



Global EHS - Contractor and Vendor EHS Requirements Standard

CONTROL INFORMATION

Control Items	Details
Document Number	2W4373RQWREN-1568922467-123
Revision	3
Revision Date	20 Jul 2023
ECN Number	101147005
Translated Documents	English , Simplified Chinese , Traditional Chinese , Japanese , Malay

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1 Purpose

This standard defines the requirements and responsibilities of Contractors and Vendors who work at Micron locations.

Activities at Micron can include complex tool installations, gas and chemical systems and other high-risk activities that may have a significant impact on site EHS performance, legal compliance and an increased risk of incident and injury without proper oversight and controls. Even simple tasks may pose an increased risk if sufficient care is not taken to ensure that Contractor employees meet minimum requirements with regards to safety standards.

When attached to a Contractor and Vendor agreement, this standard becomes part of the contract terms. The Contractor and Vendor must ensure that the requirements put forth in this standard are met and that their employees and subcontractor employees are trained and comply with all aspects of this standard. Each Micron site, may at their discretion, include a written addendum that identifies additional local and site requirements.

2 Scope

Items	Details
Site(s) Impacted	This document applies to the following sites:
	☒ FE ☒ AT ☒ TD ☐ Construction
	☒ NMS Level 1 ☒ NMS Level 2 ☒ NMS Level 3 ☒ NMS Level 4
Target Audience	Site Leadership, Global and Site EHS, Global and Site Facilities, Global and Site Procurement, Legal
Applicability	Sites shall fully meet the requirements outlined in this standard by the Conformance Date stated in the Revision History. Failure to ensure conformance will result in a possible NC in the absence of a recorded and approved Management of Change entry in ehsmoc/. Sites shall, at a minimum, comply with this standard. Wherever local statutory, regulatory or customer specific requirements or a risk assessment establish the need for more stringent requirements to be followed, the site must meet those. This standard does not apply to greenfield construction or persons performing non-industrial consulting services, including related site visits for sales/consultancy meetings, site tours or administrative work. This standard applies to all tasks conducted by contractors in facilities and manufacturing/production areas.

3 Roles and Responsibilities

Roles	Responsibilities
Site Leadership, Site EHS, or designee	- Supervision and implementation of Micron EHS policies and standards for Contractors and Vendors at the site level and that they are in compliance with applicable local legal regulations. - Ensure that Contractor and Vendor employees are appropriately briefed on Micron global and site EHS requirements before commencing work at Micron locations. - Review the requirements and subsequent changes of this standard and identify actions to ensure the requirements are effectively implemented

Roles	Responsibilities
	Evaluate continuous compliance to the updated requirements of this standard at least once every 3 years or more frequently (when risk of noncompliance is present) and implement actions to correct deficiency(ies) identified during the compliance evaluation process
Global EHS	- Maintain and ensure Global EHS - Contractor and Vendor EHS Requirements Standard is up to date. - Audit the compliance of the standard through regular audits and/or site reviews. - Ensure that the criteria in the SLP Ariba system or any new Procurement suppliers management system are aligned with Micron Contractor and Vendor EHS Standard pre-qualification requirements.
Procurement	- Include Global EHS - Contractor and Vendor EHS Requirements Standard into Procurement supplier onboarding process. - Ensure that the EHS qualification criteria are extracted from this standard and consult Global EHS with any changes to EHS criteria in SLP system. - Inform Micron Contractors and Vendors of changes and updates to this standard. - Manage business relationship with contracting Contractors and Vendors through quarterly business review and other monitoring system. - Include EHS pre-qualification elements for Contractors and Vendors into Micron Supplier Compliance Assessment system and evaluate them on their compliance risk profile. - Work with Micron EHS and Host to issue Contractors and Vendors with Supplier Quality Notification (SQN) for significant contractor non-conformance identified by Micron.
Micron Host	- Ensure Contractor or Vendor companies comply with this standard. - Work with EHS representative to ensure that Contractors and Vendors are appropriately briefed and trained on Micron site EHS requirements before commencement of work.
Contractor and Vendor Management or Supervisor	- Each Contractor and Vendor is responsible for ensuring their work activities meet all applicable local legal regulations, as well as the requirements contained in this standard. - Before starting work at Micron, Contractors and Vendors must contact their Micron Host or site EHS to clarify any EHS requirements stipulated in this standard (if applicable) - Ensure all applicable local EHS legal requirements are adhered to throughout the course of the activities being carried out while at a Micron location.
Contractor and Vendor Employees	Each Contractor and Vendor Employee is responsible for following Micron EHS Policies and Standards as well as local legal regulations.

4 Terms and Definitions

Terms	Definitions
CoHE	Control of Hazardous Energy The placement of a lock and tag on an energy isolating device, in accordance with an established energy isolating procedure (EIP), ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lock is removed.

