



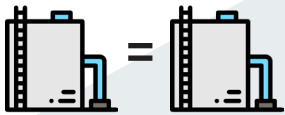
A Provenance  Consulting Solution

FOCUS ON THE BIG PICTURE BY  
AGGREGATING HISTORICAL PHA  
DATA FOR MACRO-LEVEL ANALYSIS

WE'RE **CHANGING THE GAME**



*How consistent are your PHA's for:*



THE SAME  
**PROCESS?**



THE SAME  
**TECHNOLOGY?**



DO THEY HAVE SIMILAR  
**CAUSES, CONSEQUENCES,  
OR RISK LEVELS?**

*PHA Central™ enables you to answer these questions by addressing the structure and accessibility limitations of current PHA data:*

1. Structure improves  
Consistency

2. Consistency allows  
for Analysis

3. Analytics direct and  
support Decisions

## PRODUCT FEATURES

- Categorization Approach Allows for **Robust Comparison & Analytics** at a Macro-Level
- Easily Generate and View **Risk Profiles & Matrices**
- **Flexible Enterprise Deployment** Options (Cloud or Onsite)
- Unlimited Users with **Controlled Data Editing Access**
- **Import Support** for Historical PHA File Formats

# VALUE PROPOSITION OF PHA CENTRAL™

PHAs are the petrochemical industry's primary and most comprehensive method to identify and mitigate process-based risk.

While there are many PHA facilitation and data management software options, PHA Central™ is the only advanced PHA data analytics solution that combines multiple PHA data sets into a categorized database with built-in analytics tools.

PHA Central™ aggregates all PHA data into one system and allows users to:

- > Create **PHA data consistency** which allows for **accurate, meaningful comparisons**
- > Enable better investment stewardship based on risk by **preventing over- and under-mitigation**
- > Provide **accessible, actionable PHA data analysis** for smarter, faster decision making
- > Retain current **PHA system customizations**
- > **Capture Historical Industrial Knowledge** in a Usable, Accessible Interface
- > Enjoy **Simple Enterprise-Level Implementation** with Software Support
- > Import **Support for All Historical PHA File Formats** on the Market

## Overall – Corporate Risk Profile

$$\text{URV} \quad 2.7 \quad - \quad \text{MRV} \quad 1.7 \quad = \quad \text{RRV}^* \quad 1.0$$

## Unit 1 Risk Profile

$$\text{URV} \quad 2.0 \quad - \quad \text{MRV} \quad 1.4 \quad = \quad \text{RRV}^* \quad 0.6$$

## Unit 2 Risk Profile

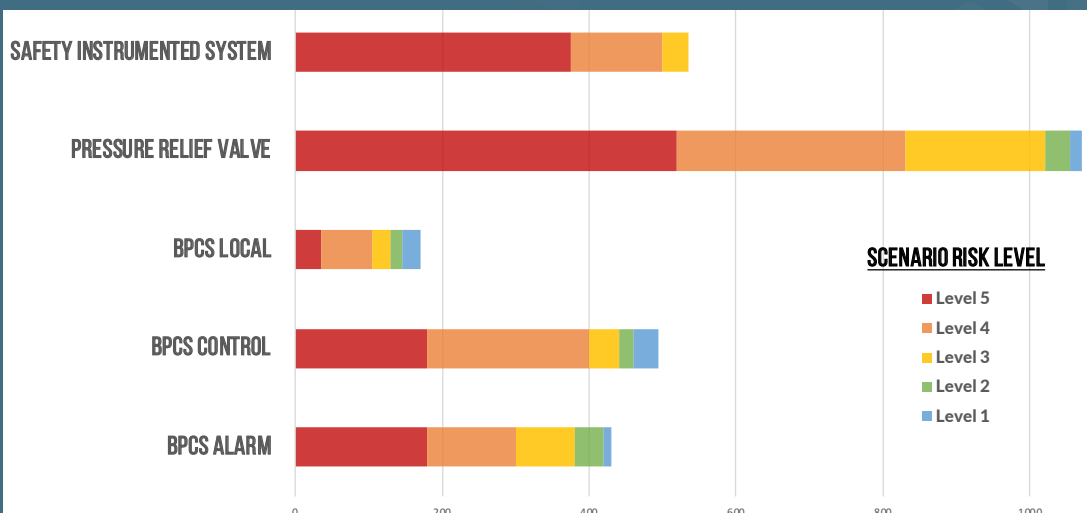
$$\text{URV} \quad 3.4 \quad - \quad \text{MRV} \quad 1.9 \quad = \quad \text{RRV}^* \quad 1.5$$

RISK PROFILES

## SAMPLE PHA CENTRAL™ REPORTS

	Negligible (N)	Minor (M)	Serious (S)	Catastrophic (C)	Extreme (E)
Frequent (F)	2 185	3 117	4 167	5 238	5 142
Occasional (O)	1 233	2 183	3 313	4 460	5 259
Remote (R)	1 24	1 13	2 12	3 50	4 22
Improbable (I)	1 0	1 0	1 0	2 0	3 0
Extr. Improb. (E)	1 0	1 0	1 0	1 0	2 0

## SCENARIO DISTRIBUTIONS



## IPL TYPE CREDITED BY SCENARIO RISK LEVEL