

H02050 EXCERPT

Microsoft Supplier Social and Environmental Accountability Manual



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1. Responsible Sourcing Program

Microsoft requires all Suppliers doing business with Microsoft to uphold the environmental, health and safety, labor, and ethical practices prescribed in the Microsoft Supplier Code of Conduct - which is partially based on the Responsible Business Alliance (RBA) Code of Conduct - and to adhere to Microsoft's Responsible Sourcing of Raw Materials Policy. At the core of Microsoft's supply chain responsibility efforts is its Responsible Sourcing Program¹ established in 2005, which ensures that Microsoft hardware and packaging Suppliers conform to Microsoft's Supplier Code of Conduct and additional requirements for social and environmental accountability (SEA), including worker living conditions, safe working practices, responsible sourcing of raw materials, and environmental and health and safety protection. These requirements are incorporated into Microsoft contracts with directly contracted hardware and packaging Suppliers. Microsoft also requires its hardware and packaging Suppliers to address the issues covered in this specification with its sub-tier suppliers - those with which Microsoft does not directly engage via contract. We apply risk-based approaches for the responsible management of our Suppliers. We also work collaboratively with our Suppliers on proactive initiatives to positively impact their workers, the communities in which they operate, and their own businesses.

This document is the successor version of:

- Microsoft Corporate Social Responsibility Specification.
- Requirements Regarding Worker Conditions.
- All previous versions of H02050.

2. SEA Requirements Specification

2.1 PURPOSE

The purpose of this specification is to provide Microsoft's directly contracted Suppliers with operational requirements to ensure full conformance to Microsoft's Supplier Code of Conduct, Microsoft's Global Human Rights Statement and Supply Chain Human Rights Policy Statement, and SEA and RSC requirements. This specification sets forth a minimum set of requirements that Suppliers must meet. Elements of this specification may go beyond legal compliance in order to advance social and environmental responsibility and business ethics. In no case should complying with this specification violate applicable laws. If there is a conflict between this specification and applicable laws, then Suppliers must comply with the stricter requirement. This specification is not intended to create new or additional third-party rights, including for workers. Use of the word "shall" or "must" in this document means that fulfillment of the requirement is mandatory.

Microsoft requires its worldwide Suppliers and their employees, personnel, agents, subcontractors, and sub-tier suppliers (collectively referred to as "Suppliers") to comply with all applicable laws and regulations with respect to labor, ethics, occupational health and safety, and protection of the environment. Laws and regulations define minimum, and not maximum, standards. Microsoft is committed to maintaining a high standard on environmental, health and safety, human rights, and ethical practices in its supply chain, including workers' rights to self-determination, physical integrity, and individual liberty, including freedom of movement,



Environment



Health and Safety



Labor



Ethics

¹ Also referenced as Social and Environmental Accountability (SEA) Program

thought, conscience, religion, speech, family rights, nationality, and privacy. Suppliers are encouraged to go beyond legal compliance in the areas of ethics, labor management, environmental protection, and health and safety by committing to the relevant international standards (i.e., International Labour Organization and relevant United Nations Conventions) and to a process of continuous improvement. Suppliers are required to source responsibly, especially with regard to raw materials that may pose higher social and environmental risks than other materials. This specification outlines specific areas where Suppliers have responsibilities to meet international standards and the expectations of Microsoft customers, officers, and shareholders. Suppliers must require their subcontractors and sub-tier suppliers to comply with this specification in their operations and across their supply chains.

Implementation of industry standards and best practices is an effective way to ensure conformance. This specification incorporates the Responsible Business Alliance (RBA) Code of Conduct as well as additional requirements deemed applicable by Microsoft. Suppliers, their subcontractors, and sub-tier suppliers are required to comply with all applicable laws and regulations and to implement and conform to this specification. Where any requirement in this document differs from the RBA Code of Conduct, this specification takes precedence.

Suppliers shall be responsible for implementing and monitoring improvement programs designed to achieve conformance with this specification. Microsoft will select and retain only those business partners that commit to conforming to this specification. Failure by a Supplier or its sub-tier suppliers to conform to this specification may constitute a breach of the Supplier's contractual agreements with Microsoft and may pose grounds for Microsoft to terminate its business relationship with such Supplier.

2.2 ACCESS TO FACTORY AND RECORDS

When requested by Microsoft and in accordance with applicable privacy and data protection laws, Supplier must provide necessary information and supporting documentation to enable Microsoft and/or any of its designated representatives (such as third-party auditors) to perform and complete supply chain due diligence, including providing full and unrestricted access to its facilities (all areas under the same business license or legal entity), documentation, personnel, and workers (without factory management oversight or attendance) for verification of the conformance to this specification and the absence of forced labor indicators, including at the recruitment stage, and disclosure of certain information from subcontractors or sub-tier suppliers.

Microsoft has the right to disclose Supplier-owned factories' previous SEA and RSC audit results, including non-conformances, to its third-party auditors, which are considered Microsoft representatives under the Microsoft Non-Disclosure Agreement with the Supplier. The confidentiality of the audit results will be maintained when disclosed to third-party auditors.

2.3 MANAGEMENT SYSTEMS

Microsoft requires its Suppliers to utilize environmental, health and safety, labor and ethics management systems designed to aligned to the OECD Due Diligence Guidance for Responsible Business Conduct to ensure compliance with applicable laws and regulations and customer requirements related to this specification. Management systems should also identify and mitigate operational risks and facilitate continuous improvement. Management system elements shall include but are not limited to the areas covered in **Sections 2.3.1 to 2.3.11** below.

Particular attention shall be paid to the rights and needs of individuals from groups at heightened risk of vulnerability or marginalization.

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2.3.1 Company Commitments

Suppliers shall have corporate labor, ethics, occupational health and safety, and environmental responsibility policy statements that affirm the Supplier's commitment to compliance, due diligence and continual improvement and which are endorsed by executive management. Policy statements shall be made public and communicated to workers in a language they understand via accessible channels.