Terms	Definitions
Contractor and Vendor	Any external person, firm, company, supplier, or combination thereof (including any employee, servant, or agent thereof), that enters into a contract or agreement with Micron to deliver services, products or perform work, including equipment/tool vendors. For ease of reference, the term Contractor will be used throughout this document.
EHS	Environmental, Health, and Safety
EHS Event Notification	Micron's communication tool for notification to interested parties throughout the company of critical EHS-related incidents. Event notifications may be in the form of a First Alert or an Event Sharing.
EHS Incident	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.
Emergency	A sudden, unplanned, serious event or situation that has the potential of putting human life, the environment, or property at risk such as earthquake, explosion, fire, or release of hazardous energy or chemicals.
ERT	Emergency Response Team A team responsible for responding to emergencies.
Evacuation	To leave a working place or area because of a potential hazard or danger. An evacuation can be initiated by an alarm or a person who is aware of the danger.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals Defines and classifies the hazards of chemical products and communicates health and safety information on labels and safety data sheets. A GHS compliant Safety Data Sheet contains 16 chapters (Identification, Hazard(s) identification, Composition/information on ingredients, First-aid measures, Fire-fighting measures, Accidental release measures, Handling and Storage, Exposure controls/personal protection, Physical and chemical properties, Stability and reactivity, Toxicological information, Ecological information, Disposal considerations, Transport information, Regulatory information, Other information).
Hazardous Chemical	Any chemical which is classified as a health hazard, physical hazard, or environmental hazard by Globally Harmonized System of Classification and Labeling of Chemicals (GHS).
JHA	Job Hazard Analysis A technique that focuses on job tasks as a way to identify hazards before they cause an accident. A JHA focuses on the relationship between the worker, the task, the tools, and the work environment. Once identified, the hazards can be eliminated or controlled. In the context of emergency response, a JHA is intended to be a pause after emergency response to plan what actions are going to be performed next, potential risks and mitigation efforts. This may also be used for non-emergency work such as decontaminations.
Legal / Regulatory Requirement	A requirement coming from a law, regulation, or standard that can be legally enforced.

Terms	Definitions
Lost Day Case Rate	The Lost Day Case Rate is calculated as followed: $= \frac{\text{Number of loss day cases} \times 200,000}{\text{Number of man hours worked}}$ The lost day case rate may be calculated on a per month, per year or rolling rate as needed.
Micron Host	Micron employee responsible for bringing a Contractor or Vendor onsite to perform work.
Near Miss	An undesired event that, under slightly different circumstances, could have resulted in harm to people, damage to property, equipment, the environment, or a loss of process.
OSHA Recordable Incident Rate	The OSHA Recordable Incident Rate is calculated as follows: $= \frac{\text{Number of recordable cases} \times 200,000}{\text{Number of man hours worked}}$ The incident rate may be calculated on a per month, per year or rolling rate as needed.
PPE	Personal Protective Equipment Any of a series of specialized devices, clothing or equipment worn by employees for protection against hazards. PPE includes anything from gloves to full-body suits with self-contained breathing apparatus.
Process Safety Incident	A process safety incident is one where there is unplanned or uncontrolled release of a material and which meets the following criteria: • A process must have been directly involved in any damage caused • Results in a consequence which meets reporting thresholds • Occurs in production, distribution, storage, utilities, or pilot plants of a facility • Is an acute release A process safety event is one in which there is a loss of primary containment but which doesn't meet all the criteria listed above.
RA	Risk Assessment A procedure through which knowledge and experience of design, use, incidents and accidents and harm are brought together to measure risks for specified scenarios of the equipment being assessed. Risk assessment includes determining the limits of machinery, hazard identification, and risk estimation. It is the process of evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and determining whether or not the risk(s) is acceptable.
Risk	The expected magnitude of losses from a hazard, expressed in terms of severity and likelihood.
RM	Risk Management A process that is utilized to determine the hazard or risk of an activity as well as the corresponding controls that will mitigate the hazard or risk of performing the task. Common examples include Risk Assessment (RA) and Job Hazard Analysis (JHA).
SC	Secondary Containment Level of containment that is external to and separate from the Primary Containment. Secondary containment is a method of safeguarding used to prevent unauthorized releases of toxic or hazardous gases into uncontrolled work areas. Secondary containment is in addition to the primary containment system. Secondary Containment is required any time there are mechanical fittings.
Unsafe Act	The actions or conduct of individuals or groups, which possess characteristics of a behavior, deliberate or not, that may contribute to a mishap such as work-related illness or injury.

Terms	Definitions
Unsafe Condition	The physical attributes of an environment where safety controls have been ignored, bypassed, or insufficiently developed to eliminate potential for hazards, and eventual mishaps.
Work-Related Recordable Injury	An injury or illness that: - resulted from an undesired event or exposure in the work environment, and - was caused, aggravated, or contributed to by the worker's work activities.

5 References

Internal References	Link
Global EHS - Confined Space Program Standard	2W4373RQWREN-1568922467-146
Global EHS - Control of Hazardous Energy (CoHE) Standard	2W4373RQWREN-1568922467-29
Global EHS - Distracted Walking and Stairwell Safety Standard	2W4373RQWREN-1568922467-26
Global EHS - Electrical Safety Standard	2W4373RQWREN-1568922467-388
Global EHS - Excavation Standard	2W4373RQWREN-1568922467-695
Global EHS - Incident Reporting and Investigation Standard	2W4373RQWREN-1568922467-279
Global EHS - Lifting and Rigging Standard	2W4373RQWREN-1568922467-82
Global EHS - Lone Worker Standard	TEDSZF665RUJ-2038493890-912
Global EHS - Safety Permit to Work Standard	2W4373RQWREN-1568922467-394
Global EHS - Work At Heights Program Standard	2W4373RQWREN-1568922467-48

