

*River Corridor
Closure Project*

Monitoring Performance: Going Beyond Performance Indicators

EFCOG, QA Working Group

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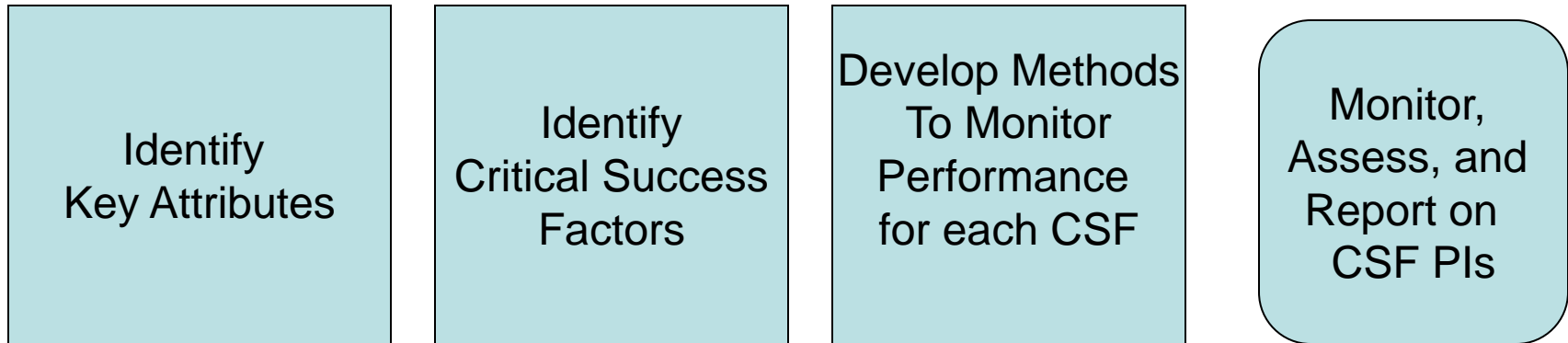


U.S. Department of Energy
Richland Operations Office

Synopsis

- A typical approach in developing Performance Indicators
- Does this provide a representative picture of health?
- WCH Assessment on Topic
- Functional Health Report Development

