

Process Safety Management Overview



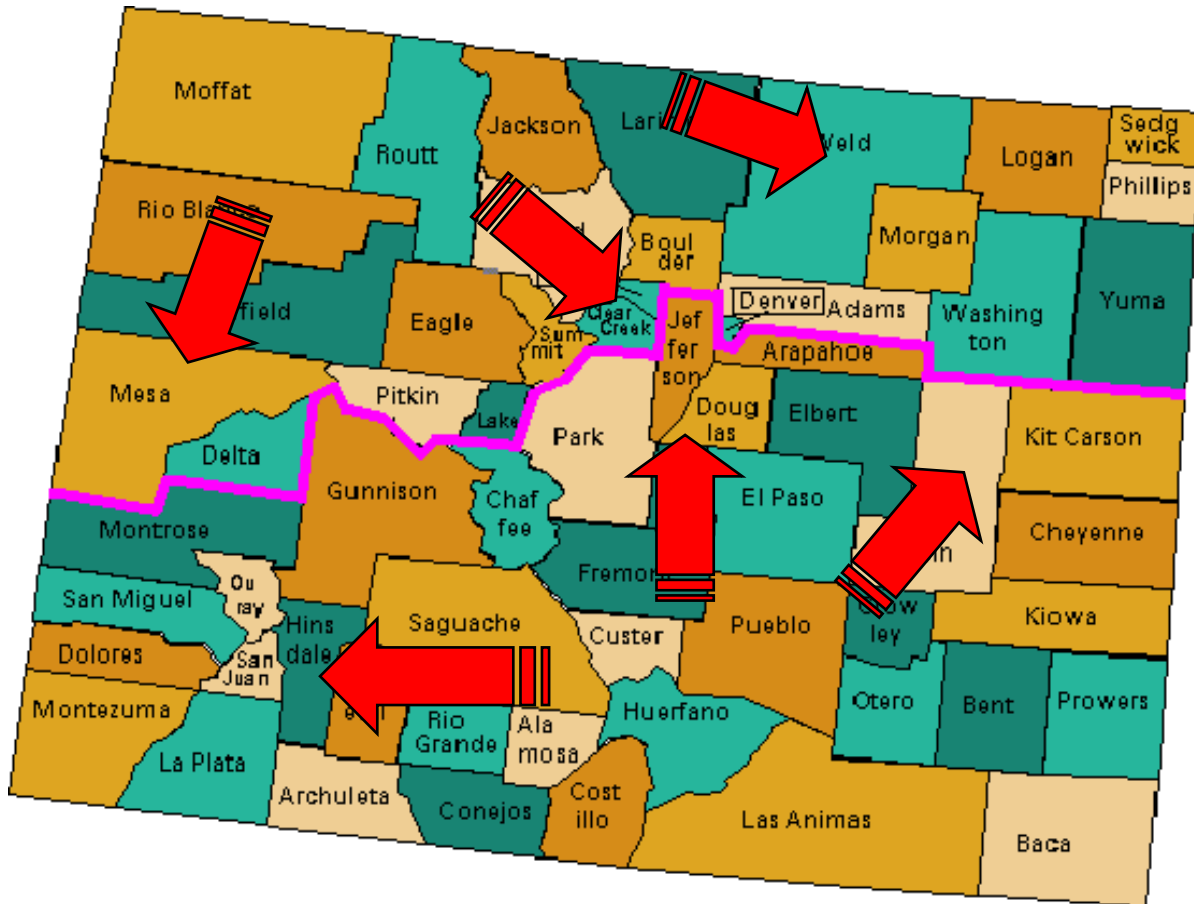
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What Can We Expect?

- Determine coverage under the PSM standard
- Provide a brief overview of the PSM standard
- Describe the National Emphasis Program for inspections of PSM covered chemical facilities
- Clarify recent letters of interpretation and policy updates for PSM covered facilities
- OSHA inspection procedures
- Discuss compliance assistance resources
- Questions

Denver AO - 303-844-5285



**Englewood AO
303-843-4500**

What is PSM?

- 29 CFR 1910.119:
 - Requirements for safe management of hazards associated with processes using, storing, manufacturing, or handling highly hazardous chemicals.
 - Emphasizes management of hazards through comprehensive program that integrates established technologies, procedures and practices

PSM History

- Years of unexpected releases of toxic, reactive or flammable liquids and gases in processes involving highly hazardous chemicals
- Incidents/disasters resulting in death and injury
- Proposed standard published 1990
- Clean Air Act Amendments enacted 1990
- Final Rule issued 1992