External References	Link
Nil	Nil

6 Standard

6.1 Applicable EHS and Legal Requirements

- Contractors shall ensure that all work activities comply with local EHS legal requirements and Micron standards. If legal regulatory requirements are more stringent than those established by Micron in this standard, the legal requirements will prevail.
- Failure to comply with local legal requirements or the requirements listed in this standard may result in the removal of contractor employees or contracting firm or being struck from the approved contractor list. All costs associated with the stopping of work because of violations can be charged to the responsible contractor.
- Each Micron site reserves the right to require additional EHS requirements not listed in this standard as needed, based on the hazards and local legal aspects associated with contractor tasks and activities on site. Each Micron project, may at its discretion, include a written addendum that identifies additional local and site requirements.

6.2 EHS Pre-Qualification Requirements

- Contractors performing work at Micron will go through an EHS pre-qualification processes administered through Procurement's Supplier Lifecycle and Performance (SLP) Assessment system. Each proposed Contractor and Vendor shall have to meet the following criteria:
 - OSHA Recordable Incident Rate ≤ 2.1 for the previous 3 years (or equivalent local country incident rate)
 - Lost Day Case Rate ≤ 1.0 for the previous 3 years (or equivalent local country severity incident rate)
 - Zero (0) Fatalities in last 5 years
 - Company has not been prosecuted, served with a prohibition or improvement notice or fined by the enforcing authorities for a violation under local Health, Safety or Environmental legislation for the past 5 years.
 - Company has an EHS Management System including formal documented processes in place to identify, manage and review risks and hazards for all their project-specific work activities (e.g., Risk Assessment, Job Hazard Analysis, Standard Operating Procedures, and Control of Work etc.).
- Any Contractor who fails to maintain an acceptable EHS performance record pertaining to the above's shall be required to prepare an EHS Corrective Action Plan demonstrating how it will improve its EHS performance during work contracted under Micron.
- Additional requirements are in place and will be requested of Contractors who may provide or sell chemicals and/or gases to Micron, or who will provide waste management services to Micron, including transportation, storage, treatment, direct reuse, recycling or disposal.
- A Global EHS representative will review and approve all new requests through the Procurement SLP system and ensure that the criteria in the SLP Ariba system or any new Procurement suppliers management system are aligned with this standard.

6.3 Training and Orientation Requirements

- Contractors companies are required to provide relevant training to their employees based on the job scope being performed. Training and authorized licensing for any specific task being carried out will be borne by the respective Contractor companies. Micron will provide training to Contractors pertaining to Micron specific risks and expectations.

- Contractors will be required to attend Micron Contractor and Vendor Safety Orientation training depending on the location and scope of the work. The orientation shall ensure that the Contractors are familiar with hazards and systems that are unique to Micron.
 - At the minimum, Contractor and Vendor Safety Orientation shall include the following EHS requirements:
 - Micron EHS Policies
 - Message from Micron Leadership Team
 - Global Safety Rules
 - Global EHS Requirements and Rules
 - Incident Reporting
 - Emergency Response and Preparedness
 - Risk Management & Environmental Aspect and Impact Assessment Requirements
- Depending on the nature of work activities present at Micron site:
- Personal Protective Equipment (PPE) Requirements
 - Chemical and Gas safety
 - Control of Hazardous Energy (awareness)
 - Working at Height requirements, including Fab Open Floor Tiles requirements (awareness)
 - Housekeeping requirement
 - Confined Space Entry Operation
 - Electrical Safety
 - Live Electrical Work
 - Scaffolds
 - Lifting Operations
 - Permit to Work System (Site Specific)
 - Safety good catch system
 - Two-Person Rule/ Lone Worker Requirements
 - Waste, wastewater, air emission management
- If there is no specific Contractor and Vendor Safety Orientation at site, Micron Hosts will provide sufficient training by briefing the Contractor Employees on Micron EHS requirements before work commences.
 - Micron safety orientation training records shall be maintained by the respective Contractors, and shall be produced when requested. The responsible Micron Host shall verify that orientation training has been completed before work commences.
 - Micron reserves the right to request or require additional training as needed.

6.4 Risk Management

- Each Contractor shall develop a Risk Assessment (RA) or Job Hazard Analysis (JHA) and an Environmental Aspect and Impact Assessment (EAIA) for all scheduled and ad-hoc tasks and work activities in the respective scope of work performed at Micron premises prior to the commencement of work.
- Contractors shall appoint a team of competent personnel to conduct RAs or JHAs for all the work activities in the job or task awarded. All work activities shall have safety and environmental precautionary measures outlined in activity-based procedures or other means to protect Micron and Contractor employees, the environment and Micron property, as needed.
- Contractor RAs and JHAs shall be reviewed and approved by the Contractor company Management Representative. The submitted RAs and JHAs shall be reviewed at least once every three (3) years, or

when there are significant changes in work activities, or after a review of incident, near miss or dangerous occurrence related to the work activities.