Typical Approach to Generating Performance Indicators



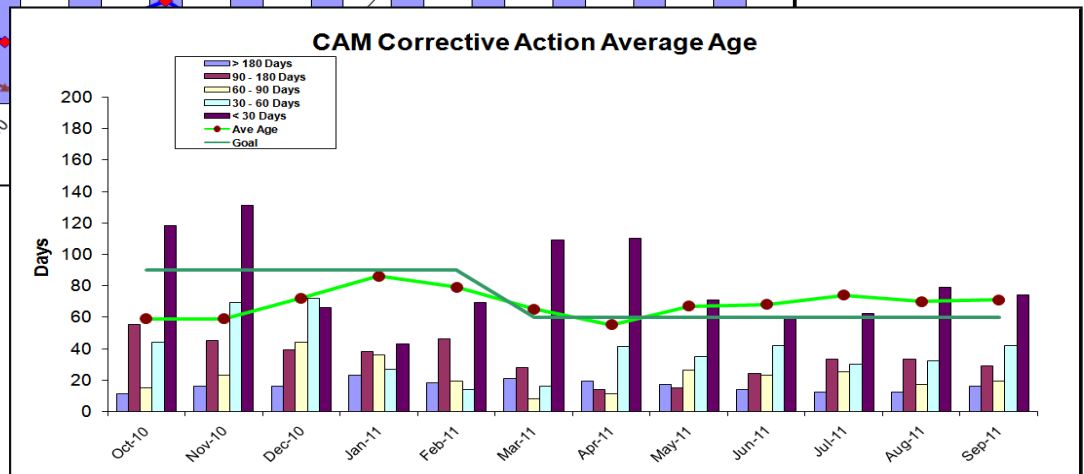
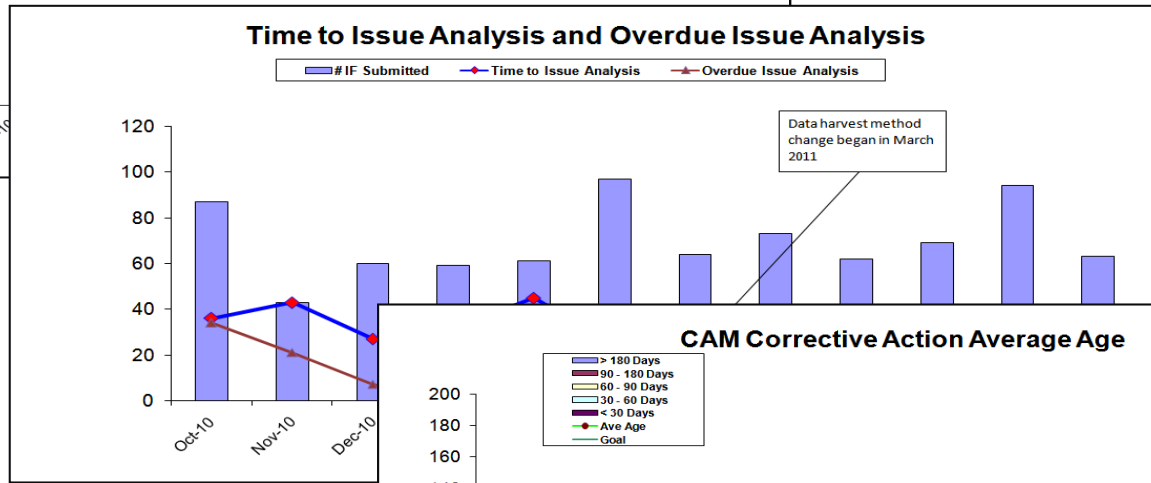
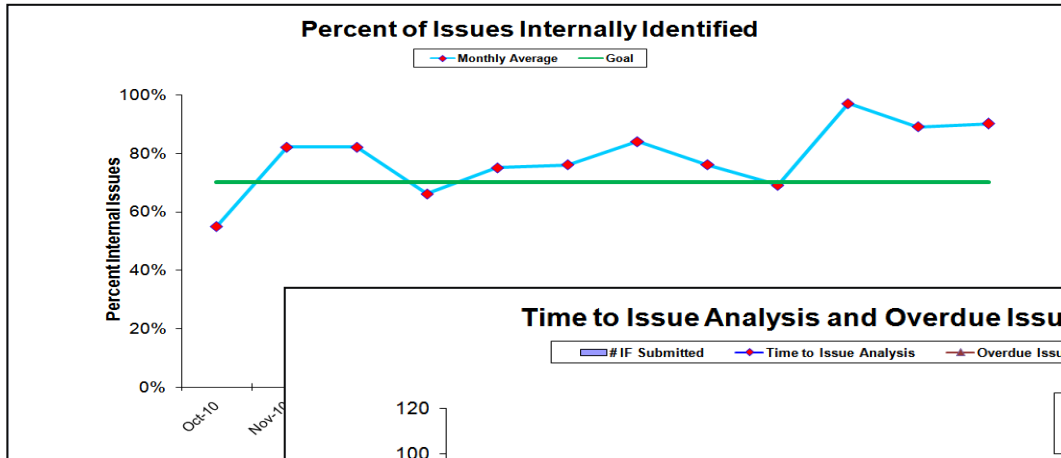
Performance Indicators
Periodic Assessments
Trend Analysis
Etc.

Example - CAM System

- Key Attributes
- A Contractor's Corrective Action Program Should: (DOE G 414.1-2)
 - Detect and Document Problems
 - Identify Causes
 - Correct Problems
 - Prevent Problems
 - Control Deficient Items/Conditions
 - Assess Adequacy of Corrective Actions

Critical Success Factors

- Detection:
 - Issue Generation
 - Issue Distribution (Significance)
 - Self Detection: Company Identified vs. External Identified
- Causal Analysis:
 - Average Time for Issue Analysis
 - Overdue Issue Analysis
 - Trend Program (no PI)
- Prevention:
 - Trending Program (no PI)
 - End Point Assessment for Significant Issues (no PI)
- Correction:
 - CA Average Age
 - CA Aging Report
 - Overdue CA
- Control Deficient Item/Condition:
 - Management Control (no PI)
 - NCR process (no PI)
- Assess:
 - Trending Program (no PI)
 - End Point Assessment for Significant Issues (no PI)



One Team for Safe, Visible Cleanup of the River Corridor

Does this approach provide a representative picture of health?

