



Inland Area Contingency Planning Meeting



Risk Management Program

May 7, 2019



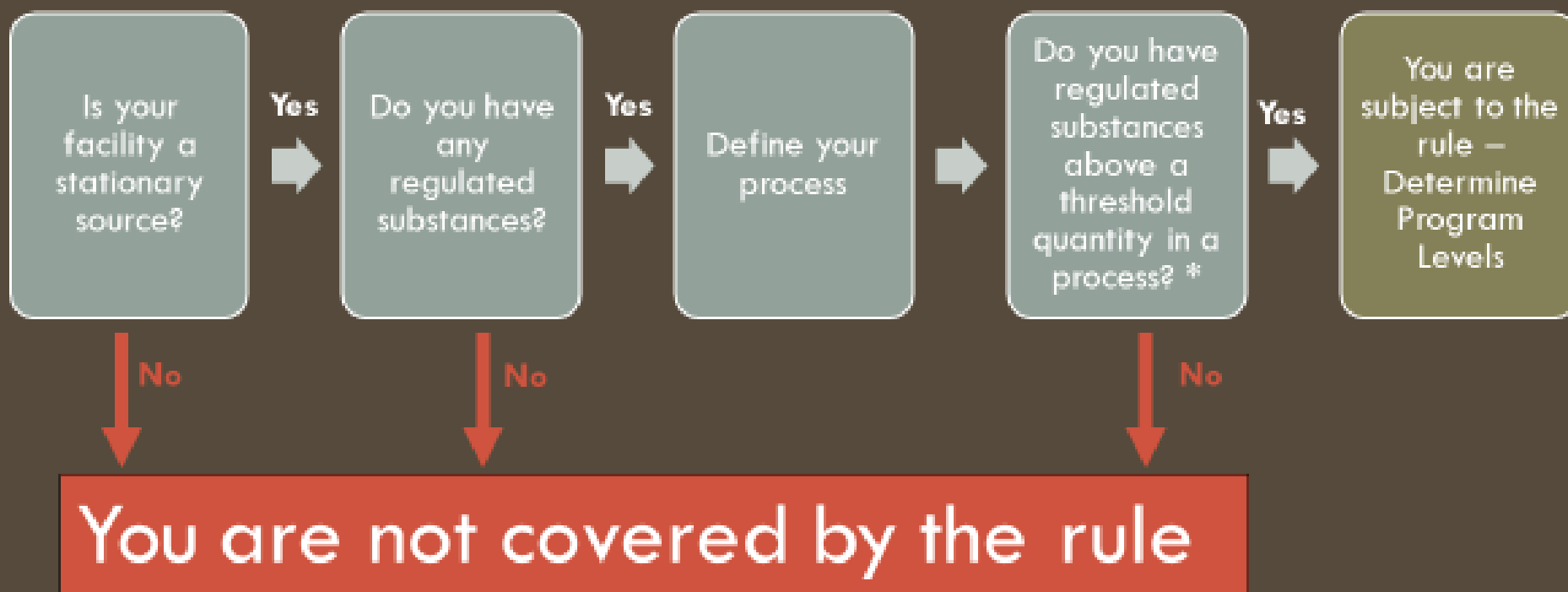
Basic Goal of RMP Program

Reduce the likelihood of accidental chemical releases by:

- Using Hazard Assessments
- Prevention Programs
- Emergency Response Planning
- <https://www.youtube.com/watch?v=UFFDLk1fXcU>