- Contractors shall conduct initial and periodic training to ensure that all their employees comprehend and implement the contents of the RAs and JHAs. All safety and environmental precautionary measures identified in the RAs and JHAs must be verified for compliance before work commences daily.
- Micron Site EHS may be contacted for specific information pertaining to RA or JHA requirements, such as advice on acceptable formatting and standard control measures that are acceptable within the Micron work environment. As Risk Management is mandatory in some regions, Site EHS teams may specifically indicate the site risk management procedures in order to meet local regulatory requirements for their region.
- When needed, Contractors will be requested to participate in Hazard and Operability Studies (HAZOP) as subject matter experts on their equipment/tool sets.
- At no time shall a Contractor change equipment or tool parts, chemicals in use, or approved procedures for completing a task, without first going through the management of change procedure that exists at each Micron site or through their Micron Host. This is to ensure that all risks associated with the planned change can be appropriately assessed.

6.5 Incident Reporting and Investigation

- All Contractor Employees involved in an EHS or Process Safety-related incident at a Micron location shall report the incident to their Company Management Representative, Micron Host and Site EHS immediately. Where available at each site, the Contractor Employees are to either call for emergency assistance using the local site emergency number, or report to the Health Center for medical aid.
- All Contractor Near Miss Incidents shall be reported to the Micron Host and Site EHS Representative as soon as the incident is contained. Near Miss categorization will be determined by Micron with Contractor input.
- The Contractor Representative, together with the Micron Host is responsible for providing the EHS incident notification to the Micron Site EHS Representative upon containment of the incident in accordance with the [Global EHS - Incident Reporting and Investigation Standard](#).
- If the incident meets the criteria identified for a Micron First Alert Notification, the Site EHS team shall initiate a First Alert Notification.
- Incident notifications shall be fact-based, non-speculative, avoid a rush to conclusion and include the following information at a minimum:
 - Date, Time and Location of the incident
 - Any injuries sustained and current status of injured persons
 - Any chemical release to the environment
 - Details of the incident known at the time of notification
 - Persons involved in the incident
 - Status at the time of the notification e.g. location, containment actions in place
 - Contact person from Contractor company if more information is required.
- Where needed, a Supplier Quality Notification (SQN) will be issued to the Contractor for completion of an incident 8D report.

6.6 Emergency Response and Reporting

- In the event of an emergency evacuation, all personnel shall follow Micron site emergency evacuation procedures to exit the building through the nearest emergency exit. If working in the clean room, exit the building without removing the clean room garments. Never use an elevator/lift during an emergency evacuation.
- Once outside of the building, personnel shall travel to the nearest muster station/assembly point and report to the muster station/evacuation coordinator. Contractor employees are not to leave the site or area until a head count can be determined to ensure personnel are safe.
- Micron ERT is the primary emergency response team at Micron manufacturing facilities. All Contractors discovery of fires, chemical spills, leaks, or odors shall be reported immediately to the Micron ERT by calling the site emergency number.
- The primary means of notifying site personnel of an evacuation are audible alarms, visual flashing lights, or verbal instructions. The Incident Command Control Center for Micron manufacturing facilities will activate the appropriate alarms and may follow with an announcement on the public-address system.
- If a Contractor employee is contacted by a chemical substance, the employee shall move to the nearest emergency eyewash / shower and flush the affected area with copious amounts of water for a minimum of 15 minutes. For exposures to the body, all clothing must be removed. Note: For exposure to Hydrogen Fluoride or hydrofluoric acid, after flushing for 5 minutes immediately apply calcium gluconate which is available from the Micron ERT.
- Manufacturing areas where toxic gases are used have an automatic gas monitoring/leak detection alarm system. The alarm system continuously monitors for the presence of hazardous flammable and toxic gases. Evacuation is required when local emergency lights are flashing in conjunction with the audible alarm.
- Micron is not responsible for Contractor-owned first aid kits. If a Contractor supplies first aid kits for their employees, the kit must be identified with the owner's name and contact information, and be registered with Micron Site EHS. The owner must be able to prove that a monthly inspection occurs which ensures sufficient inventory and no expired materials within the first aid kit.

6.7 EHS Specifications and Requirements

This section outlines minimum EHS compliance requirements. All Contractors performing work for Micron are expected to comply with these requirements. Failure to abide by these requirements may subject the Contractor to corrective action that may result in disqualification for future consideration of work at Micron.

6.7.1 General Site EHS Requirements

- All Contractor employees shall correct and report all unsafe conditions to their Supervisor or Micron Host immediately.
- All Contractor employees shall comply with all posted safety instructions such as caution, warning, and restricted area signs.
- Barriers and barricades, including red danger or yellow caution tape shall not be crossed for any reason unless given proper authorization by those performing the work. These barricades shall have signage stating what work is being performed and who is performing it and include contact information and date.

