



Global EHS - Incident Reporting and Investigation Standard

CONTROL INFORMATION

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1 Purpose

This document specifies the minimum requirements for incident notification, investigation and documentation at all Micron Manufacturing and Non-Manufacturing facilities, including incidents that occur at Construction sites.

2 Scope

Items	Details
Site(s) Impacted	All Micron Manufacturing and Non-Manufacturing sites, including Construction sites
Target Audience	Site Leadership, Site EHS, and EHS Incident Investigators
Applicability	<p>This Standard covers:</p> <ul style="list-style-type: none"> • Work-Related Injuries for Team Members and Contractors/ Vendors • Damage to Micron property • Near Misses and First Aids with potential Life Altering Injuries <p>This Standard does not cover:</p> <ul style="list-style-type: none"> • Personal Medical Related issues beyond reporting in Enablon • Incidents and accidents that occur outside of Micron premises

3 Roles and Responsibilities

Roles	Responsibilities
Site Vice President / Site Leadership	<p>Incident Reporting</p> <ul style="list-style-type: none"> • Include Global EHS in all initial Incident Communications to Executives • Share incident summary, corrective actions, etc. at FLT/ BLT Bi-Weekly Staff Meeting for incidents meeting the Moderate – 3, Major – 4 and Severe – 5 categories <p>Incident Investigation</p> <ul style="list-style-type: none"> • Appoint an investigation team for high severity cases • Support and manage resources for high severity cases • Ensure the completion of action items identified in incident investigation reports
Global EHS	<p>Incident Reporting</p> <ul style="list-style-type: none"> • Maintain the Enablon Incident Management Software and the necessary licenses for its use • Issuance of Global EHS First Alert to the Micron network • Maintain this standard, and all resources related to this program • Review incidents for potential global applicability • Issue and track Continuous Improvement Tracking (CIT), when needed <p>Incident Investigation</p>

Roles	Responsibilities
	<ul style="list-style-type: none"> • For Severe Category incidents, the Global EHS Director may identify members of the Global EHS team to participate in the incident investigation including leading, supporting or acting as a subject matter expert. In such cases, specific responsibilities include: <ul style="list-style-type: none"> ○ Ensuring consistency and quality of the investigation ○ Acting as a liaison between the site investigation team and the Global EHS Leadership team ○ Determining restart criteria ○ Supporting any request for resources for ongoing investigations
<p>Site EHS Manager/Director</p>	<p>Incident Reporting</p> <ul style="list-style-type: none"> • Be familiar with the Global EHS Incident Severity Ranking Table and notification requirements • Alert/Inform Site Vice President (or Site Leadership) if incidents meet the criteria outlined in the Global EHS Incident Severity Ranking Table • Initiate the Global EHS Notification process when the Global EHS Incident Severity Ranking criteria is met • Provide relevant updates as incident containment and initial actions progresses • Ensure Site’s data is entered and maintained in the Enablon Incident Management Software <p>Incident Investigation</p> <ul style="list-style-type: none"> • Support and manage resources for investigation, including appointing EHS team members to be in the investigation team • Ensure the validation of action items that were identified in the incident investigation report • Determine the restart criteria, in consultation with Site PSM Manager and Area Supervisor, when needed • Seek Global EHS assistance, if deemed necessary • Point of Contact between Regulatory Agency & Micron for the site, if necessary • Consult with the Legal Department, when needed • Ensure 8D report is triggered for events that occur • Review for appropriate identification of direct and systemic root causes • Ensure Corrective and Preventive Action (CAPA) plans correctly address identified root causes • Ensure validation of CAPA implemented at site
<p>Site EHS</p>	<p>Incident Reporting</p> <ul style="list-style-type: none"> • Be familiar with the Global EHS Incident Severity Ranking Table and notification requirements • Enter and maintain site data in the Enablon Incident Management Software <p>Incident Investigation</p> <ul style="list-style-type: none"> • Facilitate all EHS Incident Investigations • Handover and support PSM Incident Investigations

Roles	Responsibilities
	<ul style="list-style-type: none"> Determine the restart criteria Carry out validation of action items that were identified in the incident investigation report
Site ERT	<p>Incident Reporting</p> <ul style="list-style-type: none"> Be familiar with the Global EHS Incident Severity Ranking Table and notification requirements <p>Incident Investigation</p> <ul style="list-style-type: none"> Perform a Post Incident Analysis (PIA) or After-Action Review (AAR) for incidents that meet first alert criteria or are rated a 4 or 5 severity
Area Supervisor/Incident Owner	<p>Incident Reporting</p> <ul style="list-style-type: none"> Report all incidents that have occurred in their areas – including near misses, to their leaders and Site EHS <p>Incident Investigation</p> <ul style="list-style-type: none"> Ensure containment actions are in place and appropriate to prevent any further injury or damage due to the incident Trigger 8D report for incident that occurred Lead, or appoint appropriate TM to lead the 8D investigation for EHS incidents Select the team for the incident investigation Support and manage resources for investigation Ensure the completion of action items that were identified in the incident investigation report Ensure the validation of action items that were identified in the incident investigation report Determine Restart Criteria by working with site EHS and PSM teams
Team Members/Hosts	<p>Incident Reporting</p> <ul style="list-style-type: none"> Report all incidents that have occurred to them or in their area – including near misses <p>Incident Investigation</p> <ul style="list-style-type: none"> Participate in, or coordinate with contractors, on incident investigations

4 Terms and Definitions

Terms	Definitions
Correction (or Containment Action)	Action to eliminate a detected nonconformity or other undesirable situation.
CA (Corrective Action)	Action to eliminate the cause of a detected nonconformity or other undesirable situation.

