

# RMP Safer Communities by Chemical Accident Prevention (SCCAP) Proposed Rule

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## Presenter

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## Trinity Consultants

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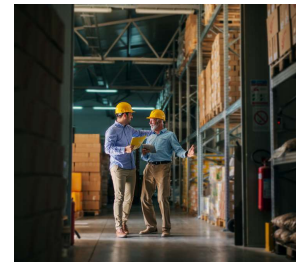
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## Agenda

- 1. Recent RMP Rule Activity
- 2. 2022 RMP Proposed Rule  
Prevention Programs  
Emergency Response  
Other Areas of Technical Clarification
- 3. Next Steps
- 4. Q&A and Wrap-up

## Recent RMP Rule Activity

### 2017 Amendments Rule

- Prompted by E.O. 13650, “Improving Chemical Facility Safety and Security”
- Addressed prevention program elements
  - ◆ Safer technology and alternatives analysis (“STAA”);
  - ◆ Incident investigation root cause analysis; and
  - ◆ Third-party compliance audits
- Emergency response coordination with local responders (including emergency response exercises), and
- Availability of information to the public

## Recent RMP Rule Activity

### 2019 Reconsideration Rule

- Rescinded certain provisions of the 2017 rule
- Removed most new accident prevention requirements added by the 2017 rule
- Modified some other provisions of the 2017 rule
- Reflect the current RMP regulations to date

## Recent RMP Rule Activity

### RMP Safer Communities by Chemical Accident Prevention Rule

- ▶ January 20, 2021: E.O. 13990
  - Directed Federal agencies to review existing regulations and take action to prioritize:
    - ◆ Bolstering resilience to the impacts of [climate change](#)
    - ◆ Prioritizing [environmental justice \(EJ\)](#)
    - ◆ Limit exposure to dangerous chemicals and pesticides
- ▶ June & July 2021: EPA held virtual public listening sessions and solicited public comment
- ▶ August 31, 2022: Proposed rule, known as “Safer Communities by Chemical Accident Prevention Rule”



## 2022 RMP Proposed Rule



### **Prevention Program (Subpart C and D)**

- Hazard Review (HR) and Process Hazard Analysis (PHA)
- Incident Investigation
- Compliance Audit
- Employee Participation

### **Emergency Response (Subpart E)**

### **Information Availability**

### **Other Areas of Technical Clarification**

- Process Safety Information (PSI)
- Compliance with Recognized and Generally Accepted Good Engineering Practices (RAGAGEP)
- Storage Incident to Transportation
- Retail Facility Exemption

# Prevention Program (Subpart C and D)

## Hazard Review (HR) and Process Hazard Analysis (PHA)

- ▶ Address external events such as **natural hazards**, including those caused by *climate change* or other triggering events, that could lead to an accidental release
  - Natural hazards are defined as naturally occurring events with the potential for negative impacts, including meteorological hazards from weather and climate cycles, and geological hazards.
  
- ▶ Address **standby or emergency power systems**
  - Required for *air pollution control or monitoring equipment for prevention and detection of accidental releases*
  - Not required for the entirety of an RMP process

## Hazard Review (HR) and Process Hazard Analysis (PHA)

- ▶ Clarify **facility siting** requirements
  - *New requirements* for Program 2 HR
  - Rely on industry guidance to help **adequately address stationary source siting**
    - ◆ API recommended practices, NFPA codes and standards, and CCPS guidelines
  - Include:
    - ◆ Placement of processes, equipment, buildings
    - ◆ Hazards posed by proximate facilities; and
    - ◆ Accidental release consequences posed by proximity to the public and public receptors
  
- ▶ Justify in the Risk Management Plan why recommendations from facility siting were not adopted

## Hazard Review (HR) and Process Hazard Analysis (PHA)

- ▶ Add Safer Technologies and Alternative Analysis (STAA) for
  - Petroleum refining or chemical manufacturing processes located within one mile of another facility with petroleum refining or chemical manufacturing processes
  - All petroleum refining facilities *using hydrofluoric acid (HF) in an alkylation unit*
  
- ▶ Document the feasibility of applying STAA in PHA based on more than cost alone
  - Not required to implement identified inherent safer measures

## Compliance Audit

- ▶ Require a third-party audit for
  - All facilities after **two RMP-reportable accidents within a 5-year period**
  - All petroleum refining or chemical manufacturing processes that are located within a one-mile radius of another petroleum refining or chemical manufacturing process after **one RMP-reportable accident**
- ▶ Justify in the Risk Management Plan why recommendations from third-party audit were not adopted.