- Contractor employees shall never tamper with or defeat safety devices (such as guards, shields, interlocks, smoke or flame detectors, sprinklers, PA speakers, exhaust airflow monitors) or operate valves, breakers, disconnects, blast gates, or other similar control devices, without formal approval.
- No work is to take place on operational systems unless prior approval has been given by a Micron employee and any permit required for the work has been submitted and signed off.
- All equipment used shall be in good working condition, and where needed include an inspection program to ensure on-going suitability for the tasks required.
- Life safety systems, including exhaust, alarm, fire detection, and the like shall not be interrupted without proper control measures in place and approval from an authorized Micron representative.
- Aisles, exit routes, doorways, and access to emergency equipment (such as fire extinguishers, emergency eyewash/showers, fire control stations) shall never be blocked by material or equipment.
- Material or equipment shall not be stored in exit passageways or stairwells.
- All Contractor material or work areas shall be kept neat. Housekeeping shall be monitored by the Contractor Site Supervisor or EHS personnel to ensure compliance with safety and contamination control requirements.
- Gasoline, liquefied petroleum gas (LPG), or other internal combustion engines shall not be operated inside buildings, on roofs, or near the fab building without Micron approval and proper controls in place.
- Horseplay, unsafe acts, threats, violent behavior or harassment of any kind will not be tolerated by any Contractor employee. Violators will be subjected to immediate removal from the site as well as notification to local law enforcement agencies, if necessary.
- Utility knives, box knives, and similar cutting devices shall be stored with the blades retracted. Use of safety knives is recommended wherever possible.
- Safe practices per the [Global EHS - Distracted Walking and Stairwell Safety Standard](#) must be followed at all times.
- All traffic rules and signs must be followed at all times. Contractor employees must use designated pedestrian crossings.

6.7.2 Permit to Work

- Contractors and Vendors shall ensure work permits are completed, submitted and approved before starting any work according to the [Global EHS - Safety Permit to Work Standard](#). Permits that are required at Micron facilities include:
 - Work at Height
 - Hot Work
 - Energized Electrical Work
 - Crane Lifting
 - Excavation
 - Confined Space Entry

Additional site specific permits may include:

- Demolition Permits
- Life Safety System Bypass Permits
- Fire System Impairment Permits
- As part of the permit submission, site incident prevention plans (SIPP), JHA/RA, pre-task plans, worker competency and training records and emergency and rescue response plans may need to be submitted. Requirements are listed in the standard, and for clarification the Micron Host or Site EHS should be consulted.

6.7.3 Working at Height

- Contractors shall implement a working at height fall protection plan that meets or exceeds Micron [Global EHS - Work At Heights Program Standard](#), and local EHS legal requirements. Contractors shall define the scope of work and identify all possible working at height activities and the hazards associated with them.
- Contractors shall identify the scope for walkable ceiling panel work and define the safety requirements for such work. The different types of loads that a walkable ceiling may be subjected to, must be considered and planned, including the dead load of the work itself and imposed loads such as maintenance activities. The installed walkable ceiling shall be inspected for structural integrity and their supports have been designed for that purpose by a competent person before use. Any perforated or modified ceiling panel should be secured and personnel shall be prohibited from standing or walking on it. Access to walkable ceilings shall be controlled with a permit to work system and restricted to authorized trained personnel.
- All personnel who might be exposed to fall hazards shall be trained and training records shall be available at the request of Micron. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the acknowledgement of the training facility/ person who conducted the training or the signature of the employer.

6.7.4 Scaffolds

- All use and erection of any type of scaffolds shall comply with the [Global EHS - Work At Heights Program Standard](#) and local EHS legal requirements.
- Scaffold materials shall meet the minimum structural integrity requirements for its type and purpose. At no time shall wooden scaffolds be used on-site.
- Scaffolds shall be inspected:
 - Upon completion of its construction, erection or installation;
 - At intervals of not more than 7 days immediately following the date of the last inspection by the scaffold supervisor;
 - after exposure to weather conditions likely to have affected its strength or stability or to have displaced any part.

6.7.5 Mobile Elevated Work Platforms (MEWP)

- All MEWPs must be inspected daily, per manufacturer recommendations, prior to commencing work.
- Fall protection must be worn while the MEWP is elevated. The anchor point used must be a manufacturer- approved anchor point.
- Spotter Requirements:
 - Spotters are required for during all vertical and horizontal movement.
 - Spotters must have direct communication with the operator during any movement.
 - When it is not possible for the spotter to see obstructions, an alternative plan to ensure zero incidents must be created.
 - Spotters must have line of sight and be in visual contact with the operator.
 - Spotters must be trained on MEWP emergency procedures and on their roles and responsibilities

6.7.6 Overhead Work

- A “Stop the Drop” Work Program shall be developed by the contractor to ensure zero risk with dropped objects.
 - Employees shall be trained in falling object prevention
 - As a minimum, training must consist of an initial new hire training and an annual refresher training.
 - Add falling object prevention refreshers to regular toolbox talk rotation

- Utilize pre-task planning (PTP) for daily risk and/or hazard mitigation
- Always follow proper rigging procedures
- Site barrier policy must be complied with
- Remove all tools and unused materials from elevated work areas as soon as the job is complete.
- A post job walk shall be performed to ensure all tools and materials are removed from heights.
- Hand / Power Tools and Material use at Height
 - All unnecessary tools / material shall be left at ground level.
 - All hand and power tools must be positively secured (tether or equivalent) whenever there is a potential that they may fall eight feet or more, including at:
 - Unprotected holes, edges, or guardrails
 - When working from ladders
 - Within the confines of a mobile elevated work platform Personnel are allowed to remove tools from containers/holders in order to tether.
 - If hand / power tools cannot be tethered and materials cannot be secured a risk assessment must be completed and mitigation measures agreed with Site EHS (mitigation may include bullet proofing, exclusion zones, etc.).
- Contractors will be subject to audits by Micron to assess performance against program requirements.