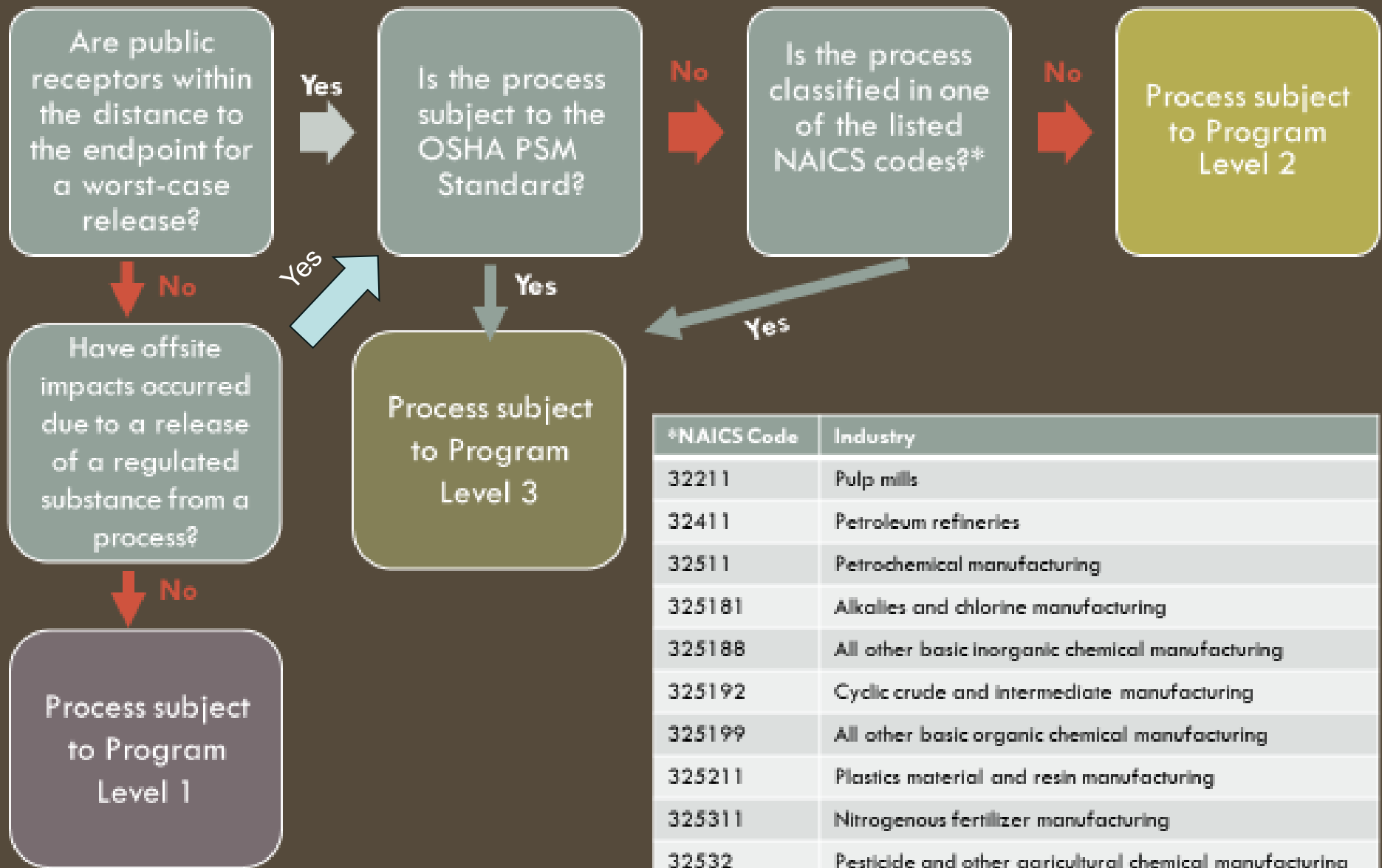
ARE YOU SUBJECT TO RMP REPORTING REQUIREMENTS?



*Additional regulatory exemptions may affect applicability – see

<https://www.epa.gov/rmp/general-rmp-guidance-chapter-1-general-applicability> for details

PROGRAM LEVELS



*NAICS Code	Industry
32211	Pulp mills
32411	Petroleum refineries
32511	Petrochemical manufacturing
325181	Alkalies and chlorine manufacturing
325188	All other basic inorganic chemical manufacturing
325192	Cyclic crude and intermediate manufacturing
325199	All other basic organic chemical manufacturing
325211	Plastics material and resin manufacturing
325311	Nitrogenous fertilizer manufacturing
32532	Pesticide and other agricultural chemical manufacturing



RMP Tools

- RMP*Comp – WCS distance to endpoint
<https://www.epa.gov/rmp/rmpcomp>
- MARPLOT – Population within radius of WCS



True or False

The facility follows OSHA Process Safety Management, therefore, no need for a Risk Management Plan...



