

Serious Incident and Fatality (SIF) Prevention Model

TOOLS FOR STEP 1: PLAN

Ensure Leadership Commitment and Organizational Readiness



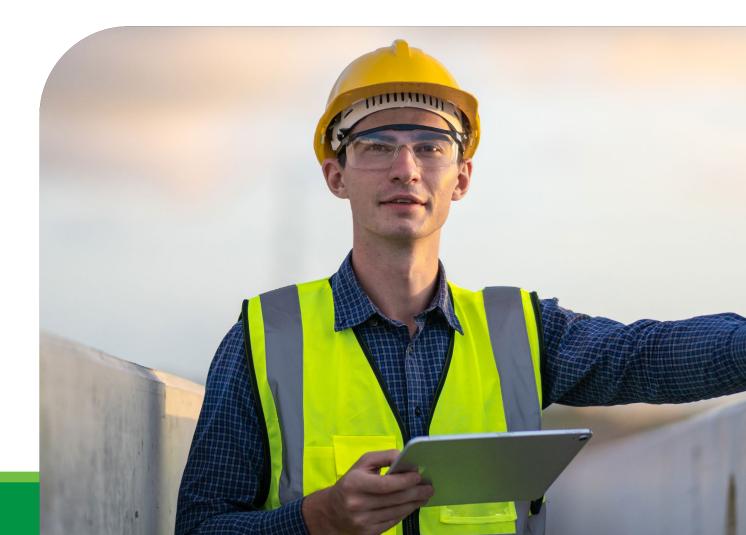
Table of Contents

3	PLAN TOOL 1: Document Review
10	PLAN TOOL 2: Organizational Gap Analysis
16	PLANOOL 3: SIF-related Employee Perception Data
26	PLAN TOOL 4: Feedback from Key Stakeholder Groups
33	PLAN TOOL 5: Setting Expectations for Leadership

Plan Tool 1: Documentation Review

Organizations need a full view of their SIF risks and identify objectives to reduce their SIF risks by strengthening safeguards, building capacity, and driving performance.

Guidance: Assemble the following information and documents to support a review of the company's Safety Management System (SMS) and assessment of organizational readiness. As applicable, indicate whether they are a) provided, b) provided but outdated, c) cannot be located, or d) do not exist. Also provide any other relevant remarks.



Documents to Assemble A: Organizational

Injury/illness data (OSHA or country specific, ASTM, actual SIFs, potential SIFs, etc.) for the operation for the last three years, plus year-to-date.

FULLY PROVIDED

PROVIDED, BUT OUTDATED

CANNOT BE LOCATED

DOES NOT EXIST

An organizational chart that includes EHS/safety personnel and where the function is located within the organizational structure.

FULLY PROVIDED

PROVIDED, BUT OUTDATED

CANNOT BE LOCATED

DOES NOT EXIST

A2:

Workers' compensation claims for the operation for the last three years, plus year-to-date.

FULLY PROVIDED

PROVIDED, BUT OUTDATED

CANNOT BE LOCATED

DOES NOT EXIST

A description or procedural document describing how injuries and illnesses are reported, investigated, tracked, and closed out, as appropriate.

FULLY PROVIDED

PROVIDED, BUT OUTDATED

CANNOT BE LOCATED

DOES NOT EXIST

The latest external or internal annual report that includes information and metrics about A4: the company's occupational health and safety efforts. Examples include KPI, annual or sustainability reports.

FULLY PROVIDED

BUTOUTDATED

BE LOCATED

DOES NOT EXIST

Safety and health policy statement. May be included within the organization's overall operating policy.

FULLY PROVIDED

PROVIDED, BUT OUTDATED

CANNOT BE LOCATED

DOES NOT EXIST

A written Safety Management System program outlining roles and responsibilities, risk determination, controls, and corrective action monitoring. Examples include VPP, IIPP, ISO, or a similar program incorporating safety aspects.