6.7.7 Personal Protective Equipment (PPE)

- Contractors shall provide their employees with personal protective equipment (PPE). Contractors shall evaluate each work task and provide, at no cost to the employee, the proper personal protective devices to perform the work tasks safely. PPE on Micron sites shall consist of the following:
 - Hard hat
 - Safety glasses
 - High-visibility, reflective vest
 - Long pants
 - Heavy-duty, work boots or shoes
 - Task appropriate gloves
- Contractors must control their work zones and effectively communicate the hazards of the work area, including providing required PPE to all personnel requiring access to those work areas. Contractor employees shall wear the appropriate PPE for work tasks they are performing or assisting in, as specified by the respective RA / JHA. Additionally, certain work areas may have been evaluated by Micron and have specific PPE requirements posted which are required to be followed.
- Proper clothing shall be worn by all Contractors adequate to protect them from hazards. Sleeveless shirts, shorts, or open-toed shoes are not permitted by Contractor employees. Contractors shall be aware that cleanroom garments, including coveralls and gloves, do not provide protection against chemical contamination. High-visibility, reflective vests must be worn at all times when work is being carried outdoors.
- Micron has identified work in chemical/gas rooms, work on or within the sub fab pipe rack, and/or breaking, cutting, repairing, or installing chemical and gas lines or ductwork as potentially hazardous. This work requires specific chemical protection to prevent contamination. Suitable gloves, safety glasses, apron, full-face shield, and boots must be worn when handling dangerous materials.

6.7.8 Chemical and Gas Safety

- Contractor Management must ensure that the proper PPE has been identified for work activities being carried out based on risk assessments for work involving chemicals, and are communicated to all their employees.

- Contractors shall inform their Micron Host and call the site emergency number immediately if a chemical or gas leakage or process safety incident is suspected or identified during the course of their work.
- Contractors are required to request Micron-approval for any chemical intended to be used at a Micron site prior to bringing the chemical on site. All chemical requests must include a GHS compliant Safety Data Sheet (SDS). The use of unapproved chemicals or gases is strictly prohibited. All chemicals used shall be in the original container with the original labels or in properly labelled secondary containers. The labels must include the chemical constituents, hazard information, safety precautions and proper use specifications of the chemical contained within.
- Contractors are responsible for maintaining all the chemical products they are using in a safe manner, which may include the use of flammable cabinets, suitable storage locations, maintaining distances between incompatible chemicals, and keeping containers properly labeled and closed when not in use. Adequate ventilation must be present or provided and maintained at all times when flammable and/or toxic chemicals are used. All chemical containers are to be staged in a correctly sized secondary containment to prevent spillage.
- Contractors using compressed gas cylinders shall ensure they are maintained in an upright position, transported on approved carts, and secured from tipping during storage.
- When removing gas and chemical piping, a buddy system shall be implemented, and each line being removed shall be traced to ensure the proper line is cut. The use of shields may be needed to prevent other lines in close proximity from being damaged. When a line penetrates a wall or floor, a tracer wire will be pushed through the penetration to verify the line. The use of power tools is never permitted when removing gas or chemical piping.
- Suitable gloves, safety glasses, apron, full-face shield, and boots must be worn when handling hazardous chemicals and gases.
- Contractors are fully responsible for responding to oil and/or hazardous material spills resulting from their actions or from their failure to provide adequate safeguards, including without limitation the full cost of the response and any associated clean-up. The Contractor shall indemnify Micron from fines, penalties or other legal exposures caused by any release.

6.7.9 Waste Management

- Contractors are responsible for all purchased chemicals and any waste generated using their purchased materials in the course of their work. Contractors shall ensure prompt removal of any waste generated, with particular attention to hazardous waste. Contractors shall follow all applicable legal requirements for proper transportation and disposal of waste.
- Decontamination and verification sign off must be completed before pipes, ductwork, and/or process tools are removed from the site, unless specific arrangements have been made for suitable offsite treatment or disposal.
- All hazardous waste containers shall be properly labeled, including single use containers. Each label shall include, at a minimum, the generating employee's name and contact number, contractor site representative name, Micron Host's name and contact number, date, generation location, description of the waste, and a list of all waste contaminants.
- All hazardous wastes shall be secured and processed at the end of each workday, shift, or when not in use. This includes properly bagging, labeling, and placing the waste in the appropriate waste collection area. No hazardous waste shall be placed into any trash receptacle or compactor on Micron sites.
- All hazardous waste containers are to be staged in correctly sized secondary containment to prevent spillage.

6.7.10 Lone Work

- Micron defines requirements around Lone Work in the [Global EHS - Lone Worker Standard](#). A Lone Worker is an individual who performs an activity that is carried out in isolation from other workers or without close or direct supervision. Additionally, an individual is further considered to be a lone worker if he or she works by himself/herself at a work site in circumstances (i.e., remote location, lack of regular traffic, area not normally occupied) where assistance is not readily available when needed.
- Contractors should analyze each work assignment and evaluate the hazards to decide whether a worker is considered a Lone Worker. Once Lone Worker status has been determined the Supervisor should decide appropriate controls to implement in order to ensure Lone Worker safety.
- The common Lone Worker controls used to ensure Lone Worker safety are; the assignment of an additional worker to the task and the use of communication devices by the lone worker.
- If clarification/guidance is needed for determination of Lone Work, consult Site EHS.