## Compliance Audit – Third-Party Auditor Independence

- ▶ Third-Party Auditor Independence criteria requires auditors
  - Act **impartially** and receive no financial benefit other than payment for audit services
  - Ensure all third-party personnel involved in audit sign conflict of interest statement and do not accept employment within 2 years of final audit report
  
- ▶ **Does not include** the following criteria from the 2017 rule requirements:
  - Auditors cannot have conducted past research, development, design, construction services, or consulting for the owner or operator within the last 2 years
  - Auditors cannot provide other business or consulting services to the owner or operator, including advice or assistance to implement the findings or recommendations of an audit report, for a period of at least 2 years following submission of the audit report.

## Employee Participation

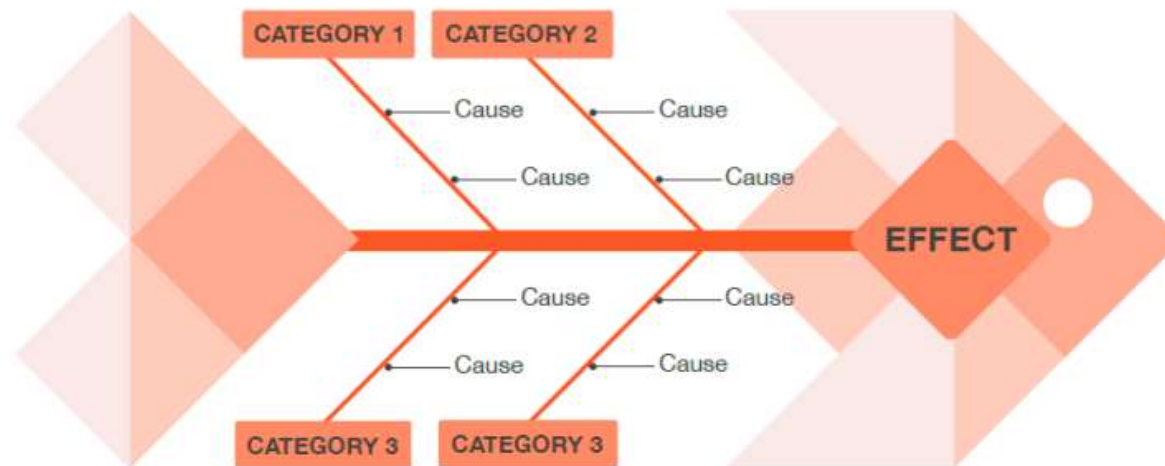
- ▶ Require **employers consult with employees** when making decisions on *implementing recommendations* from PHAs, compliance audits, and incident investigations
- ▶ Require providing employees the opportunities to
  - **Stop work** under certain circumstances
  - **Report late or unreported accidents and other areas of RMP non-compliance** to management, EPA or other relevant authorities





# Incident Investigation

- ▶ Require a root cause analysis for **any RMP-reportable** accident
  - Use a recognized investigation method
  - Complete within 12 months of the incident
  - Time extension via a written approval may be granted by the implementing agency for complex incidents



## RMP-Reportable Event

## Risk Management Plan 5-year Accident History

- ▶ Differs from CERCLA or EPCRA reporting criteria
- ▶ Release from covered process and involves regulated substance held above TQ
- ▶ No Reportable Quantity (RQ) threshold
- ▶ Include all accidental releases from covered processes that resulted in
  - On-site effects – death, injury, significant property damage
  - Offsite effects – death, injury, evacuation, shelter in place, property damage, environmental damage
- ▶ RMP-reportable events
  - RMP\*eSubmit database (CDX)

### Access RMP\*eSubmit

RMP\*eSubmit can be accessed via EPA's [Central Data Exchange](#).

You will need a JavaRuntime environmental to use the RMP\*eSubmit System. To learn more about JavaRuntime, see the [Java Downloads page](#).

## RMP-Reportable Event Definitions (1 of 5)

- ▶ **Injury** - Any effect that results either from direct exposure to toxic concentrations, radiant heat, or overpressures from accidental releases or from indirect consequences of a vapor cloud explosion (e.g., flying glass, debris, other projectiles) from an accidental release and that **requires medical treatment or hospitalization**.
- ▶ **Medical treatment** - treatment, other than first aid, **administered by a physician or registered professional personnel under standing orders from a physician**. Your Log of Work-Related Injuries and Illnesses (OSHA Form 300) and Injury and Illness Incident Report (OSHA Form 301) will help complete these items for employees.<sup>1</sup>

<sup>1</sup> <http://www.epa.gov/rmp/general-rmp-guidance-chapter-3-five-year-accident-history>