Terms	Definitions
PA (Preventive Action)	Action to eliminate the cause of a potential nonconformity or other potential undesirable situation.
Illness	A condition that results from exposure in a workplace to a physical, chemical or biological agent to the extent that normal physiological mechanisms are affected and the health of the worker is impaired. This may include, but is not limited to, skin diseases, respiratory conditions, poisoning, hearing loss, heat stroke, radiation exposure, etc.
Incident	An EHS incident is an unplanned natural, operational, or human event that causes or has the potential to cause a negative impact to an organization's people, property or environment. An EHS-related incident can also be the result of planned activities with unexpected significant non-routine consequences. Examples of an EHS-related incident include but are not limited to work-related injury, release of material to the environment, unknown odors in the work environment, illness of work force, etc. If not managed properly, an incident can escalate into an emergency, crisis or a disaster.
Injury	Any damage to the body because of some sort of traumatic (acute or chronic) episode such as a fall, being struck, ergonomic injuries, etc.
Near Miss	An undesired event that under slightly different circumstances could have resulted in harm to people, damage to property, equipment or environment or loss of process.
Root Cause Analysis	An acceptable analytical methodology used to determine the underlying causes or deficiencies in work activities or processes that either resulted in or could result in an incident.

5 References

Table 1 Internal References

Title	Link
Incident Reporting Portal	Incident Reporting Portal
8D Scoring Template	8D Scoring Template
Global EHS - Emergency Response Standard	2W4373RQWREN-1568922467-15
Global Record Retention Schedule	PUPCC6UH2RDF-873223117-17
Process Safety Event Tier Evaluation Tool	WFT6NJ3WDNAT-65211962-2325

Table 2 External References

Title	Link
Nil	Nil

6 Standard

Micron recognizes that incident reporting and investigation are important aspects of an effective Environmental, Health, and Safety Management System. Maintaining a systematic approach to incident reporting and investigation can help to identify & curb trends in incident types and facilitate the improvement opportunities through the Micron Network.

Prompt reporting of incidents also ensures that Micron Team Members that may have been injured during the incident, receive the necessary medical care and therapy that will be required for their rehabilitation.