6.7.11 Confined Space Entry

- Contractors are required to meet the requirements of the [Global EHS - Confined Space Program Standard](#).
- A confined space rescue team shall be formed, trained and available for rescue prior to any entry into a permit required confined space.
- Contractors shall ensure that a confined space entry permit has been approved by a competent confined space assessor before entry into any confined space.
- The confined space assessor shall test the atmosphere of the confined space prior to entry by any person. The test shall include but not be limited to the level of oxygen content, flammable or toxic gas or vapor in the space that is to be entered.
- Contractors shall have controlled access/egress points to confined spaces to prevent unauthorized access. Where practicable the Contractor shall ensure that there are at least two readily accessible escape routes from each confined space. The Contractor shall operate a tag system for entry so that all personnel entering the confined space can be accounted for.
- Gas monitoring shall be conducted by a competent confined space assessor to certify that the confined space is safe for personnel to enter and thereafter at every two (2) hour intervals. In addition, the Contractor shall ensure that suitable atmospheric monitoring devices such as anemometer and wet/dry bulb thermometer are made available for the competent confined space assessor to determine the air flow, ambient temperature and humidity level within the confined space.
- Contractors shall ensure that adequate and effective ventilation is maintained in the confined for the purposes of entry into and work in the confined space. The air supply for the ventilation shall be from a source free from contaminants. Ventilation must provide constant circulation of fresh air through all parts of the confined space. If mechanical exhaust is used for ventilation, the exhaust air from the ventilation system shall be exhausted to an area outside the confined space where it does not present a hazard to any person.

6.7.12 Hot Work

- A Hot Work Permit process is required for any temporary operation involving open flame, heat, or spark production. This includes, but is not limited to brazing, cutting, grinding, soldering, pipes thawing, welding, and torch-applied roofing. Contractor Hot Work permits must meet the minimum requirements set out in the [Global EHS - Safety Permit to Work Standard](#), and of any additional applicable laws and regulations of the location of that Micron site.
- Where possible, contractors need to ensure that hot work is conducted at an offsite location or outside the building away from combustible and flammable materials. Where hot work must be carried out within the premises, the surrounding area must be assessed for control of potential

hazards such as fire and/or explosion. The Contractor representatives are responsible to ensure all flammable and combustible material in close proximity to the spark-producing operations is protected or removed.

- Remove any flammable/combustible material from a radius of at least 11 meters or 36 feet around the work area. If this is not possible, protect and cover such material with a fire-resistant material. Cover all floors, wall openings and drain with fire-resistant material to prevent slag or sparks from falling to the area.
- A fire watch who is competent and trained to operate the fire extinguisher and fire alarm shall be appointed throughout the duration of the hot work, during breaks and for at least 1 hour of continuous watch after completion of the hot work. The area must be monitored with electronic surveillance or another suitable means such as periodic checks for an additional 3 hours after the work is completed.
- Contractor employees shall use appropriate personal protective equipment (examples: safety goggles required for arc welding and work that generates sparks). Where hot work is carried out in working environment which could affect staff due to sparks, UV glare and fumes, the surrounding area should be shielded and/or fumes exhausted to minimize health impact to staff.
- No hot work shall be done in or near rooms or locations where flammable liquids or vapors are located unless an approved method has been introduced to eliminate the hazard. Local Exhaust Ventilation must be provided at flammable areas and location with poor ventilation when performing hot work. Do not perform any hot work on any equipment unless it has first been depressurized / drained / flushed / purged and lockout/tagout.
- Isolation of existing site Fire Alarm Systems is required when performing hot work at an area where smoke detectors or heat detectors are located. Hot work must be performed at least 2 meters away from the nearest sprinkler head. If not possible, adequate protection for the sprinkler head must be provided.

6.7.13 Electrical Safety

- Contractors shall implement an Electrical Safety program that meets or exceeds the [Global EHS - Electrical Safety Standard](#), local EHS and authority requirements.
- Contractors shall ensure that employees performing electrical installation, operations, or maintenance activities are properly qualified to perform electrical work.
- Ground fault circuit interrupters (GFCI), Earth Leakage Circuit Breaker (ELCB) or Residual Current Devices (RCD) shall be used for all portable electrical equipment, extension cords, and power tools.
- General Electrical Safety requirements include:
 - Wiring should be routed safely over head at least two meters high.
 - No wiring shall be left on the ground or the floor where there is vehicular or human traffic. If unavoidable, the wiring must be provided with adequate mechanical protection to withstand the wear and tear to which it may be subjected.
 - Precautions must be taken to verify the location of underground and/or inner wall electrical cable routing prior to beginning any excavation/penetration activities. If unsure of the exact location of these interferences, protective equipment must be worn.
 - Heavy equipment must not be operated in close proximity to overhead lines.
- As a general policy, Micron does not allow any service and maintenance of electrical systems that are not properly de-energized and locked out. If it is not feasible, an energized electrical work permit must be signed and approved by both the Site Facilities and Site EHS. In addition, a proper RA/JHA and safe work procedure shall be established to safeguard the personnel performing the tasks to protect them from the risk of shock and electrical arc flash. All live electrical work shall have a minimum of 3 meters

(10 feet) barricaded around the operation to protect affected personnel in the area from contact and exposure.