## RMP-Reportable Event Definitions (2 of 5)

- ▶ **Evacuated** - Relocated to prevent exposure that might have resulted from the accident. People who were ordered to move simply to improve access to the site for emergency vehicles are not considered to have been evacuated.<sup>1</sup>
- ▶ **Sheltered** – Sheltering-in-place occurs when community members are ordered to remain inside their residence or place of work until the emergency is over to prevent exposure to the effects of the accidental release. Usually these orders are communicated by an emergency broadcast or similar method of mass notification by response agencies.<sup>1</sup>

<sup>1</sup> <http://www.epa.gov/rmp/general-rmp-guidance-chapter-3-five-year-accident-history>

## RMP-Reportable Event Definitions (3 of 5)

- ▶ **Environmental damage** - The damage to be reported is not limited to environmental receptors listed in the rule. Any damage to the environment (e.g., dead or injured animals, defoliation, water contamination) should be identified. You are not, however, required to conduct surveys to determine whether such impact occurred. Types of environmental damage include: fish or animal kills; lawn, shrub, or crop damage; water contamination, other (specify).<sup>1</sup>

<sup>1</sup> <http://www.epa.gov/rmp/general-rmp-guidance-chapter-3-five-year-accident-history>

## RMP-Reportable Event Definitions (4 of 5)

- ▶ **Environmental receptor** - Natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and Federal wilderness areas . . . that can be identified on local U. S. Geological Survey maps.
- ▶ **Property damage** – EPA guidance states to estimate the value (American dollars) of the equipment or business structures (for your business alone). Do not include any losses that you may have incurred as a result of business interruption.

## RMP-Reportable Event Definitions (5 of 5)

- ▶ **Offsite property damage** - Offsite property damage from explosions could include broken glass (in houses, buildings, cars), structural damage and damage from shrapnel. Toxic releases could destroy vegetation. Property damage from fires would include smoke damage, contamination, and fire itself. <sup>2</sup>
- ▶ **On-site significant property damage** -The owner or operator of a stationary source must determine whether on-site property damage as a result of an accidental release from a covered process was "significant". The owner or operator should be able to document such a decision.



# Emergency Response (Subpart E)

## Community Notification of RMP Accidents

► For **non-responding facilities:**

- Develop and implement procedures for **informing the public and the appropriate federal, state, and local emergency response agencies** about accidental releases
- Ensure that a **community notification system** is in place to warn the public within the area threatened by a release
- Make notification procedures be available upon request to the **public residing within six miles**



## Emergency Response Exercises



### ► For responding facilities:

- Conduct **field exercises** of a simulated accidental release of a regulated substance by *March 15, 2027 or within 10 years of a field exercise conducted between March 15, 2017 and publication of the proposed rule. Perform a field exercise at least once every 10 years, unless local responders indicate that frequency is infeasible.*
- Mandate the current recommended elements of the field and tabletop exercise **evaluation report**
  - ◆ Scenario description
  - ◆ Participant names and organizations
  - ◆ Evaluation of the exercise results such as lessons learned and recommendations
- Report is still due within 90 days of the exercise event

# Information Availability

## Information Availability

- ▶ Allow the public to request specific chemical hazard information if they reside **within six miles of a facility**
  - Certain chemical hazard information
  - Access to community emergency preparedness information
- ▶ EPA intends to begin publishing **non-OCA risk management plan data annually**, less any CAA 112(r)(7)(H) protected sensitive information
  - Similar to TRI and TSCA

## Other Areas of Technical Clarification

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### ► Compliance with RAGAGEP

- PHAs must include **an analysis of the most recently promulgated RAGAGEP** to identify any gaps between practices related to the facility's design, maintenance and operation, and the most current version of RAGAGEP.
- Explain in RMP *why RAGAGEP PHA recommendations are not implemented*

### ► PSI

- Required to be **current**

### ► Hot Work Permits

- Retention for **5 years**



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## Other Areas of Technical Clarification

### ► Storage Incident to Transportation

- Include a **48-hour time frame** that a transportation container may be disconnected from the motive power that delivered it to the site before being considered part of the stationary source
- Alignment with DOT and PHMSA requirements
- 48 hours = total amount of time
  - ◆ A railyard could not move a rail car around in the railyard using a mobile railcar mover to start the clock again

### ► Retail Facility Exemption

- “Retail facility” is one in which more than one-half of the “**annual**” income “**in the previous calendar year**” is obtained from direct sales to end users or at which more than one-half of the fuel sold over that period, by volume, is sold through a cylinder exchange program



## Next Steps

## Next Steps

- ▶ Final rule in August 2023 per OMB
- ▶ Likely subject to litigation

The screenshot shows the Reginfo.gov website interface. At the top, there is a navigation bar with the following text: "OFFICE of INFORMATION and REGULATORY AFFAIRS", "OFFICE of MANAGEMENT and BUDGET", "EXECUTIVE OFFICE of the PRESIDENT", and "Reginfo.gov". On the right side of the navigation bar, it says "U.S. General Services Administration" and "GSA". Below the navigation bar, there are links for "Home", "Unified Agenda", "Regulatory Review", "Information Collection Review", "FAQs / Resources", and "Contact Us". A search bar is also present with a "Go" button.