False

- Both form the regulatory framework for prevention of catastrophic chemical accidents at facilities; HOWEVER, OSHA focuses on protecting workers and EPA focuses on protecting public health and the environment. RMP includes all PSM aspects plus requires worst case analysis. But...



Risk Management Program 112(r)(7) - 40 CFR Part 68 Facilities Above Threshold Quantity (TQ)

PROGRAM 1	PROGRAM 2	PROGRAM 3
<ul style="list-style-type: none"> Worst case analysis 5-year accident history Document management system 	<ul style="list-style-type: none"> Worst case analysis 5-year accident history Document management system 	<ul style="list-style-type: none"> Worst case analysis 5-year accident history Document management system
Prevention Program		
Certify no additional prevention steps needed	<ul style="list-style-type: none"> Safety information Hazard review Operating procedures Training Maintenance Incident investigation Compliance audit 	<ul style="list-style-type: none"> Process safety information Process hazard analysis (PHA) Operating procedures Training Maintenance Incident investigation Compliance audit Management of change Pre-startup review Contractors Employee participation Hot work permits
Emergency Response Program		
Coordinate with local responders	Develop plan/program and coordinate with local responders	Develop plan/program and coordinate with local responders



True or False

EPA targets facilities for inspection of the General Duty Clause (GDC)

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False.

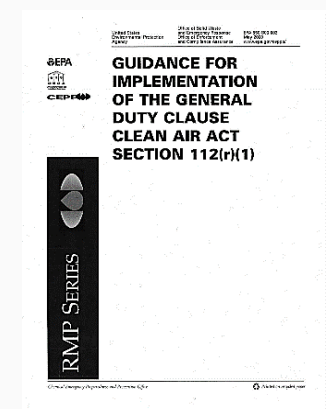
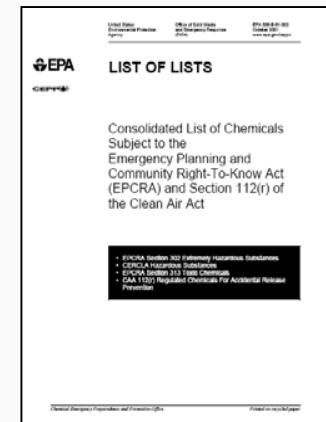
EPA targets RMP facilities only; however, if a GDC facility has a release, it may be included in our inspection plan for that fiscal year



General Duty Clause 112(r)(1) (GDC) 3 Pronged Approach

Based on Industry Codes & Standards
No Specific Threshold Quantity (TQ)

- Identify hazards associated with a potential accidental release of an “extremely hazardous substance” using appropriate hazard assessment techniques
- Designing and maintaining a safe facility to prevent accidental releases
- Minimizing the consequences of accidental releases that do occur.





True or False

EPA targets facilities that have an ammonia refrigeration process



True.