6.7.14 Control of Hazardous Energy

- Contractors shall implement a control of hazardous energy program (Lock out Tag Out program) that meets or exceeds the [Global EHS - Control of Hazardous Energy \(CoHE\) Standard](#) and local EHS legal requirements.
- Contractors shall isolate the equipment or system by operating the switch, valve, or other energy-isolating device and either block, bleed down, deenergize or otherwise control all stored energy. The Contractor shall also verify that isolation and de-energization has been accomplished by attempting to operate the equipment or system and verifying with appropriate diagnostic equipment. Prior to startup, check the equipment or system to ensure it is in safe operating condition with all guards, etc. in position.
- Micron reserves the color RED for locks used for the control of hazardous energy. No other locks used on Micron sites are allowed to have red bodies or be substantially red, have red bases, bands or other markings that could lead to confusion.

6.7.15 Lifting Operations

- All crane lifting operations shall comply with the [Global EHS - Lifting and Rigging Standard](#), and applicable local legal requirements. It is the responsibility of the contractor and/or crane equipment supplier to ensure any crane used on site is in safe working condition. Documentation must be supplied with the crane and reviewed prior to any work.

6.7.16 Excavation Operations

- Any excavation work carried out at a Micron site will need to meet or exceed requirements set out in the [Global EHS - Excavation Standard](#), and applicable local legal requirements.

6.7.17 Raised Open Floor Tile Safety

- The [Global EHS - Work At Heights Program Standard](#) must be followed by all contractors on any work.
- The open area of the floor must be completely barricaded with rigid barricades prior to removing any tile. Upon exiting the open floor tile and leaving the area unattended (breaks, lunch or the end of the day), the tiles must be replaced. Barricade signage must be filled out with all the appropriate information and posted onto the barricade.
- When pulling floor tiles, all personnel must use proper tile lifting tools and lifting technique. When replacing floor tiles that have been removed and/or modified be sure to replace tiles and support structures exactly as they were designed. If the space beneath the raised floor contains or has the potential to contain any recognized serious safety hazard, contractor shall conduct risk assessment and identify appropriate hazard control measures.
- All floor tiles (including tile screws - if applicable) shall be flushed and levelled with the floor after installing and ensuring it in a safe condition.

6.7.18 Alcohol and Drug Use

- Micron is committed to fulfilling its legal and ethical responsibility to maintain a safe and efficient working environment. Persons who work while under the influence of drugs or alcohol present a safety hazard to themselves and other employees. Drugs and alcohol are not allowed at any time at Micron locations.
- The use, sale, possession, or distribution of any illegal substance is prohibited on Micron property. Any substance prescribed by a licensed medical provider that may be mistaken for, or cause, similar effects of illegal substances shall be brought to the attention of the Micron Host immediately.

6.7.19 Mobile Phone Use

- The use of mobile phones while at work can present a hazard or distraction to the user and/or co-workers. It is prohibited to make or receive calls while:
 - Operating any type of vehicle or equipment
 - Working at height
 - Involved in high-risk activities (e.g., spotting, completing mech/electrical, permitted activity etc.).
- Site phone policies vary. Some Micron locations do not permit mobile phone use for any unauthorized users. Some sites operate designated phone points for phone use. Contractors must comply with the site-specific mobile phone control process.
- If making or receiving a call, ensure you are in a safe location. Do not pick up the call if you are in a high-risk area. Always move to a safe area to make/answer calls. Operate a "no walking while texting" policy (e.g., no crossing roads, no walking up/downstairs), as indicated above in Section 6.7.1.

6.8 Holiday/Weekend Work Guideline

Contractor shall ensure that work activities are scheduled to incorporate holidays which coincide with Micron and local public/national holidays. Where work is required to be carried out during a Micron holiday or on a weekend, the Contractor shall submit a plan for such work for approval to the Micron Host not less than three weeks prior to the commencement of work.

6.9 Equipment Move In/Out

During the equipment move in/out, always ensure that the equipment center of gravity (CG) is taken into consideration and if a jig is required for the move in/out. Equipment's may be top heavy or in an odd shape, always contact the Original Equipment Manufacturer (OEM) /Subject Matter Experts (SME's) when you are in doubt before commencing the work activities.

Ensure the following:

- A proper transporter equipment shall be used whenever possible during the movement.
- Moving path shall be well-lit.
- Moving path shall be clear from any obstacles.
- Traffic marshal shall be deployed (if required) to ensure passerby stand clear during the movement.
- Consider laying metal sheet along the path to ensure a smooth path.

7 Appendices

Nil

8 Document Control

Items	Details
ECN Facility	CORP EHS
ECN Area	EHS CONST
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: • GLOBAL_EHS • GLOBAL_EHS_MANAGERS • GLOBAL_EHS_TEAM_MEMBERS • GLOBAL_EHS_SEAL_LT • GLOBAL_FAC_NOTIFY • GLOBAL_FAC_MANAGER • PSM • PSM_MGR • GP_ALL_LEADERS • TSE_KEG_MOD • TSE_KEG_COK_INTERFACE • TSE_KEG_SSD • TSE_KEG_BURNATE • TSE_TEE_INTEGRATION • SIGDOC_GLOBAL_EHS_NTF • PDE_EQUIPMENT
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