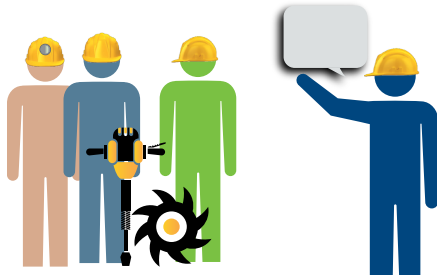


Behavior Optimization



Human behavior is an integral part of mine safety and health. Individuals often take unnecessary shortcuts or expose themselves to unnecessary risks. Mining companies that work to reduce exposures to risk by encouraging their employees to do the right thing generally have fewer and less severe injuries.

Behavior Optimization by Minimizing Unsafe Behavior is the process of:

- Educating all employees on the causes of safe and unsafe behavior.
- Developing an observation and feedback process.
- Emphasizing how to control behavior and intervene with co-workers.

How it works

Unsafe behaviors are a key contributing factor in many mining incidents. However, behavior is a consequence and not a cause. We now know attitudes and behaviors are both measurable and manageable.

It is important to optimize behavior because carefully designed and effectively implemented work procedures that are not complied with still have substantial potential for increased injury and incidents

What We Know about Behavior

Most experts believe human behavior (anything that is an observable action) is primarily controlled by the “ABC model” of Activator—Behavior—Consequence.

Activators: People behave the way they do because they are activated to do so. Activators can be someone’s voice, a phone ringing, a written to do list, memory, training, etc.. Activators can be either conscious or subconscious.

MODULE


Behavior is a reflection of our knowledge, training and competence and can be intentional or unintentional. Individuals are most often motivated to repeat a behavior, e.g., driving within the speed limits, by the consequences or enforcements experienced from previous behaviors.

Behaviors are also affected by people’s attitudes about risk. This knowledge helps us to minimize unsafe behavior by making workers aware of why they behave the way they do, what is a safe and unsafe behavior, and what can be done to minimize unsafe and encourage safe behaviors.

Flow of the Process

- Educate employees regarding the causes of safe and unsafe behavior, e.g., the ABC model, how to control their own behavior and when and how to intervene with co-workers.
- Develop a workplace observation and feedback process. The process should be confidential and voluntary, but collect observation data for analysis.
- Apply the ABC model beyond observation and feedback to include an emphasis on general safety and health activators and consequences.
- Integrate behavior optimization with related SHMS Modules: 12 (Work Procedures), 14 (Incident reporting), 8 (Collaboration and Communication), 7 (Culture Enhancement), etc.
- Ensure adequate focus on the quality of observations and feedback.

Workbook Materials For Module 15

Behavior Optimization is a system for maximizing positive actions and minimizing negative or unsafe actions.

Optimizing behavior to reduce employee exposure to risk and improve safety requires strong leadership, management commitment, and a positive safety culture as prerequisites.

Behavior Optimization Techniques

Employee Education and Training:

Responsible Department: _____

Team Leader: _____

Members: _____

Outside Resources: _____

Participating Employees/Work Groups: _____

Training Topics: (e.g. the ABC model, how to control one's own behavior, when to intervene)

Training Schedule:

Behavior Observation

Behavior observation and feedback is a structured process that commonly relies on trained observer's conducting observations of their co-workers as they perform a task. The focus is on reinforcing the co-workers safe behaviors and/or encouraging them to avoid at-risk behaviors in the future.

Observation Planning:

Job or Task: _____

Observer: _____

SOP/SJP Available: _____

Identified Significant Risk: _____

Implemented Controls: _____

Observation Plan: _____

Scheduled Date: _____



MODULE



Behavior Observation (cont.)

Observing:

Date: _____

Employee Classification: _____

Training Delivered: _____

Performance Observation:

Was Safe Behavior Practiced: Yes _____ No _____

Comments: _____

Was Safe Behavior Difficult: Yes _____ No _____

Comments: _____

Action Needed: _____

Was Safe Behavior Impossible: Yes _____ No _____

Comments: _____

Action Needed: _____

Feedback:

During Observation: _____

After Observation: _____

Additional Planned: _____

Schedule: _____



MODULE



Behavior Observation (cont.)

Action Required:

Positive Reinforcement: _____

Timing: _____

Method: _____

Responsible Person: _____

Negative Reinforcement: _____

Timing: _____

Method: _____

Responsible Person: _____

Corrective Discipline: _____

Condition History: _____

Timing: _____

Method: _____

Responsible Person: _____

Change of Plan/Policy: _____

Plan/Policy: _____

Reason for Change: _____

Timing: _____

Method: _____

Responsible Person: _____

Change of SOP/SJP: _____

SOP/SJP: _____

Reason for Change: _____

Timing: _____

Method: _____

Responsible Person: _____