The main content area is titled "View Rule". Below this title, there are links for "View EO 12866 Meetings", "Printer-Friendly Version", and "Download RIN Data in XML". The rule details are as follows:

- EPA/OLEM** (Agency)
- RIN: 2050-AH22** (RIN)
- Publication ID: Spring 2022** (Publication ID)
- Title:** Accidental Release Prevention Requirements: Risk Management Program Under the Clean Air Act; Retrospection
- Abstract:** The Environmental Protection Agency (EPA) is considering revising the Risk Management Program (RMP) regulations, which implement the requirements of section 112(r)(7) of the 1990 Clean Air Act amendments. The RMP requires facilities that use listed extremely hazardous substances above specified threshold quantities to develop a Risk Management Plan. The EPA is reviewing the RMP rule in accordance with Executive Order 13990: Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis, which directs federal agencies to review existing regulations and take action to address the Administration's priorities, including bolstering resilience to the impacts of climate change and prioritizing environmental justice.
- Agency:** Environmental Protection Agency(EPA)
- Priority:** Other Significant
- RIN Status:** Previously published in the Unified Agenda
- Agenda Stage of Rulemaking:** Proposed Rule Stage
- Major:** Undetermined
- Unfunded Mandates:** Undetermined
- CFR Citation:** [40 CFR 68](#)
- Legal Authority:** [42 U.S.C. 7412 Clean Air Act](#)
- Legal Deadline:** None
- Timetable:**

	Action	Date	FR Cite
NPRM		09/00/2022	
Final Rule		08/00/2023	

Additional Information:

## Timing for Proposed Rule Changes

- ▶ **Three years** after the effective date of the final rule
  - New STAA, incident investigation root cause analysis, third-party compliance audit, employee participation, emergency response public notification, exercise evaluation reports, and information availability provisions
- ▶ **By March 15, 2027 or within 10 years** of the date of an emergency response field exercise conducted between March 15, 2017, and the date of publication of the proposed rule in the Federal Register
  - Revised emergency response field exercise frequency provisions

## Timing for Proposed Rule Changes

- ▶ **Four years** after the effective date of the final rule
  - Updates and resubmission of risk management plans with new and revised data elements
- ▶ For strategic planning decisions, consider that OMB stated it expected a final rule in **August 2023**

## Additional Resources

- ▶ Trinity eNews Article

<https://www.trinityconsultants.com/news/risk-management-program-safer-communities-by-chemical-accident-prevention-proposed-rule-highlights>

- ▶ EPA RMP SCCAP Rule

<https://www.epa.gov/rmp/risk-management-program-safer-communities-chemical-accident-prevention-proposed-rule>

**Questions?**





### Need Additional Training?

Go to Trinity's website:

*<https://www.trinityconsultants.com/training/>*

## Contact Us

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## **Biographical Information**

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Gary Strassell is the Environmental, Health and Safety Manager for The Shepherd Color Company in West Chester, Ohio. For 38 years, he has had the responsibility to oversee all aspects of health, safety, security, environmental, and medical activities, including product safety, environmental permitting, TSCA and global chemical compliance.

Gary is also involved in many industry organizations in the community as well as in the United States and abroad. He is the Chairman of the Inorganic Pigments Committee for the US-based Color Pigments Manufacturers Association and member of the Society of Dryers and Colourists Colour Index Pigment & Solvent Dye Board. He serves on the steering committees for European-based Inorganic Pigments Consortium and the Complex Inorganic Products for Emerging Regulations. Locally, he is on the Board of Directors for the Greater Hamilton Safety Council, having previously served as President.

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Mr. Petrosky serves as a Managing Consultant in Trinity's PSM/RMP services group known as Provenance Consulting. Prior to consulting, his career focused on PSM and RMP compliance within the chemical manufacturing industry. Mr. Petrosky was responsible, at the site and corporate level, for the Prevention Program elements and Emergency Response requirements of PSM/RMP. He has led numerous PHAs and LOPAs for batch and continuous processes and ammonia refrigeration systems. He has also led PSM and RMP Compliance Audits at chemical manufacturing, natural gas processing, food processing, and electric generating facilities. His work experience also includes dust hazard analysis, environmental compliance, personnel safety program implementation, capital project management, and maintenance management.

Mr. Petrosky earned a B.S. degree in Chemical Engineering from Penn State University and a M.S. in Environmental Engineering from University of Pittsburgh. He is a licensed Professional Engineer in Pennsylvania and is a Certified Safety Professional.