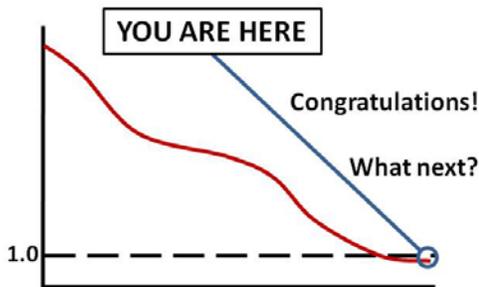




### ∇ Key Performance Indicators



Over the years, dramatic progress has been made in reducing workplace injuries. Unfortunately, as recent events in the Gulf of Mexico have tragically demonstrated, several successive years of extremely low injury rates tell you nothing about the future safe work performance of an organization. Paradoxically, as traditional consequence-based safety metrics reach extremely low values, they lose their utility as management tools.

Successful companies monitor progress against defined goals and quantifiable critical success factors. Key Performance Indicators (KPIs) provide stakeholders with a continuous real-time view of organizational units' status relative to these objectives.

The vPSI System™ includes five valuable KPIs that provide a new performance insight. vPSI KPIs are leading indicators, measuring what is being done today to reduce the probability of future losses. They tell you where you're going, not where you've been, in contrast with many metrics in use today.

**I The vPSI Number™** is a high-level KPI which reflects how an entity responds to, and deals with, problems. It is common to begin by measuring the reaction to safety problems (accidents and incidents), and gradually expand the scope of the vPSI Number to include quality deviations, environmental, reliability, etc. What does success look like? Maintaining the vPSI Number over 200 demonstrates a culture of continuous improvement.

**II Awareness Index:** A vPSI Number component, the Awareness Index essentially measures the organization's recognition of problems before they result in harm. It rewards and encourages near miss reporting and the realization of the value near misses offer as opportunities to identify and correct problems before a significant loss is incurred.

**III Solutions / Planning Index:** Reporting is only the first step; both near miss and loss events must be investigated and effective corrective actions developed. Corrective actions are the product of investigations. They are evaluated individually, and their ratings aggregated across a population of event reports. The Solutions / Planning Index is the second component of the vPSI Number, measuring the effectiveness, permanence and breadth of application of corrective actions.

#### Inside this issue:

∇ Key Performance Indicators	1
To Err is Human	2
Out and About	2
Preventing Repeat Violations	3
Combining Business with Pleasure	3
The vPSI System™	4

**IV Implementation Index:** It is a truism to say that you have not done anything until you actually do something and the purpose of the vPSI Number's final component is to make sure that corrective actions are followed-up and completed. An Implementation Index hovering above 90% indicates that the measured entity is on top of turning recommendations into reality.

**V Minor Incident Metric:** Developed in conjunction with Marathon Oil Corporation as an extension of the vPSI Awareness Index, the Minor Incident Metric is useful for organizations with an advanced near miss reporting culture. It provides greater sensitivity for high ratios of near miss to loss events. Marathon's Upstream division has achieved a 10 to 1 ratio, not only reporting large numbers of near miss events, but also investigating and resolving the underlying issues.

vPSI KPIs are independent of actual consequences: audit findings, near miss and loss events are treated the same. How a problem is identified is of lesser importance than what the organization does about it.

Inevitably, every KPI encounters some who will seek to game the system. While they are completely under the control of those being measured, filters on the front end of the process prevent low exposure issues from influencing vPSI KPIs. In fact, the only way to have a vPSI Number over 200 is to identify real problems and verify the implementation of real solutions. Effectively, the harder people try to finessse the process, the more they achieve the ultimate goal of sustainable operational improvement.

# H-E-A-R SAY

## To Err is Human

The last *H-E-A-R SAY* began a discussion on how to handle people who won't follow the rules. This article is about a different issue: individual error. We all make mistakes, the only debate is how often. Even highly motivated, well trained people conducting tasks they are very familiar with make mistakes with surprising frequency. The "vPSI Triangle" concept of a ratio between acts of people and unplanned events applies to errors in the same way as it does to deliberate acts, meaning that most of the time, nothing bad happens as a result of an error. In fact, the individual may even learn from the experience, reducing their probability of repeating the mistake. The topic of Human Performance Error rightly receives much attention and study in industries such as nuclear and aerospace. Human error is eliminated as far as possible, or processes made error

tolerant, but sometimes stuff just happens. In some cases, significant negative consequences may be realized. The question then is: how does the organization react? Unfortunately, the most common response to an individual error is to impose some inappropriate new requirement on the entire organization.

