

Gap Analysis: Safety & Health Management

Name _____

CORESafety Safety & Health Management	My Position
The importance of safety and health management to achieving 0:50:5.	<input type="checkbox"/> I fully agree, just need to get it done <input type="checkbox"/> Not sure I agree, need more info/time <input type="checkbox"/> I disagree, need to talk to my colleagues
The NMA version of Safety and health management is sufficient to achieve 0:50:5.	<input type="checkbox"/> I fully agree, just need to get it done <input type="checkbox"/> Not sure I agree, need more info/time <input type="checkbox"/> I disagree, need to talk to my colleagues
The NMA version of safety and health management clearly goes beyond the requirements of MSHA/OSHA.	<input type="checkbox"/> I fully agree, just need to get it done <input type="checkbox"/> Not sure I agree, need more info/time <input type="checkbox"/> I disagree, need to talk to my colleagues
NMA SHMS Module Expectations	Our Status
Fatality Prevention & Risk Management: <ul style="list-style-type: none"> ○ Maintain effective informal and formal hazard identification procedures, e.g., inspections, worker feedback, task observations, pre-task assessments, etc. ○ Develop or adopt a personal & pre-task (PPT) risk assessment tool [Level 1] and require workers who are at-risk in their job duties to utilize the tool before job tasks. ○ Develop or adopt systematic job & task (SJT) risk assessment tools [Level 2] for routine and repeatable non-routine work. Develop documentation and train accordingly. ○ Apply formal, process & equipment (FPE) risk assessment tools [Level 3] to the mining process, equipment, including development, operations, maintenance and reclamation. ○ Define and document the acceptable level of risk through a risk matrix (likelihood & consequences), or adopt the CORESafety generic risk matrix as a minimum guideline. ○ Ensure risks are evaluated by the appropriate level of management, consistent with the significance of the risk. Senior management should be included when assessing major risks and variances. ○ Document the company's risk management approach for all high-risk (low likelihood, high consequence) work activities and ensure consistent application of those protocols. ○ Establish a management policy that applies the hierarchy of controls to hazard control opportunities and obligations. The policy should include specific criteria for variances. ○ Where PPE is permitted to be used in lieu of more comprehensive controls, wearers should be trained on specific uses, proper usage and protection limitations. ○ Verify that controls maintain their effectiveness or are modified should circumstances change over time. Include control verification in safety and health audit criteria. ○ Document risk management decisions for tracking and verification purposes, and for future reference. ○ Develop and maintain an up-to-date registry of site-specific high risk activities. ○ Assess high risk work activities using risk assessment tools including 'systematic job & task', 'process & equipment' and 'personal' ○ Develop and/or adopt site-level high risk procedures to maintain risk at as low a level as practicable. ○ Verify that all affected employees are educated, trained and competent relative to the high risk procedures. ○ Regularly audit high risk procedures to ensure full compliance and effectiveness. 	<input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent

<ul style="list-style-type: none"> ○ Ensure internal reporting of all high risk procedure-activity near miss and injury incidents and conduct incident investigation and root cause analysis, as appropriate. 	
Action needed:	
<p>Change Management:</p> <ul style="list-style-type: none"> ○ Define change requiring management review. Communicate this process to all affected employees, contractors and other stakeholders. ○ Develop a change management procedure that defines the ‘who, what, when and how’ for the reviews. Define who is authorized to approve change actions. ○ Ensure that the procedure includes provisions to verify that change management actions have been completed and that they do not significantly result in new, negative risk. ○ Integrate change management actions into the safety and health communication process to ensure all potentially affected parties are knowledgeable. ○ Document change management decisions for tracking and verification purposes, and for future reference. ○ Pre-start up safety reviews should be conducted on all new operations, expansions, processing facilities, major mobile and fixed equipment and control systems. ○ Ensure that change management is fully integrated with Fatality Prevention & Risk Management. 	<ul style="list-style-type: none"> <input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
<p>Engineering & Construction:</p> <ul style="list-style-type: none"> ○ Safety and health management, operations and maintenance expertise are integrated into project planning processes from the inception. ○ Where engineering and design codes and standards and/or regulatory compliance are inadequate or absent, management should develop its own with external validation. ○ Design and construction for any project with safety and health management considerations should target regulatory as the minimal allowable risk. ○ Deviations from standard and accepted design are reviewed and approved by senior management. Variances are documented with adequate justification details. ○ The S&H management aspects of construction work conducted on company property should conform to the company’s SHMS standards and expectations. ○ Pre-start up safety review should be conducted on all new operations, mines, processing facilities, major mobile and fixed equipment, and control systems. 	<ul style="list-style-type: none"> <input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
<p>Safe Work Procedures & Permits:</p> <ul style="list-style-type: none"> ○ Standard operating procedures (SOPs) are developed for routine and repeated non-routine work based on work procedures and outcomes of systematic job and task (SJT) analyses. ○ SOPs are used as the basis for on-the-job training and audited against by front line supervisor or managers. Competency verifications are also based on SOPs. ○ General and specialized S&H rules should be developed, communicated to all employees and contractors and enforced through a fair and equitable disciplinary policy. ○ Risk-specific and/or general work permit program should cover all high risk work (whether routine or non-routine) and include sign-off authority and operational limitations. ○ Protocols (more detailed SOPs) should be developed for high-risk tasks that warrant the highest level of control owing to the difficulty in minimizing risk and high consequences. ○ Ensure all contractors and vendors are trained on and comply with the work permit and safe work procedure requirements. 	<ul style="list-style-type: none"> <input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
<p>Training & Competence:</p> <ul style="list-style-type: none"> ○ Conduct training needs assessment for all jobs. Training programs should define the skill level to be acquired and demonstrated, frequency, and requirements for competency. 	<ul style="list-style-type: none"> <input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent

<ul style="list-style-type: none"> ○ All new or transferred employees, visitor, contractors and vendors receive site-based safety and health orientation before being permitted to work onsite. ○ Initial, on-going and periodic refresher training is conducted to ensure job and regulatory requirements. ○ Combine discretionary training with regulatory training (MSHA, OSHA) whenever possible, e.g., new employee/miner training with company orientation. ○ Where on-the-job training is conducted, the instructor should follow standards for knowledge transfer and adhere to standard operating procedure where they exist. ○ Ensure contractors, visitors and vendors receive appropriate training to provide adequate worker protection for both the company and their third-party partners. ○ Provide train-the-trainer development to those who develop and deliver company S&H management training. 	
Action needed:	
Occupational Health: <ul style="list-style-type: none"> ○ Conduct representative qualitative and quantitative risk (exposure) assessments to characterize occupational health hazards and associated risks. ○ Determine the degree of control necessary to address occupational health hazards and apply the "hierarchy of control" accordingly. ○ Ensure exposure assessment results are communicated to affected employees in a timely and understandable way. ○ For 'over exposures, determine the need for temporary or permanent health monitoring and conduct using appropriate medical standards. ○ Ensure accurate protection of employee medical confidentiality for non-occupational information, e.g., HIPPA. ○ Provide a mechanism to assess employee general health risks that are relevant to the occupational setting, e.g., blood pressure, blood sugar, weight, flexibility, strength, etc. ○ Provide wellness education for employees including mechanisms that can be pursued to improve general health risk factors both on and off the job. ○ Document occupational health management data for compliance, analysis and verification purposes, and for future reference. 	<input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
Behavior Optimization: <ul style="list-style-type: none"> ○ 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. ○ Ensure adequate focus on the quality of observations and feedback. 	<input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
Contractor Management & Purchasing: <ul style="list-style-type: none"> ○ Ensure all company-sponsored project proposals and/or requests for proposals include safety and health management criteria or requirements. ○ Pre-screen all operational and project contractors for acceptable S&H management experience and qualifications. ○ Ensure contractors notify the company of the introduction of tools, equipment, materials, chemicals or work processes that could be a risk to contractors and/or company personnel. ○ Ensure all contractors and third parties are aware of S&H management requirements and expectations including emergency response plans and reporting obligations. 	<input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	
Incident Reporting & Investigation: <ul style="list-style-type: none"> ○ Ensure all personnel are trained and understand the company's and regulatory authority definition of a recordable/reportable incident and their obligation to comply. ○ Investigate all incidents, including near misses, to a level of detail appropriate to 	<input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent

<p>their maximum likely outcome. All full investigations should reach root cause.</p> <ul style="list-style-type: none"> ○ Ensure that a sufficient percentage of company personnel, representing all company functions, are trained in effective incident investigation and root cause analysis. ○ Develop or adopt a root cause analysis procedure that is integrated with the structure of the SHMS, i.e., root causes should relate to the SHMS, as a minimum. ○ Capture the lessons learned and ensure they are communicated to all personnel with a need to know. ○ Compile root cause data and forward to management for their review of the SHMS. 	
Action needed:	
<p>Emergency Management:</p> <ul style="list-style-type: none"> ○ Develop and maintain written, site-specific emergency response plans. Plans should be based on a critical assessment of potential emergencies scenarios and their impacts. ○ Ensure plans are communicated, trained and drilled against at an appropriate interval. All potentially affected personnel should be aware of the role and responsibilities in an emergency. ○ Plans should include an assessment and acquisition of adequate foreseeable emergency resources, e.g., warning devices, first aid supplies, rescue equipment, communication aids. ○ Plans should be communicated to external stakeholders as appropriate. ○ Emergency response drills should be conducted with sufficient frequency and intent to assure confidence in the event of a real emergency. ○ Maintain adequate internal/external first responder capabilities in relation to operations' size, risk and isolation. 	<ul style="list-style-type: none"> <input type="checkbox"/> Not doing this, but recognize the need <input type="checkbox"/> Not doing this, but working on it <input type="checkbox"/> Doing this, or something equivalent
Action needed:	

This image shows a full page of blank, lined paper. It features approximately 28 horizontal black lines spaced evenly across the page, typical of standard notebook paper. The lines are thin and extend from the left edge to the right edge. There is no handwriting or other markings on the page.