

# INCIDENT MANAGEMENT REPORTING and INVESTIGATION TOOLKIT



## HOW TO USE THIS TOOLKIT

**INSTRUCTION:** The purpose of this toolkit is to guide you in your investigation. The toolkit is organized to also collect the information that must be populated in the SAP IM. 💡 Time management tips are provided to help you meet the expected timelines.

*Note:* Return the completed toolkit to your Plant Administrator for SAP IM data entry.

REPORT THE IM	Timeline
<b>STEP 1: Reporting an IM</b> <input type="checkbox"/> Supervisor registers the IM in SAP <b>before the end of the shift</b> . All of the information in STEP 1 is required.  <b>* NOTE: For ACTUAL Serious, Critical and Catastrophic events and for POTENTIAL Critical or Catastrophic events, the SAP IM <u>must</u> be populated with all of the information in STEP 1 of this Toolkit within 2 days of the event. A photo must be attached to Documents tab in SAP IM.</b>	Before end of shift
INVESTIGATION WORKFLOW	
<b>STEP 2: Field Notes / Evidence</b>	ASAP
<b>STEP 3: Sequence of Events</b>	💡 14 days
<b>STEP 4: Root Cause Analysis</b>	
<b>STEP 5: Contributing Factors / Root Cause Checklist</b>	
<b>STEP 6: Recommended Actions</b>	
FINALIZE AND CLOSE THE INVESTIGATION	
<b>STEP 7: Superintendent Quality Check and Approval</b> <input type="checkbox"/> Review your investigation with your Superintendent. Your Superintendent is required to: <ul style="list-style-type: none"> <li><input type="checkbox"/> (A) Review/update and approve Root Cause Analysis (STEP 4)</li> <li><input type="checkbox"/> (B) Approve/update Recommended Actions; Initialize in the Superintendent approval column (STEP 6)</li> <li><input type="checkbox"/> (C) Review/update Actual and Potential Severity and estimate the likelihood.</li> <li><input type="checkbox"/> (D) Estimate Residual Risk</li> <li><input type="checkbox"/> (E) Identify investigation team members</li> <li><input type="checkbox"/> (F) Identify Lessons Learned. What is important to share with your crew, with your plant or with the organization?</li> <li><input type="checkbox"/> (G) Superintendent approval and signature:</li> </ul> <p><u>AREAS WITH PLANT ADMIN SUPPORT:</u> Return your completed Investigation Toolkit to your Plant Admin. Plant Admin will data enter the necessary information into SAP IM, upload your Toolkit and generate the IM Summary Report.</p> <p><u>AREAS WITHOUT ADMIN SUPPORT:</u> Data enter your information to your SAP IM, upload your toolkit to the Reports/Documents tab and generate the IM Summary Report</p> <p><b>*NOTE: For ACTUAL Serious, Critical and Catastrophic events and for POTENTIAL Critical or Catastrophic events, the SAP IM <u>must</u> be populated with investigation data from STEP 1 to STEP 7 within 14 days of the event.</b></p>	💡 21 days  <b>HPI</b> 💡 14 days
<b>STEP 8: Investigation Signoff for 8A: VALE Events or 8B: CONTRACTOR Events</b> <input type="checkbox"/> Supervisor dates and signs the form <input type="checkbox"/> Supervisor meets with the Originator and JHSC member to review the investigation. Complete the sign-off form. <p><u>AREAS WITH PLANT ADMIN SUPPORT:</u> Return the completed Sign-off form to your Plant Admin. Plant Admin will upload the form to your IM and close the analysis.</p> <p><u>AREAS WITHOUT ADMIN SUPPORT:</u> Upload your completed Sign-Off form to the Reports &amp; Documents tab in your IM and close the analysis.</p>	💡 28 days  <b>HPI</b> 💡 15 days
IMPLEMENT ACTION PLAN	
<b>STEP 9: Implement Actions. IM remains open until all Actions are implemented and closed in SAP IM.</b> <p><u>AREAS WITH PLANT ADMIN SUPPORT:</u> Provide evidence to your Plant Admin of completed actions. Plant Admin will upload your evidence and close the Actions in IM on your behalf.</p> <p><u>AREAS WITHOUT ADMIN SUPPORT:</u> As you complete your Actions, upload your evidence to your IM and close your actions.</p>	💡 42 days
FINALIZE AND CLOSE THE IM	
<b>STEP 10: Manager's Final Approval and IM Closure</b> <p><u>AREAS WITH PLANT ADMIN SUPPORT:</u> Once all STEPS are complete, your Plant Admin will initiate IM closure in SAP IM and send the IM for final approval. Given that all stakeholders have signed off already on STEP 8, only the manager's signature is required for final approval and closure in SAP IM.</p> <p><u>AREAS WITHOUT ADMIN SUPPORT:</u> Set the status of your SAP IM to <i>Closed</i> and send for final approval to your manager.</p>	💡 45 days