2.3.2 Management Accountabilities

Management accountabilities shall include

- clear identification of the Supplier representative(s) responsible for ensuring implementation of the management systems and associated programs,
- appropriately defined and documented labor, ethics, occupational health and safety, and environmental responsibilities and authorities for managers, supervisors, and workers, and
- the senior management representative who will be responsible for assessing the status of the labor, ethics, occupational health and safety, and environmental management system in order to identify improvement opportunities on at least an annual basis.

2.3.3 Monitoring Legal and Customer Requirements

Suppliers must have an adequate and effective compliance process for monitoring, identifying, understanding, and ensuring compliance with applicable laws and regulations and customer requirements pertaining to labor, ethics, occupational health and safety, and environmental issues. A formal, documented system for tracking applicable laws and regulations and customer requirements that apply to the facility's operations per this specification shall include the following:

- A review of new and/or revised laws/regulations on at least a quarterly basis;
- A document, updated on at least a quarterly basis, summarizing the applicable laws and regulations and the key customer requirements that impact operations; and
- A responsible person, assigned to manage this process, who possesses a good understanding of the applicable laws, regulations, and customer requirements that apply to the factory's operations.

2.3.4 Risk Assessment and Management

Suppliers shall establish and implement a formal risk assessment process for identifying the most significant SEA risks, including applicable legal and regulatory requirements and customer requirements, and the risks of severe human rights and environmental impacts. This process shall ensure that the risks relating to legal compliance, environmental concerns, health and safety, labor practices, and ethics are adequately identified and that appropriate controls for minimizing identified risks and ensuring regulatory compliance are implemented.

2.3.5 Improvement Objectives

Suppliers shall establish and implement a process for setting labor, ethics, occupational health and safety, sustainability, and environmental performance objectives, targets, and plans to improve the factory's performance. The sustainability objectives, targets, and plans shall be in line with the requirements set forth in **section 2.8.7**. The facility must conduct regular reviews of progress towards achieving set objectives and adjust the process as needed should progress be off-track.

2.3.6 Training

The management system must include programs for training managers and workers to implement the Supplier's policies, procedures, and improvement objectives and to meet

applicable legal and regulatory requirements, and to support workers' interests and human rights. Minimum training topics should cover labor law, EHS standards, each policy and process with respect to labor, ethics, the environment, health and safety, responsible sourcing of raw materials, sustainability, and management system elements such as responsibilities, risk and controls, and grievance. Specifically, Suppliers shall inform employees about Supplier's policies that prohibit human trafficking, prison labor, forced labor, and other forms of slavery and provide training and programs to promote awareness, risk identification, employee reporting, corrective action, and potential penalties for violations.

2.3.7 Communication

An adequate and effective ongoing two-way communication process with workers, and internal and external stakeholders, where relevant or necessary, shall be established to obtain feedback on labor, ethics, occupational health and safety, and environmental policies, practices, conditions and performance, and to foster continuous improvement.

- Examples of worker participation mechanisms: worker surveys, suggestions boxes, worker focus groups, joint worker-management committees, worker/union representatives, process improvement teams.
- Examples of two-way communication: face-to-face meetings, town halls, worker focus groups, joint worker-management committees, process improvement team, message groups (WhatsApp, Line, WeChat, etc.), brown bag lunches.
- Examples of stakeholder engagement mechanisms: newsletters with request for feedback, message groups (WhatsApp, Line, WeChat, etc.), social media, neighborhood or community meetings, drop-in sessions, focus groups, feedback, and impact discussions (data/study driven).

2.3.8 Worker/Stakeholder Engagement and Access To Remedy

An impartial, adequate, and effective worker grievance/complaint process must be established for workers, including workers of sub-tier suppliers defined in **Section 2.4.1** below, to confidentially communicate labor, ethics, occupational health and safety, and environmental grievances or complaints to senior level management without fear of reprisal or intimidation. Workers, including workers of sub-tier suppliers, must be given an effective, accessible, and culturally appropriate communication channel for sharing workplace concerns, grievances, and feedback without possible retaliation. The channel shall provide anonymity to allow for the free and candid communication of concerns. Grievances and the progress of their resolution shall be tracked and recorded. Suppliers must review these reporting procedures periodically. Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Workers and/or their representatives shall be able to openly communicate and share ideas and concerns with management regarding working conditions and management practices without fear of discrimination, reprisal, intimidation, or harassment. Suppliers must provide their sub-tier suppliers with information regarding their own reporting channels, as well as Microsoft's reporting channels, described in the "Raising concerns and reporting questionable behavior" section of the Microsoft Supplier Code of Conduct.

A program to evaluate and improve employee satisfaction must be in place. All worker concerns, grievances, and feedback shall be analyzed and actions shall be taken to address such concerns, grievances, and feedback. A company of substantial size (i.e., with headcount exceeding 100) shall have an employee satisfaction program based on employee opinion surveys.

Suppliers shall establish processes for ongoing two-way communication with workers, their

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representatives, and other stakeholders where relevant or necessary. The process shall aim to obtain feedback on operational practices and conditions covered by this specification and to foster continuous improvement.

Workers may use a third-party Workers' Voice Hotline provided by Microsoft free from interference, if offered in their region, as an additional channel for raising concerns or grievances or providing feedback without fear of reprisal or intimidation.

Suppliers must periodically provide workers with information and training on all grievance procedures.

2.3.9 Audits and Assessments

An adequate and effective audit process must be in place for the annual assessment of the Supplier's compliance with applicable labor, ethics, occupational health and safety, and environmental laws and regulations and conformance to this specification.

2.3.10 Root-Cause Analysis, Corrective and Preventive Action Process

The Supplier shall have a process for effectively investigating the root causes of, and for taking corrective and preventive actions for, deficiencies and non-conformances identified via internal or external assessments, inspections, employee suggestions, customer or other stakeholder concerns, investigations, and reviews.

Management shall verify the effectiveness of corrective and preventive actions in addressing identified deficiencies and non-conformances.

