

The PHA Issue

Methods, Tools, and Resources

Continuous PHA Revalidation

An ioMosaic Whitepaper

Operating companies covered by OSHA's Process Safety Management (PSM) standard or EPA's Risk Management Program (RMP) rule are required to revalidate their Process Hazard Analysis (PHA) every five years. Very frequently, process hazard analysis (PHA) teams encounter frustrating challenges, including:

- Identification of a hazard introduced by a process change
- Identification of a hazard similar to a recent incident that was either overlooked in the previous PHA or deemed to have adequate protection
- Inadequate documentation from the previous PHA

“Do not wait five years to expose hazards you can identify today.”

Clearly, PHA revalidation is an essential and critical activity. However, how and when it is performed determines if it will be effective in preventing incidents. This paper discusses the merits of a new approach geared towards increasing the effectiveness of PHAs. Called Continuous PHA Revalidation, the new approach may be summarized by asking a simple question: Why not revalidate your existing PHA every time a change is made or every time an incident investigation is completed?

What Is Continuous PHA Revalidation?

Continuous PHA Revalidation requires an operating facility to treat its PHA program as an evergreen document, rather than one requiring update every five years. In practical terms, Continuous PHA Revalidation would:

- Require the existing PHA be updated as recommended changes are implemented
- Require the existing PHA be updated after each incident

Clearly, it is much simpler to update a PHA after each change as the individuals responsible for conducting the PHA and executing assigned action items are easily accessible. After five years, several people involved in the PHA may not be available and the PHA team has to rely on second-hand information.

Continuous PHA Revalidation requires that a PHA team be assembled on short notice to update the PHA for changes made to a process. This may sound like a lot of work, but most changes do not have a significant impact on an existing PHA. It is recommended that sites employ a screening process to determine if changes to the existing PHA are necessary as this will eventually aid in expediting the process.

If the change does require an update of the PHA, it entails the simple task of reviewing the study-sections and documenting any recommendations. Since most operating companies have implemented electronic PHA and process safety information (PSI) management solutions,

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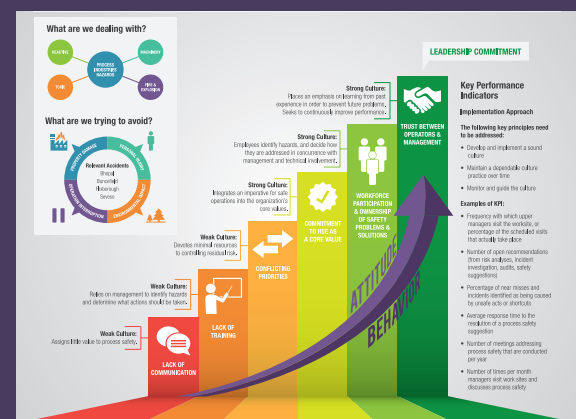
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updating existing PHAs is convenient. Some companies have taken electronic systems a step further with web-based platforms that greatly enhance information accessibility at all levels, thereby making it even easier for the PHA team members to update information.

[▶ Click here to continue reading](#)

More Reading: **Developing a Sound Process Safety Culture: A Persistent and Hard Work** by Elena Prats, CCPSC





"We knew we were getting the best company to do this work. The information and analysis provided during the process was the greatest value received."

- PHA client

We can help with your PHA

ioMosaic has conducted hundreds of Process Hazard Analyses for companies around the world. We are experienced PHA leaders providing senior process safety engineers to prepare, organize, and lead PHAs utilizing your internal technical and operations staff. Let us help your facility stay safe and compliant.

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PHAGlobal®

Work with proven PHA Tools

The PHAGlobal® component of Process Safety Office® is a process hazard analysis documentation software that simplifies recording findings and tracking follow-up from PHAs. Use built-in templates for popular methodologies, such as HAZOP, What If, and LOPA. Additional Checklist templates are able to focus on specific needs like Combustible Dust, Human Factor, Facility Siting, Process Issues, and more.

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Upcoming Events

Process Safety Office® SuperChems™ Training

September 18-20, 2018

Houston, Texas

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Mary Kay O'Connor Symposium on Process Safety

October 23-25, 2018

College Station, Texas

▶ [Learn more](#)

Save the Date

13th Annual Global Software Users Group Meeting

January 28-29, 2019

Houston, Texas

▶ [Learn more](#)



Complimentary Basic PSM Audit or Findings Consult*

Register today for a complimentary one-day PSM Audit or Findings Consult. ioMosaic ensures an independent and objective audit process focused on identifying key gaps related on the facilities company process safety management program. ioMosaic also ensures an independent and objective findings consult focused on highlighting findings and recommendations to be considered.

*Visit our website for terms and conditions