Let's say an employee reached into a desk drawer, encountered an open pair of scissors, and somehow contrived to be injured to the extent that stitches were required. How would your organization react to this unplanned event? In many companies, a recordable injury (no matter how caused) will lead to formation of an investigation team and trigger a requirement for formal root cause analysis. Is this a good use of corporate resources? This is a highly unlikely outcome of a highly improbable event. Even if you do absolutely nothing, it is never likely to happen again. Would doing nothing after a recordable injury be an acceptable option in your organization? Not likely, so what will you do? Ban scissors? You may laugh, but this is a real event and that's what the company did as a result. Consider the effect on the reputation and credibility both of the safety function and managers involved. Not everyone wants to be the subject of Scott Adams' globally syndicated Dilbert® comic strip.

*vPSI consultants encounter many corporate over-reactions as they review investigation reports. An offshore worker turned around in the shower, hit the wall, broke his toe and was evacuated to shore. Someone was injured! Something must be done! What measures can conceivably be put in place to prevent this from happening again? Introduce a "Buddy" system?*



© Scott Adams, Inc./Dist. by UFS, Inc.

The vPSI System discourages time, energy and resource wasting attempts to come up with responses to this type of event. When the relevance and effectiveness element of the vPSI Test™ is applied with brutal honesty, we see these so-called "corrective actions" for what they really are: Type 0 activities to satisfy process and management expectations, with no real prospect of preventing reoccurrence. A vPSI Type 3 corrective action is unlikely to be appropriate, or even possible. Forcing these events into the process based on the harm suffered ultimately depresses an organization's vPSI Number.

While zero incidents is an admirable philosophical goal, the probability of human error is non-zero in every activity involving people. Most individual errors will not lead to unplanned events and even if they do, usually no actual loss will arise. In the unfortunate cases where harm is sustained, consider whether you are dealing with an individual or systemic problem. Solve individual problems at the individual level rather than imposing largely irrelevant and ineffective changes on the entire organization.

Systemic causes, such as work induced fatigue, may be behind individual errors. These can and should be dealt with at the management system or business process level. If I hit my thumb with a hammer because I have heat exhaustion, the organizational reaction should be different than if I simply hit my thumb by mistake. What practical corrective actions could be implemented for the second case? Retraining in hammer use? Ban hammers from the workplace? Note that this question is independent of the harm suffered, even if my slip results in a smashed thumb and permanent disability.

## Out and About

Meet vPSI Group at these upcoming events in the Greater Houston area:

- Greater Houston STEPS Network Vender Day, July 20, 2010 in the Humble Civic Center from 10 AM to 2 PM
- Gulf Coast Chapter AIHA Dinner Meeting and Presentation on Combustible Dust, July 15, 2010 at Brady's Landing from 5:30 PM to 8:30 PM

## Prevent Repeat Violations

When something goes seriously wrong, almost every company makes sincere efforts to prevent it happening again to avoid future losses. *H-E-A-R SAY* readers in the USA will likely be aware of another incentive: OSHA's Severe Violator Enforcement Program (SVEP) which focuses on repeat violations, especially those that OSHA considers willful.

A fatality or other severe loss will attract intense OSHA scrutiny, likely leading to citations and penalties. Even if successfully contested, these are themselves a loss, both financially and in terms of damage to the firm's reputation, in addition to the immediate consequences of the event.

The SVEP is nothing new. Years ago, with the advent of electronic data-

bases, OSHA made clear its intention to classify citations at the same establishment, or at other locations linked to the same ownership, as "repeat" or "willful" violations. The first citation is issued on the principle of "there is a standard and you *should have known*." Worse is the repeat occurrence, which falls under the scope of the SVEP Directive: "You *knew*, but you did not do anything about it." OSHA says, "Let's have a deeper (and inevitably more costly) look at this."

If an organization experiences a repeat of a previous unplanned event, then it is clear that the activities output by the prior investigation, labeled as "corrective actions," were not effective. Not only was the most fundamental objective of the investigation process not met, but the original exposure was

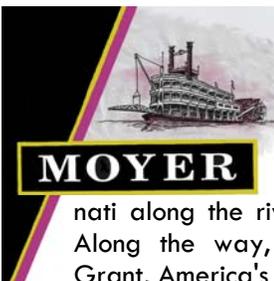
left in place, and the potential for penalties significantly increased.

It is essential that every organization has a system in place to provide confidence that hazards identified and cited by OSHA are corrected not only at the affected establishment, but most importantly, at *other* establishments of the same organization.

With the US Congress seeking to extend culpability down the ladder to Managers, Supervisors, and perhaps people with "safety" in their job title, you will want to do more to ensure you do not fall under the SVEP. That means implementing real and effective corrective actions the first time a problem becomes apparent, preferably pre-loss and before OSHA has any reason to get involved.