FULLY PROVIDED

BUT OUTDATED

BE LOCATED

DOES NOT EXIST



DOES NOT EXIST

Documents to Assemble B: Key Safety and Health Elements/Programs

B1: LOTO/Hazardous Energy Control Fall Protection/Working at Height FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED DOES NOT EXIST FULLY PROVIDED PROVIDED, BUT OUTDATED PPE Program B2: Confined Space Entry FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED DOES NOT EXIST FULLY PROVIDED PROVIDED, BUT OUTDATED B3: Hazard and Risk Assessments B9: Driver Safety PROVIDED, BUT OUTDATED CANNOT BE LOCATED DOES NOT EXIST FULLY PROVIDED PROVIDED, BUT OUTDATED **B4:** Hazard Communication Change Management PROVIDED, BUT OUTDATED FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED FULLY PROVIDED DOES NOT EXIST B5: Electrical Safety B11: Excavation and Trenching FULLY PROVIDED FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED DOES NOT EXIST BUTOUTDATED **B6:** Powered Industrial Truck B12: Overhead Lifting/Crane Safety FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED DOES NOT EXIST FULLY PROVIDED PROVIDED, BUT OUTDATED CANNOT BE LOCATED

CANNOT BE LOCATED DOES NOT EXIST CANNOT BE LOCATED DOES NOT EXIST





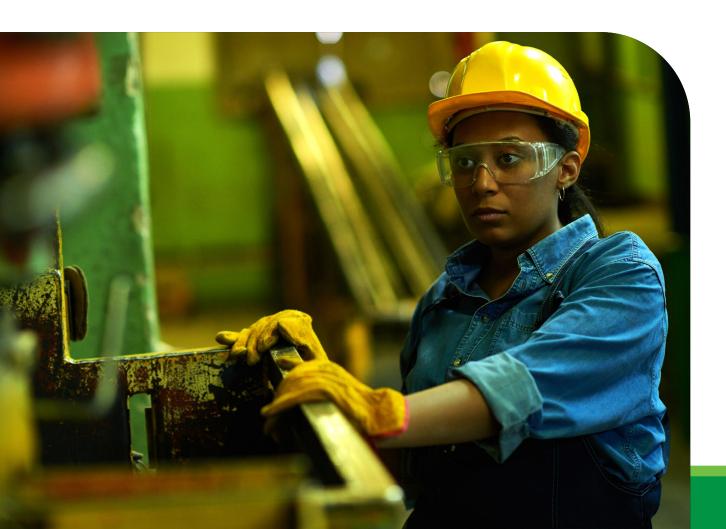
B20: Other:

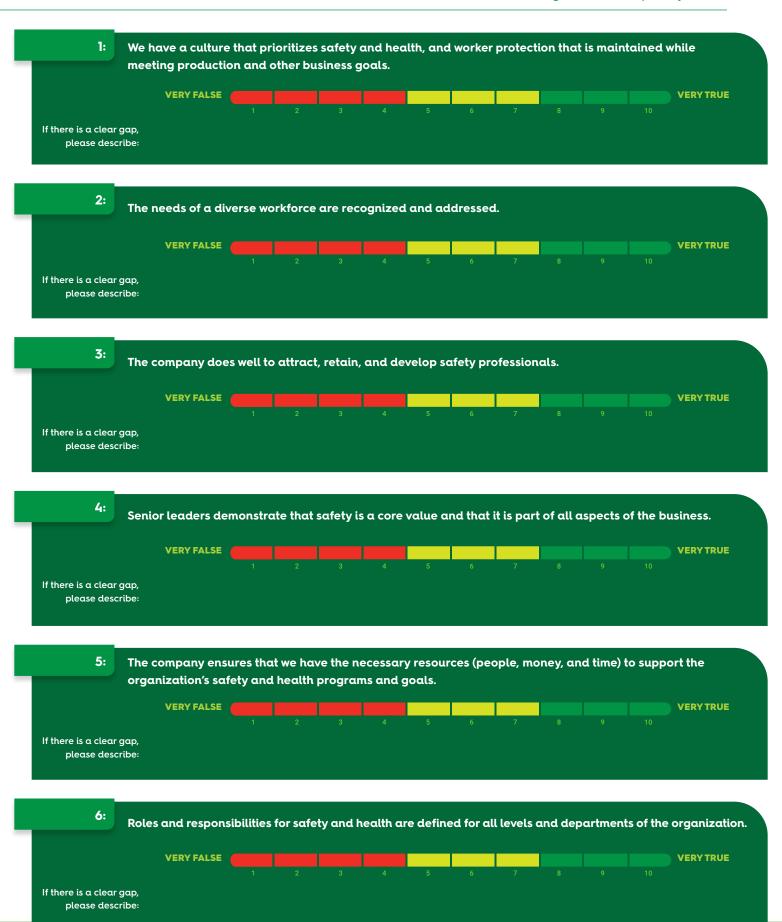
10 | Serious Incident and Fatality (SIF) Prevention Model