- “What if”
- We had a condition in the area that required reporting into the ORPS process? Would the PI's reflect that?
- We had a lot of issues with the use of the system and had to fix the system often? Would the PI's reflect that?
- We performed assessments and found out that the users of the system were confused, were implementing it wrong, and, it was perceived as a useless process? Would the PI's reflect that?
- Our Customer continued to provide feedback that the process was not meeting their expectations? Would the PI's reflect that?

Taking a different approach

WCH performed an assessment of our Performance Indicators against a suite of Functional Areas with the following Conclusion:

- Of the 18 areas assessed, WCH had some level of PIs for 12 of them,
- Very few of the PIs represented more than a snap shot of data associated with the functional areas
- None provided a strong representation of the health of the 18 areas identified.

What does provide a better picture?

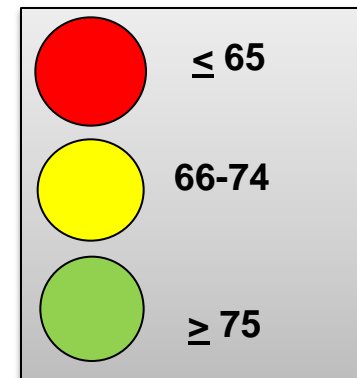
- ORPS – Any reportable events in the area?
Last month or year?
- CAMs – More than just issues from this month – some issues take months to resolve – issues should influence health perspective until resolved.
- Performance Indicators – Part of the picture – is current performance meeting expectations?
- Assessments – What have the last assessments told you? Depending on their breadth and critical review, can provide a better picture of health, OR can give you feedback that you need to do a better or different focus assessment.
- Feedback – What are the customer, management, worker perspective on the process?

Functional Health Report using Contractor Assurance System (CAS) (DOE 226.1A)

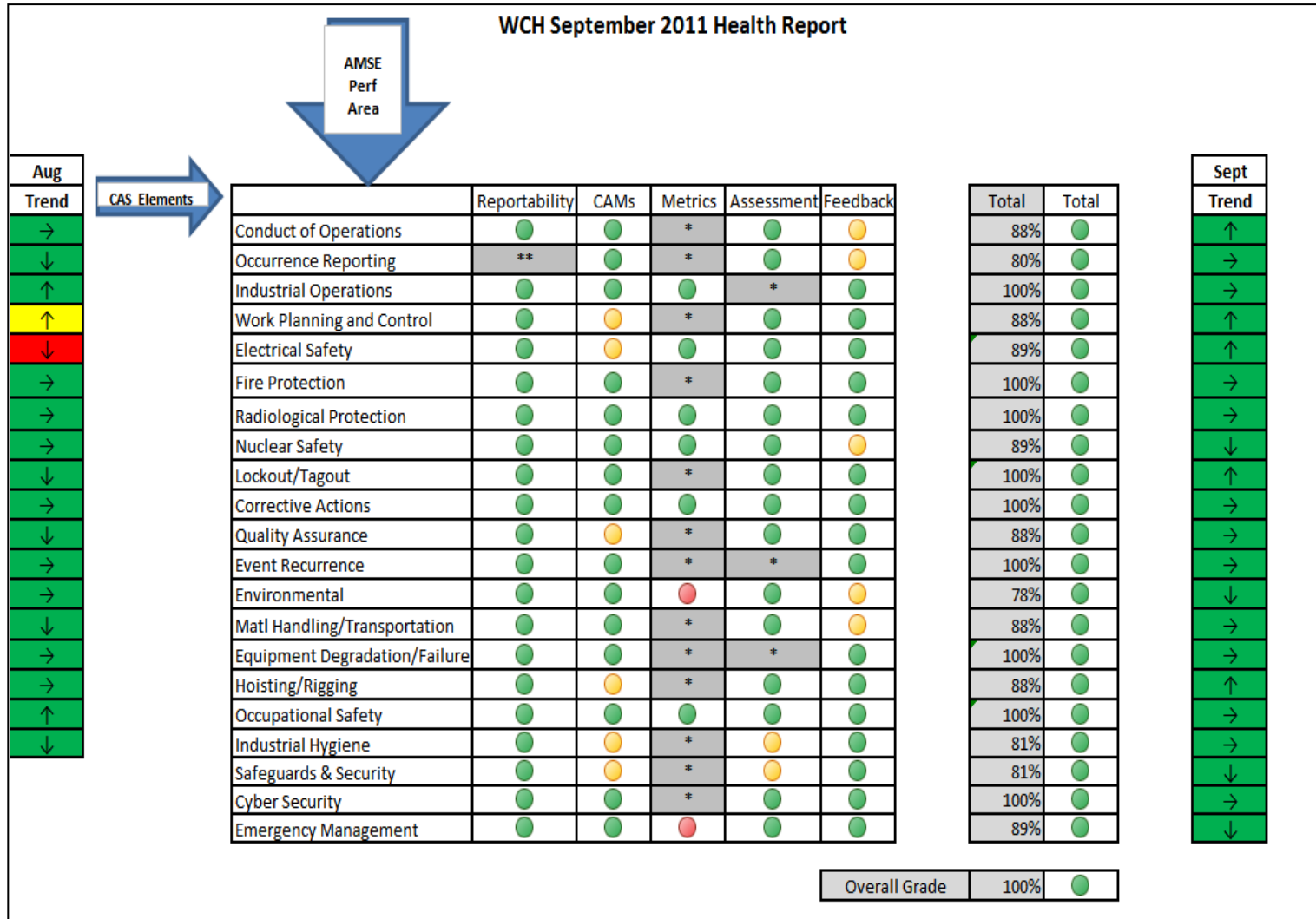
- July 2011 – Implemented a monthly Functional Area (FA) Health Report using five CAS Elements
- Data from five CAS elements are collected for each FA, with a rating of green, yellow, or red rendered.
- Criteria has been developed for each rating, but is somewhat subjective.
- Ratings for the five CAS elements are then input to a formula that renders an objective output of overall health (percentage points achieved out of 100 possible).