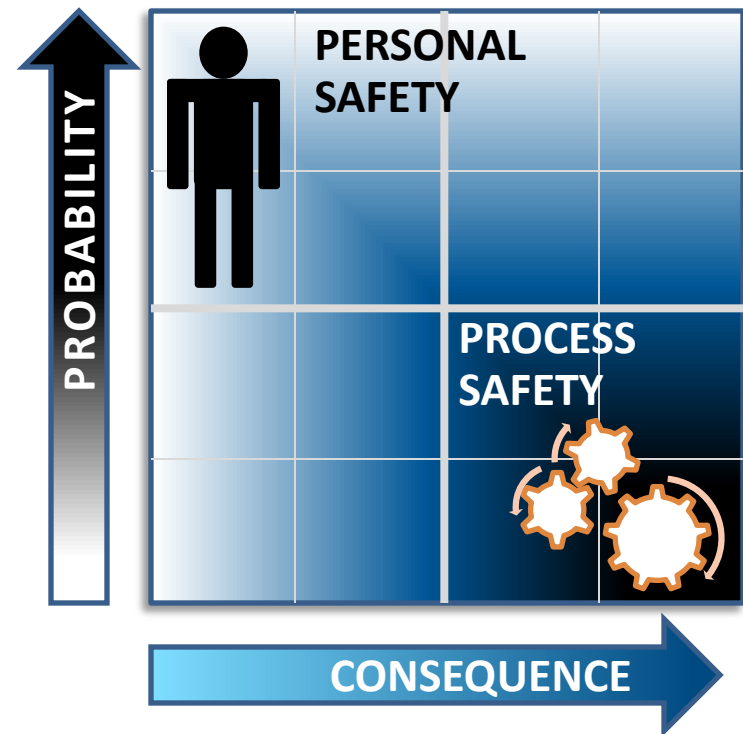
Personal Safety vs. PSM



- A superior **personal safety record** does not necessarily mean a facility's process safety performance is acceptable.
- OSHA often encounters facilities with superior personal safety records that have had a **major process safety incident**.

Personal Safety vs. PSM

- **PROCESS SAFETY** incidents are low probability/high consequence events.
- Conversely, **PERSONAL SAFETY** incidents tend to arise from higher probability/lower consequence events.
- Process safety requires a strong **MANAGEMENT SYSTEMS** approach to identify and control hazards.



Process Safety Management Elements

(a) Application

(b) Definitions

(c) Employee Participation

(d) Process Safety Information

(e) Process Hazard Analysis

(f) Operating Procedures

(g) Training

(h) Contractors

(i) Pre-Startup Safety Review

(j) Mechanical Integrity

(k) Hot Work Permits

(l) Management of Change

(m) Incident Investigation

(n) Emergency Planning and Response

(o) Compliance Audits

(p) Trade Secrets

What is covered?

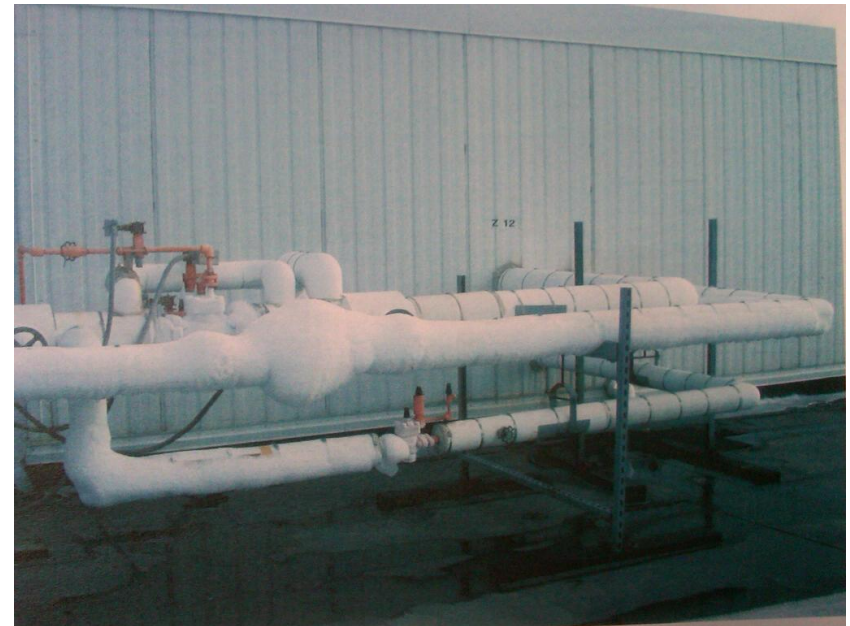
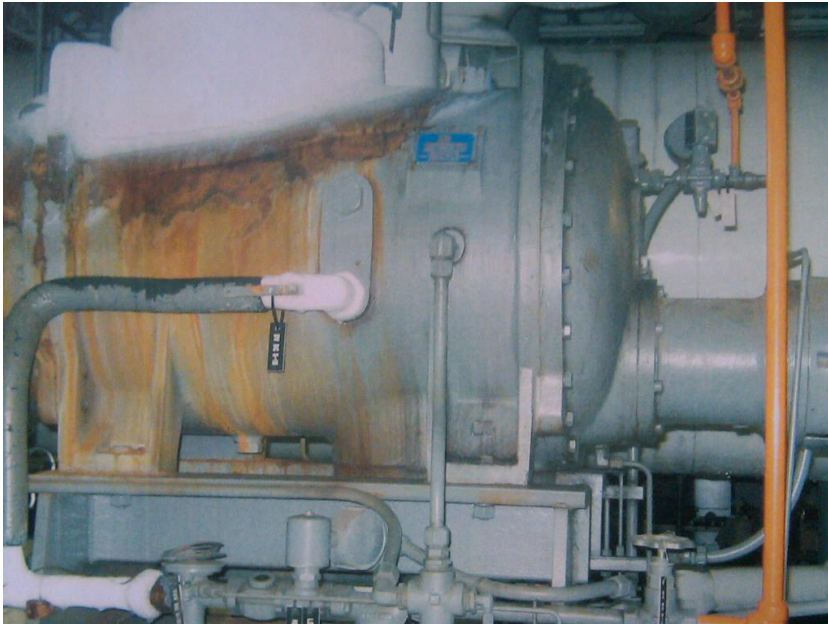
- Processes including:
 - 10,000 pounds of flammable liquids or gasses
 - Threshold quantity (TQ) of a highly hazardous chemical (HHC)
 - 130+ chemicals listed in Appendix A
 - Toxic and/or reactive chemicals