Plan Tool 2: Organizational Gap Analysis

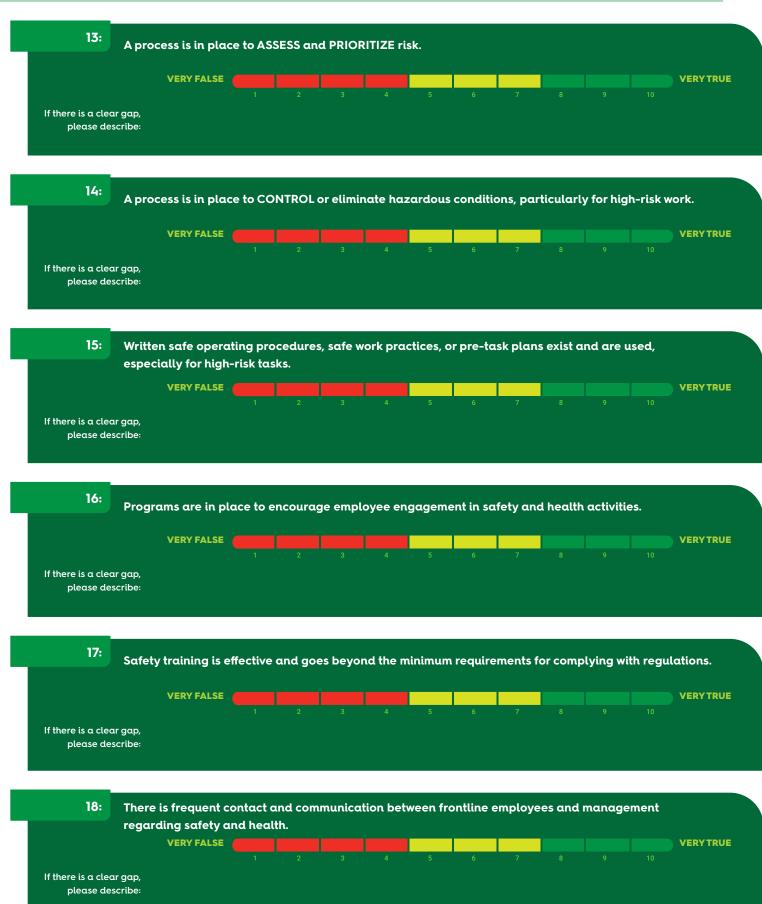
The following items can be administered using a survey to collect perceptions across employment levels. Identify a group of operational and safety leaders to complete this organizational gap analysis individually.

Compile and compare as a group as an alignment check and evidence of organizational readiness. Identify, discuss, and prioritize common gaps and address these gaps as appropriate. Track corrective or preventative actions to completion.





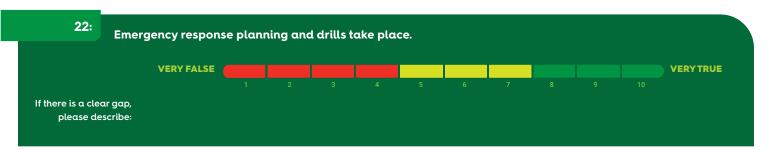


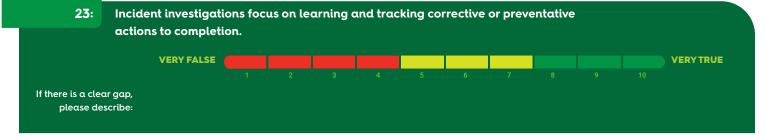




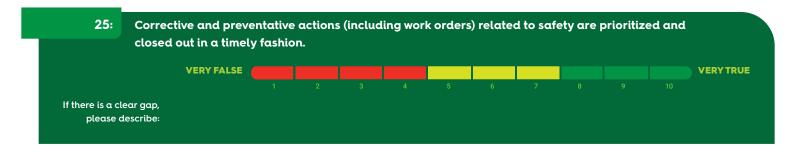












Teams should develop action plans to improve scores in red areas first, then yellow and green.

