

Best Practice 19 - Problem Evaluation Request (PER) – A Comprehensive, Low Threshold, Electronic Work Initiation//Problem Identification System

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Brief Description of Best Practice:

As the prime contractor for Hanford's tank waste clean-up mission, CH2M HILL Hanford Group is demonstrating continuous process improvements in the identification and successful resolution of critical corrective actions and cost reduction initiatives. Assuming the waste clean-up role in 2000, CH2M Hill acquired oversight on a number of disparate systems and identified several deficiencies in corrective action management, status, tracking and history and an efficient methodology to obtain employee suggestions.

In addition to applying sound Integrated Safety Management System (ISMS) principles and practices, CH2M HILL sponsored the development of a structured workflow that would interface with Electronic Suspense Tracking and Routing System (E-STARS) and automate the identification and resolution of critical corrective actions. The Problem Evaluation Request (PER) module was developed to provide a simplified way to request the evaluation of problems and suggestions as they are discovered in the field. The workflow allows the capture of information to analyze the condition, perform causal analysis and ensure problems receive the appropriate level of management attention.

Today, CH2M HILL consolidates the tracking of all internal corrective actions into a single repository, eliminating more than 9 disparate systems and reducing the delinquency rate to less than 2% across their enterprise.

Why the Best Practice was used:

With the power of E-STARS the organization was able to develop modules and interfaces for their most critical business process, corrective action management. The PER provides an easy to use interface for personnel to originate an official request to have issues, concerns, or suggestions evaluated for resolution. Once entered, a workflow structure is automatically launched to ensure each request is routed and processes through a defined set of evaluators and leadership team members. This allows capturing of information and documentation pertinent to analyzing the condition, performing causal analysis and developing sound corrective actions to prevent recurrence.

What are the benefits of the Best Practice:

Efficiencies realized through the use of an automated structured workflow mechanism, versus the historically labor-intensive manual process, have reduced CH2M HILL's delinquency rate on corrective actions by a factor of four. The PER fill-in-the-blank process integrated with E-STARS structured workflow provides a sound methodology of ensuring "conditions adverse to quality" receive the appropriate level of attention and focus. A powerful reporting capability allows the PER user base to obtain real-time status on open items, perform causal analysis, generate corrective actions, and obtain trending information for continuous improvement.

What problems/issues were associated with the Best Practice:

Initially, gaining organizational trust to dissolve their home grown tracking systems and rely solely upon the PER and E-STARS systems was a challenge. Once indoctrinated in the program use and capabilities, the benefits of transitioning far out-weighed the benefits of running independent systems. The concept of "zero threshold" reporting prompted a high rate of initiation for about 3 months. The rate of initiation has tailed off and is holding at a manageable rate of approximately 6000 per/yr.

How the success of the Best Practice was measured:

- Since the implementation of PER and E-STARS, the company corrective action delinquency rate has decreased from approximately 48% to 1% company wide.
- We've seen a reduction of issue management turn-around time, cut by 1/3 over a 12 month period.
- The ratio of significant PERs to total PERs (0.5%) has remained "Best in Class".
- E-STARS placed in the top 25 finalist in the 2004 Excellence in Government Awards program.
- PER and/or E-STARS customers include the US Air Force, US Department of Energy Hanford Site, Centers for Medicaid and Medicare, US Department of Energy Environmental Management CIO and Pantex.

Description of process experience using the Best Practice:

PER and E-STARS have been established and used as a best management practice at CH2M HILL. Results include:

- Collaborative business process management
- Accountability tracked at the desktop
- Organizational focus
- Audit and compliance-based tracking
- Involvement and feedback to the originator
- Timely identification of problems and reporting to outside agencies
- Real time tracking
- Records management
- Accurate historical data

ISM Core Function and Guiding Principle to which the Best Practice relates

Core Function 5: Provide Feedback and Continuous Improvement