IM #:

OCCURRENCE DATE:

TITLE:

STEP 1: REPORTING the Incident, Near Miss or Unsafe Condition

Before end of shift

INSTRUCTION: Use this form to collect the initial information required for SAP IM data entry and notification. Record the occurrence in IM before the end of your shift, ensuring to record all of the information in STEP 1.

\* NOTE: For ACTUAL Serious, Critical or Catastrophic and for POTENTIAL Critical or Catastrophic events, the SAP IM must be populated with all information outlined in STEP 1 within 2 days of the event and include a photo of the site.

This form was completed by (print name):

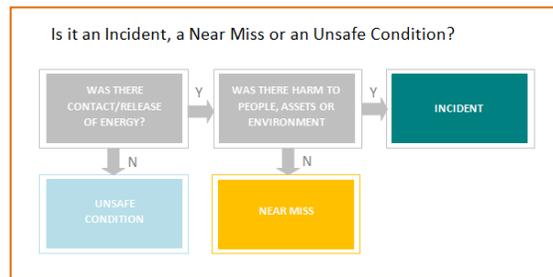
Tel #:

Are you reporting an:

- Incident: An occurrence that caused harm to people, to assets or to the environment
Near Miss: An occurrence that did not cause harm, but had the potential to cause harm
Unsafe Condition: A condition with the potential to result in a harmful occurrence.

When did it happen? Date (YYYY/MM/DD): Time (24-hr clock):

Where did it happen? Plant: Location:



What happened and what immediate actions have been carried out?

Title:

Description of occurrence or condition: Note: For contractor related IMs, include project number or work order number:

Table with 2 columns: Immediate actions (corrective measures) taken to address the occurrence or condition, Completed by (name):

Table: Related Critical Activity. Includes checkboxes for NA, RAC 01-11 (Working at Heights, Automotive Vehicles, Mobile Equipment, Lockout and Tagout, Lifting of Loads, Confined Spaces, Machine Guarding, Ground Stability, Explosives, Working with Electricity, Molten Metal).

Supervisor responsible to manage the incident or condition:

Service type: Operation Maintenance Exploration Project Not Applicable

Who was injured (print): Employee Contractor - include NORCAT #

For contractor occurrences Contractor company name: Project/Work Order # Vale contact person:

Witness (print): Employee Contractor - include NORCAT #

JHSC member involved (where applicable):

Classify the Severity of the event. Incident: Classify Actual and Potential Severity Near Miss: Classify Potential Severity only

Table: SEVERITY CLASSIFICATION CRITERIA. Columns: ACTUAL, POTENTIAL, A MINOR, B MODERATE, C SERIOUS, D CRITICAL, E CATASTROPHIC. Rows: Safety (injury) & Health (Illness), Financial (assets), Environment.

For ACTUAL Serious, Critical or Catastrophic events and for POTENTIAL Critical and Catastrophic events refer to \*NOTE at the top of STEP 1

IM #:

OCCURRENCE DATE:

TITLE:

**STEP 2: Field Notes / Evidence**

As soon as you are able

**INSTRUCTION:** As the supervisor you are likely the first on the scene, giving you valuable insight. Similar to the SHEL Model, this STEP will help you identify pertinent information that should be collected immediately. Record your information on this form. This will be valuable information during your investigation. Attach additional information as required (i.e.: photos; maps; etc).