Notes or Comments:		

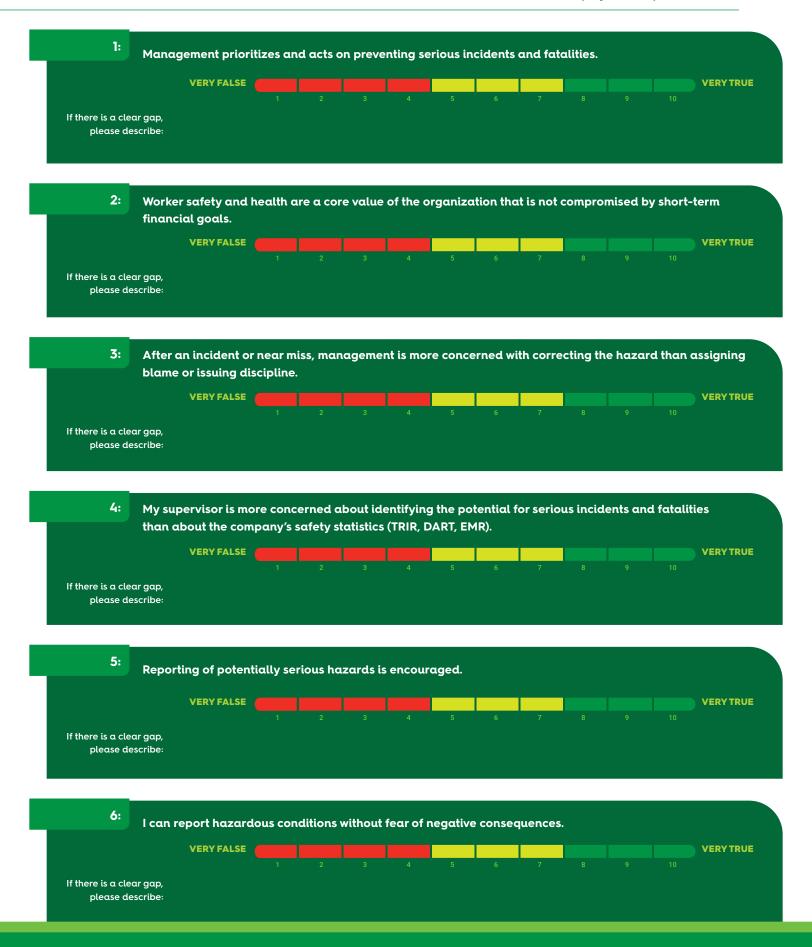


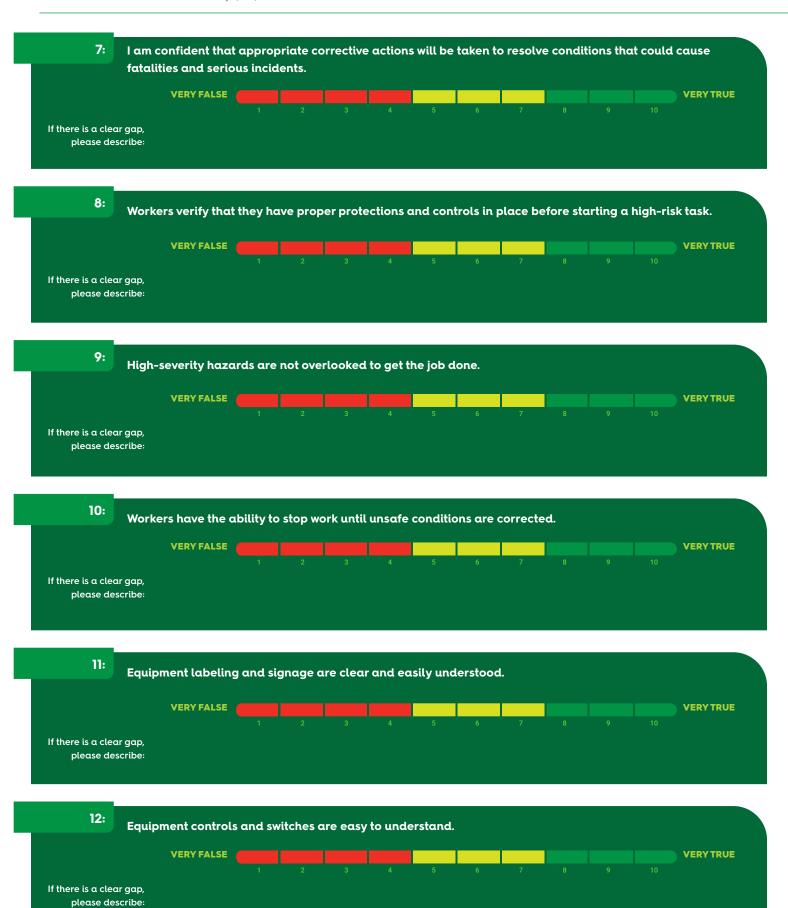
SIF-Related Employee Perception Data

Consider the following survey items to collect employee perceptions related to SIF prevention. A sampling of these items could be administered as a standalone survey or select items can be incorporated into an existing employee engagement survey. Individual items could also be used to collect feedback from employees during in-person training sessions, toolbox talks, or pre-shift meetings.

Compile responses and relevant notes and check for alignment among various employment levels. Insights and data trends can also serve as evidence of employee engagement and organizational readiness. Identify, discuss, and prioritize common perceptions to reinforce or address them as appropriate; track necessary corrective or preventative actions to completion.



