary change. Proper documentation and review of these changes are invaluable to ensuring that safety and health considerations are incorporated into operating procedures and processes.		
27	<p>Do MOC procedures assure that the following are addressed prior to any change in the process/Selected Unit?</p> <ul style="list-style-type: none"> <li>i. Technical basis for the proposed change</li> <li>ii. Impact of the change on safety and health</li> <li>iii. Modifications to operating procedures</li> <li>iv. Necessary time period for the change</li> <li>v. Authorization requirements for the proposed change</li> </ul> <p>(l)(2)</p> <p><u>Evaluation Tips:</u> Follow with a review of recent equipment, process, operations, and/or HHC changes that would require an MOC.</p>		
28	a. Did the employer update the operating procedures, practices, and/or the PSI affected by a change in the PSM covered process/Selected Unit? (l)(4)&(5)		
	b. Were P&IDs completed for a new facility or updated for modification to an existing facility in the process area/Selected Unit? (d)(3)(i)(B)		
	c. Were affected employees and contractors informed and trained on a change in the PSM covered process/Selected Unit prior to start-up? (l)(3)		
29	Additional evaluation findings?		
<b>H</b>	<b>Pre-Startup Safety Review (PSSR)</b>		
30	Indicate if this is a <u>new facility or modification of an existing facility</u> requiring a change in PSI. If yes, was PSSR conducted, and completed prior to the introduction of HHCs to the process? (i)(1)		
31	Did PSSR verify that construction and equipment is in accordance with design specifications? (i)(2)(i)		
32	Did PSSR verify that safety, maintenance, operating and emergency procedures are in place and adequate? (i)(2)(ii)		

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	29 CFR 1910.119... (The references in this table refer to paragraphs of 29 CFR 1910.119, except otherwise specified. For example, (o)(1) refers to 29 CFR 1910.119(o)(1))	<b>Yes/No</b>	<b>Findings and Recommendations</b>
33	a. Were Management of Change (MOC) procedures followed for changes or modifications to an existing facility?		
	b. For a new facility was a PHA performed and recommendations resolved or implemented before startup? (i)(2)(iii)		
34	<i>Did PSSR verify that each employee involved in operations in the process/Selected Unit received training before startup?</i> (i)(2)(iv)		
35	Additional evaluation findings?		
<b>I</b>	<b>Hot Work Permit</b>		
36	Does the employer issue a hot work permit for hot work operations conducted on or near a covered process/Selected Unit? (k)(1)  <u>Evaluation Tips:</u> Does the establishment have a procedure for evaluating hot work hazards on or near PSM covered processes before issuing a hot work permit?		
37	a. Does the employer retain a statistically-valid number of hot work permits to comply with the audit requirements of 29 CFR 1910.119(o)(1) at least every three years?  <u>Note:</u> 29 CFR 1910.119(k) specifies that the hot work permit must be kept on file until completion of the hot work, however:: <ul style="list-style-type: none"> <li>i. To comply with the provisions of 29 CFR 1910.119(o)(1), an employer must audit the procedures and practices required by PSM and assure they are adequate and are being followed.</li> <li>ii. Since hot work permits are part of the hot work procedure, OSHA expects that employers would audit a statistically-valid number of hot work permits to assure they were completed and implemented per their procedure.</li> <li>iii. Therefore, the employer would need to <u>retain a statistically-valid number of hot work permits</u> to comply with the audit requirements of 29 CFR 1910.119(o)(1) (see <a href="#">OSHA Letter of Interpretation</a>,</li> </ul>		