Appendix A

CHEMICAL NAME	CAS*	TQ**
Acetaldehyde	75-07-0	2500
Acrolein (2-Popenal)	107-02-8	150
Acrylyl Chlorde	814-68-6	250
Allyl Chlorid	107-05-1	1000
Allylamine	107-11-9	1000
Alkylaluminum	Varies	5000
Ammonia, Anhydrous	7664-41-7	10000
Ammonia solutions (greater than 44% ammonia by weight)	7664-41-7	15000
Ammonium Perchlorate	7790-98-9	7500
Ammonium Permanganate	7787-36-2	7500

What is covered?

- Example: Ammonia
 - TQ > 10,000 pounds for anhydrous (gas) ammonia
 - Mostly used in refrigeration



What isn't covered?

- Retail facilities
- Oil or gas well drilling or servicing operations
- Normally unoccupied remote facilities
- Hydrocarbon fuels used solely for workplace consumption (ie vehicle refueling)
- Flammable liquids with flash point below 100F and stored in atmospheric tanks and kept below boiling point without refrigeration

Process Safety Information (PSI)

- Employers must compile written process safety information (PSI)
 - Hazards of the HHCs used/produced
 - Technology of the process
 - Equipment in the process

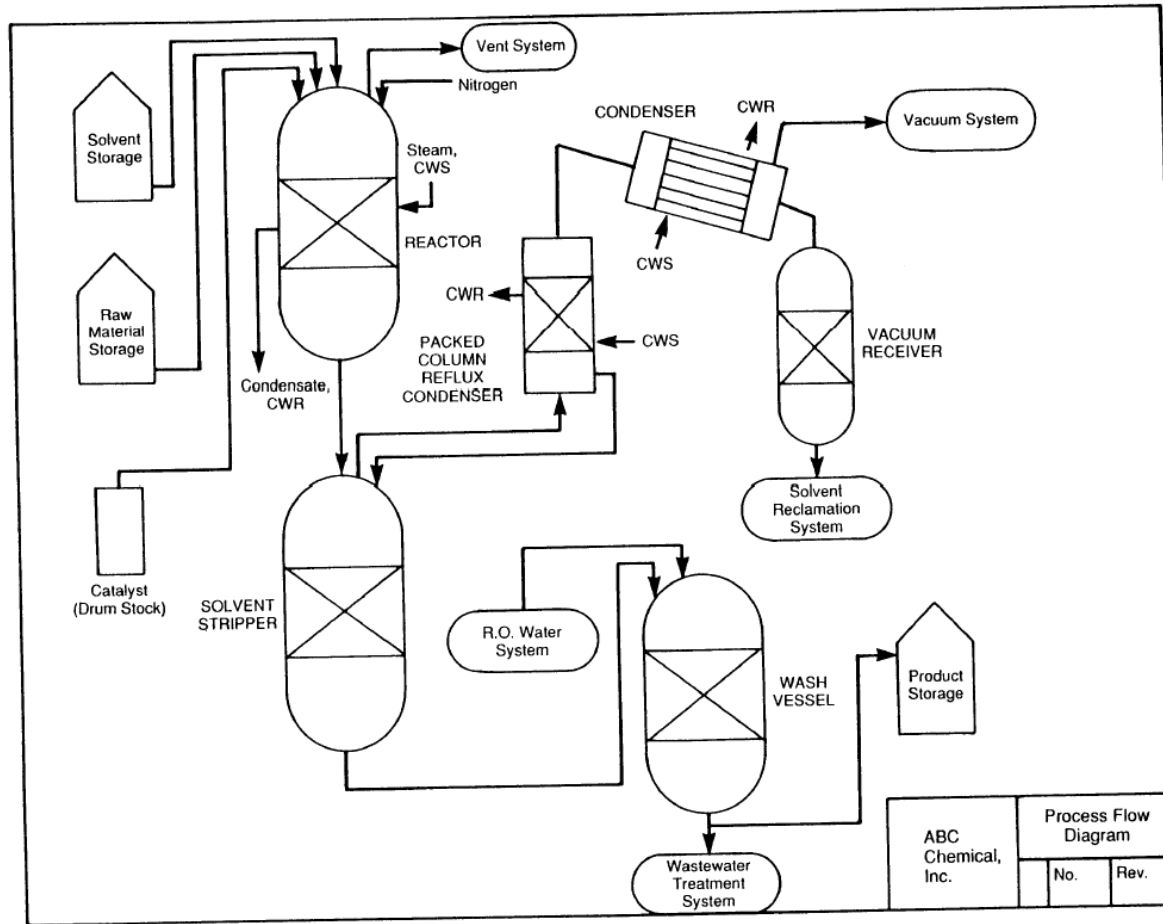
PSI

- Process Hazards
 - Permissible exposure limits (PEL)
 - Physical data
 - Reactivity data
 - Corrosivity data
 - Thermal/chemical stability
 - Effects of mixing
 - SDS may be source