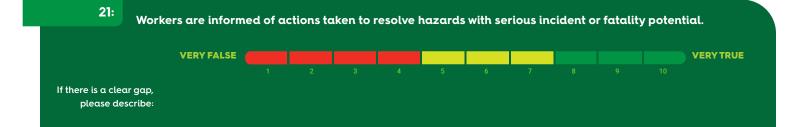




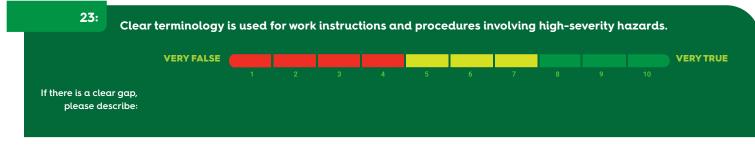




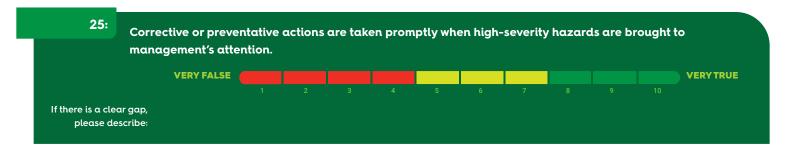


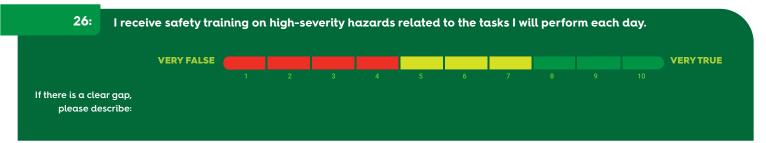




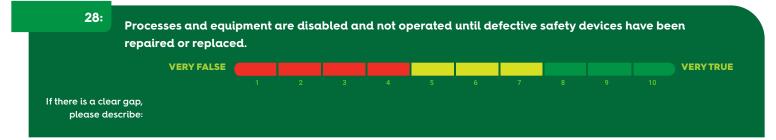


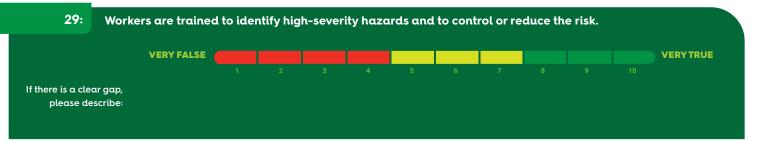










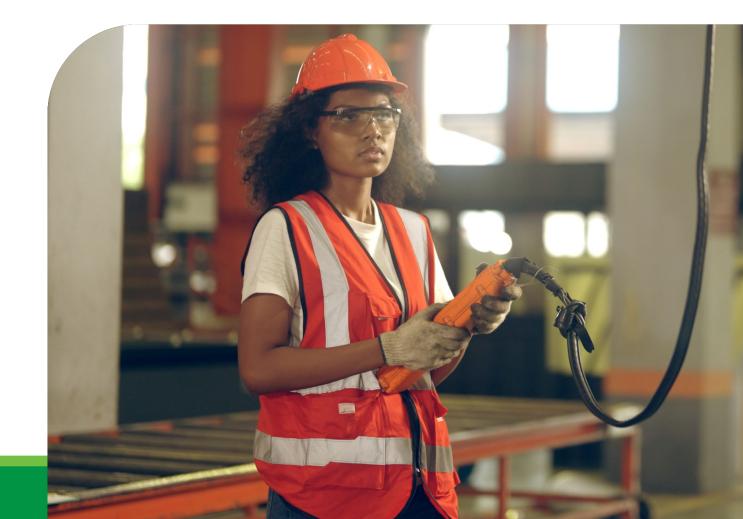






Teams should develop action plans to improve scores in red areas first, then yellow and green.





Plan Tool 4:

Feedback from Key Stakeholder Groups

Guidance: Use the following questions to guide stakeholder meetings with senior leaders, safety and health professionals, frontline leaders, and frontline workers. Collect feedback either formally through a survey or informally through job observations and other existing meeting channels.



Senior Leadership Feedback Questions:

This group will vary depending on the size and scope of the operation. In general, this group includes individuals with responsibility over company operations with the following titles: CEO, COO, vice president, director, general manager, manager, etc.

- >>> What processes do you have in place to identify, prioritize, and manage health and safety risks?
- What processes or work tasks concern you the most for potential SIFs?
- >>> What is the process for allocating resources for health and safety?
- What is your view of the role of leadership in health and safety?
- >>> What is your view of the role of frontline workers in health and safety?
- Do you feel that production is prioritized over safety and health?
-)) What performance metrics do you monitor to determine the effectiveness of your health and safety system or programs?
- Is there executive compensation tied to the outcome of lagging or leading safety and health metrics?