CAS Elements

- ❖ Reportability
- ❖ Issues Management System
- ❖ Performance Metrics
- ❖ Assessments
- ❖ Feedback










Functional Health Report



One Team for Safe, Visible Cleanup of the River Corridor

Functional Health Report

Functional Area Previous Color Trend	Inputs	Functional Area Current Color Trend
<p style="text-align: center;"></p> <p><u>Work Planning & Control</u></p> <p>Last program assessment:</p> <p><i>MA-2010-019 – Annual Eval of all ConOps assessments and surveillances. No additional actions were identified.</i></p> <p><i>MA-2009-024 - Annual IWCP Management Assessment. No additional actions were identified.</i></p>	<p>Work Planning & Control</p> <ul style="list-style-type: none"> ○ Reportability –  No reportable events attributed to Work Planning & Control. ○ CAMs –  The following adverse issue was documented in this functional area: <ul style="list-style-type: none"> ○ Mock ups were performed to support anomaly sampling at 100-D. On the day work was set to commence one of the team members was unavailable (death in the family); it was decided to proceed with work, using a replacement individual (he was at the mock ups as well but in a different role). This led to some confusion during the process. (IF-2011-0592) ○ Metrics –  No performance indicators established for this area. Initial data expected in November representing October data. ○ Assessment –  The following assessments were documented in this area: <ul style="list-style-type: none"> ○ A self assessment of the workability of selected craft and Type 1 work packages was completed. Other than minor adjustments to add additional forms and minor adjustments to numbering and sequencing to link misc. paperwork to indexes, no issues were identified. All packages were concluded to be workable. (FR-2011-SA033) ○ Following corrective actions, a surveillance of the anomaly craft work package that was previously determined deficient and documented on IF-2011-0483 was completed at FR 100D (action 2 of the same IF). No issues were identified with the work package or performance pages. A couple of minor improvement items were identified for addressing with the overall work control process, not directly related to original issues. (FR-2011-S090) ○ Surveillance performed on installation of fill material around the river structures at 100N. This included a review of work package instruction, and oversight of ongoing work to assure compliance to work package and design requirements. (QA&S-2011-S050) ○ Surveillance performed on work processes at the construction of the D4 114D bat tower. Included verification of compliance to work package and design drawing requirements. (QA&S-2011-S054) ○ Feedback –  The following external feedback was received. <ul style="list-style-type: none"> ○ OA 39507 documented an observation that during a table top workability review for an Excavation, Sorting and Load Out work package, required Form WCH-FS-260 was not used. This form documents each participant’s acceptance that the task instructions can be worked as written. 	<p style="text-align: center;"></p> <p><u>Work Planning & Control</u></p> <p><i>Actions taken/planned for performance improvement:</i></p> <ul style="list-style-type: none"> - Implemented Con Ops Mentors at D4 (100 and 300 areas), 618-10, and remaining FR sites and ERDF. - Implementing Con Ops Council with champions from all projects. First meeting week of October 17th. - Review of all active work packages/procedures that will be implemented between now and end of calendar year. - Roll out revitalization of Safety Ownership Program (SOP) - Configuration Mgmt Root Cause Analysis - Annual Management Assessment of Work Planning and Control is in process. Includes a review of IWCP against URS Corporate Standard. <p>“CAMs” determined yellow due to the August significant event where an excavator struck an energized, buried 220V power cable. Compensatory actions are in place, via a standing order, to address weaknesses in the use of excavation permits. CAMs will remain yellow however, until the formal corrective actions are complete, currently scheduled for November.</p>