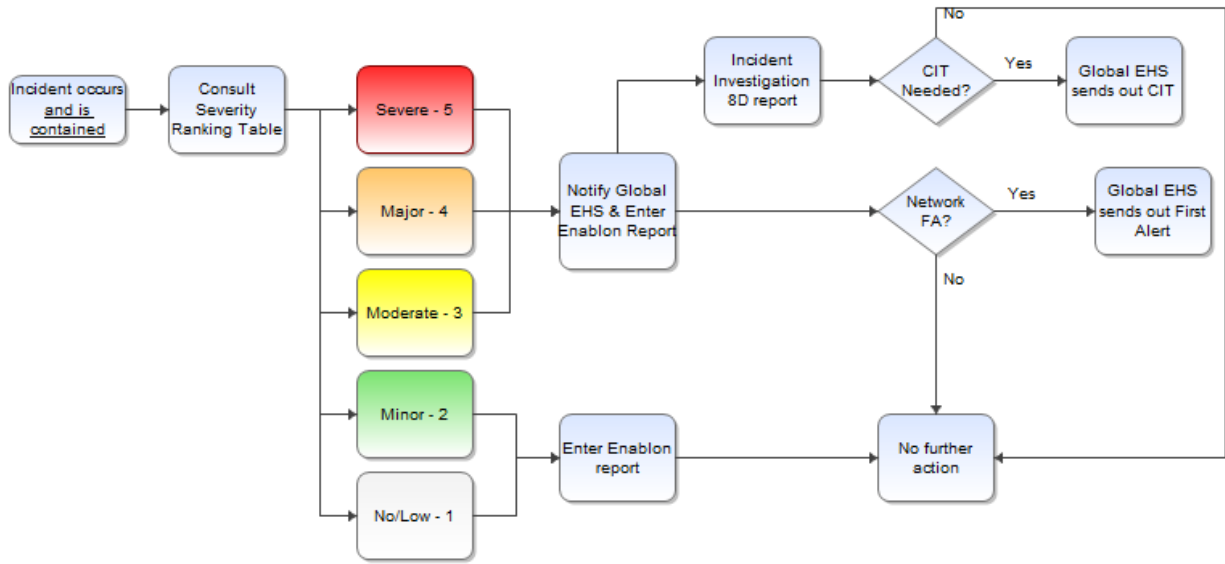


Figure 1 Global EHS Continual Improvement Framework for Incidents

6.1 Incident Reporting

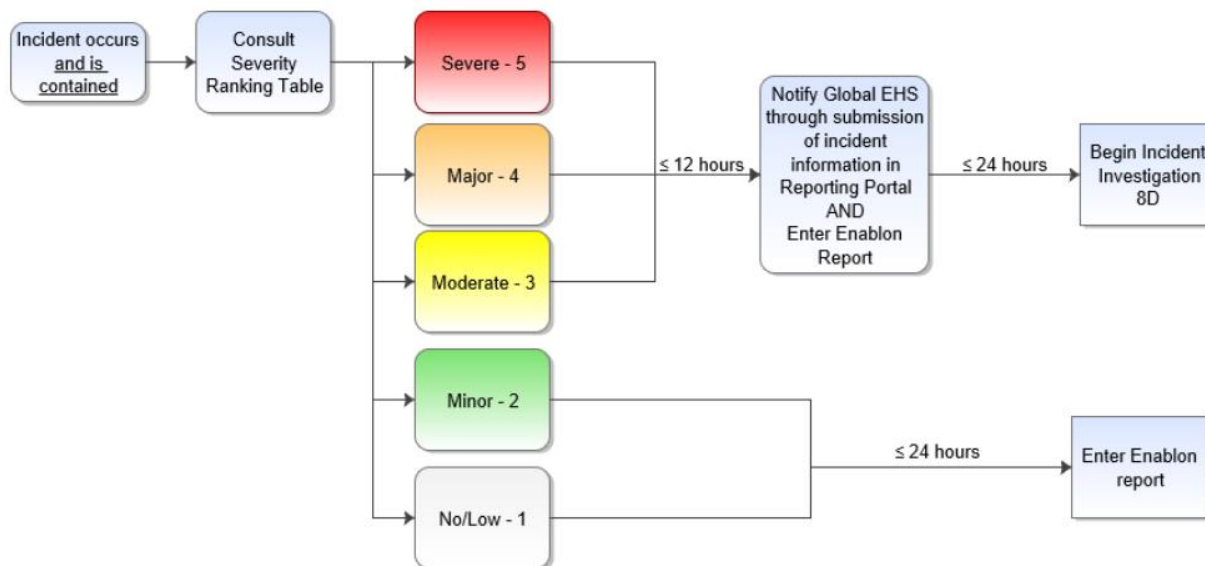


Figure 2 Incident Reporting & Investigation Business Process

6.1.1 Requirements for Global EHS Incident Reporting

Sites shall refer to the Appendix 1 Incident Severity Ranking Table for criteria for incident reporting. **The Incident Severity Ranking Table serves as a guide with examples of typical incidents that have been known to occur.** For instances where there are multiple outcomes from a single incident, the outcome with the highest severity will determine the overall severity of the incident. **Please consult with the Global EHS team if unsure which severity level to assign to an incident. If unsure always report to a higher severity level.**

6.1.2 Critical timelines, level of communication and method of reporting

Sites shall adhere to the requirements listed in this standard for timelines, required levels of communication and the different methods of reporting when reporting incidents.

6.1.2.1 Communication to Leadership

Any immediate communication from the Site to Leadership teams beyond their site regarding the incident, must include the Global EHS team (include MT group Global_EHS) in the email recipients. This is to ensure that the Global team is included in all communication and can be on standby to assist where needed.

6.1.2.2 Severity 5 and 4 Incidents

Site EHS is to arrange a call with a Global Safety Manager within 48hours of the event. The call is to update the Global team of the incident status and site containment actions.

The Global Safety team will review the Global EHS Notification for any further clarifications required from the site before it is sent out to the Global Micron Network as a First Alert.

Determination of the need for Global EHS team members to travel to the site to assist with the investigation may also take place at this meeting.

6.1.2.3 General Requirements for Reporting

Incident Severity Category 5 – Severe / 4 – Major / 3 – Moderate

- Within 12 hours of incident stabilization → Submit incident information on the Global EHS Incident Reporting Portal (alias: ehsincident) and;
- Within 12 hours of incident stabilization → Fill in ENABLON Incident Management System

Incident Severity Category 2 – Minor / 1 – No/Low

- Within 24 hours of incident stabilization → Fill in ENABLON Incident Management System

6.1.2.4 External Reporting Requirements

Site Management and Global EHS shall be made aware when there are incidents that need to be reported to external governmental agencies due to the nature or outcome of the incident. Reporting should typically be coordinated by the Site EHS team.

6.1.2.5 EHS-PSM Collaboration

Site EHS will ensure that Site PSM is made aware of and included in any communication of incidents that occur at their sites. Site EHS may use the [Process Safety Event Evaluation Tool](#) to determine if Site PSM should be informed of an incident at the site if they are unsure, or if Site PSM has not already been called in during the incident response.