PSI

- Process Technology
 - Block flow diagram/process flow diagram
 - Process chemistry
 - Maximum intended inventory
 - Safe upper/lower limits
 - temperatures, pressures, flows, compositions, pH
 - Evaluation of consequences of deviation

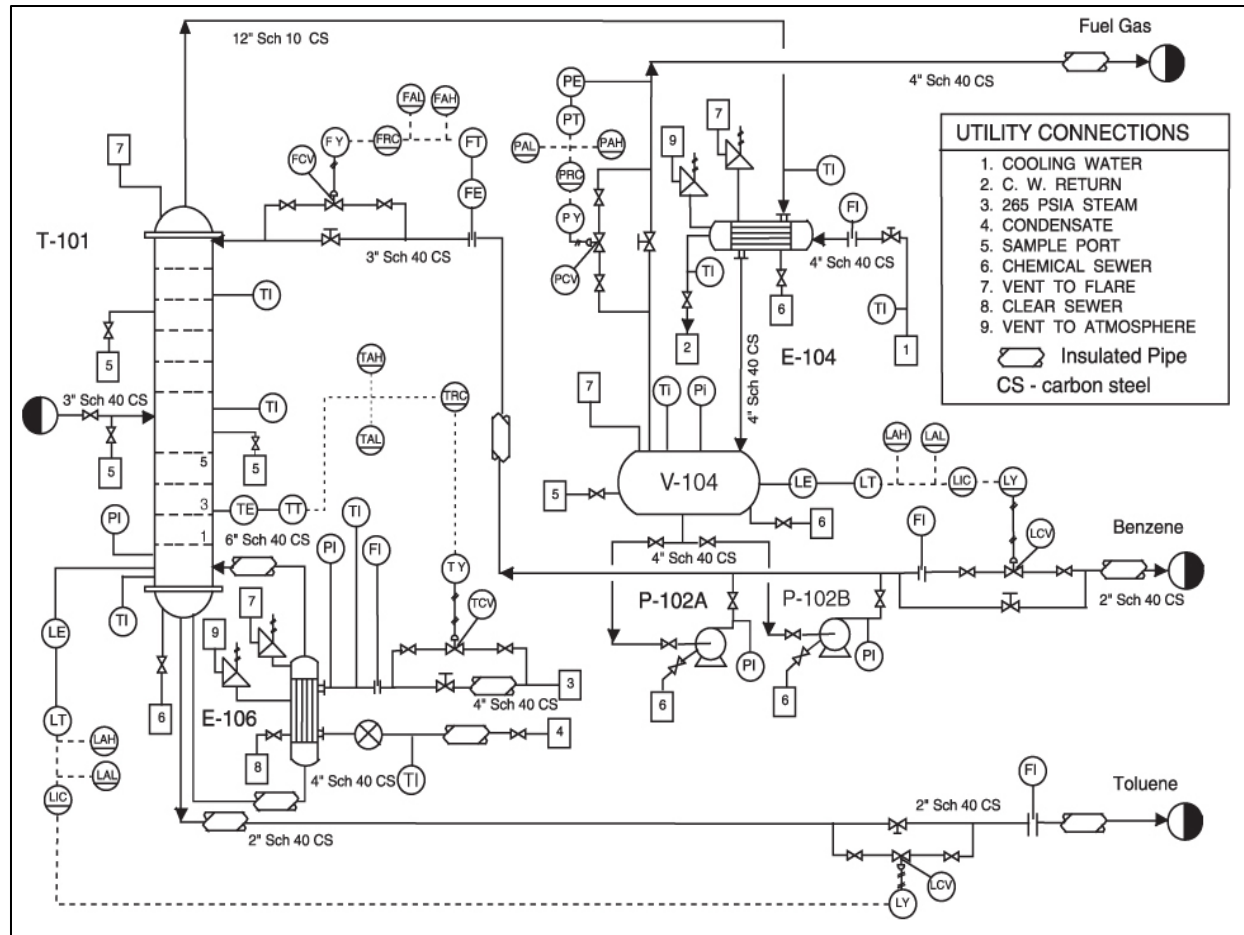
Process Flow Diagram



PSI

- Process Equipment
 - Materials of construction
 - Piping and Instrumentation diagrams (P&IDs)
 - Electrical classification
 - Relief system design and design basis
 - Ventilation system design
 - Design codes and standards (ASME, API, ANSI, CGA, IIAR, etc)
 - Material and energy balances (built after 1992)
 - Safety systems (interlocks, detection, suppression)

Piping and Instrumentation Diagram (P&ID)



PSI

- The employer shall document that the equipment complies with **Recognized and Generally Accepted Good Engineering Practices (RAGAGEP)**
 - ASME, CGA, API, ANSI, IIAR, etc
 - RAGAGEP also applies to Mechanical Integrity
 - RAGAGEP is for equipment design, inspection and testing, and frequency of inspection and testing