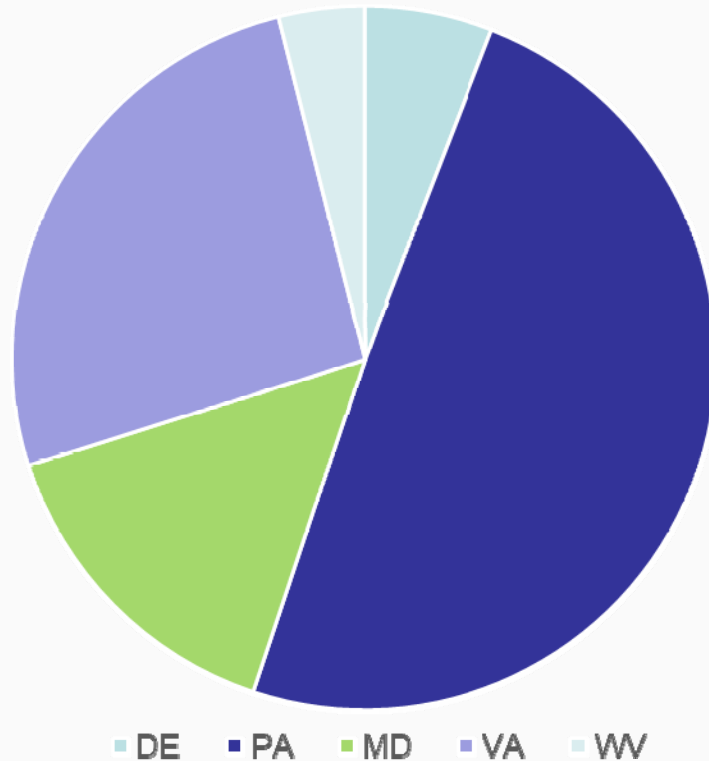
EPA has a current national compliance initiative that includes:

- Ammonia Refrigeration
- Chemical Manufacturing
- Gas Processing Plants
- Fertilizer Distribution
- Refineries



EPA Region 3 – NH3 RMP Universe

Facilities that store/use anhydrous ammonia, by state



State	RMP Facilities
DE	15
MD	39
PA	125
VA	66
WV	10



EPA RMP Modernization

The amendments are intended to:

- Address and improve accident prevention program elements;
- Enhance the emergency preparedness requirements;
- Ensure LEPCs (Local Emergency Planning Committees), local emergency response officials, and the public can access information in a user-friendly format to help them understand the risks at RMP facilities and better prepare for emergencies.



RMP Amendments Compliance Obligations

- Emergency Coordination Provisions (68.93)
 - The facility must coordinate response needs at least annually with LEPCs and document these coordination activities.
 - The facility must provide to LEPCs: emergency response plan, emergency action plan, emergency contact information, and other relevant emergency planning information.
 - Responding stationary sources must consult with LEPC to establish appropriate schedules and plans for field and tabletop exercises before March 15, 2021.
- Emergency Response Program Provisions (68.95)
 - Inform Fed/State emergency response agencies of accidental releases.
 - Review and update ERP, as appropriate (based in coordination activities, exercises, incident investigations).
 - Ensure employees are informed of changes to the ERP.