6.1.3 Submission of EHS Notification for Incidents with a Severity level of 3 or higher

- Sites shall use the Global EHS Notification template (alias: ehsincident) to submit a summary notification of information for incidents with Severity Level 3 or higher.
- The Global EHS team will use the Global EHS Notification submitted by the site as the basis for any EHS First Alert that will be sent to the global network. The Site must ensure that the summary notification is filled in with the required information (listed in the template), and photographs are attached to ensure transparent and effective communication through the First Alert.

6.1.4 Transmission of EHS First Alert to the Micron Global network

- Global EHS shall, where applicable, transmit the EHS First Alert to the Micron Global Network within 48 hours of incident stabilization to facilitate time for site investigation.
 - The email will be distributed to EHS_FIRST_ALERT
 - Subject: Global EHS First Alert Notification – {FAB Name/Number} {Description of incident and date}
- Incident Severity Category 5 (Severe) and 4 (Major) shall automatically qualify as a Global EHS First Alert and Incident Severity Category 3 (Moderate) may require review from Global EHS for relevance to the network.
- A Global EHS First Alert is only a situational update of the incident to the Micron Global Network. **Further updates on the incidents will be provided to the Global team in the Global Safety Council and SEAL meetings.**
- **Site EHS must share information from First Alerts and subsequent incident updates to the relevant workers (including Contractors) through appropriate means such as Site EHS Committees and pass-downs.**
- Global EHS may issue actionable items via the Continuous Improvement Tracking (CIT) Program for the Sites to act upon & complete.

6.1.5 Data Management & Record Retention

- All Micron Manufacturing and Non-Manufacturing facilities shall use the ENABLON Incident Management System (EIMS) to record the occurrence of an EHS-Related Incident or a potential EHS-Related Incident such as, but not limited to:
 - Potential work-related injuries and occupational illness
 - Any hazardous or non-hazardous chemical or gas release from its normal means of storage or distribution into the atmosphere or room
 - Fire
 - Fire alarm or toxic gas monitoring alarms that trigger an evacuation that meets the Global EHS Incident Severity Ranking Table
- Sites shall submit and update as necessary all Global EHS Notifications through the EHS incident page (alias: ehsincident) for record retention
- The EHS First Alert record retention period is 5 years.

6.1.6 Training

Sites shall conduct appropriate awareness training to its site leaders and team members on the Global EHS Incident Reporting requirements

6.2 Incident Investigation

6.2.1 Requirements for Global EHS Incident Investigation

Table 3 Investigation Requirements

Severity Category	Actions Required	
	Submit 8D to Global EHS	Root Cause Analysis
Severe (5)	Required	Part of the 8D process
Major (4)	Required	Part of the 8D process
Moderate (3)	Required	Part of the 8D process
Minor (2) (with LAI potential)	Required	Part of the 8D process
Minor (2) (with no LAI potential)	Not required	Required
Low (1)	Not required	Required
Near Miss (with LAI potential)	Required	Part of the 8D process

- Sites shall investigate all incidents that occur on-site based on the Severity Category that is prescribed in Table 3.
- Where identified in the table above as required, Sites must ensure that an 8D is triggered to ensure appropriate root cause analysis and corrective and preventive actions are taken. The 8D should be triggered by the area/department owner of the incident. The 8D for EHS Deviations may be found in the Global Deviation Management System (GDMS). Site EHS is to ensure that this is done.

- For incidents that meet the 8D reporting threshold involving Contractors, a Supplier Quality Notification (SQN) in the GDMS system must be issued so that the 8D process is triggered for the Contractor to complete.
- Sites shall select an appropriate root cause analysis tool for the type and severity of the incident that occurred (5-Why, Fishbone, Fault Tree).
- Sites shall determine the Stop Work criteria for any other activities that are related to the incident.
- For incidents such as First Aids and Near Misses, Sites shall investigate when there is a repeated occurrence, or as deemed necessary by the Site EHS team, in the area to prevent reoccurrence. However, if there is LAI potential, an 8D investigation must be performed.
- For an incident with Severity 4 or 5, Global EHS may send representatives to the site to assist with the investigation.

6.2.2 Evidence Preservation

- The investigation shall consider the nature of evidence. Shorter-lived evidence may need to be collected before the emergency response clean-up efforts are complete, for example, samples of materials to be sent for laboratory analysis.
- Some evidence is more fragile, other evidence is durable. Examples of fragile evidence:
 - Odors/conditions
 - People/memories
 - Physical positions
 - Materials that may be cleaned up and disposed of as part of the emergency response
 - Materials that decompose or are not stable
- Examples of Evidence that is somewhat fragile:
 - Electronic data
- Examples of durable evidence:
 - Physical parts, components, stable materials
 - Paper data
- Appropriate care must be taken in the case of a severe incident, as key information can be easily lost or changed, and this must be prevented from taking place
- The timing of clean up and recovery efforts should also be considered as they may be viewed negatively by a government investigator, be sure to confer with Site Management or the Legal department, if needed