PSI

- **Examples of RAGAGEP**
 - ASME (American Society of Mechanical Engineers)
 - ANSI (American National Standards Institute)
 - CGA (Compressed Gas Association)
 - API (American Petroleum Institute)
 - ASTM (American Society for Testing and Materials)
 - IIAR (International Institute of Ammonia Refrigeration)
 - Manufacturer (Operations/Maintenance manuals)
 - Internal RAGAGEP

Process Hazard Analysis (PHA)

- PHA is a thorough, systematic approach for identifying, evaluating and controlling the hazards of processes involving HHCs
 - The employer must perform a PHA on all covered processes
 - The PHA format must meet the complexity of the process
 - The PHA must identify, evaluate, and control the hazards involved in the process

PHA

- PHA Methods
 - What-if
 - Checklist
 - What-if/checklist
 - Hazard and operability study (HAZOP)
 - Failure mode and effects analysis (FMEA)
 - Fault tree analysis, or
 - An appropriate equivalent methodology

» See OSHA publication [3133](#) for more information

PHA

- PHA shall address:
 - Hazards of the process
 - Prior incidents
 - Engineering and administrative controls
 - Consequences of failure of those controls
 - Facility siting
 - Human factors
- Shall be performed by a team
- Shall establish a system to address findings
- Revalidation every 5 years

Operating Procedures

- Written operating procedures for safely conducting activities in each covered process
- Covering:
 - Initial startup, normal/temporary/emergency operations, shutdowns
 - Operating limits, consequences of deviation, and steps required to correct
 - Safety/Health considerations
 - Hazards of chemicals, unique hazards, material control
 - Engineering controls, administrative controls, PPE
 - Safety systems and their functions

Operating Procedures

- Must be readily available to employees
- Reviewed as necessary to reflect current practices
- Annual certification of review

Employee Participation

- Employers must consult with employees and their reps on the development of the elements of process safety management
- Employers shall provide employee access to all information required by the PSM standard
- Employer shall develop a written plan regarding the implementation of employee participation

Training

- Initial training in the process
 - Overview of process and ops procedures
 - Safety and health hazards
 - Emergency operations/shutdown
 - Safe work practices applicable to employee's tasks
- Refresher training at least every 3 years
- Documentation of training (must state the means by which the training was shown to be effective)

Mechanical Integrity

- Written procedures for maintaining the on-going integrity of:
 - Pressure vessels
 - Piping systems
 - Relief and vent systems and devices
 - Emergency shutdown systems
 - Controls (monitoring devices, sensors, alarms, interlocks)
 - Pumps

Mechanical Integrity

- Inspection and testing of equipment shall follow RAGAGEP
- Maintenance employees shall be trained
- Inspections shall be documented
- Equipment deficiencies shall be corrected in a safe and timely manner (ensure safe operation)

MI



Rusted and broken cable to the “snappy joe” shut off valve



Rusted cable repaired by attaching new cable to old rusted piece

MI



Missing paint and rust on ammonia piping. No flow direction or phase markings. Color?



Broken pressure gauges

Management of Change (MOC)

- Written procedures to manage changes to process chemicals, technology, equipment, and procedures that affect a covered process
 - technical basis for proposed change
 - impact of change on safety and health
 - modifications to operating procedures
 - time period for the change
 - authorization requirements for the change
- Does not include “replacements in kind”
- Requires updated PSI, op procedures, training

The other elements...

(a) Application

(b) Definitions

(c) Contractors

(i) Pre-Startup Safety Review

(k) Hot Work Permits

(m) Incident Investigation

(n) Emergency Planning and Response

(o) Compliance Audits

(p) Trade Secrets

Appendix C

(1910.119)

- Non-mandatory Compliance Guidelines
 - Detailed description of each element of the standard
 - Plain language summary and recommendations
 - Good introduction to the standard

ChemNEP Citations by PSM Element

Element	Description	% of PSM Citations	Cum %
j	Mechanical Integrity	26.9	26.9
d	Process Safety Information	19.6	49.2
e	Process Hazard Analysis	15.3	64.5
f	Operating Procedures	10.5	74.9
l	Management of Change	5.2	80.1
h	Contractors	4.7	84.9
o	Compliance Audits	3.6	88.5
n	Emergency Response and Planning	3.4	91.9
g	Training	3.2	95.1
c	Employee Participation	2.1	97.2
m	Incident Investigation	1.3	98.5
i	Pre-startup Review	1.1	99.6
k	Hot Work	0.4	100

Process Safety Management Updates

- Updated NEP
- PSM related memos/interpretations:
 - [Appendix A Concentrations](#)
 - [Retail Exemption](#)
 - [RAGAGEP](#)

Chemical NEP Update for 2016

- Release was scheduled for April
- Updated to include refineries
 - Refinery inspections distributed based on total number per region
- Five targeting categories
 - Ammonia refrigeration – 25 percent
 - Ag ammonia – 10 percent
 - Refineries – based on total per region
 - Chemical facilities (NAICS 325) – 40 percent
 - Other – 25 percent

Change to 1992 Retail Exemption

- Retail Exemption Interpretation
 - Aligns OSHA method with commerce department NAICS Codes
 - Only retail groups 44 and 45 are granted the retail exemption from PSM
 - Sale of...small allotments...to the general public
 - Biggest impact on NAICS 424910 – Farm Supply Merchant Wholesalers
 - However, over 130 unique NAICS codes were using the old interpretation