If the factory has been subject to labor, ethics, occupational health and safety, and environmental regulatory actions where monetary penalties have been assessed or formal corrective actions have been mandated by a regulatory agency or legal entity, the Supplier must demonstrate that these violations have been corrected or that they are on track for correction and that all fines and penalties have been paid or settled.

2.3.11 Documents and Records

Facilities shall maintain adequate labor, ethics, occupational health and safety, sustainability, and environmental management system documents and records to ensure legal and regulatory compliance and conformance to customer requirements, including this specification.

2.4 SUPPLIER SUB-TIER SUPPLIER RESPONSIBILITIES

Suppliers shall establish and implement an effective program to ensure that their supply chains are in conformance with this specification.

2.4.1 Sub-tier Supplier Management Guidelines

A sub-tier supplier is defined as a manufacturer that supplies components or materials to a Microsoft contracted Supplier for incorporation or use with Microsoft-branded devices. Sub-tier suppliers do not have a direct contractual relationship with Microsoft.

Each of Microsoft's directly contracted Suppliers is expected to have a sub-tier supplier management system and any labor agents/contractors and on-site service providers shall be included in the scope of this management system. The sub-tier supplier management system shall cover, but is not limited to, the following aspects:

- Upon implementation of each program, Suppliers are required to provide Microsoft with the Bill of Materials (BOM) that lists all Suppliers and factory locations that provide all parts

used for Microsoft products. The BOM must be complete and must be kept current, and any changes must be provided in a timely manner. If a sub-tier supplier is found to be restricted for not meeting Microsoft requirements, the contracted Supplier shall work to remedy this situation or find an alternative sub-tier supplier.

- Suppliers shall have a Code of Conduct that defines what is expected of sub-tier suppliers with respect to labor, ethics, the environment, health and safety, responsible sourcing of raw materials, and sustainability. Suppliers must demonstrate that the Code of Conduct is substantially equivalent to Microsoft's Code of Conduct and this specification.
- Suppliers shall have a communication mechanism that requires all sub-suppliers to satisfy their Supplier Code of Conduct and labor, ethics, environmental, health and safety and sustainability requirements.
- Suppliers shall inform agents, sub-agencies, recruiters, contractors, subcontractors, and sub-tier suppliers about Supplier's policies that prohibit human trafficking, prison labor, forced labor, and other forms of slavery and provide training and programs to promote awareness, risk identification, employee reporting, corrective action, and potential penalties for violations.
- Suppliers shall have trained labor, ethics, health and safety, and environmental and sustainability professionals who are capable of managing sub-tier supplier program planning, risk assessments, audit execution and reporting, and corrective action closure.
- Suppliers shall perform an annual risk assessment of all sub-tier suppliers to demonstrate a risk-based approach to Supplier management; at a minimum, a risk assessment shall address location risks, labor risks, EHS process risks, previous audit performance, and risks identified via media reports.
- Suppliers shall perform sub-tier supplier SEA audits as follows:
 - Sub-tier suppliers that produce parts with the Microsoft logo and Microsoft's trademark must receive an annual SEA full audit by a Microsoft-approved third-party audit firm using a Microsoft-approved audit protocol. Suppliers may choose to accept an RBA VAP audit in place of conducting a third-party audit.
 - All sub-tier suppliers shall receive a full SEA or equivalent audit to verify the fulfillment of all requirements in this specification at the following audit cadence:
 - High-risk sub-tier suppliers, labor agents/contractors, and on-site service providers must receive an audit at least annually.
 - Medium-risk sub-tier suppliers should receive an audit at least biennially.
 - Low-risk sub-tier suppliers should receive an audit at least triennially.
 - At a minimum, the audit should meet the following conditions:
 - The scope should cover the same areas documented in **Section 2.2 to Section 2.9** in this specification.
 - The audit must be conducted on-site and include a document review, factory tour, management interviews, and worker interviews.
 - Audit findings shall be substantiated by at least three different independent data points through site observation, document review, management interviews, and worker interviews to justify a finding of conformance or nonconformance.
 - The audit checklist shall include all standards in this document.
- Auditors must demonstrate general auditing competencies, including the following:
 - Demonstrated Labor & Ethics (L&E) and/or EHS competencies.
 - At least two years of experience or a combination of experience and education equaling four years.
 - Successful completion of at least one of the RBA pre-approved RBA Code of Conduct training courses or an equivalent training course.

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- Performance of at least five L&E and/or EHS full audits.

If the minimum conditions are not met, Microsoft may require a third-party audit to be conducted. Suppliers may choose to accept an RBA VAP audit in place of conducting a third-party audit for the sub-tier supplier.

- Closed-loop corrective and preventive action process, policies, and procedures must be in place.
 - Non-conformance closure should follow the same timeline based on NC severity outlined in this documentation.
 - Suppliers shall conduct on-site verification to verify the closure of non-conformances when site observation and/or worker interviews are necessary to justify a finding of conformance.
 - The timely closure of non-conformances based on established and agreed-upon processes must be demonstrated.
- Suppliers shall have a documented process that considers the sub-tier supplier's performance in terms of labor, health and safety, environmental protection, and ethics in decisions to award business.
- Suppliers shall perform an annual review of sub-tier audit program performance during Business Reviews with Microsoft upon request (may be more frequent as defined by the business).
- The sub-tier supplier management system shall include
 - business continuity plans,
 - an incident-response mechanism, and
 - Supplier capability building programs, as required.

Microsoft expects all aspects of the Supplier management system described above to be documented, accessible, systematically maintained, verifiable, and available for review by Microsoft and its designated representatives upon request. Microsoft requires a Supplier to take corrective actions if non-conformances are identified.

2.4.2 Fabless Supplier Management Guidelines

A fabless supplier is defined as a Supplier that designs, develops, and/or sells hardware components for Microsoft but which outsources the manufacturing of such hardware components to other Suppliers. A fabless manufacturer is defined as a factory to which a fabless supplier outsources manufacturing.

Fabless suppliers must guarantee that their policies and procedures are in conformance with Microsoft's Supplier Code of Conduct, this specification, and Microsoft's Responsible Sourcing of Raw Material Policy.