This form was completed by (print name): \_\_\_\_\_

Tel #: \_\_\_\_\_

**PART A - EQUIPMENT & AREA LAYOUT (add photographs or drawings as required)**

1 Scene layout and positioning of equipment (re-enactment or as located after event). The first rule of capturing the site layout is to take photographs of the scene. Accurate recording of the scene layout is especially important if photographs cannot record everything as is. This should include a sketch of openings of floor layouts as well as where any equipment was located after the event, and if possible, where it came from. Record all equipment numbers.

[Empty space for scene layout notes and drawings]

2 Tools, process, material equipment (what is required, what is missing, and what was involved in the occurrence?) If hand tools or other non-mobile process equipment or material are involved, record what it is and the condition.

3 Safety devices (what is required, what is missing, and what was involved in the occurrence?) Check the operation of all safety devices (if possible) such as automatic or manual shutoffs; warning devices or conversely if missing safety devices such as lock tags/mechanical stops, etc...

4 Personal protective devices (what is required, what is missing, and what was involved in the occurrence?) Check the use of and condition of all personal protective equipment (if possible) such as face shields, harnesses or conversely, if personal protection devices should have been present and are missing such as lifeline, etc...

5 Control panel, signaling and alarm layout. Where relevant, check the layout of the control panels and mechanism used for process control and signaling and abnormal operating conditions. Provide a description of any contributing factors that may have been involved and provide photographs or sketches to support the description.

IM #:

OCCURRENCE DATE:

TITLE:

**PART B - CONDITIONS OF WORK**

6	Prevailing climate / temperature / humidity		It is important to record what the climate conditions were, especially if they are contributing factor to the occurrence. Is the area excessively cold or hot or wet? Record what part the prevailing workplace climate may have had to play in the occurrence.
7	General workplace conditions (road or surface conditions / ventilation / structural integrity)		The physical condition of the workplace can contribute to an occurrence. If conditions are a contributing factor, record the physical issues. Consider the entire workspace from what is underfoot, overhead and around.
8	Visibility and lighting		Prevailing lighting conditions that can affect visibility need to be recorded if this is deemed a contributing factor. (This could include whether the area is foggy for example which is possible in some workplaces.)
9	Vibration / noise / radiation		Was there noise, vibration or radiation that may have contributed to the occurrence? Document the conditions.
10	Housekeeping		Housekeeping is usually a good indicator of the prevailing level of acceptance of workplace standards. The level of housekeeping in the area must be specifically documented with areas of concern well detailed.
11	Hazardous conditions (chemical/biological) / oxygen deficiency		Are there hazardous conditions contributing to the occurrence
12	Ease of access to workspace (restrictions, obstructions, tight corners, etc...)		Where this may be a contributing factor, record the ease of access to the workspace. Is it a highly congested, high traffic area or is the access impeded by other obstructions?
13	Physical / ergonomic constraints (cramped, over-stretching, repetitive, etc...)		Look for ergonomic factors contributing directly or indirectly to the occurrence especially where the risk of injury may be due to an over-reaching or cramped type of condition.

**PART C - PERSONAL FACTORS**

14	Knowledge and skill		Knowledge and skill/experience requirement to safely perform the work. Are these requirements met? What is missing?
15	Physical/Physiological Condition (medical restrictions or disability / physical fatigue / restricted range of motion / etc...)		Where this may be a contributing factor, chronic or acute conditions that do not allow full capacity to perform the task as currently designed. Remember to respect the confidentiality and integrity of all involved.
16	Mental/Psychological Condition (mental fatigue / distraction / conflicting demands / repetitive or monotonous work)		Where this may be a contributing factor, identify situations that require deep concentration, complex decision making, repetitive and monotonous work, leading to error.
17	Motivation/Conduct (rush / internal pressures / overconfidence / attempt to save time or effort)		During the initial information gathering, identify any external pressures (real or perceived) that could have led to performing the work differently than expected and that may have led to the occurrence.