6.2.3 Return to Normal Operations – Restart Criteria

Table 4 Return to Normal Operations Authorized TM

Severity Category	Permission for Restart
Severe	Site EHS or PSM Manager in consultation with Global EHS or PSM
Major	At a minimum, Site EHS or PSM Manager (Site VP, Legal or Global EHS or PSM may be consulted).
Moderate	
Minor	At a minimum, Area Manager/Supervisor or Site EHS Team
No / Low	

- Restart Criteria shall always be enforced after any incident to ensure that any affected area is safe for team members or contractors to return to the area. A Risk Assessment should be completed, when needed, as part of the restart to ensure that expected hazards are accounted for and controlled. If no restart criteria are defined, the area shall remain restricted
- If an area remains restricted, Site EHS shall have clear requirements on access identified and posted at the incident site
- Restart Criteria may take short-term safety measures such as restricted access, temporary containment, temporary monitoring or periodic inspection into account. Short-term safety measures shall not be allowed to become permanent
- The successful completion of an incident investigation will always take precedence over restarting any operations.

6.2.4 Actions resulting from Investigation

- The Incident Owner shall ensure the timely closure of all actions identified in each investigation report.
- Where any action identifies a new or changed hazard, or a need for a new or changed control, the relevant evaluation through a risk assessment prior to implementation shall be carried out.
- If actions identified in the reports are not closed on-time, Site EHS shall escalate to their Site Leadership Team or Global EHS for the necessary resources to close the actions.

6.2.5 Verification of Effectiveness for Action

- The Incident Owner and where needed, Site EHS shall conduct a review to verify the effectiveness of any actions implemented as a result of the investigation.
- The review should typically be carried out one-month post-implementation, however, in some cases, may require a longer time for effective verification to take place.
- The review may include
 - Interviewing TMs working in the area
 - Inspection of area
 - Auditing the Safe Work or Operations Procedure and RA/JHA
 - Review of repeated occurrences of incident

6.2.6 Closure of Investigation Reports

- All Investigation Reports shall only be considered closed when all actions identified in the Investigation report have been closed and effectiveness verification of action items have been completed.
- Documented investigation reports shall be retained.
- Closed investigations, including verification of effectiveness will be presented at quarterly Site Management Review Meetings and to the Global Safety Council.

6.2.7 Submission of 8D and other investigation reports

- Sites shall upload a link to the 8D that is being prepared to Global EHS via the EHS Incident page.
- The link to the 8D uploaded shall be managed by the respective sites and should be the link to the 8D that is being actively updated for the site.
- Submissions of Incident Reports via the EIMS shall also be updated and closed by Sites

6.2.8 8D Scoring Metric

- The Global EHS Team shall score all submitted 8D Investigation Report using the Standard 8D scoring Template
- Identified Global EHS Team members performing the 8D scoring for the purpose of the 8D scoring metric must be trained in 8D methods and tools and must be independent of the direct management of the 8D Investigation Team

6.2.9 Data Management & Record Retention

- Sites shall update all Incident Reports that have been submitted via the ENABLON Incident Management System
- All 8D Investigation Reports shall be submitted via the EHS Incident page
- All Investigation Reports record retention period is 5 years

6.2.10 Training

- Global EHS requires that all Site EHS team members be trained in the following:
 - 8D Facilitator
 - Safety 8D
 - Witness Interview
 - Evidence Collection & Preservation
- Sites shall conduct any additional competency training for its Investigation Team, as appropriate.

7 Appendices

Appendix 1 Severity Ranking Table

This table is intended to be guiding examples for sites to determine the severity of the incident. There is no substitution for experience and judgement. If there is a doubt about a severity, err with the higher severity ranking.

	Severe - 5	Major - 4	Moderate - 3	Minor - 2	No / Low - 1
Medical	Fatality (personal medical or potentially work related)	Injury with hospitalization	Any injury or near miss with LAI ¹ potential ²	OSHA recordable no LAI potential	No injury/no treatment ³
	Life threatening injury	Two or more OSHA recordable injuries.	Any TMAH or HF exposure	Injury that requires off site non-emergency but urgent care ⁴	First aid
	CPR/AED use (personal medical or potentially work related)	Two or more patients requiring care beyond first aid	Injury requiring transport to Emergency Room		Personal medical
	Pandemic		Occupational Illness ⁵		
Evacuation	Sitewide evacuation	Evacuation of building exceeding 1 hour	Evacuation of building because of EHS incident reoccupied <1 hour	Local evacuation by EHS/ERT/alarm	People leave workstation in manufacturing building
				Unintentional evacuation of a manufacturing building, reoccupied <30 minutes	Unintentional evacuation of non-manufacturing building
Fire	Chemical fed flame in area not designed for fire potential.	Chemical fed flame in enclosure designed for fire potential (gas cabinet)	2 handheld portable fire extinguishers, small hose line, suppression system activation	Smoldering fire	Small brush, cigarette can, etc.
	Fire where suppression system failed to activate	Fire resulting in sprinkler or suppression system activation/discharge	Incipient or any fire on site that required external response	Water flow alarm with no fire	Smoke odor
	Structure fire where external response was needed			Fire alarm triggering an evacuation (unintentional)	
Environment	Public impact (media exposure)	Potential public impact (media exposure)	Unauthorized/above limit release to air, surface water or soil	Release not leaving site – identified and contained before violating limits	No threat – release to environment within allowable limits/quantity

¹ LAI = Life Altering Injury

² E.g. Worker fell through hole into bin full of boxes and only had abrasion injury.