All fabless suppliers are expected to have a Supplier management system which includes but is not limited to the following aspects:

- Ensuring that their fabless manufacturers are in conformance with Microsoft's Supplier Code of Conduct, this specification, and Responsible Sourcing of Raw Material Policy.
- Sharing the following information with Microsoft: factory name(s) and location(s) for all parts outsourced for manufacturing hardware that is supplied to Microsoft.
- A due diligence program that covers the following:
 - Annual risk assessments of all fabless manufacturers to demonstrate that they operate a risk-based approach to Supplier management.
 - Audit plans that are based on risks posed by fabless manufacturers. Fabless manufacturers that produce parts with the Microsoft logo and Microsoft's trademark

must receive an annual SEA full audit by a Microsoft-approved third-party audit firm using a Microsoft-approved audit protocol.

- Closed-loop corrective and preventive action process, policies, and procedures.
- Support for Microsoft's right to audit its fabless manufacturers.
- Authorizing and supporting Microsoft requests to include fabless manufacturers in assessments, trainings, and SEA programs where Microsoft decides it is necessary.

2.5 LABOR

We strive to ensure that every person who makes our products and services is treated with respect and dignity. Microsoft expects its Suppliers to comply fully with all employment laws, share its commitment to respect all human rights and to provide equal opportunity in the workplace, engage with impacted communities, and take effective measures to remedy any adverse human rights and labor impacts, including the disclosure of any and all potential violations.

2.5.1 Prohibition of Forced Labor

Suppliers shall use only voluntary labor.

- Forced, indentured, or bonded labor (including debt bondage), prison labor, the procurement of commercial sex acts, slavery or trafficking of persons is prohibited.
- Suppliers must use recruiters, employment agencies, and recruiting companies that are trained and which comply with international standards, local labor laws of the countries in which the recruitment takes place, or Microsoft requirements, whichever are stricter.
- All Suppliers, including recruiters, employment agencies, sub-agencies, and recruitment firms, are prohibited from using misleading or fraudulent practices during the recruitment of employees or offering of employment, such as failing to disclose, in a format and language accessible to the worker, basic information or making material misrepresentations during the recruitment of employees regarding the key terms and conditions of employment, including wages and fringe benefits, the location of work, the living conditions, housing and associated costs (if employer or agent provided or arranged), any significant cost to be charged to the employee, and, if applicable, the hazardous nature of the work.
- Suppliers shall ensure that worker employment agreements and, where applicable, employee handbooks clearly convey the conditions of employment in respective workers' native language or in a language the worker can understand. In addition:
 - The written employment agreement shall contain a description of terms and conditions of employment, including work descriptions, wages, prohibitions on charging recruitment fees, work locations, living accommodations and associated costs, time off, roundtrip transportation arrangements, grievance processes, and the content of applicable laws and regulations that prohibit trafficking in persons.
 - Prior to employment, workers shall be informed of the key employment terms and conditions in their native language or in a language the worker can understand, either verbally or in writing via an employment letter/agreement/contract, as required by law.
 - Foreign migrant workers must receive the employment agreement prior to departing from their country of origin, and there shall be no substitution or change(s) allowed in the employment agreement upon arrival in the receiving country unless these changes are made to comply with local law and provide equal or better terms.
 - All workers shall be given a copy of their employment agreement, in which the conditions of employment are clearly conveyed in a language understood by the respective workers.
 - All employment agreements shall reflect current and applicable labor laws and regulations.

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- Workers shall not be required to pay employers', agents', or sub-agents' recruitment fees or other related fees for their employment, such as for skill tests, additional certifications, or medical exams/screening. If any such fees are found to have been paid by workers, such fees shall be immediately repaid to the workers. Suppliers shall not require workers to pay any fees, including but not limited to the following:
 - Pre-departure fees and costs for both foreign and internal migrant workers
 - Documentations/permits and associated costs for both foreign and internal migrant workers
 - Transportation and in-transit subsistence costs (including lodging, meals, and other related expenses) after the employment offer has been made and accepted, from their habitual place of residence to the place of work, Supplier's facility or provided accommodations for both foreign and internal migrant workers.
 - Border-crossing fees for foreign migrant workers.
 - Foreign migrant workers must be provided with or paid for return transportation to his/her habitual place of residence in country of origin, including in-transit, subsistence costs and costs of medical exams/screening if it is required to enable the return journey, by Suppliers when employment comes to an end.
 - Arrival, orientation, or onboarding costs
 - Relocation costs if asked to move once employment has begun
 - Deposits or bonds, including those required or not required by law
 - Government-mandated migrant levies and worker welfare funds related to the employment of foreign migrant workers
 - Fees or related costs associated with regularizing undocumented migrant workers for the purpose of employment through government-authorized programs
 - Fees for skill tests, additional certifications, and medical exams/screening
- Suppliers, agents, and sub-agents shall not hold or otherwise destroy, conceal, or confiscate identity or immigration documents, such as government-issued identification, passports, driver's license, or work permits. Employers can only hold documentation for the time needed to obtain or renew work permits and other legal documents. Suppliers or their agents must provide proper documentation (stating the reason for holding of passport/travel document and expected duration to hold such documents.). In this case, workers shall not be denied access to their documents at any time.
- There shall be no unreasonable restrictions on workers' freedom of movement in the facility in addition to unreasonable restrictions on entering or exiting Supplier provided facilities including, if applicable, workers' dormitories or living quarters. Workers will be free from arbitrary arrest and detention. Workers shall be granted basic liberties, such as access to drinking water and use of toilet facilities.
- All work must be voluntary, including overtime. Workers shall be free to leave work at any time or terminate their employment after giving reasonable notice, which shall be clearly stated in the worker's contract. In addition:
 - If the worker has provided the full notice period as per local law or the worker's contract (whichever notice period is shorter), no fees shall be charged.
 - If the worker has not provided the full notice period,
 - the worker shall not be required to pay more than 60% of one month of gross base wages if there is no legal penalty associated with workers leaving early, and
 - the worker shall not pay any fees if the reason for leaving without providing the full notice period is abuse or a threat to safety.
 - Documentation shall be maintained on all leaving workers.
- Suppliers shall have a process that details what remediation the Supplier will provide in case

of any violations related to forced labor. When developing a remediation strategy to address forced labor, suppliers shall give due consideration to and consider strategies to minimize potential loss of income to families that may result from measures taken to eliminate the use of forced labor.