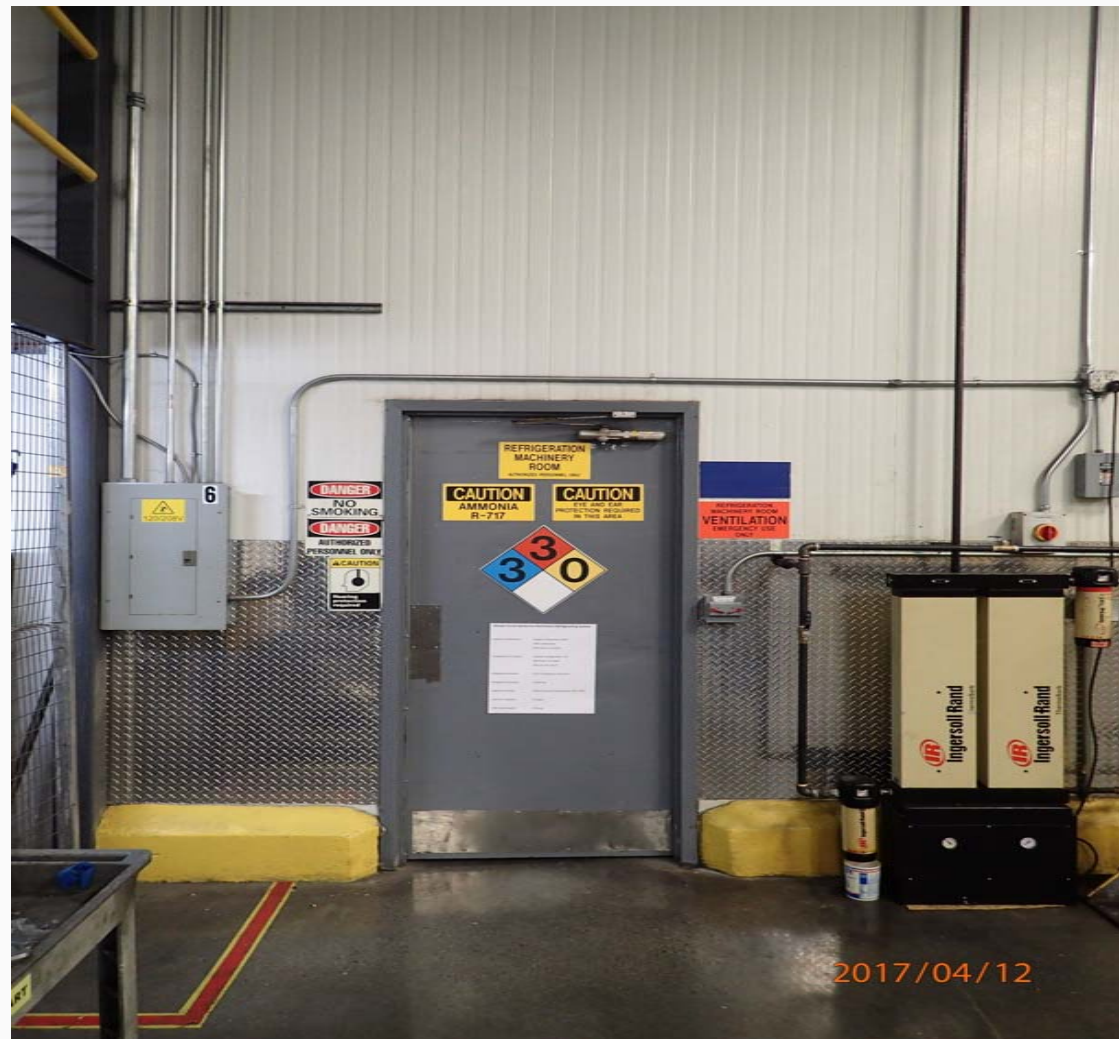


RMP Amendments Compliance Obligations

- Prevention Program Provisions (effective date of final rule) not limited to the following:
 - Incident investigation to include “near miss” – incidents that “could reasonably have resulted in a catastrophic release.”
 - Incident investigation complete within 12 months of the incident.
 - Specified content of investigation report including root cause analysis (incidents after March 15, 2021).