³ E.g. Someone tripped and wanted to log a report, did not require any care.

⁴ E.g. Stitches. In Taiwan & Japan's context, this is hospital care.

⁵ Refer to Occupational Health Standard

	Severe - 5	Major - 4	Moderate - 3	Minor - 2	No / Low - 1
	Actual/visible impact to water bodies, flora and fauna (terrestrial or aquatic/marine)	Any release that leaves the property (unauthorized or above limits)	Release contained within the site boundary	Abatement/treatment system malfunction	
	Significant release to air/water/soil with immediate visible effects beyond the site boundary	Potential impact to water bodies, flora and fauna (terrestrial or aquatic/marine)	Release requiring regulatory notification	Notification to local authorities not required	
	Above allowable/reportable Quantity, off property	Formal regulatory action from environmental agency (Notice of violation)			
Rescue	Rescue with Severe-5 medical criteria	Rescue with Major-4 medical criteria	Rescue with any Moderate-3 or below medical criteria ⁶	Rescue from height (no injury) ⁷	Elevator rescue no medical emergency
	Advanced machinery extrication ⁸	Simple ⁹ machinery extrication (person in machine) beyond digits ¹⁰	Simple machinery extrication with injury limited to digits	Fall from height abated with fall protection (no injury)	
				Other technical rescue with no injury (excluding elevator rescue)	
Chemical release—excluding potable water	Chemical release of any volume resulting in a vapor cloud, toxic, or flammable atmosphere within a building ¹¹	Chemical release of any volume that leaves property	Hazardous release <10G/38L, beyond secondary containment, but contained on property	Release from primary containment, captured within secondary	Small spill ¹²
		Hazardous release from >10G/38L, beyond secondary containment, but contained on property	Any TMAH or concentrated HF release		

⁶ Includes fall from height and rescue from height

⁷ E.g. Worker fell on to roll-up door casing

⁸ Advanced means the extrication or disentanglement from large machines, using specialized search and rescue resources, extended/complex disassembly, etc. (NFPA 1670-2017)

⁹ Simple is defined as; disentanglement by operating the device (ex. putting machine in reverse), easy/quick disassembly, lightweight materials that can be cut, spread, or lifted and has simple hazards which can be readily controlled (NFPA 1670-2017).

¹⁰ Digits = fingers/toes

¹¹ E.g. Carbon Dioxide release that reduced oxygen levels in a room.

¹² E.g. A small spill is the release from a handheld container with a fixed volume.

	Severe - 5	Major - 4	Moderate - 3	Minor - 2	No / Low - 1
Gas (TGM/HPM)	Highly toxic gas release into ambient/ environment	Non-inert gas release into ambient/environment	Confirmed release that hits high-high alarm WITHOUT auto-shutdown when it should have	Gas release that triggers alarm with shutdown	Inert gas release
		Pyrophoric liquid/gas release (or evidence of) ¹³			
Others	Any incident greater than what was outlined in "Major"	Explosion (detonation or deflagration), rapid pressure release with damage ¹⁴	Natural disaster with EHS involvement ¹⁵		Natural disaster with no EHS consequences. ¹⁶
	Formal notice from regulatory agency, because of an EHS incident, to stop or interrupt site operations.	Government site visit because of an EHS Incident	Minor unexpected/unplanned chemical reaction		
	Interruption to production or production impact due to EHS incident/activity requiring mitigation efforts exceeding 1 shift	Potential investor/customer impact	Any activation of the site crisis management/BCP team related to EHS operations.		
	Media on site	Significant interruption to production due to EHS incident ¹⁷			
					Any incident that triggers ERT/ERC response per local procedures for a scenario not otherwise covered in this table
					Any investigation conducted by Site EHS prompted by a complaint or scenario not otherwise covered in this table
Facility	Significant damage that leaves building unable to be occupied	Damage that shall require significant infrastructure restoration	Damage that shall require minor restoration to infrastructure		Little to no property damage

