



Auditing

Auditing creates data and possibly lots of it. To create good oversight, you must determine what data and how much of it needs to be captured. Great auditing systems change the data to useful information that management teams use to alter plans (training, procedures, equipment acquisitions, etc.). Poor systems take up a lot of time and produce useless results. When creating the system, start measuring only what is TRULY important. For instance in the Confined Space Records Info Sheet #14 we list over 24 different forms. Completion of the forms is time consuming on its own, data mining for auditing purposes can be a significant effort. So you have got to develop a system that can quickly tally the right data for interpretation.

To begin, what is the key driver in your program and it isn't something like "no injuries" or "safe". Key drivers (aka Key Performance Indicators or KPIs) include time down, procedural compliance and/or costs. In addition we must remove bias (subjectivity) from our intelligence gathering. Psychologists have proven that recent events influence what we remember long term. So get objective. Build forms that create the data to prove we met our KPI. If your forms create checks and narratives we must create a scoring sheet that creates numbers as checks and narratives are subjective and not conducive to auditing. For instance, put a number on an observation sheet based on a range of 1 to 4. 1 is very poor performance, 2 means they need some improvement, 3 is expected and 4 means the person went above and beyond. Yes or no answers become 1 or 0. These number systems quickly give a number result. Couple the result with a target and you can quickly see how well we are doing. For instance if we are looking at Procedural Compliance as a driver, our target result is over 75% and our paperwork audit creates a score of 85%. We know we weren't perfect, but above the target. If the numbers were reversed we know we have work to do. The beauty of the system is the audit shows us where our efforts need to focus.

Data mining will have to have someone or a group of people assigned to manipulate it and analyse or interpret the information. Reviewing these interpretations regularly (at least annually) can find opportunities for improvement in the program (including the data collection process) that would drive change to accommodate needs. Today there are many software applications to aid in the analysis. These programs accept different data types and can display the information in charts and graphs. The visual representation of the data, helps uncover trends or show links to previously unthought of data groups that may not be immediately obvious when peering at page after page or row after row of data. In addition, investing in Analytical Software can save significant amounts of time (once set up).

Finally, it will take 3 to 5 years to see real benefits of your auditing programs. It takes time to develop a quantity of data to be truly helpful. In addition as the data pile grows, changes will naturally occur as we become smarter with search parameters and questions to ask. There maybe rewards before then, but I'm preparing you for the long haul, not for the instant gratification we normally seek. What and how you use them in furthering your organization's goals and objectives is up to you.

Sample KPI's Based on Drivers

Time Down

Focus: What times are on various forms

Key Data

- 1) Time of Gas Monitor Bump Tests
- 2) Permit shift length, Initial Gas Test
- 3) Accountability Log Time in and outs as well as Gas Monitoring times recorded

Procedural Compliance

Focus: How close were our activities to those outlined in the procedures

Key Data:

- 1) Paperwork completed properly
- 2) Regular site/work audits
- 3) Employee surveys
- 4) Incident Reports

Cost

Focus: What costs are associated with the project

Key Data:

- 1) Repair costs in Maintenance Records
- 2) Times shown in Accountability Logs
- 3) Entry Team size on Permit
- 4) Incident Reports

Paperwork Audit

Date: _____

Total # of Docs Reviewed: _____ Time Period Covered: _____

Permit Review Criteria:

- all blanks filled in properly
- slight deviations in penmanship
- names match (Permit and Accountability Log)
- Signatures match (Attendant/Evaluator)
- Hazard statement crossed off as required
- Pre-entry test matches Gas Monitor log (readings and time)

Remarks:

Accountability Sheet Review Criteria:

- all out (in box/out box match)
- times of entry and/or exit are recorded when monitor alarms and match reading times
- names match (Accountability Log and Permit)
- slight deviations in penmanship
- gas reading times are not always rounded to the nearest number

Remarks:

Other Documents:

Evaluator: _____ Signature: _____