



UNITING
Process Safety Experts
SOLVING
Global Challenges

SPRING24 +20TH GCPS

A Joint AIChE and CCPS Meeting

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**New Orleans Ernest N. Morial
Convention Center
New Orleans, LA**



Cooking up the Ideal Recipe for a PHA Facilitator

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Introduction

- Effective PHA leader is ESSENTIAL component to a successful PHA
- **How do you choose a PHA facilitator?**
- How much experience is required? 3 years – 15years – 25+ years?
- Do they need to be an engineer?
- What is their field of expertise?

Recipe - Effective PHA Facilitator

Ingredients

- Operational experience
- Conducting a certain # of PHAs a year
- Hazard modeling experience
- Management experience
- PHA preparation and organization
- Essential soft skills





□ Operational Experience

- Basic Operational Principles
 - Drive team discussions
 - Helps prevent missing potential consequences
- Consequences:
Worst-case conceivable vs. worst-case credible
 - Understand what is and is not realistic
 - Avoids future management headaches
 - Prevents the potential inability to close out PHA recommendations

□ Operational Experience



- When to “push back”
 - Ask follow-up questions
 - Don’t be afraid to ask basic questions to drive relevant discussions
- Know when you are not the expert
 - Don’t need to be the expert in every piece of equipment or process
 - Know when it’s time to call in a subject matter expert

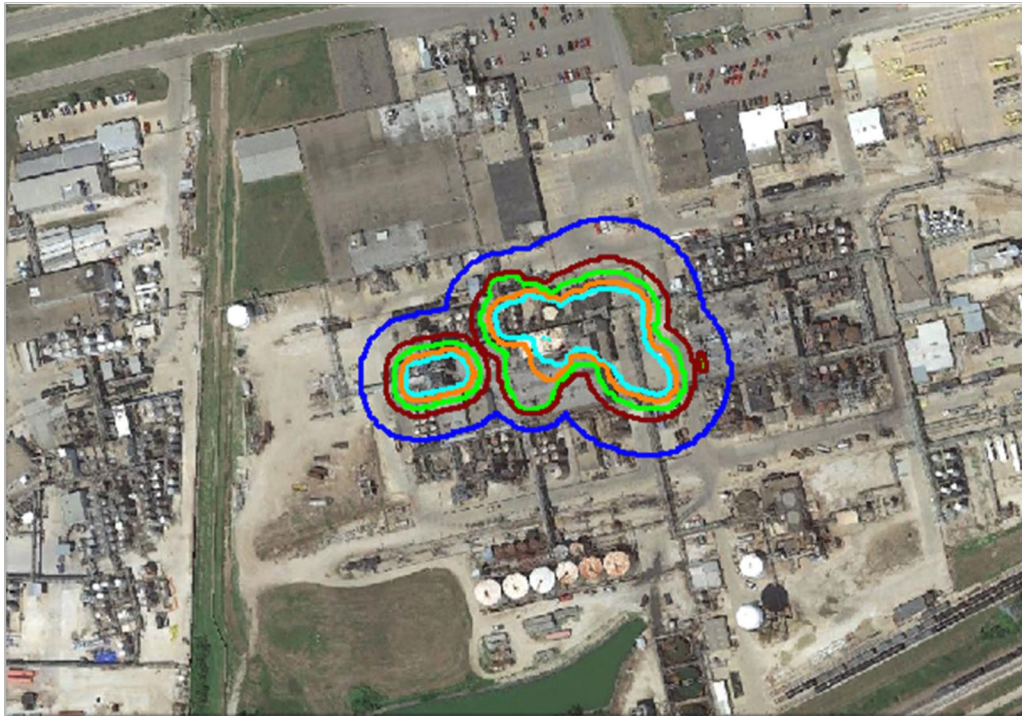
❑ Conducting a Certain number of PHAs a Year

“The first pancake is always spoiled.”