¹³ E.g. Silane release in gas cabinets

¹⁴ E.g. Asher

¹⁵ E.g. Injury sustained during earthquake

¹⁶ E.g. Tornado or Earthquake with no injuries or environmental impact

¹⁷ E.g. Out of spec waste discharge that is controlled via chemical turn-off

	Severe - 5	Major - 4	Moderate - 3	Minor - 2	No / Low - 1
Site - Actions/Notifications					
Site Actions	Complete Incident Notification Template ¹⁸ and upload to the Incident Reporting Portal (within 12 hours of incident stabilization)	Complete Incident Notification Template and upload to the Incident Reporting Portal (within 12 hours of incident stabilization)	Complete Incident Notification Template and upload to the Incident Reporting Portal (within 12 hours of incident stabilization)		
	Review BCM/BCP/SCMT activation criteria	Review BCM/BCP/SCMT activation criteria			
	Within 12 hours, enter an Enablon report	Within 12 hours, enter an Enablon report	Within 12 hours, enter an Enablon report	Within 24 hours, enter an Enablon report	Within 24 hours, enter an Enablon report
Global EHS Team - Actions					
	Draft EHS Network First Alert ¹⁹ (within 48 hours) and send to EHS FIRST ALERT	Draft EHS Network First Alert (within 48 hours) and send to EHS FIRST ALERT	If needed, draft EHS Network First Alert (within 48 hours) and send to EHS FIRST ALERT		
	Consider CIT	Consider CIT	Consider CIT		
Site Level Incident Investigation and Reporting					
8D	Yes	Yes	Yes	LAI potential – Yes No LAI potential – No	No
Root Cause Analysis	Yes (part of 8D)	Yes (part of 8D)	Yes (part of 8D)	Yes	Yes
ERT PIR / PIA / Critique - if involved	Yes	Yes	As needed	Discretionary	Discretionary

¹⁸ Go to [Incident Reporting Portal](#) and click “New +”

¹⁹ Go to [First Alert Portal](#) and click ‘new’

Appendix 2 8D Overview and EHS Requirements

Step	Requirements
D0 Become Aware of the Problem	<ul style="list-style-type: none"> 8D investigations are required for level 3-5 severity incidents and for near misses or first aids with LAI potential. The Area Supervisor shall gather information needed to form the team and preserve information and evidence as necessary. Site EHS should advise on this if the Area Supervisor is not aware of what to preserve. Site Emergency Response Teams (ERT) shall move quickly to determine any Emergency Response Actions to protect people, the environment, company assets, and production; protect evidence; and to communicate to key stakeholders. Site ERT shall coordinate with site EHS to gather information that will be needed for subsequent steps in the incident investigation process. Site ERT and site EHS shall also coordinate with site Process Safety Management (PSM) as appropriate. It is good practice to begin the creation of a timeline immediately, even if it only includes the event log. Site ERT and Site EHS shall ensure that times are noted, where appropriate, so that a timeline can be created. Examples: when an alarm is reported, when an alarm clears, when responders are dispatched, when response actions are taken or reported to a central command post, etc. Incident investigators shall keep in mind that not all facts are pertinent to the investigation or root cause analysis, but they may not be able to make that determination at the time of the incident.
D1 Form a Team	<ul style="list-style-type: none"> The Area Supervisor shall establish a team of people with subject matter expertise (SME), allocated time, and authority to complete the investigation. One team member from the Site EHS team should support the investigation., and act as a facilitator with subject matter expertise on incident investigation methods and tools. The team must be cross-functional to the degree necessary to understand the incident and its causes and to drive appropriate corrective actions. Team composition may require adjustment as more is learned about the incident; the team leader shall include any new personnel and remove contributors who are no longer necessary.
D2 Describe the Problem	<ul style="list-style-type: none"> The investigation team leader and incident investigation team shall create a problem statement. A problem statement should not assign a cause, blame, or offer a solution. Teams shall not include assumptions, guesses, or conclusions in the problem description or statement. Teams shall include only what is known and supported by facts. The team shall describe the incident by identifying who, what, where, when, why, how, and how many (5W2H) and is/is not for the incident. The team leader and incident investigation team should try to keep the problem statement to a few simple sentences.
D3 Implement and Verify Containment Actions	<ul style="list-style-type: none"> The team shall work with appropriate departments to create containment actions. Containment actions for severe incidents may be implemented enterprise-wide through the EHS Continuous Improvement Tracking (CIT) system. The team shall define and implement containment actions to isolate the effects/symptoms of the problem until corrective action is implemented: <ul style="list-style-type: none"> Key aspects of this step include isolation and containment, ensuring continued operations, and acting quickly to minimize effects of the problem. Verification of actions must occur to prove that the interim containment action works and continues to work until the implementation and verification of the corrective action.
D4 Find and Verify Root Causes	<ul style="list-style-type: none"> The team shall identify cause(s) that explain why the problem was not detected before it became an incident (Escape), what created the problem (Occurrence), and why planning or management processes failed to identify a concern (Systemic). The team shall determine changes and differences from the detailed problem description with possible causes for the team to analyze. The team shall use tools (such as 3x5Why, timeline charts, and cause and effect analysis) to identify specific (primary) root causes. A process safety-related incident may trigger a Hazard and Operability study (HazOp), but that may best be performed after another method is used for root cause analysis. HazOp studies are ideal for the analysis of chemical processes, but may not focus on the specific circumstances of an actual incident that has occurred.