- Victims of trafficking in its operations shall be provided with adequate access to remedy. Adequate and effective policies and procedures governing the discovery of human trafficking victims shall include as a minimum:
 - Commitment to provide the worker with protection from loss of employment, deportation or other financial and legal consequences
 - Protection from retaliation or denunciation
 - Coordination with sending and host country government agencies to obtain or correct documentation, such as work permits, visas and passports
 - Provision of food and housing until legal status can be secured
 - Continued payment of base wages
 - Outreach to local victim support organizations to provide any other needed assistance
 - The effectiveness of access to remedy procedures is evaluated at least annually.

2.5.2 Child Labor Avoidance and Young Workers

- Suppliers shall comply with all local and national minimum working age laws or regulations and shall not use child labor. A child refers to anyone under the age of 15, or under the age for completing compulsory education, or under the legal minimum working age for employment in the country, whichever requirement is most stringent. The eligibility of all employment candidates must always be verified prior to recruitment. Suppliers shall review, validate, and maintain a copy of legal proof of age and identity upon hiring a candidate.
- Suppliers shall ensure that necessary permits and documentation are in place for all young employees (including apprentices and trainees) and restrict them from performing work that is likely to jeopardize their health or safety (i.e., night shifts overtime, heavy lifting, and working with toxic or hazardous materials). Young workers shall be given a health examination before hiring and physical examinations must be conducted on a regular basis, if required by law. A young employee refers to anyone at least 15 years of age, at least the age for completing compulsory education, or at least the legal minimum working age for employment in the country, whichever requirement is greatest, and under the age of 18, or older if specified in local legislation.
- If child labor is identified, Suppliers must remediate immediately. Suppliers shall have a child-labor remediation plan that describes the actions to be taken in case a child is found working on the Supplier's premises. When developing a remediation strategy to address child labor, suppliers shall give due consideration to and consider strategies to minimize potential loss of income to families that may result from measures taken to eliminate the use of child labor. The plan shall, at a minimum, confirm that the Supplier will bear the cost of returning the child to the child's guardian and provide support in terms of the child's cost of education until the child reaches legal age in addition to fulfilling other legal requirements.

2.5.3 Student Workers and Interns

Suppliers shall fully comply with all applicable national and local laws and regulations concerning the use of student workers, interns, and apprentices, including laws and regulations addressing working hours, working environment, compensation, benefits, time off, insurance, welfare, termination, and severance. This requirement applies regardless of the purpose for which student workers and/or interns are engaged and includes both internships to provide

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students with work experience and work to subsidize their education. In addition:

- Students under the age of 15 or under the legal minimum age for regular employment or student internships are prohibited from being student workers/interns.
- Microsoft only supports the use of legitimate workplace learning or apprenticeship programs for the educational benefit of young people, which comply with all laws and regulations, and will not do business with Suppliers that abuse such systems. Suppliers shall verify and ensure that the schools have legitimate permits.
- Workers in apprenticeship programs, student workers, and/or vocational workers must not exceed 30% of the total workforce or the legal limit, whichever is stricter.
- In the absence of local law, the wage rate for student workers, interns, and apprentices shall be at least the same wage rate as other entry-level workers performing equal or similar tasks. A complete wage statement in a language understood by them shall be provided.
- Suppliers shall not arrange for students to work overtime and shall pay the students directly and not through an agent or school.
- Suppliers shall not allow student workers to engage in dangerous or hazardous work, such as work at heights, underground work, work that involves exposure to pollution, toxic or hazardous materials, and radioactive work.
- Suppliers that use student workers/interns shall have a tri-party agreement in place between the school, the facility, and the student or student's guardian(s) that supports the employment arrangement as a legitimate workplace learning or apprenticeship programs for the educational benefit of the student workers/interns.
- Microsoft Suppliers must enter into an NDA with the students or their guardians before the students begin work at the factories, and the NDA shall not conflict with or violate the NDA signed between Microsoft and the Supplier (Microsoft NDA) or make the Microsoft NDA unenforceable.
- Suppliers must ensure proper management of student workers through proper maintenance of student records, rigorous due diligence of educational partners, and protection of students' rights in accordance with applicable laws and regulations. Suppliers must provide appropriate support and training to all student workers.

2.5.4 Working Hours

Suppliers shall ensure that workers are not required to work more than the maximum daily/weekly/monthly hours set by International Labour Organization standards or local and national laws and regulations or as set in the freely negotiated and legitimate collective agreement. A workweek must not exceed 60 hours per week, including overtime, except in emergency or unusual situations.

Emergency or unusual situations are situations that are unpredictable and require overtime in excess of Microsoft's expectations. Such events cannot be planned or foreseen. Examples of such situations include

- equipment breakdowns, power failures, or other emergencies resulting in a prolonged shutdown of a production line and
- unforeseen raw material or component shortages or quality issues that shut down production.

In all emergency and unusual cases, there shall be documented evidence of fewer hours being worked before a period of excessive production, and the site must have a documented plan for recovering from the emergency and bringing working hours back into conformance. During the implementation period of the documented recovery plan, the site will be deemed in conformance.

Situations that are **NOT** considered emergencies or unusual include but are not limited to the following:

- Peak season production demands and new product ramps.
- Contract change orders that significantly increase order volumes or shorten delivery timelines.

Suppliers shall ensure that overtime is voluntary and paid in accordance with local and national laws and regulations, and workers shall not be penalized for refusing overtime work. In addition:

- Workers shall have at least one day off, comprising at least twenty-four consecutive hours, within a seven-day period.
- All workers shall take breaks, holidays, and vacation days as legally entitled.
- Suppliers shall keep complete and reliable records of workers' standard and overtime hours.