IM #:

OCCURRENCE DATE:

TITLE:

**PART D - SYSTEMS**

18	Communication		Inadequate communication, programs, mechanisms or execution for effective transfer of information
19	Emergency Systems		Lack or failure in emergency systems and/or response.
20	Leadership		Lack or failure in planning the work, matching individual qualifications to task requirements, availability of workforce,
21	Maintenance and inspection		Lack or failure in planning and /or execution of maintenance or inspection
22	Management of risk and change		Failure to identify and assess risk; manage change; failure to implement controls or monitor effectiveness of controls
23	Operational control		Lack or failure in planning and or execution of operational controls (Example: Golden Rules, Safety and Health programs and procedures; Fatality Prevention; Operational Processes; Work Permit; Critical Activities; etc...)
24	Projects and engineering		Lack or failure in design, commissioning, shutdown, project criteria and demands (Example: Drawings to identify / operate / isolate process equipment; Project plans for design and commissioning, etc...)
25	Purchasing and management of contractors		Lack or failure in specification of purchasing requirement; contractor management; materials management/storage.
26	Tools, equipment, machines and devices		Lack or failure in defining usage requirements; designed vs. installed capacity; availability
27	Training and orientation		Lack or failure in adequately defining and/or executing on training or orientation requirements; performing safety toolbox meetings; evaluating employee knowledge; instruction qualification, visitor orientation, etc...
28	Work standards		Lack or failure in the development or review of standards including assessment or risk; legal requirements; permits; standards contradict the reality of the area.

**PART E - OTHER COMMENTS**

29	What else can help this investigation? Attach separate sheets as necessary.		What other information might have not been captured here and would be useful to the investigation?
----	---	--	--

IM #:

OCCURRENCE DATE:

TITLE:

STEP 3: Sequence of Events

 14 days

**INSTRUCTION:** The sequence of events is important to the ultimate goal of finding root cause(s). Once the sequence of events are understood, you can start looking at the causes that resulted in each step leading up to the occurrence. This form is provided as a guide to help you organize your sequence of events.

Completed by: \_\_\_\_\_

Date: \_\_\_\_\_

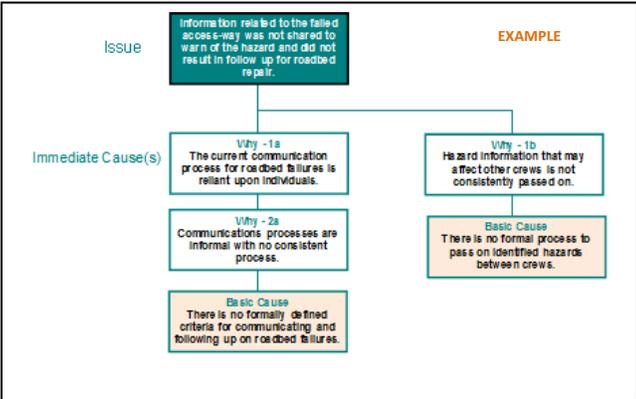
#	DATE	TIME	EVENT
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

STEP 4: Root Cause Analysis (5-WHY worksheet)

14 days

INSTRUCTION: Use this worksheet to help you work through the 5-WHY to identify the cause-effect relationship in an occurrence. By repeatedly asking the question "why?" you peel away layers of issues and symptoms that can lead to the root cause.

Start with a statement of the occurrence from your Sequence of Events and ask why it occurred. Turn the answer to the first question into a second why question, etc... until you identify the root cause.



**STEP 5: Contributing Factors / Root Cause Checklist** 14 days

**INSTRUCTION:** Circle the contributing factor(s) that aligns with your 5-Why Root Cause Analysis and include a statement in the description box of why you selected these causes? The causes below align with SAP IM and together with your description, will appear on the SAP IM Summary Report