IIAR 2 & ANSI/ASHRAE Audible/Visual Alarms At Every Machinery Room Entrance





Stavis Seafood-Boston -1 Death - Numerous Violations





Housekeeping as a leading indicator







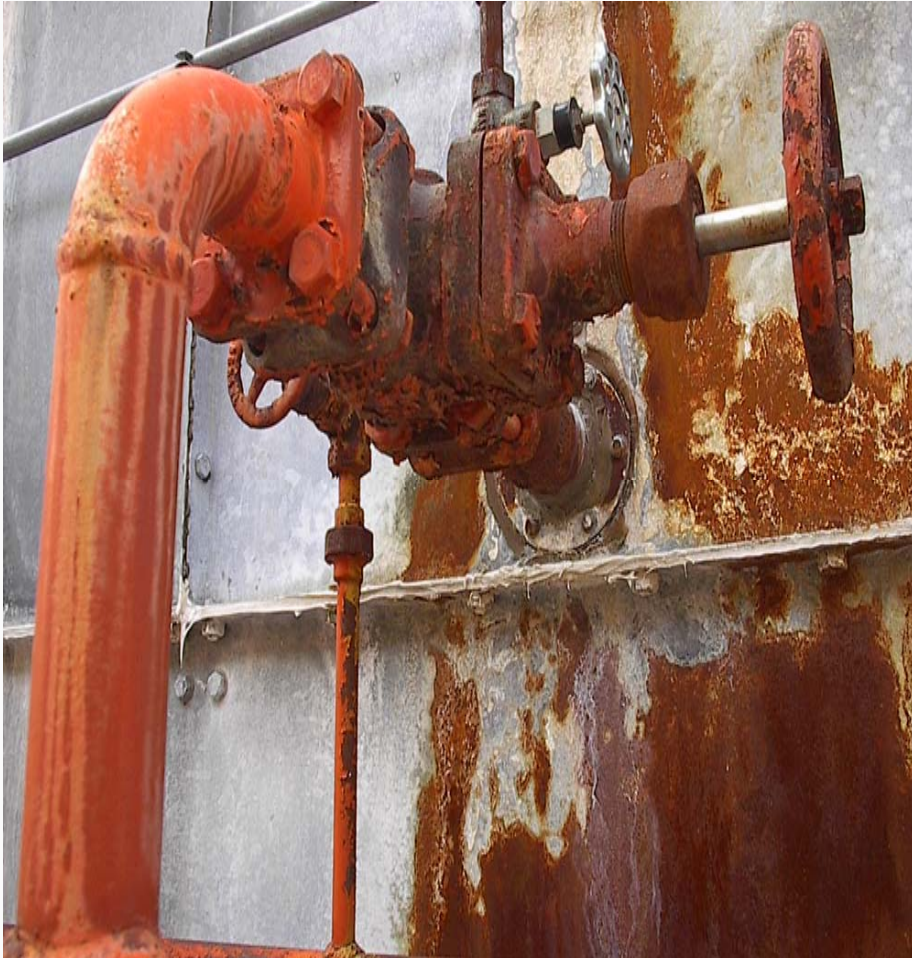


Discharge from Vent Lines



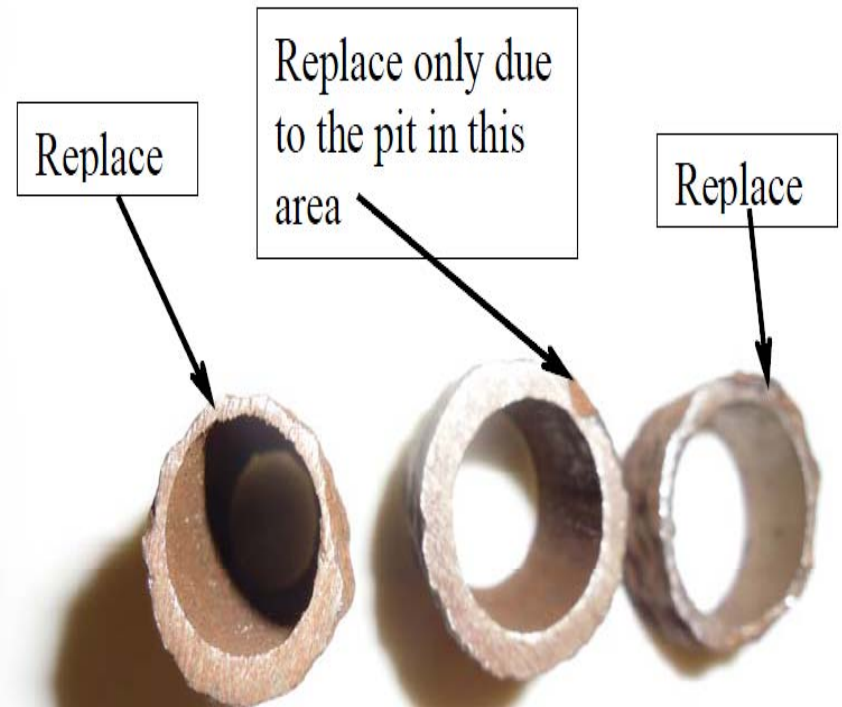


Corrosion – is it active





Indications of moisture incursion & CUI

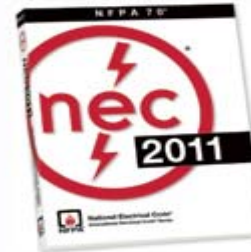




Industry Codes & Standards



National Fire Protection Association
The authority on fire, electrical, and building safety





Questions?

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