2.5.5 Wages and Benefits

Suppliers must ensure the payment of wages in accordance with applicable wage laws and provide legally mandated benefits within the jurisdiction where the Supplier operates or engages workers, including employees who are permanent, temporary, or dispatched, migrant workers, apprentices, or contract workers. Suppliers are expected to comply with the new and existing applicable living wage requirements or regulations. All workers shall receive equal pay for equal work and qualification. In addition:

- Overtime work shall be compensated at pay rates greater than regular hourly rates, which shall not fall below any applicable legal requirements.
- Suppliers shall not delay or withhold payments to workers.
- Suppliers shall provide workers with all legally mandated benefits.
- Suppliers shall ensure that statutory and legally required payments (e.g., social insurances, pensions) are paid for all employees.
- Suppliers shall provide all workers with clear written information about their employment conditions with respect to wages before the workers enter employment and as needed throughout their terms of employment.
- Suppliers shall not permit deductions from wages as a disciplinary measure.
- If Suppliers are found to be underpaying legal wages to workers or making unauthorized deductions (including for disciplinary measures) from wages, the Suppliers shall pay back the underpaid wages and deductions to workers.
- Wage deductions that are not provided for by applicable law, such as for meal or dormitory fees, shall not be permitted without the worker's express written permission. Workers shall be allowed to choose freely between Supplier-provided meals and dormitories and the option to eat and live outside of the factory.
- For each pay period, workers shall be provided with a timely and understandable wage statement that includes sufficient information to verify accurate compensation for work performed. Suppliers shall keep workers' records in accordance with applicable laws and regulations and provide such records to Microsoft, if requested, in a timely manner.

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2.5.6 Non-Harassment/Humane Treatment

Suppliers shall commit to a workforce and workplace free of harassment and inhumane treatment. Suppliers shall not engage in harassment or any harsh or inhumane treatment including violence (gender-based or otherwise), sexual harassment, sexual abuse, corporal punishment, mental or physical coercion, bullying, or public shaming, verbal abuse or other forms of intimidation of workers; nor is there to be the threat of any such treatment. Suppliers must have a non-harassment and humane treatment policy and monitor supervisors to ensure

appropriate conduct. Disciplinary policies and procedures in support of these requirements shall be clearly defined and communicated to workers, supervisors and management. In addition, Suppliers shall ensure that company rules and disciplinary procedures are clearly defined, progressive, and communicated to workers (e.g., included in an employee handbook if available). All disciplinary measures shall be recorded. Favoritism or preferential treatment not justified by work-related reasons is forbidden.

Suppliers shall provide any worker who experiences harassment or inhumane treatment with adequate access to remedy. The remediation plan shall, at a minimum, include the following:

- Suppliers shall provide access to legal, social, medical, and administrative support for individuals affected by harassment or inhumane treatment. Partnerships with qualified third-party providers may be established to ensure comprehensive support.
- Remediation processes shall incorporate gender-responsive approaches, language and cultural sensitivity, and offer safe, effective channels for complaint, dispute resolution, and access to support services and remedies.
- Privacy and confidentiality of all individuals involved in such cases must be protected. Confidentiality shall be maintained throughout reporting, investigation, and remedy processes, and not be used to impede justice.
- Workers shall have the right to remove themselves from work situations where there is reasonable justification to believe there is an imminent and serious danger to life, health, or safety due to harassment or inhumane treatment, without retaliation or undue consequences. They shall be allowed to remove themselves without informing management prior to or at the time of removal.
- Suppliers shall not tolerate any retribution or retaliation against workers who raise concerns or participate in remediation processes.
- Regular follow-up with affected individuals shall be conducted to assess recovery and workplace reintegration, with tracking of resolution timelines and evaluation of remedy effectiveness.

2.5.7 Non-Discrimination

Suppliers must commit to a workforce and workplace free of unlawful discrimination. Suppliers shall ensure that their business practices respect the rights of different demographic groups, including women and migrant workers. Suppliers must provide equal opportunity in the workplace and reasonable accommodation and not infringe on voting rights or political participation, engage in discrimination in employment including hiring, compensation, access to training, promotion, termination, and/or retirement on the basis of race, color, sex (including pregnancy), ethnic origin, caste, national origin, religion, age, physical or mental disability, gender identity or expression, genetic information, marital or family status, minority status, pay, sexual orientation, political affiliation, protected veteran status, union membership, ancestry, citizenship, family or medical care leave, immigration status, medical condition, or any other characteristic protected by applicable local laws, regulations, and ordinances. Suppliers must accommodate all disabilities to the extent required by law. In addition:

- Workers or potential workers shall not be subjected to medical tests, including pregnancy or virginity tests, or physical exams that could be used in a discriminatory way. In addition:
 - Suppliers shall not, on the basis of a person's medical status, make any employment decisions that negatively affect the person's employment status unless such a decision is dictated by the inherent job requirements or is required for workplace safety.
 - Suppliers shall not discriminate against a worker based on the worker's refusal to take a medical test or physical exam that is not required for such a position.

- Health tests, pregnancy testing, or contraception shall not be used as a condition of employment. (In some cases, local governments require health tests for foreign workers prior to issuing work visas, and this would not be prohibited.)
- Suppliers shall provide reasonable accommodation for workers' religious practices and disability. This means that
 - adequate and effective policies and procedures are in place to reasonably accommodate religious practices and disability, and adjustments are made to the work environment to allow a worker to comply with their religious beliefs or meet minimum needs of people with disability(ies), while at work or during the job application process, and
 - a mechanism is in place to receive religious and/or disability accommodation requests, review and decide upon and provide reason of decision of accommodation (or no accommodation) to the requestor in a timely manner.
 - workers are aware of the existing and planned accommodations as well as channel to request accommodations.
 - perform disability assessments and effectiveness evaluation using legal and worker situations to identify gaps that should be addressed, e.g., missing ramps for those using wheelchairs or insufficient and inappropriate workstation tools.