IMMEDIATE CAUSES					
<b>1. ACTS / DECISIONS (behaviour)</b>					
1A	Accessing barricaded/restricted/unauthorized area	1G	Failure to perform lock out / tag out	1M	Performing activity in an unsafe way
1B	Deactivating safety devices	1H	Failure to barricade	1N	Servicing equipment in operation
1C	Intentional deviation from work standards	1I	Failure in the perception of the risk situation	1O	Using defective tools/equipment/devices
1D	Unintentional deviation from work standards(error)	1J	Operating at inadequate speed	1P	Using tools/equipment/devices in an inadequate or improvised way
1E	Inadequate lifting/handling of load	1k	Inadequate position for task	1Q	Using inadequate material
1F	Failure to warn/inform/ communicate	1L	Performing activity without authorization, training or physical condition	1R	Failure to use personal protective equipment
Description of immediate cause selected – why did you select this cause? Include corresponding cause number. <b>(Required and will appear on the summary report)</b>					
<b>2. CONDITIONS</b>					
2A	Exposure to ergonomic factors	2I	Congested workspace for action	2Q	Inadequate material
2B	Exposure to chemical agent	2J	Mechanical failures in equipment	2R	Inadequate housekeeping
2C	Adverse weather conditions	2K	Inadequate/defective tools/equipment/ devices	2S	Exposure to harmful levels of radiation
2D	Inadequate soil/surface conditions	2L	Defective/inadequate guards or barriers	2T	Exposure to harmful levels of noise
2E	Adverse/inadequate road or ground condition	2M	Inadequate lighting or visibility	2U	Inadequate or lack of warning/alarm system
2F	Favourable conditions for fire or explosion	2N	Poor structural integrity	2V	Exposure to extreme temperatures (heat/ cold)
2G	Oxygen deficiency	2O	Interface between vehicles/equipment and people	2W	Inadequate or lack of ventilation
2H	Defective/inadequate PPE	2P	Inadequate or lack of lock out/tag out	2X	Exposure to harmful levels of vibration
Description of conditions selected – why did you select this cause? Include corresponding cause number. <b>(Required and will appear on the summary report)</b>					
INTERMEDIATE CAUSES					
<b>3. PERSONAL</b>					
<b>3.1 PHYSICAL / PSYCHOLOGICAL CONDITION</b>					
3.1A	Fatigue due to non-work related activities	3.1C	Fatigue due to sensory overload	3.1E	Restricted range of body movement
3.1B	Fatigue due to work load or task duration	3.1D	Pre-existing injury or disease (medical restrict)	3.1F	Physiological needs
<b>3.2 MENTAL / PSYCHOLOGICAL CONDITION</b>					
3.2A	Excessive work load	3.2C	Excessive demands for decision/judgment	3.2E	End of work shift
3.2B	Excessive demands for concentration	3.2D	Distraction	3.2F	Routine and monotony
3.2G	Under the influence of alcohol, medicine or other drugs				
<b>3.3 KNOWLEDGE / SKILL</b>					
3.3A	Lack of knowledge	3.3C	Lack of risk perception / awareness	3.3E	Inadequate practice
3.3B	Lack of experience / beginner in the task	3.3D	Misunderstood instruction/training	3.3F	Rare/unusual task or performed for the first time
<b>3.4 MOTIVATION / CONDUCT</b>					
3.4A	Complacency (tendency to tolerate unsafe behaviours)	3.4C	Pressure from colleagues	3.4E	Attempt to help in the execution of the task
3.4B	Rush (desire to complete the task)	3.4D	Reported not to feel comfortable stopping the activity / exercising the right to refuse work		
Description of personal causes selected – why did you select this cause? Include corresponding cause number. <b>(Required and will appear on the summary report)</b>					

IM #:

OCCURRENCE DATE:

TITLE:

