

#### Easy to Use PHA Reports

##### The Challenge

Does this sound familiar? You are auditing a PHA program. You want to pull a few pieces of information from several studies.

You look at the PHA reports - each over 500 pages long. The information you want is somewhere in those pages but each is organized differently and some do not provide easy access to needed information.

You are preparing for a PHA revalidation and want to know how many sessions and how long the last study lasted. To find that, you have to access the file and look up the data because the report did not capture that information.

The Process Hazard Analysis (PHA) report is a gold mine of information to improve your safety. It can be used to enhance training programs and procedures. When organized as a reference and utilized fully, it can help identify critical areas for mechanical integrity programs, assist with updating Process Safety Information (PSI), and provide information for Management of Change and emergency response plans.

##### Client Description

<b>Company</b>	Multiple Global
<b>Project Location</b>	Multiple sites
<b>Industry</b>	Chemical, Food, Agribusiness, Oil
<b>Annual Revenues</b>	\$20+ Billion
<b>Employees</b>	10,001+ employees
<b>RISK, Inc. Solution</b>	PSM/RMP Audits with remote approach

##### The Solution:

A PHA is a gathering place for Process Safety Information (PSI) and its impact on recognized causes, consequences, and safeguards. The mapping of cause/consequence pairings that were developed by an experienced team provides detailed information that can be utilized in many areas of your PSM program, such as Mechanical Integrity (MI), training, and emergency response. Your PHA report needs to be designed to capture and communicate that information.

When we partner with companies to develop or improve PHA programs or facilitate PHAs, we recommend using a company-wide PHA report template used by all facilitators and sites designed to gather the information. Reports are more consistent and not facilitator dependent when key information needs are captured in the template. If you use external resources to facilitate your PHAs, having a PHA report template to provide to the facilitator is essential. When discussing a PHA with a client, we not only talk about the PHA expectations, we also talk about the report requirements. We want to understand what information is expected, the format, and how the report will be utilized moving forward.

Key information is provided as tables in the report and as WORD or Excel files for easier tracking of items. A table of contents may include some or all of the following:

- PHA Recommendations
- Study Team Members
- Study Sessions Summary (Days/Hours)

- Study Team Attendance
- Node Description / Design Intentions
- HAZOP Deviation Guidewords
- Drawings / References
- Previous Incidents Reviewed
- Completed MOCs Reviewed
- Definitions of Severity
- Definitions of Likelihood
- Risk Ranking Suggested Action Legend
- Safeguards used in Study
- KPIs
- PRA Worksheets
- LOPA Worksheets
- ALL Credited ISL
- Qualitative Screening Matrix for ISL
- ISL Credit Types
- Guidance for Recommendations

The report we design uses the information identified in the PHA to support other areas of your PSM program. Here are two key ways:

### **Set up Reports for Easier Information Access & Transfer**

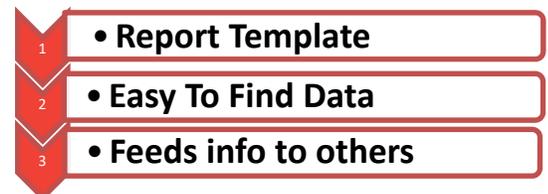
Custom reports in PHA software allow information to be exported as a Word document, Excel spreadsheet or .csv file that can be embedded in the PHA report for easy access. First we plan what data you would like to pull from a completed PHA, then we modify your template to capture those parameters. We have helped clients first understand what information is available from their PHA report then helped them create different ways to pull data.

#### **One example:**

A database was being created to determine criticality of certain safeguards and/or equipment based on its use in the PHA. We partnered with the client to modify their PHA documentation guidance so that the information in the PHA was in a format that could be transferred easily into the appropriate database.

Specifically, the format for:

- Interlocks written to include the set points
- Valves identified as required to open or close & the scenario that it is protecting
- Alarms written to clearly identify what is triggered & what is protected



This information may be utilized to determine priority for maintenance, for example.

### **Feeding Information to Other Areas**

To help our clients get more use from PHAs and the PHA reports we help them design PHA templates and reports that can better capture and feed information to other areas of the site. Some examples include:

- Identifying & Tracking Safeguards
- Updating Process Safety Information (PSI)
- Updating Mechanical Integrity (MI)
- Enhancing SOPs
- Enhancing Training
- Enhancing Emergency Response

We set up easy to reference tables in the PHA report and as standalone addendums that can be transferred to other staff for input into on-line systems or other department work orders.

**The Result:**

There are a variety of ways that a high quality PHA can be used to augment other areas of your PSM program after it has been completed. Your PHA report should summarize that information for easy use. Data mining, while time consuming, can yield valuable information to enhance Training programs, update Procedures, and Emergency Response Plans, support Mechanical Integrity programs, and update Process Safety Information.

Setting up your expectations in advance allows you to establish requirements for modification to the PHA template (if possible) such that data can be exported easily. If not, you can create expectations about how the scenarios, safeguards and recommendations will be written to facilitate the identification and subsequent transfer of data for the other elements within the PSM program.

Being able to easily access information when needed prevents downtime. Statistically unplanned downtime can average \$125,000 per hour. Investing in your PHA reports now can save time and money later.

**Related Papers:**

Don't Put Your Report on a Shelf:

[https://psmrisk.com/wp-content/uploads/2021/04/Dont-Put-Your-Report-on-a-Shelf-Murata-16th\\_gcps.pdf](https://psmrisk.com/wp-content/uploads/2021/04/Dont-Put-Your-Report-on-a-Shelf-Murata-16th_gcps.pdf)

***What our clients are saying about our PHA services:***

*"You led a team I was on 20 years ago and I have followed your excellent facilitation style since. When I saw your name on the approved facilitators list I knew I had to contact you for our next study." TechSafe Lead, PSI & MOC Advisor, Process Safety Engineer, Renewables Energy Firm*

*"I was in the PHAs you did on Thursday and Friday. I just wanted to reach out and say thank you for making them interesting and making me finally feel like my safety concerns about my unloading area have been heard. You are very good at what you do." PHA team member, operator at chemical plant*

***Get expert guidance for process safety success***

***Partner with us for your PHAs***

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Call us at 510-828-7228 to talk about your needs