2.5.8 Freedom of Association and Collective Bargaining

Suppliers must respect workers' rights to freedom of association, collective bargaining, and peaceful assembly (including the right to refrain from such activities) in accordance with local legal requirements and responsibilities, international standards, such as International Labour Organization standards, or Microsoft requirements, whichever are stricter. Employees must be free to join associations of their own choice and select their representatives according to local and international practices.

Management shall ensure that the workers' organization can carry out its representative role free from interference, discrimination, and harassment. When local laws or circumstances restrict this right, Suppliers should pursue other ways of engaging in meaningful dialogue with their workers on employment issues and workplace concerns.

2.5.9 Resource Planning

Suppliers shall measure employee attrition rates and mitigate any negative impact of such attrition. External temporary labor/dispatched labor may be used to provide needed flexibility and accommodate seasonality in production but not for the purpose of avoiding payment of legally mandated contributions or to avoid meeting other requirements. All use of temporary, dispatched and outsourced labor will be within the limits of the local law. False apprenticeship schemes are prohibited and shall not be used. Suppliers are expected to limit the use of indirect labor, including dispatched workers, and direct employment shall be the first choice whenever it is feasible. Where indirect labor is employed, its percentage shall not exceed the legal limit of the local region/country, if applicable.

2.6 ETHICS

Microsoft Suppliers and their agents are required to uphold the highest standards of ethics as required by Microsoft's Supplier Code of Conduct. Microsoft Suppliers shall be open, honest, and transparent in all discussions and conduct business interactions and activities with integrity and trust. Suppliers shall, without limitation, meet the following requirements:

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2.6.1 Business Integrity

Suppliers shall conduct themselves in an honest, direct, and truthful manner in all discussions with regulatory agency representatives and government officials.

The highest standards of integrity must be upheld in all business interactions. Suppliers shall have a zero-tolerance policy and prohibit any and all forms of bribery (to include the promising, offering, giving, or accepting of bribes), corruption, extortion, and embezzlement. All business dealings shall be transparently performed and accurately reflected in the Supplier's business books and records. Monitoring, record-keeping, and enforcement procedures shall be implemented to ensure compliance with anti-corruption laws. Suppliers shall adhere to these standards and apply the same standards throughout their entire supply chain.

Anti-Corruption: Microsoft prohibits corrupt payments of all kinds, including facilitating payments. We require that all our Suppliers comply with the Anti-Corruption Policy for Microsoft Representatives. Suppliers are expected to conduct themselves with high ethical standards and comply with the U.S. Foreign Corrupt Practices Act ("FCPA") and all other applicable Anti-Corruption and anti-money laundering laws.

Suppliers shall not, directly or indirectly, promise, offer, pay, or authorize the payment of anything of value (including but not limited to travel, gifts, hospitality, charitable donations, or employment) to any Government Official or other party in order to improperly influence any act or decision of such official or party for the purpose of promoting the business interests of Microsoft in any respect or in order to otherwise improperly promote the business interests of Microsoft in any respect. Suppliers must prohibit any and all forms of bribery and corruption and their business dealings shall be transparently performed and accurately reflected in Supplier's business books and records. Suppliers must implement monitoring, record keeping, and enforcement procedures to ensure compliance with Anti-Corruption laws. Suppliers must report to Microsoft any signs of any personnel, representative or subcontractor performing unethically or engaged in bribery or kickbacks.

Definitions: "Government Official" refers to any employee of a government entity or subdivision, including elected officials; any private person acting on behalf of a government entity, even if only temporarily; officers and employees of companies that are owned or controlled by the government; candidates for political office; political party officials; and officers, employees, and representatives of public international organizations, such as the World Bank and United Nations.

Suppliers shall comply with all laws and regulations applicable to the import or export of goods, software, technology, or services subject to any agreement with Microsoft. Suppliers shall meet the following requirements:

- **Notice:** Suppliers shall not provide controlled technologies, products, or technical data to Microsoft, without providing notice of such controls as necessary for Microsoft to maintain compliance with applicable laws.
- **Restricted Parties:** Suppliers shall ensure they are not owned or controlled (directly or indirectly) by any person or entity designated as restricted under Trade Laws. This includes parties located in embargoed jurisdictions or affiliated with military or intelligence organizations prohibited by applicable laws.
- **Trade Compliance Program:** Suppliers shall maintain a trade compliance program with reasonable due diligence standards, as outlined in Microsoft contracts or terms. This includes conducting independent sanctions and ownership screening of all known subcontractors and third parties against Restricted Party lists throughout the business relationship.
- **Violations:** Suppliers shall not take actions that would cause Microsoft to violate trade laws

or risk exposure to sanctions, penalties, or legal action, including actions that may require Microsoft to submit a voluntary self-disclosure or defend against government investigations or enforcement actions.

2.6.2 No Improper Advantage

Gifts and Entertainment: Suppliers must use good judgment when exchanging business courtesies. Gifts, meals, entertainment, hospitality, and trips that are lavish or lack transparency or a legitimate purpose may be viewed as bribes, may create the appearance of a conflict of interest, or may be perceived as an attempt to improperly influence decision making.

Giving business courtesies to Microsoft employees, if permitted at all, shall be modest, infrequent and occur in the normal course of business. Suppliers shall not offer anything of value to obtain or retain a benefit or advantage for the giver and shall not offer anything that might appear to influence, obligate, or compromise the judgment of any Microsoft employee. Suppliers are prohibited from giving gifts of any value to any member of certain Microsoft organizations, including Microsoft Procurement or its representatives. Suppliers are required to ask Microsoft employees what the Microsoft gift policy limits are for potential recipients and to not exceed those limits.

Suppliers are prohibited from paying expenses for travel, lodging, gifts, hospitality, entertainment, or charitable contributions for government officials on Microsoft's behalf.

