



BELOW THE RADAR

Factors that Steal Tons, Increase Costs and Prevent Change

Could That 3:00am Phone Call Have Been Prevented?

Think back to the 2008 election. It's 3 o'clock in the morning. The children are all asleep. Then, the phone rings... The question is not "Who will be there to answer it?" Instead, the question is "Could that call have been prevented?"

Last year the Shortfall Coal Company, owned and operated by Fictitious Coal, Inc., upgraded equipment in one of its prep plants, the right business decision given the age and maintenance requirements of several components. This plant had been experiencing significant downtime, lost tons and higher costs due to unplanned breakdowns. Plant upgrades were completed in 2008, so the 2009 plant budget included higher tons, lower costs and higher utilization as the result of higher availability. So far, 2009 utilization had increased but was below budget due to continued plant upsets on both shifts (not maintenance related). These upsets reduced recovery and increased costs (primarily magnetite usage). Plant superintendents were called at all hours of the day and night to be informed of these problems and adjust priorities for production or maintenance, depending on the issue.

Shortfall's senior management team was losing patience with the plant's "shortfalls" (pun intended). Given the capital justification submitted by the plant, they had expected the new equipment to solve many of the plant's operating problems. Local plant management was asked to determine the cause of the recurring operational problems and **get them solved soon**. So...where did management start looking?

They analyzed changes in raw coal quality, but found that it was fairly consistent. They checked for changes in chemicals or other inputs due to a change in suppliers or product quality, but found nothing significant. They knew that all of their control room operators had completed Shortfall's plant training program, so what was left to check? They scratched their collective heads, not sure where to turn for an answer...meanwhile, the phone kept ringing.

Enter "Dave" (a fictional character), one of Shortfall's newer control room operators. Dave had completed the company's plant training program, which emphasized safety, throughput and SOPs for control panel operation. Dave had also spent many hours training with John and Andy (also fictional characters), two of Shortfall's senior plant operators. All three men were dedicated employees. Over the years, John and Andy had been through many unplanned events that negatively impacted coal quality and recovery. Dave noticed that each man had his own way of correcting these problems based on his experience with "what worked". After a few months, Dave recognized an opportunity to shorten some procedures to 1) help the plant start more quickly after an upset and 2) make himself look good as a less-experienced employee.

What is wrong with this scenario? There are at least four answers to that question:

1. Operators lacked procedures for minimizing the number of out-of-control conditions and recovering from them.
2. Operators believed that they knew the best way to correct plant problems.
3. Operators believed that it was their job to develop and implement their own methods for problem correction.
4. Management did not recognize the "hole" in the operator training program and in their management system, partially due to their emphasis on throughput.

Management had never measured the cost of out-of-control conditions due to this problem, but it is safe to say that Shortfall's cumulative losses would be worth hundreds of thousands (perhaps millions) of dollars over time.

In summary, the number and cost (equipment damage, lost production, wasted chemicals, etc.) of plant interruptions can vary greatly with the operator on shift IF no standards for problem prevention or correction are provided. Often overlooked as improvement opportunities, **control and response plans fill the void left by SOPs** by providing these guidelines for control room operators. To achieve the best results with both types of plans, management must be involved in plan review and/or development.

Here's the thought for September:

Use control and response plans to minimize the 3:00am calls and their impacts to the bottom line.

Kay Sever implements improvement programs for mining and downstream processing facilities. Her approach balances commonly used tools and methods with a focus on value creation and the "people side of improvement". Kay works with every organizational level and department to find the highest dollar opportunities and remove barriers that prevent sustainable change. She helps management teams lead improvement and better execute the budget, capital approvals, incentive plans, communications, etc.

See MiningOpportunity.com for details on her services and contact information. Look for the mining edition of her first book "Building An Opportunity Culture – Addressing the Barriers That Steal Profits and Prevent Sustainable Change", available on her website under Products/Books. Kay has designed a **NEW Management Training Series** called "**Opportunity Fundamentals – Equipment, Cost and Culture**". It will be available to management teams everywhere beginning in August 2009.