- Continuously develop and refine skills
 - New lessons to learn for each PHA
 - Improve speed and thoroughness
- Develop consistency for safety-critical scenarios
 - Approach similar scenarios in a consistent manner
 - Utilize industry guidance and personal experience

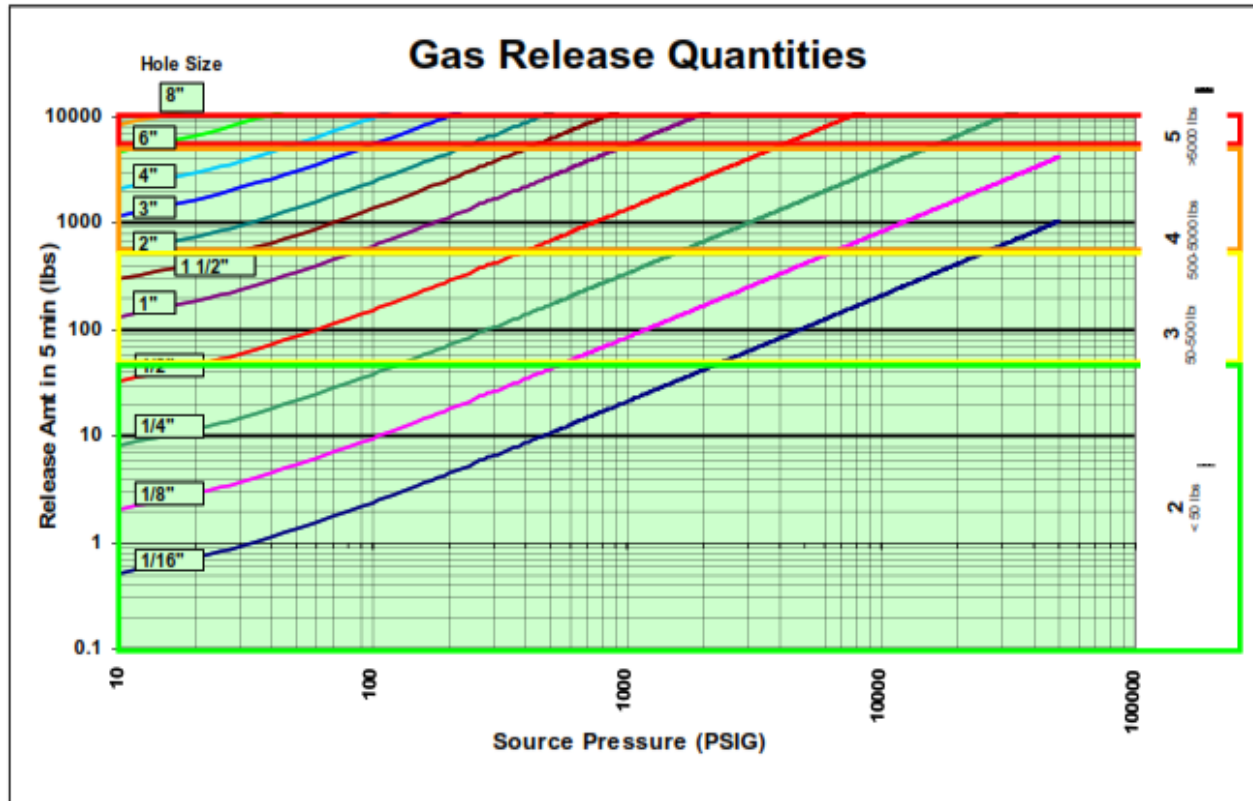


□ Hazard Modeling Experience



- Typical PHAs consider a simplified consequence for LOPC events for overpressure scenarios
- **Hazard modeling –** eliminate the “guessing game”
 - Understand the actual, credible consequence
 - Potentially lower the severity
 - Avoid over-reliance on assumptions/opinions

□ Hazard Modeling Experience



- Quantifiable way to **assess the severity** of **different release scenarios**
- Use of industry databases to perform calculations
- Modeling to determine release quantity over a given amount of time

□ Management Experience



- Most PHA recommendations have a cost to implement
- Calibrate the language used to communicate:
 - Risk
 - Potential benefits
- Improves chances of management accepting recommendations as they are written

☐ PHA Preparation & Organization

- Missing or “expired” Process Safety Information can de-rail a PHA
- Gather all necessary information in advance
- Verify all versions are current and up-to-date
- Prevents delays during the PHA & ensures best results



☐ Soft Skills

- ✓ Be patient and understanding
- ✓ Develop ability to read people
- ✓ Encourage group participation
- ✓ Be humble
- ✓ Have a good sense of humor



□ Soft Skills

- Scribing opportunities to improve soft skills
- PHA Team Leader class
- Mentorship from a senior facilitator



Conclusion

Ingredients

- ☑ Operational experience
- ☑ Conducting a certain # of PHAs a year
- ☑ Hazard modeling experience
- ☑ Management experience
- ☑ PHA preparation and organization
- ☑ Essential soft skills



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Questions?

- Thank you to
 - Sam Aigen
 - Amanda Lanson
 - Nick White
 - Nick Francis

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