Left column – Historical – Assessments



- **Work Planning & Control**
- **Last program assessment:**
- ***MA-2010-019 – Annual Eval of all ConOps assessments and surveillances. No additional actions were identified.***
- ***MA-2009-024 - Annual IWCP Management Assessment. No additional actions were identified.***

Middle Column – This months perspective

- **Reportability** – ■ No reportable events attributed to Work Planning & Control.
- **CAMs** – ■ The following adverse issue was documented in this functional area:
 - Mock ups were performed to support anomaly sampling at 100-D. On the day work was set to commence one of the team members was unavailable (death in the family); it was decided to proceed with work, using a replacement individual (he was at the mock ups as well but in a different role). This led to some confusion during the process. (IF-2011-0592)
- **Metrics** – ■ No performance indicators established for this area. Initial data expected in November representing October data.
- **Assessment** – ■ The following assessments were documented in this area:
 - A self assessment of the workability of selected craft and Type 1 work packages was completed. Minor adjustments to add additional forms, numbering and sequencing to link misc. paperwork to indexes, no issues were identified. (FR-2011-SA033)
 - Surveillance performed on installation of fill material around the river structures at 100N. Included a review of work package instruction, and oversight of ongoing work to assure compliance to work package and design requirements. (QA&S-2011-S050)
 - Surveillance performed on work processes at the construction of the D4 114D bat tower. Included verification of compliance to work package and design drawing requirements. (QA&S-2011-S054)
- **Feedback** – ■ The following external feedback was received.
 - OA 39507 documented an observation that during a table top workability review for an Excavation, Sorting and Load Out work package, required Form WCH-FS-260 was not used. This form documents each participant's acceptance that the task instructions can be worked as written.

Right column – languishing issues, improvement plans, explanations

Actions taken/planned for performance improvement:

- Implemented Con Ops Mentors at FR/D4/WO.
- Implementing Con Ops Council with champions from all projects.
- Review of all active work packages/procedures that will be implemented between now and end of calendar year.
- Roll out revitalization of Safety Ownership Program (SOP)
- Configuration Management Root Cause Analysis
- Annual Management Assessment of Work Planning and Control is in process. Includes a review of IWCP against URS Corporate Standard.

“CAMS” determined yellow due to the August significant event where an excavator struck an energized, buried 220V power cable. Compensatory actions are in place, via a standing order, to address weaknesses in the use of excavation permits. CAMS will remain yellow however, until the formal corrective actions are complete, currently scheduled for November.

Benefits to date

- Better understanding of program health for mission critical processes:
 - Provides a more stable perspective on overall health
 - Helps keep “today's issues” in perspective; but doesn't discount yesterday's issues
 - Identified areas that had no performance indicators
- Help focus future assessments
- Provides a real time ability to identify trends intuitively in lieu of once every 3 months
- Provides Stakeholder confidence that mission critical processes are being actively monitored for performance and health.