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RMP, *NOT* AS YOU KNOW IT: HOW TO PLAN AND RESPOND

40 CFR Part 68

A BRIEF RMP REFRESHER

RMP Applies to Stationary Sources

1. Processes at stationary sources / facilities,
 2. That store RMP-listed chemicals.
- ~12,000 facilities nationwide RMP-regulated currently

At or above certain Threshold Quantities (TQs)

- 77 Toxic Compounds – TQs of 500 to 20,000 lbs in a process
 - e.g., Anhy. Ammonia 10,000 lb
- 63 Flammable Compounds – TQ of 10,000 lbs in a process
 - Butane
 - Propane
 - Methane
 - etc.

RMP's Goal

- Prevent Chemical Accidents
 1. Assess Hazards
 - identify potential effects of a chemical accident
 2. Accident Prevention
 3. Emergency Response Procedures
- Document this all in an RMP submitted to USEPA
 - At least every 5 years

Key Dates of RMP

- 1984: Catastrophic chemical release in Bhopal, India
- 1990: Accidental Release Prevention requirements under Section 112(r) CAA
- 1994: List of regulated substances & TQs
- 1996: RMP codified in 40 CFR Part 68
- 2024: Safer Communities by Chemical Accident Prevention (SCCAP)

Program Levels 1, 2 & 3: Release Prevention varies by Program Level – progressively gains granularity and rigor

BACKGROUND TO 2024 AMENDMENTS

- 2017 Amendments Rule during Obama administration
- 2019 RMP Reconsideration Rule during Trump administration
- 2024 Amendments: Safer Communities by Chemical Accident Prevention Rule
 - Proposed rule published August 2022, following 2021 public listening sessions
 - Impetus for these amendments:
 - Climate change executive order
 - Major accidents continue to occur
 - EPA goals: improve chemical process safety; assist in planning, preparedness, and response to reportable accidents; improve public awareness of chemical hazards
 - EPA anticipates the amendments will reduce the risk of accidents and the severity of the impacts when they occur
 - Final rule published March 11, 2024. Went into effect 60 days later, on May 10, 2024

HAZARD EVALUATION AMPLIFICATIONS / CLARIFICATIONS

USEPA Clarified & Amplified three subjects it says already need to be addressed in hazard evaluations

1. Natural Hazards
2. Power Loss
3. Facility Siting

These must be addressed in Program 2 hazards reviews and Program 3 process hazard analyses (PHAs)

- *(collectively, hazard evaluations)*

Required justification for why a hazard recommendation was not adopted

AMPLIFICATIONS / CLARIFICATIONS – NATURAL HAZARDS

- “Meteorological, environmental, or geological phenomena that have the potential for negative impact, accounting for impacts due to climate change”
- Examples listed in federal register include: “avalanche, coastal flooding, cold wave, drought, earthquake, hail, heat wave, hurricane, ice storm, landslide, lightning, riverine flooding, strong wind, tornado, tsunami, volcanic activity, wildfire, and winter weather.”
- EPA didn’t specify where certain natural hazards are likely to occur
 - *Maybe areas prone to hurricanes & subsequent flooding (e.g., on the east and gulf coasts)*
 - *Maybe more tornados in ‘tornado alley’ (Kansas, Nebraska, etc.)*
- ‘Some RMP accidents are being reported as having a natural cause as the initiating event and include unusual weather conditions as a contributing factor’
- EPA states that climate change increases the threat of extreme weather as a natural hazard and should be taken into account at covered facilities when evaluating hazard frequency and severity.
- Little new direction on how to respond to natural hazards identified

AMPLIFICATIONS / CLARIFICATIONS – POWER LOSS

- Must explicitly address power failure/loss, and standby or emergency power as an engineering control
- Air pollution control or monitoring equipment used to prevent/detect accidental releases of RMP chemicals must be equipped with standby/backup power
 - e.g., fence line monitors, continuous emissions monitoring system (CEMS), gas and ammonia detection monitors, etc.
- Cannot remove such monitoring equipment prior to an imminent natural hazard without documenting a legitimate reason why.
- EPA has data showing that power loss has resulted in serious accidental releases

AMPLIFICATIONS / CLARIFICATIONS – POWER LOSS

- Amendments explicitly define siting considerations that facilities must address in hazard evaluations
- Consider the presence of facilities within release impact zones that could occur from their facility, and how those releases would be affected because of the presence of nearby facilities.
- “The rule does not mandate that existing sources modify their footprint as a result of a siting analysis.”
- Local zoning and required setbacks not changed by SCCAP.
- Requires justification if siting hazard recommendations are not adopted
 - EPA calls this an amplification, and notes, “when conducting siting evaluations, EPA would reasonably expect sources to consult publicly accessible information on nearby sources, such as RMPs and information available through LEPCs.”