## Combining Business with Pleasure

vPSI consultants travel extensively in the course of their work, giving them the opportunity to sample cuisines from a variety of cultures.



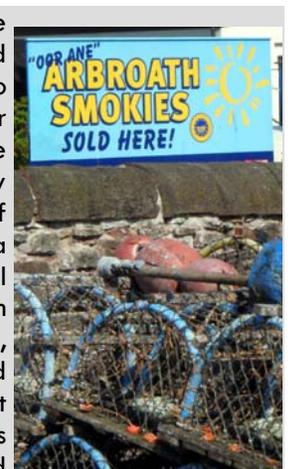
Catlettsburg, on the Kentucky side of the mighty Ohio River, is home base for Marathon's Marine Transportation group. There are many interesting ways to get there, including a scenic drive from Cincinnati along the river's eastern bank on US Route 52. Along the way, visit the birthplace of Ulysses S. Grant, America's 18th President, in Point Pleasant and the Moyer Vineyard, Winery and Restaurant in Manchester. The Moyer Restaurant lives up to its reputation for great food, a great atmosphere, great wine, and a great view of the river.

The small town of Conway, in the heart of Arkansas, produced several happy culinary surprises. While training for SouthWestern Energy, our consultants were impressed by three local restaurants: Oak Street Bistro, Mike's Place, and Michelangelo's.

One vPSI Director managed to do a trip around the world all on his own: over two long weeks 9 training workshops were conducted at 7 locations in 5 countries. Obviously this

afforded many culinary opportunities! One notable favorite was found at retail and dining destination Dempsey Hill in Singapore. Dempsey Hill is a converted army barracks and national service enlistment center. Don't try to choose between the Jumbo Seafood Restaurant's Chilli Crab or Black Pepper King Crab: try them both!

The distinctive and aromatic Smokie is recommended for confirmed foodies who have the opportunity to travel around Scotland. Two of our colleagues conducted training at the Halliburton manufacturing facility located in the small fishing harbor of Arbroath. The Arbroath Smokie is a haddock prepared using traditional methods dating back to the 19th century. The fish is cleaned, salted, tied in pairs by the tail and dried overnight. A beech and oak fire is lit inside a half whisky barrel, the pairs of fish are hung over the fire and the top of the barrel covered with a lid and dampened sacks. This creates a very hot and humid fire and lots of smoke. After an hour of smoking, the fish are ready to eat.



More vPSI travel photos can be found on our Facebook page.



# The vPSI System™

The vPSI System™ is a professional development program in addition to being a route to improved safety performance. Using vPSI measurements to manage an organization produces sharply improved problem-solving skills. Everyone performs more effectively when they understand a few simple vPSI concepts and methods and learn how to apply these ideas to their jobs. Skills learned through the program can be applied to all areas of the organization, which will improve overall efficiency and boost the bottom line by reducing costs and the business impact of unplanned events of all types.

## vPSI Training Menu

### *Applying vPSI Methods of Accident Prevention*

This 8-hour class provides the fundamentals of vPSI methodology with an emphasis on rating and developing effective corrective actions to prevent recurrences of unplanned events.

### *JSA: Planning Jobs for Safety and Success; Hands On vPSI Online Tool Workshop*

This 4-hour class followed by a 4-hour hands on workshop provides users with skills to build effective JSAs specific to their worksites.

### *Applying KUBO-TEPA™ Methods in Problem Solving*

This 8-hour class provides users with KUBO-TEPA behavioral components of problems which aid in developing long term corrective actions applied across organizations.

### *Executive Overview Presentation*

This 2-hour presentation provides a high level overview of vPSI Implementation for busy executives.

### *Customized Training*

Training can be designed and delivered to very particular customer specifications such as: vPSI Corrective Action Assessment integrated with TapRoot®, vPSI Corrective Action Assessment integrated with Cause Mapping, and integrating customer incidents into the Fundamental, Assessor, and the Pre-Task Planning classes. vPSI thinking has also been applied in developing custom training to address difficult issues such as DOT driver compliance and journey management.

©2010 vPSI Group, LLC All rights reserved

## vPSI Online Tool Portal

<http://vpsionline.com>



### *vPSI Online Tool Demo*

This 1-hour demonstration gives users insight into the vPSI Methodology behind the online tools and guides them through the key functions to help them as they input incidents and corrective actions then review and rate their effectiveness or build Pre-Task Planning documents.

## vPSI GROUP, LLC



Become a fan on



10497 Town & Country Way  
Suite 225  
Houston, TX USA  
Phone: 713.460.8888  
Fax: 713.460-8988  
Email: [info@vpsigroup.com](mailto:info@vpsigroup.com)  
[www.vpsigroup.com](http://www.vpsigroup.com)