- Do you report any safety and health performance metrics to outside entities (shareholders, regulatory bodies, NGOs, etc.)?
- Who are your safety and health stakeholders and what are their expectations?
- >> How has the safety and health management system been integrated into business operations?
- How do you manage change in your organization?
- What processes or work performed in your organization concerns you the most for potential SIFs?

Senior Leadership

Notes and Observations:				

Safety and Health Professionals Feedback Questions:

This group includes individuals whose primary responsibility is promoting and managing the safety and health of the company, division, business unit, or department.

- >>> What are your safety and health priorities? How is safety and health training planned and facilitated?
- >>> What processes or work tasks concern you the most for potential SIFs?
- Do you feel there are adequate resources dedicated to safety and health?
- >>> What is the process for obtaining capital funds for key safety and health initiatives?
- Do you feel there is enough safety and health staff to perform the required duties?
- Do you feel that production is prioritized over safety and health? Explain the incident investigation process including initial investigation, determination of root cause, assignment of countermeasures, and follow-up on the completion of corrective actions.
- >>> How are near misses reported and what follow-up is conducted?
- >>> How much of your time is spent reactively "putting out fires"?
- >>> What are the barriers to achieving desired safety maturity?
- Do you feel you are properly trained and given access to professional development opportunities? What are the processes, operations, or risks that give you the greatest cause for concern with respect to SIF potential?