Change to 1992 Retail Exemption

- Retail Exemption
 - Enforcement Delay
 - No enforcement until October 1, 2016
 - PSM program development is complex
 - Compliance assistance is critical

July 22, 2015

MEMORANDUM FOR: REGIONAL ADMINISTRATORS
STATE PLAN DESIGNEES

THROUGH: DOROTHY DOUGHERTY
Deputy Assistant Secretary

FROM: THOMAS GALASSI, Director
Directorate of Enforcement Programs

SUBJECT: Process Safety Management of Highly Hazardous Chemicals and Application of the Retail Exemption (29 CFR 1910.119(a)(2)(i))

This memorandum revises the Occupational Safety and Health Administration's (OSHA) interpretation of the exemption of retail facilities from coverage of the Process Safety Management of Highly Hazardous Chemicals (PSM) standard (29 CFR 1910.119). The revision is in accordance with the President's August 1, 2013, Executive Order 13650, *Improving Chemical Facility Safety and Security*.⁽¹⁾

The PSM standard contains an exemption from coverage for retail facilities at 29 CFR 1910.119(a)(2)(i). Although the term "retail facility" is not defined, the preamble to the final PSM standard explains that chemicals in retail facilities are generally sold in small packages, containers, and allotments (57 FR 6356, 6369 - February 24, 1992). The preamble gives the example of gasoline stations as a type of facility that would typically qualify for the exemption.

Other Federal Government agencies define retail facilities in similar terms. In particular, the U.S. Department of Commerce, which is responsible for the development of the North American Industry Classification System (NAICS) that organizes businesses into specific industrial sectors for economic and statistical purposes, characterizes retail trade as follows:

The Retail Trade sector comprises establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The retailing process is the final step in the distribution of merchandise; retailers are, therefore, organized to sell merchandise in small quantities to the general public. North American Industry Classification System Manual ("NAICS Manual"), Sector 44-45 - Retail Trade.⁽²⁾

Following the promulgation of the PSM standard, however, OSHA issued a series of letters of interpretation and made statements in the PSM compliance directive (CPL 02-02-045) interpreting the exemption much more broadly. According to these statements, an establishment was exempt from PSM coverage if it derived more than 50 percent of its income from direct sales of highly hazardous chemicals to the end user ("the 50 percent test"). This interpretation, however, has no relationship to OSHA's original intent for application of the exemption, nor is it consistent with either the commonly understood meaning of retail establishment or the definition recognized by the U.S. Department of Commerce in the NAICS Manual.

In addition, the 50 percent test allows employers who sell or distribute large, bulk quantities of highly hazardous chemicals directly to end users to claim the exemption, even if the end users are themselves commercial establishments. This result is directly contrary to OSHA's original intent, as stated in the preamble to the PSM standard. There, OSHA said that it chose to exclude retail facilities from PSM coverage because the small container, package, or allotment sizes of the chemicals typically found at these facilities do not present the same safety hazards as establishments that handle large, bulk quantities of materials. The types of facilities described in the preamble generally fall into NAICS Sectors 44-45 - Retail Trade. In contrast, facilities that handle large, bulk quantities of materials typically fall into NAICS Sector 42 - Wholesale Trade - and include facilities that sell or arrange the purchase or sale of raw and intermediate materials and supplies used in the production of other end products. Because the exemption is limited specifically to retail facilities, it should never have been interpreted to cover facilities engaged in distinctly wholesale activities.

As a result, OSHA hereby rescinds all prior policy documents, letters of interpretation, and memoranda related to the retail exemption and the 50 percent test. OSHA now interprets the retail facilities exemption in accord with its original intent, and in reference to the widely-accepted NAICS Manual:

Only facilities, or the portions of facilities, engaged in retail trade as defined by the current and any future updates to sectors 44 and 45 of the NAICS Manual may be afforded the retail exemption at 29 CFR 1910.119(a)(2)(i).

OSHA will also update the statement of policy related to retail facilities in the PSM compliance directive (CPL 02-02-045) consistent with this new interpretation. Therefore, a compliance safety and health officer (CSHO) may recommend issuance of a citation for any applicable violation(s) of the PSM Standard after determining that the employer's primary NAICS related to the sale of HHCs is something other than a retail trade, as defined in NAICS sectors 44 or 45, and PSM coverage is otherwise established. The area office should contact the appropriate regional office or the Office of Chemical Process Safety and Enforcement Initiatives if there are questions regarding the employer's operations as they relate to the application of the retail exemption.

If, during the course of an inspection, an employer claims it is eligible for the retail exemption, a CSHO should: (1) ask the employer to provide the basis for their retail exemption claim; and (2) review operations of the employer's facility to determine the validity of the exemption claim.

Appendix A contains example questions and answers related to the retail exemption to assist CSHOs in determining the application of this enforcement policy memorandum.

https://www.osha.gov/pls/oshaweb/owa_disp.show_document?p_table=INTERPRETATIONS&p_id=29528

Listed PSM Chemicals

- [Memo on Appendix A Concentrations](#)
 - Aligns OSHA method for calculating threshold quantities for PSM coverage with EPA RMP approach
 - 1% di minimus concentration
 - <10 mm Hg partial pressure not covered
- No formal enforcement delay

Appendix A (Concentrations)

CHEMICAL NAME	CAS*	TQ**
Dimethyldichlorosilane	75-78-5	1000
Dimethylhydrazine, 1,1-	57-14-7	1000
Dimethylamine, Anhydrous	124-40-3	2500
2,4-Dinitroaniline	97-02-9	5000
Ethyl Methyl Ketone Peroxide (also Methyl Ethyl Ketone Peroxide; concentration greater than 60%)	1328-23-4	5000

How Does OSHA come to inspect a facility?