Appendix L-1: On-Site Consultation Program PSM Evaluation Worksheet			
	Name of Establishment:	Visit Date(s):	Report Date:
	Describe the PSM covered process(es)/Selected Unit(s) evaluated at the establishment:		
	29 CFR 1910.119... (The references in this table refer to paragraphs of 29 CFR 1910.119, except otherwise specified. For example, (o)(1) refers to 29 CFR 1910.119(o)(1))	Yes/No	Findings and Recommendations
	PSM compliance for ammonia refrigeration systems, July 12, 2006, response 10, updated July 7, 2015, Question #4), which requires “employers <u>to certify that they have evaluated compliance with the provisions of 29 CFR 1910.119 at least every three years</u> , to verify that the procedures and practices developed under the standard are adequate and are being followed.”		
	<p>b. Do hot work permits::</p> <ul style="list-style-type: none"> <li>i. Document that the fire prevention and protection requirements in 29 CFR 1910.252(a) have been implemented prior to beginning hot work operations?</li> <li>ii. Specify the date authorized for hot work?</li> <li>iii. Document the identity of the object on which hot work is to be performed?</li> </ul> <p>(k)(2)</p> <p><u>Evaluation Tips:</u> Review the hot work permit – does it require workers to apply appropriate safe work practices to prevent a fire (29 CFR 1910.252(a))?</p> <p>Is there a procedure in place to periodically verify safe work practices identified in hot work permits are followed during hot work operations?</p> <p>Interview employers, supervisors, and workers. For instance, do they know that appropriate safe work practices to prevent a fire are required during hot work operations?</p>		
<b>J</b>	<b>Emergency Planning and Response</b>		
38	<p>Was an emergency action plan (EAP) established and implemented for the entire establishment, covering at a minimum:</p> <ul style="list-style-type: none"> <li>i. Procedures for reporting a fire or other emergency;</li> <li>ii. Procedures for emergency evacuation, including type of evacuation and exit route assignments;</li> <li>iii. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;</li> </ul>		



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	iv. Procedures to account for all employees after evacuation; v. Procedures to be followed by employees performing rescue or medical duties; and vi. The names and job titles of employees that may be contacted by employees who need more information about the EAP or explanation of their duties under the plan.  (n) 29 CFR 1910.38(c)  <u>Evaluation Tip:</u> Interview employees (i.e., host employer's workers, contract workers, temporary workers, etc.). Do employees know the emergency procedures for the process area/Selected Unit? How are emergencies communicated to all employees at the establishment? Is the employer also subject to hazardous waste and emergency response provisions in 29 CFR 1910.120 (a), (p) and (q).		
39	Did the EAP include procedures for handling small releases of chemicals in the process area/Selected Unit? (n)		
40	If employees are engaged in emergency response to hazardous substance releases (except clean-up operations), does the EAP address the following: i. Coordination with outside parties? ii. Personnel roles, lines of authority, training, and communication? iii. Emergency recognition and prevention? iv. Safe distances and places of refuge? v. Site security and control? vi. Evacuation routes and procedures? vii. Decontamination? viii. Emergency medical treatment and first aid? ix. Emergency alerting and response procedures? x. Critique of response and follow-up? xi. PPE and emergency equipment? 29 CFR 1910.120(q)		
41	a. Has the host employer reviewed the EAP with each employee covered by the plan:		

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	i. When the plan was developed or the employee was initially assigned to a job? ii. When the employee's responsibilities under the plan changed? iii. When the plan was changed? (c)(2) 29 CFR1910.38(f)  b. Did the host employer explain applicable provisions of the establishment's EAP to contract workers in the process/Selected Unit before they started work? (h)(2)(iii)  <u>Evaluation Tip:</u> Interview contract workers: do they know the emergency procedures for the process area/Selected Unit?		
42	Additional evaluation findings?		
K	<b>Employee Participation</b> (See additional employee participation evaluation criteria in other elements)		
43	Does the employer have a written plan of action developed for employee participation? (c)(1)  <u>Evaluation Tip:</u> If yes, interview employees to verify implementation.		
44	Were employees involved in developing elements of the PSM Program? (c)(2)  <u>Evaluation Tip:</u> Interview employees to verify/clarify their involvement and if they understand the program.		
45	Additional evaluation findings?		
L	<b>Contractors</b> (See additional information in Emergency Planning and Response)		
	<b>Describe the PSM covered process/Selected Unit that was evaluated (if different from above):</b>		
46	Were the following host employer responsibilities performed as required:		
	a. Did the employer obtain and evaluate information on contractors' safety performance and programs before selection? (h)(2)(i)		