## ROOT (BASIC) CAUSES

### 4. SYSTEMS

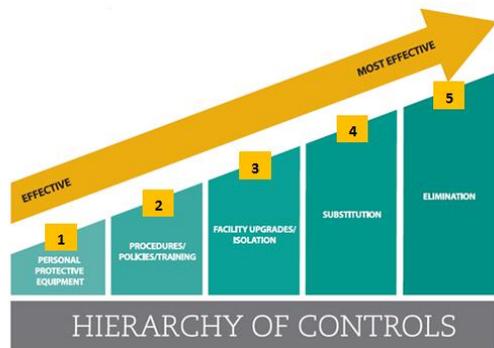
4.1 PURCHASE AND MANAGEMENT OF CONTRACTORS					
4.1A	Failure in delivery / commissioning inspection	4.1C	Failure in the storage of materials	4.1E	Failure in handling / manipulating materials
4.1B	Failure in the recovery or disposal of waste	4.1D	Failure in managing contractors	4.1F	Failure in the process to select / quality / disqualify contractors
4.2 COMMUNICATION					
4.2A	Failure of information system / database	4.2D	Failure in communication between work groups	4.2G	Failure / interference in communication via radio / telephone
4.2B	Failure in communication between different organizations	4.2E	Failure in communication between shifts	4.2H	Failure in communication between team members
4.2C	Failure in communication between employee and leader	4.2F	Failure in communicating changes in processes, facilities and equipment	4.2I	Inadequate or lack of communication method
4.3 OPERATIONAL CONTROL					
4.3A	Failure in lock out / tag out process	4.3F	Failure in the specification / implementation of preventive controls (collective PPE)	4.3K	Failure in the operational process
4.3B	Failure to analyze incidents and conditions	4.3G	Failure to manage Critical Activity requirements (RACs) or high/very high risk scenarios	4.3L	Failure in the Fatigue Prevention Program
4.3C	Failure in the application of Job Observation	4.3H	Failure in the control of chemical products	4.3M	Failure in the Fatality Prevention Program
4.3D	Failure in the application of Golden Rules	4.3I	Failure in the applicability analysis and organizational learning process	4.3N	Inadequate or lack of housekeeping program
4.3E	Failure in specification of PPE	4.3J	Failure in the Work Permit process	4.3O	Inadequate or lack of health, safety, hygiene and /or ergonomics programs
4.4 TOOLS, EQUIPMENT, MACHINES AND DEVICES					
4.4A	Differences between design capacity and installed capacity	4.4C	Failure to plan the use of tools / equipment / machines /devices	4.4E	Hardware failure
4.4B	Failure in availability of tools/equipment/machines/ devices	4.4D	Use beyond service life without technical evaluation	4.4F	Software failure
4.5 MANAGEMENT OF RISK AND CHANGE					
4.5A	Lack of risk assessment	4.5C	Failure to define control measures	4.5E	Failure in implementing control measures
4.5B	Failure to evaluate human / ergonomic factors	4.5D	Failure in the management of change	4.5F	Failure in monitoring / effectiveness of controls
4.6 LEADERSHIP					
4.6A	Inappropriate behaviour is tolerated	4.6C	Failure in planning / scheduling work	4.6E	Failure in the availability of workforce
4.6B	Deviation from agreed role	4.6D	Failure in matching individual qualifications and task requirements	4.6F	Prioritizing production / task completion at the expense of health and safety
4.7 MAINTENANCE AND INSPECTION					
4.7A	Failure in preventive cleanup or restoration of surfaces	4.7C	Failure in preventive maintenance	4.7E	Failure to plan / schedule corrective maintenance
4.7B	Failure in corrective maintenance	4.7D	Failure in the method / frequency of inspection	4.7F	Failure to plan / schedule preventive maintenance
4.8 WORK STANDARDS (DOCUMENTS, REGISTERS AND INFORMATION)					
4.8A	Failure in the development/review of the standard	4.8B	Standard is conflicting with other standards	4.8C	Standard contradicts the reality of the area
4.9 PROJECTS AND ENGINEERING					
4.9A	Deficiencies in layout or design of facilities, plants, equipment or tools	4.9B	Failure in project coordination / planning / execution / shutdown	4.9C	Failure in commissioning process
4.10 EMERGENCY SYSTEMS					
4.10A	Failure in the emergency plan	4.10B	Failure to control, inspect, test and maintain equipment for emergencies	4.10C	Failure in the emergency response
4.11 TRAINING AND ORIENTATION					
4.11A	Failure in performing Safety Toolbox Meetings	4.11B	Failure in training management (employees without training; out of date training)		

Description of root causes selected – why did you select this cause? Include corresponding cause number. (Required and will appear on the summary report)

## STEP 6: Recommended Actions

 14 days

**INSTRUCTION:** Now that you have identified the causes, what actions are required to address them. Use the Hierarchy of Controls in making your decision. The goal of the action plan is to prevent a recurrence. Actions should be **SMART**. Avoid actions that are too broad or that focus on a punitive approach. Assign the actions to specific individuals with the appropriate authority to implement the actions. Assign a due date for the completion of actions.