Step	Requirements
	<ul style="list-style-type: none"> The 3x5Why tool is default for the purpose of clarifying escape/detection, occurrence, and systemic root causes; however, this is not necessarily to the exclusion of other tools, which may be helpful in the root cause analysis and to supplement the 3x5Why (for example, timeline charts, fishbone for brainstorming, and so forth). For catastrophic or for complex incidents, 3X5-Why may not be appropriate. Therefore, its use is up to the discretion of the investigation team. Fault Trees or another similar method is preferred where there is the potential for many root causes and intermediate causal factors. The team shall isolate and verify the root cause(s) by testing each potential cause against the problem description and test data.
D5 Select Permanent Corrective Actions	<ul style="list-style-type: none"> The team shall evaluate potential alternative solutions relating to all identified causes (from step D4) to understand options and select the best corrective action options for eliminating the cause(s) or reducing their occurrence. In some cases, a root cause may not be able to be economically or technically eliminated, however, appropriate mitigation can reduce the risk to a tolerable level. The Hierarchy of Controls 2 shall be used to determine the most appropriate approach to mitigating hazards. When the best option for corrective actions is complex or selection is difficult, the team shall use decision analysis tools to identify and weigh options against the corrective action objectives and to assess risks. The team shall clearly state the permanent corrective actions (PCA) for each of the occurrence and escape/detection causes. The team shall consider management or operational systems, practices, business processes, and relevant procedures when determining systemic causes. There shall be no "orphan" corrective actions. These are actions that cannot be directly tied to one or more of the root causes from D4 (likewise, all root causes from D4 should have at least one corrective action tied to them if practicable).
D6 Implement Permanent Corrective Actions	<ul style="list-style-type: none"> The team shall clearly describe corrective actions that completely cover all Occurrence and Escape/Detection root causes from D4 with ownership and due dates. The action item owners shall implement the corrective actions and validate their proper implementation and actual effectiveness at resolving the root cause(s) of the problem. That is, validate that the correction did actually solve the problem. Site EHS shall verify removal of containment actions implemented in D3 after corrective action implementation and validation of effectiveness.
D7 Prevent System Problems	<ul style="list-style-type: none"> Site EHS shall ensure that systemic corrective actions are completed. For severe incidents or near misses with LAI potential, Global EHS shall evaluate whether system root causes impact other sites and may trigger a Continuous Improvement Tracking (CIT) action for sites.
D8 Congratulate the Team	<ul style="list-style-type: none"> The 8D may only be considered Closed when all corrective actions (D6) and preventive actions (D7) are completed and validated for effectiveness. To close the 8D, a signature or electronic approval from the Incident Investigation Team Leader is required. Management or supervisors of Incident investigation team members should include incident investigation activities as part of performance planning and provide documentation within Success Factors in support of performance or development plans and supporting behaviors.

8 Document Control

Items	Details
ECN Facility	CORP EHS
ECN Area	EHS GENERAL
Approval	This document is approved by: GLOBAL_EHS_SEAL_LT
Notification	Notification of changes to this document is managed through Micron’s Engineering Change Notification (ECN) process to the following: <ul style="list-style-type: none"> • FLT • ATLT • GLOBAL_EHS • GLOBAL_EHS_MANAGERS • GLOBAL_EHS_SEAL_LT • GLOBAL_EHS_TEAM_MEMBERS • PSM • PSM_CORP • PSM_MGR • GSC • GLOBAL_FAC_NOTIFY • GLOBAL_FAC_MANAGERS
Review	This document will be reviewed at least biennially (once per two years) by Global EHS / PSM through the Periodic Document Review (PDR) process.

9 Revision History

Table 5 Revision History

Rev	Date	Description	Requestor
0	30 Apr 2020	<p>ECN Number: 301056677</p> <p>First published version. Consolidated past standards:</p> <ul style="list-style-type: none"> • Global EHS - Global Injury Escalation Process • Global EHS - Incident Reporting Standard • Global EHS - Incident Investigation Standard • Global EHS - First Alert Notification Standard 	HEATHERC
0	19 Jun 2020	<p>ECN Number: Not workflowed</p> <p>Added reference link to Global EHS - Global EHS - Emergency Response Standard</p>	HEATHERC
1	21 Jun 2020	<p>ECN Number: 301061806</p> <p>Additional clarity made on Enablon reporting criteria for situations not otherwise covered in Severity Ranking Table.</p> <p>Was: Appendix 1: Severity Ranking Table “Others” x “No/Low-1”: Nil</p> <p>Is: Appendix 1: Severity Ranking Table “Others” x “No/Low-1”: Any incident that triggers ERT/ERC response per local procedures for a scenario not otherwise covered in this table, and Any investigation conducted by Site EHS prompted by a complaint or scenario not otherwise covered in this table</p>	HEATHERC
2	17 Nov 2020	<p>ECN Number: 101075415</p> <p>Additional clarity made on reporting criteria and expectations. Please refer to changes in RED.</p>	HEATHERC

End of Document