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	b. Did the employer periodically evaluate the performance of contract employers in fulfilling their obligations? (h)(2)(v)		
	<p>c. Did the host employer inform contract employees of the known potential fire, explosion or toxic release hazards related to their jobs and the process/Selected Unit before starting work? (h)(2)(ii)</p> <p><u>Evaluation Tip:</u> Are contract workers aware of the hazards of their work and the PSM covered process?</p>		
	<p>d. Did the host employer develop and implement safe work practices that apply to employees and contractors consistent with 29 CFR 1910.119(f)(4) to:</p> <ul style="list-style-type: none"> <li>i. Control hazards during operations such as lockout/tagout, confined space entry, opening process equipment; ((f)(4))</li> <li>ii. Control entrance into a facility by maintenance, contractor, laboratory, or other support personnel; ((f)(4)); and</li> <li>iii. Control contractors' entrance, presence, and exit from the process area/Selected Unit? ((h)(2)(iv))</li> </ul> <p><u>Evaluation Tip:</u> During the walkthrough observe how contract workers and others enter and exit the process area/Selected Unit: are appropriate procedures followed? What control measures are in place (e.g., permit system or work authorization system)? Consultants should assess worker protection and participation requirements specified in the PSM standard for all workers at a site (i.e., host employer's workers, contract workers, temporary workers, etc.).</p>		
	e. Did the host employer maintain contractors' Injury and Illness logs related to the contractor's work in the process area/Selected Unit? (h)(2)(vi)		
47	a. Did the contract employer establish procedures to assure contract employees follow the safety rules for the facility including safe work practices required by 29 CFR		

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	29 CFR 1910.119... (The references in this table refer to paragraphs of 29 CFR 1910.119, except otherwise specified. For example, (o)(1) refers to 29 CFR 1910.119(o)(1))	<b>Yes/No</b>	<b>Findings and Recommendations</b>
	1910.119(f)(4)? (h)(3)(iv)		
	b. Did the contract employer ensure that contract employees are aware of the known potential fire, explosion or toxic release hazards related to their jobs and the process/Selected Unit, as well as the applicable provisions of the EAP before starting work? (h)(3)(ii)		
	c. Was there a process in place to report unique hazards found or created by the contract employer's work? (h)(3)(v)		
	d. Were contract employees trained in the work practices to safely perform their job tasks? (h)(3)(i)		
	e. Was there a training record with each contract employee's identity, training date, and means used to verify that the employee understood the training? (h)(3)(iii)		
48	Additional evaluation findings?		
<b>M</b>	<b>Training</b> (Additional training evaluation criteria are specified in the MI, MOC, and Contractors elements) May use Table M as a guide.		
49	a. Has each worker involved in operating a process, or before being involved in operating a newly assigned process, been trained in an overview of the process and operating procedures including: <ul style="list-style-type: none"> <li>i. Steps for each operating phase? (i.e., initial startup, normal operations, temporary operations, emergency shutdown, emergency operations, normal shutdown, and startup following a turnaround or emergency shutdown)</li> <li>ii. Operating limits? (i.e., consequences of deviations and steps required to avoid deviations)</li> <li>iii. Safety and health considerations? (i.e., properties and hazards of chemicals used and precautions for preventing exposure)</li> <li>iv. Safety systems and their functions?</li> </ul> (g)(1)(i) (f)		
	b. Did the training include an emphasis on specific safety and health hazards, emergency operations including shutdown, and safe work practices applicable to the worker's job tasks? (g)(1)(i)		

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	29 CFR 1910.119... (The references in this table refer to paragraphs of 29 CFR 1910.119, except otherwise specified. For example, (o)(1) refers to 29 CFR 1910.119(o)(1))	<b>Yes/No</b>	<b>Findings and Recommendations</b>
	<u>Evaluation Tips:</u> Observe workers performing tasks and interview them. Are workers applying proper techniques to safely do their work? Do they know and <u>understand</u> the proper procedures to safely complete their assigned tasks?		
50	a. Has refresher training been provided at least every three years, and more often if necessary, to each worker involved in operating the process?(g)(2)		
	b. Did the employer consult with workers to determine the appropriate frequency of refresher training?(g)(2)  <u>Evaluation Tips:</u> Do workers know the current, documented operating procedures? Are workers able to apply the current procedures effectively? If feasible, observe workers to verify if they are following specified procedures.		
51	a. Has the employer provided a means for ascertaining if each employee involved in operating the process has received and understood training?(g)(3)		
	b. Do training records contain the identity of the worker, the training date, and means used to verify the employee understood the training? (g)(3)  <u>Evaluation Tips:</u> Interview/observe workers, review incident logs (et al) to ascertain training effectiveness.		
52	Did workers receive additional training to effectively perform their job tasks such as training required by trade schools (e.g., electricians), and applicable OSHA standards (e.g., 29 CFR 1910.1200(h)(3), Hazard Communication Standard)?		
53	Additional evaluation findings?		