- Programmed Inspections
 - National, Regional or Local Emphasis Programs
- Unprogrammed Inspections
 - Complaints (from employees or their reps)
 - Referrals (from other sources)
 - Reports of fatalities or accidents

FY 15 NEP's

- Amputations in Manufacturing
- Lead Exposures (GI and Construction)
- Silica Exposures (GI and Construction)
- Hexavalent Chromium Exposures
- Chemical Processing Safety
- Combustible Dust
- Trenching and Excavation
- Primary Metals Industries (Foundries)
- Nursing Homes
- Isocyanates

FY 16 Regional and Local EPs

- Regional Emphasis Programs
 - Fall Hazards in Construction
 - Roadway Work Zone Activities
 - Silica in Cut Stone and Slab Handling
 - Oil and Gas Industry
 - Grain Handling Facilities
 - Workplace Violence in Residential Intellectual and Developmental Disability Facilities
- Local Emphasis Programs
 - Hazards in Automotive Services (Billings/Bismarck/Englewood)
 - Asbestos Abatement (Englewood)
 - Scrap & Recycling (Englewood)
 - Wood Manufacturing and Processing (Billings)

Inspection Procedures

- Opening Conference
 - Explain the purpose, nature and scope of the inspection
 - Background information
 - Answer questions
- Walkaround Inspection
 - Observe worksite, look for hazards
 - Employee Interviews
 - Potential sampling/measurement
- Closing Conference

Inspection Procedures (continued)

- Closing Conference
 - Discuss validity of complaint items
 - Discuss findings/hazards observed
 - Discuss abatement
 - Discuss employer rights/possible citations

Tips for a Successful OSHA Inspection

- Know the hazards in your industry
- Know the hazards of your office operations
- Know your injury history/trends
- OSHA Top 10
- Written Programs and Training Records
- Prepare your staff to participate

OSHA Web Site

The screenshot shows the OSHA website with several elements highlighted:

- Search Bar:** A red circle highlights the search bar at the top right, containing the text "Find it in OSHA".
- Navigation Menu:** A yellow arrow points to the "Occupational Safety & Health Administration" link in the top navigation bar.
- Right Sidebar:** A green circle highlights the "Free On-site Consultation" link, and a yellow circle highlights the "Reporting Fatalities & Severe Injuries" link in the right sidebar.
- Newsletter:** A purple circle highlights the "OSHA QuickTakes" newsletter sign-up button.
- Header:** The top header includes the "UNITED STATES DEPARTMENT OF LABOR" logo and social media icons for Facebook, Twitter, Instagram, RSS, and Email.
- Main Content:** A featured article titled "OSHA seeks comments on updated Safety and Health Program Management Guidelines" is visible, along with a "Visit web page" button.
- IN FOCUS:** A section titled "IN FOCUS" features a video player with the text "Know Your Rights!" and a "Learn more" button.
- Fatality Reports:** A section titled "4,679 workers died on the job in 2014" includes a "Fatality Reports" section with a video player and a quote from Secretary of Labor Thomas E. Perez.
- HOW TO...:** A list of links under the heading "HOW TO..." includes: "File a complaint", "Get a FREE OSHA poster", "Get information on reporting severe work-related injuries, illnesses and fatalities to OSHA", "Get information on recordkeeping & reporting requirements", "Get help for employers", "Learn about temporary worker protections", "Find out if OSHA has inspected a workplace", "Find information on construction hazards", "Get help for clinicians", "Learn about partnerships and cooperative programs", "Find information on state plans", "Find an OSHA office", "OSHA's free on-site consultation program for small employers", and "Find what you are looking for from A to Z".
- NEWS:** A "NEWS" section at the bottom features a "More News" button and a news item dated February 4, 2016, about the National Advisory Committee on Occupational Safety and Health.

Frequently Cited OSHA Standards



UNITED STATES
DEPARTMENT OF LABOR



Find it in OSHA



Occupational Safety and Health Administration

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A to Z Index

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Frequently Cited OSHA Standards

This page allows the user to list the most frequently cited Federal or State OSHA standards for a specified 6-digit North American Industry Classification System (NAICS) code. Also available is [Industry Profile for OSHA Standard](#) which lists NAICS classifications having the most occurrences of citations for a specified OSHA standard.

Select number of employees in establishment:

All 1-9 1-19 1-99 20-49 20-99 50-99 100-249 1-249 250+

Federal or State Jurisdiction:

Federal ▾

NAICS:

(Submit empty for NAICS list.)

Submit

The data shown reflects OSHA citations issued by the Federal or State OSHA during the specified fiscal year; see [definitions](#). If you are interested in obtaining the NAICS code for a particular industry, references are available on the [NAICS Manual](#). This manual contains descriptions of every NAICS sector.