Safety and Health Professionals Notes and Observations:

Frontline Supervisors Feedback Questions:

This group includes individuals whose primary responsibility is to supervise frontline workers in their daily activities.

- >>> Tell me about the production pressures you are facing.
- >>> What processes or work tasks concern you the most for potential SIFs?
- >>> How do you feel your frontline workers are responding to the demands of production?
- >>> What is the process for how new workers become trained or acclimated to their specific jobs?
- >>> How are risks or hazards of the job emphasized or shared with frontline workers?
- >>> Do employees have the authority to stop operations if they feel something is unsafe or "not quite right"?
- >>> Do you feel that production is prioritized over safety and health?
- >>> How often do employees actually stop production operations, and what was the response the last time this occurred?
- >>> How do you involve frontline workers in decisions on how they perform job duties?
- Are toolbox talks or pre-shift meetings conducted?
- >>> What are the risks that give you the greatest cause for concern?

Frontline Supervisors Notes and Observations:

Frontline Workers Feedback Questions:

This group includes individuals who perform work for the organization and are directly interacting with equipment, tools, parts, customers, visitors, etc.

- >>> What safety and health expectations does the company have for you?
- >>> What processes or work tasks concern you the most for potential SIFs?
- Do you feel senior leadership has a good understanding of the hazards you face on a daily basis?
- >>> Do you feel adequate controls are in place to protect you from potential SIFs?
- >>> Do you feel you have the authority to stop work if you feel unsafe?
- >>> How would you describe the safety maturity of the organization?
- >>> Tell me about the last incident that did result or could have resulted in a serious injury or fatality.
- >>> Do you feel you are involved in organizational decisions related to your safety and health?
- >>> Do you feel that production is prioritized over safety and health?
- Do you ever have to bypass safety controls due to other priorities or pressures?
- >>> Are you comfortable reporting safety and health issues?
- Do you feel action will be taken?

32 | Serious Incident and Fatality (SIF) Prevention Model

Frontline Workers

Notes and Observations:					

Plan Tool 5:

Setting Expectations for Leadership

Review the following expectations for leadership and evaluate them against existing roles and responsibilities that may be detailed in the company's safety management system or safety and health policy. Ensure that leaders at all levels understand and express commitment to upholding the expectations identified for their employment level. Make modifications to roles and responsibilities as needed to best support the organization's SIF prevention strategy and related activities.

Executive and Senior Leadership Expectations:

- >>> Leaders shall set the tone of safety and assign responsibility for overall Safety Management System responsibilities (should be officers of the company or high-ranking officials).
- **>>>** Establish acceptable levels of risk for the organization.
- >>> Determine executive engagement and support process for learning and improving from SIF risk, potential SIF, and actual SIF events.
- >>> Establish appropriate metrics to drive continuous improvement to reduce risk associated with high-severity outcomes to levels that are acceptable.
- >>> Set the tone for a psychologically safe environment, learning, and improvement culture.
- >>> Listen to each elevated concern to understand the opportunities for improvement, and provide feedback that is timely and actionable.
- » Provide the necessary resources to address high-severity hazards, including assessment of risk and appropriate defenses to control and/or mitigate outcomes of events and incidents.
- Drive accountability for risk reduction through reviews and metrics, and understand what the potential SIF activities and drivers are within the business.

Managers / Frontline Supervisors / Safety and Health **Professionals Expectations:**

- >>> Refusal to accept that deviation from procedures is normal and refusal to accept substandard processes and procedures.
- >>> Promotion and use of critical controls to eliminate or mitigate SIF risk and high-severity hazards.
- >>> Maintenance of critical controls to prevent SIFs, and understanding the challenges that workers face while performing the expected work activities.
- >>> Understand that traditional metrics (TRIR, DART cases, and historical performance) do not accurately predict or imply risks of SIFs existing within the operation.
- >>> Understand that risk is influenced by culture, management systems, process conditions, and human factors.
- >>> Understand that mitigating risk requires not only identifying the hazards and assessing the controls; it also requires addressing related organizational and human factors.
- >>> Create a learning environment. Ask open-ended questions to understand the context and contributing factors of events and learn from successes and failures.

Notes and Observations:				

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