STAA, PRACTICABILITY ASSESSMENT, ETC.

- First level: STAA for Program 3 petroleum/coal products mfg. (NAICS 324) and chemical mfg. (NAICS 325) sector processes
- Heightened level: Practicability assessment of inherently safer technologies and designs for processes:
 - In NAICS 324 or 325, within 1 mile of another stationary source with a covered process in NAICS 324 or 325
 - In NAICS 324 with hydrofluoric acid alkylation covered processes
 - In NAICS 324 or 325 and having a 5-year accident history reportable accident since the most recent PHA
- Implementation of at least 1 passive measure, or IST/ISD, or a combination of active and procedural measures equal to or greater than the risk reduction of a passive measure
- Technology Transfer
- RMP justifications

PUBLIC INFORMATION AVAILABILITY PROVISIONS

- Facility must provide chemical hazard information, upon request, to public living, working and *spending significant time* within 6 miles of the facility
- How to verify that the requestor is within a 6-mile radius of the facility (fence line)?
 - *utility bill for verification of residence*
 - *pay stub for verification of employment*
 - *“specific documentation to verify ‘significant time’ spent within the 6-mile radius”*
- What must be provided? Within 45 days of a request:
 - Names and Safety Data Sheet (SDS) of RMP-regulated substance(s)
 - 5-year accident history
 - Emergency Response Program (*e.g., self-responder or not; names and phone #s of local responders last coordinated with; procedures to notify public*)
 - List of scheduled exercises occurring within 1 year (of the request)
 - LEPC contact info (*LEPC name, phone # and web address if available*)
 - Declined recommendations and justifications
- English, *and* at least two major languages used locally

THIRD-PARTY COMPLIANCE AUDITING

- Triggers for Program 2 and 3 processes:
 - Qualifying release (accidental release from covered process, meeting 5-year accident history eligibility criteria)
 - “Could lead” determination by agency
 - Previous third-party audit failed to meet competency/independence requirements
- Strict auditor competency and independence requirements
- Audit Report and Findings Response Report
- Submission to Board of Directors
- New RMP data element: justifications for rejected auditor recommendations

INCIDENT INVESTIGATION ROOT CAUSE ANALYSIS (RCA)

- Requires an RCA incident investigation when a Level 2 or 3 facility has had an RMP-reportable accident
 - *Release from an RMP-covered process of an RMP-listed substance that*
 - *Caused at least one of the following:*
 - *On-site death, injury or significant property damage*
 - *Known off-site death, injury, evacuations, sheltering in place, property damage* or environmental damage*
 - **Offsite property damage is most likely to occur from explosions*
- Root Cause definition: *‘fundamental, underlying, system-related reason why an incident occurred that identifies a correctable failure(s)* in management systems and, if applicable, in process design.’*
 - **The term ‘correctable failure’ might invite litigation*
- Must include specific elements; use a recognized investigation method*; and include root cause information in incident investigation reports, which must be completed as soon as reasonably practicable
 - *e.g., “Guidelines for Investigating Process Safety Incidents” by CCPS - provides guidance on incident investigations, near miss identification, root cause analysis, and other related topics*

EMPLOYEE (AND REPS) PARTICIPATION

- Consulting with employees on recommendations and findings
- Documenting Stop Work Authorities
 - Authority to recommend shutdown, and/or actually carry out a shutdown
- Channel for employee accident and noncompliance reporting to EPA or the company
 - Anonymously (or not)
 - Link to enforcement

EMERGENCY RESPONSE

- Maintain and implement procedures for informing the public and response agencies about accidental releases of RMP-regulated substances
- Requires a community notification system to warn public within the area threatened by a release
 - *Partner with response agencies to ensure community notification system is in place to warn the public*
- Provide to local first responders timely info on
 - *Current understanding & best estimates of the nature of a release when a release response needed*
- Conduct Field *at least once every 10 years*
- Bolster required documentation elements for field and tabletop exercises
 - *Description of scenario, names and org of each participant, evaluation of the results, recommendations for improvement, etc.*
 - *Prepare an evaluation report within 90 days of each field and tabletop exercise*

OTHER AREAS OF CLARIFICATION

- Process Safety Information
- Compliance with RAGAGEP
- 3-year retention of hot work permits
- No finalization of “storage incident to transportation”
- Definition of "year" in retail facility exemption

LITIGATION UPDATE

- *State of Oklahoma, et al. v. EPA*
 - Petitions for review filed by some states and industry groups
- Litigation currently held in abeyance, pending EPA's review of Petition for Reconsideration
 - But the rule has not been stayed
- Risky to bet on

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