**Actions should be SMART**

- Specific
- Measurable
- Achievable
- Relevant
- Time Bound

Date and initial as actions are completed

Cause # from STEP 5	Required Actions	Hierarchy of Control #	Implementer (Responsible)	Due Date	Supt. Approval	Date Completed	Superv. Initial	JHSC Initial
1								
2								
3								
4								

**Supervisor:** You will give this Action plan to your Plant Admin on two separate occasions:

- 1) After you have completed this package including STEP 7; and
- 2) After you have initialed and dated that actions are completed; and that the JHSC member has initialed as well. Keep a copy of this Action plan close by for monitoring of action completion.

If you are not supported by a Plant Admin, input your data into SAP IM after STEP 7 is completed.

IM #:

OCCURRENCE DATE:

TITLE:

**STEP 7: Superintendent Quality Check and Approval**

 **14 days (HPI)** \ 21 days (non HPI)

**INSTRUCTION:** Review your completed investigation and action plan with your Superintendent. Your Superintendent is required to:

**\*NOTE:** For ACTUAL Serious, Critical and Catastrophic events and for POTENTIAL Critical or Catastrophic events, the SAP IM must be populated with investigation data from STEP 1 to STEP 7 within 14 days of the event with additional photos. The completed Toolkit must be attached to the SAP IM.

- (A) Review/update and approve 5-Why Root Cause Analysis (STEP 4)
- (B) Review/update and approve Contributing Factors / Root Cause checklist (STEP 5)
- (B) Review/update and approve Recommended Actions. Initialize in the Supt. Approval column (STEP 6)
- (C) Complete Severity and Likelihood for Actual and Potential Severity in the table below.
- (D) Complete Severity and Likelihood for Residual risk. How have the action plan impacted residual risk? If risk is still High or Very High return to STEP 4. If a reduced risk cannot be achieved, escalate to the Manager.

ESTIMATION OF LIKELIHOOD AND RESIDUAL RISK												
	C ACTUAL		C POTENTIAL		D RESIDUAL		SEVERITY CLASSIFICATION CRITERIA					LIKELIHOOD
	SEVERITY (How bad was it?)	LIKELIHOOD	SEVERITY (How bad could it be?)	LIKELIHOOD	SEVERITY How bad was it?	LIKELIHOOD	A Minor	B Moderate	C Serious	D Critical	E Catastrophic	FREQUENT One or more a month
Safety (Injury) & Health (Illness)							Incidents requiring only first aid only	Incidents without absence (requiring work restriction, medical treatment)	Incidents with absence.	Permanent disabling incidents or 1 (one) fatality.	Incident resulting in multiple fatalities.	LIKELY Within one year
Financial (asset)							< US \$10,000	US\$ 10,000 - US\$ 100,000	US\$ 100,000 - US\$ 1,000,000	US\$ 1,000,000 - US\$ 10,000,000	> US\$ 10,000,000	OCCASIONAL Within 1 and 10 years
Environment							No significant impact	Significant impact restricted to plant property, limited to man-made areas, controllable in short term (<1day)	Significant impact restricted to plant property, impact to man-made and natural areas, may require longer term control of adverse effects	Significant impact, outside of plant property, limited to man-made areas, controllable in short term (<1day)	Significant impact outside of plant property, impact to man-made and natural areas, may require longer term control of adverse effects	UNLIKELY Every 10-100 years  RARE One per lifetime of facility

(E) Who was involved in this investigation

Name	Department	Position
		Investigation Lead

(F) What is important to share with your crew, with your plant or with the organization?

**Lesson learned**

(H) Superintendent approval and signature:

<b>Superintendent Signature</b>	<b>Date</b>
---------------------------------	-------------

**Return the completed Toolkit STEP 1 to STEP 7 to the Plant Admin for data entry to SAP-IM.**

IM #:

OCCURRENCE DATE:

TITLE:

**STEP 8A: Investigation Signoff Form for VALE event**

 **15 days (HPI)** / 28 days (non HPI)

**INSTRUCTION:** Every investigation must be reviewed with the Originator and the involved Joint Health and Safety Committee member prior to closing the investigation. The IM Summary Report is a useful tool to print and have on hand when completing this review. Once completed, return to the Plant Admin to be uploaded in your SAP-IM. This will initiate the closure of the investigation in SAP IM.