UNITED STATES
DEPARTMENT OF LABOR

<https://www.osha.gov/pls/imis/citedstandard.html>

OSHA Consultation

- Free
- Non-enforcement
- Confidential
- On-site audits
- Training
- Sampling/Monitoring
- Program Review



<http://csu-cvmbbs.colostate.edu/academics/erhs/osha/Pages/default.aspx>

OSHA Compliance Assistance

The screenshot displays the OSHA Compliance Assistance website. The browser address bar shows the URL http://www.osha.gov/dcsp/compliance_assistance/new_ca_products.html. The page title is "New Compliance Assistance Products".

The main content area features a text block: "The following are some of OSHA's recently issued or updated compliance assistance products. Many publications with an OSHA publication number can be downloaded or ordered from the [OSHA Publication](#) page. They can also be ordered by telephone from the OSHA Publications Office at (202) 693-1888 or (800) 321-OSHA (6742)."

Below this text are two links: [Quarterly New Resources Reports](#) and [New Products Archive](#).

The "Hazard Alerts" section includes a link to [Working Safety with Scissor Lifts](#) (PDF*), OSHA Publication HA-3842, (updated 2016, February).

The "Web Resources" section includes links to [Process Safety Management Rulemaking](#) (2016, January), [Restrooms and Sanitation](#) (2016, January), and [Worker Rights](#) (updated 2016, January).

On the right side, there is a vertical navigation menu with the following items: **Program Management Guidelines**, **Trenching and Excavation**, **Confined Spaces**, **Temporary Workers**, and **Reporting Requirements**.

A photograph of a man in a hospital bed being attended to by a nurse is shown. Below the photo is the text: [Draft Safety and Health Program Management Guidelines](#).

The Windows taskbar at the bottom shows the time as 10:46 AM on 2/8/2016.


OSHA Compliance Assistance

- Regional Compliance Assistance Newsletter
- Send request to olaechea.john@dol.gov to subscribe

OSHA Region VIII Compliance Assistance Newsletter

Spring 2016

OSHA's On-site Consultation Program offers free and confidential safety and occupational health advice to small and medium-sized businesses. To find a program office near you, click on the map.



OSHA's Consultation Directory
Find the Local Office in Your State

Work Safely with Silica

The Center for Construction Research and Training (CPWR) has created an [e-tool](#) that takes employers through a step-by-step assessment of their workplace and assists them in determining appropriate dust controls and creating a written plan to minimize silica dust hazards.

Control the Dust

There are many contractors can reduce the dust and protect the workers. There are 10 key practices that you can use to stay safe through conducting a job hazard analysis for silica, installing appropriate controls, and wearing a job-specific plan to minimize or reduce silica exposure. Visit the site at [www.cprw.org](#) to learn more.

[CREATE A PLAN](#)
[Click Here](#)

Top Stories/National News


OSHA Issues Final Rule for Respirable Crystalline Silica

The Occupational Safety and Health Administration (OSHA) has [issued a final rule](#) to curb lung cancer, silicosis, chronic obstructive pulmonary disease and kidney disease in America's workers by limiting their exposure to respirable crystalline silica. The rule is comprised of two standards, one for [Construction](#) and one for [General Industry and Maritime](#). The new rule requires that employers use engineering controls – such as ventilation and wet methods for cutting and sawing crystalline silica-containing materials – to reduce workers' exposure to silica dust.

OSHA issued this rule because the previous permissible exposure limits (PELs) for silica were outdated, inconsistent and did not adequately protect worker health. OSHA determined that occupational exposure to respirable crystalline silica at the previous PELs resulted in significant risk of developing or dying from silicosis, lung cancer, other lung diseases or kidney disease. OSHA estimates that the rule will save over 600 lives and prevent more than 900 new cases of silicosis each year, once its effects are fully realized.

About 2.3 million workers are exposed to respirable crystalline silica in their workplaces, including 2 million construction workers who drill, cut, crush, or grind silica-containing materials such as concrete and stone, and 300,000 workers in general industry operations such as brick manufacturing, foundries, and hydraulic fracturing, also known as fracking. The Final Rule is projected to provide net benefits of about \$7.7 billion, annually.

The construction standard provides for flexible alternatives, especially useful for small employers. Employers can either use a control method employed in Table 1 or they can measure workers' exposure and independently determine which dust control methods work best to limit exposures in their workplaces.



SOME KEY PROVISIONS OF THE SILICA STANDARD:

- Reduces the permissible exposure limit (PEL) for respirable crystalline silica to 50 micrograms per cubic meter of air (50ug/m3) as an 8-hour average
- Requires employers to use engineering controls to limit exposure
- Requires employers to provide respirators when engineering controls cannot adequately limit exposures
- Requires employers to develop a written control plan
- Requires employers to offer medical exams to highly exposed workers

COMPLIANCE DEADLINES

Construction: June 23, 2017

General Industry/ Maritime: June 23, 2018

Hydraulic Fracturing: June 23, 2018 for all provisions except Engineering Controls, which have a compliance date of June 23, 2021

QUESTIONS?

Disclaimer

- This information has been developed by an OSHA Compliance Assistance Specialist and is intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, OSHA may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit OSHA's website at www.osha.gov.



Working Together, We Can Help

www.osha.gov

800-321-OSHA (6742)