**Supervisor**

I approve the closure of this investigation.

Print name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**Originator (i.e.: notifier / injured person)**

I have reviewed the investigation and I am satisfied with the corrective actions taken to address the contributing factors.

Yes     No

If not satisfied, please identify why:

\_\_\_\_\_

\_\_\_\_\_

Print name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**JHSC Member:**

I have reviewed the investigation and I am satisfied with the corrective actions taken to address the contributing factors.

Yes     No

If not satisfied, please identify why:

\_\_\_\_\_

\_\_\_\_\_

Print name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

IM #:

OCCURRENCE DATE:

TITLE:

**STEP 8B: Investigation Signoff Form for CONTRACTOR event**  **15 days (HPI) / 28 days (non HPI)**

**INSTRUCTION:** Every investigation must be reviewed with the Originator and the involved Joint Health and Safety Committee member(s) prior to closing the investigation. The IM Summary Report is a useful tool to print and have on hand when completing this review. The completed Investigation Signoff Form will initiate closure of the investigation.

**VALE Representative**

I approve the closure of this investigation.

Print name: \_\_\_\_\_ Date: \_\_\_\_\_

Role: \_\_\_\_\_

Signature: \_\_\_\_\_

**CONTRACTOR Representative**

I approve the closure of this investigation.

Print name: \_\_\_\_\_ Date: \_\_\_\_\_

Role: \_\_\_\_\_

Signature: \_\_\_\_\_

**Originator (i.e.: notifier / injured person)**

I have reviewed the investigation and I am satisfied with the corrective actions taken to address the contributing factors.

Yes  No

If not satisfied, please identify why:

\_\_\_\_\_  
\_\_\_\_\_

Print name: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

**VALE JHSC Member**

I have reviewed the investigation and I am satisfied with the corrective actions taken to address the contributing factors.

Yes  No

If not satisfied, please identify why:

\_\_\_\_\_  
\_\_\_\_\_

Print name: \_\_\_\_\_ Date: \_\_\_\_\_

Role: \_\_\_\_\_

Signature: \_\_\_\_\_

**CONTRACTOR JHSC Member (if applicable)**

I have reviewed the investigation and I am satisfied with the corrective actions taken to address the contributing factors.

Yes  No

If not satisfied, please identify why:

\_\_\_\_\_  
\_\_\_\_\_

Print name: \_\_\_\_\_ Date: \_\_\_\_\_

Role: \_\_\_\_\_

Signature: \_\_\_\_\_

### STEP 9: Implement Actions

 42 days

**INSTRUCTION:** The SAP IM will remain open until all Actions are completed. As the actions are completed, complete the final columns in **STEP 4 - Recommended Actions**.

Areas with Plant Admin: Provide evidence of completed actions to your Plant Admin. The Plant Admin will close the actions in the SAP IM system and upload your evidence.

Areas without Plant Admin: As actions are completed, complete the actions in your SAP IM Work Overview and attach evidence to the Report & Documents tab in your IM.

	Cause # from STEP 5	Required Actions	Hierarchy of Control #	Implementer (Responsible)	Due Date	Supt. Approval	Date Completed	Superv. Initial	JHSC Initial
1									
2							<div style="border: 1px solid black; background-color: #00AEEF; color: white; padding: 5px;">           Ensure to attach to the SAP IM, the evidence that supports completion of actions (Example: attendance sheets; completed work order; photos; etc...)         </div>		

### STEP 10: Manager's Final Approval and Closure of IM

 45 days

**INSTRUCTION:** When all actions are completed, the Manager's completes the final approval on the SAP IM via the Work Overview tab.

Areas with Plant Admin: The Plant Admin will sent the final approval to the Manager for closure.

Areas without Plant Admin: Change the IM status to closed. Remove all approvers except for the Manager.

*Congratulations, you have successfully completed your investigation and SAP IM.*