2.6.3 Disclosure of Information

Information regarding Suppliers' and sub-tier suppliers' human rights, health and safety, environmental practices, business activities, structure, financial situation, and performance is to be disclosed in accordance with applicable regulations and prevailing industry practices. Suppliers are to retain all records for a minimum of seven (7) years; any retention beyond seven (7) years is at the discretion of the Supplier. Falsification of records or misrepresentation of conditions or practices in the supply chain are unacceptable and may result in termination of Supplier's business relationship with Microsoft.

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2.6.4 Protection of Intellectual Property

Intellectual property rights are to be respected. Transfer of technology and know-how is to be done in a manner that protects intellectual property rights, and customer and Supplier information is to be safeguarded. Suppliers shall comply with the most recent version of Required Security Controls for Microsoft's Supply Chain Specification (H02216).

2.6.5 Fair Business, Advertising, and Competition

Antitrust: Suppliers shall conduct business in full compliance with the antitrust and fair competition laws and regulations that govern the jurisdictions in which they conduct business. Suppliers shall establish an effective program to ensure that advertising statements are not false or misleading and meet fair business and advertising legal requirements.

2.6.6 Communication and Whistleblowing

Suppliers shall ensure that information relevant to employees (e.g., business activities, changes, and results) is communicated across the organization in a timely manner.

Suppliers shall define and implement effective processes for employees to anonymously (if desired) voice improvement ideas and concerns (e.g., cases of unethical conduct, violations of company policies or legal obligations, threats to an individual's health and safety, or damage to the environment). All employees shall be aware of these channels, know how to use them, and

be encouraged to do so. Management shall act upon this feedback and handle it confidentially and anonymously.

2.6.7 Protection of Identity and Non-Retaliation

Programs that ensure the confidentiality, anonymity, and protection of Supplier and employee whistleblowers are to be maintained unless prohibited by law. Suppliers shall establish a communication process for their workers to be able to raise any workplace concerns without fear of retaliation. Microsoft will not tolerate any retribution or retaliation against any individual who has, in good faith, sought advice or reported questionable behavior or a possible violation of the Microsoft Supplier Code of Conduct, any applicable Microsoft specification, including this specification, or any applicable law. Suppliers shall share this commitment to not tolerate any retribution or retaliation against workers who report workplace grievances. Suppliers shall not retaliate by means of personal attacks, intimidation, or other threats against workers who act to raise workplace concerns, including infringement of worker rights under local legal requirements or international standards.

2.6.8 Privacy

At Microsoft, we value, protect, and defend privacy. Suppliers shall establish a formal and effective process to protect privacy, and secure and protect personal data. Suppliers shall commit to protecting the reasonable privacy expectations of personal information of persons with whom they do business, including Suppliers, customers, consumers, and employees. Suppliers must comply with privacy and information-security laws and regulatory requirements when personal information is collected, stored, processed, transmitted, or shared.

2.7 OCCUPATIONAL HEALTH AND SAFETY

Suppliers are required to integrate sound health and safety management practices into all aspects of their business. Suppliers or vendors working on the factory premises need to align with the Microsoft health and safety management system and all relevant procedures.

2.7.1 Occupational Safety

Suppliers shall identify and assess any potential for worker exposure to health and safety hazards and mitigate such risk using the Hierarchy of Controls, which includes eliminating the hazard, substituting processes or materials, ensuring control through proper design, implementing engineering and administrative controls, preventative maintenance, and safe work procedures (including lockout/tagout), and providing ongoing occupational health and safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained personal protective equipment (PPE) and educational materials about the risks associated with these hazards. Workers shall be encouraged to raise safety concerns. In particular:

- Suppliers shall ensure that all required permits, licenses, and test reports for occupational safety are in place and a process is implemented to ensure that permits and licenses are up to date at all times.
- Suppliers shall ensure that workers are not exposed to potential hazards and that such hazards are controlled through proper design, engineering and administrative controls, and safe work procedures.
 - Electrical installations and wiring shall be regularly inspected and maintained to prevent electrical shock hazards such as damaged cords and plugs, frayed wiring, missing protective barriers, etc.

- Workers shall be given educational materials (e.g., safe work instructions, operating instructions) describing the risks associated with electrical hazards as applicable to their positions in order to ensure the safe execution of their functions.
- The use of metal ladders is prohibited in areas where the ladder or the person using the ladder could come into contact with energized parts of equipment, fixtures, or circuit conductors.
- All equipment and electrical devices shall be properly grounded.
- Portable electrical tools and equipment and fixed electrical equipment shall be grounded or of the double-insulated type.
- All disconnecting switches and circuit breakers shall be labeled to indicate their use or equipment served.
- All electrical raceways and enclosures shall be securely fastened in place.
- Circuit breakers shall be accessible to personnel, protected from physical damage, and located away from ignitable material.
- Exposed wiring and cords with frayed or deteriorated insulation shall be repaired or replaced promptly.
- Flexible cords shall be used only in continuous lengths without splice or tap.
- Suppliers shall ensure that correct lockout/tagout procedures are followed for work on equipment that could injure workers due to stored (electrical, pneumatic, or mechanical) energy or inadvertent start-up.
- A lockout/tagout procedure includes but is not limited to the following:
 - Notifying employees when servicing or maintenance is required on a machine or equipment and informing them that the machine or equipment must be shut down and locked out to perform the servicing or maintenance
 - Shutting down the operating machine or equipment by normal procedure (e.g., depress STOP button, open switch, or close valve)
 - Activating the energy-isolating device(s) so that the machine or equipment is isolated from the energy source(s)
 - Locking out the energy-isolating device(s) with assigned individual lock(s)
 - Dissipating or restraining stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, and hydraulic systems as well as air, gas, steam, or water pressure) by methods such as grounding, repositioning, blocking, or bleeding down
 - Verifying the isolation of the equipment by operating the push buttons or other normal operating control(s) or by testing to make certain that the equipment will not operate (CAUTION: Return operating control(s) to neutral or OFF position after verifying the isolation of the equipment. The machine or equipment is now locked out.)
 - Restoring the equipment to service by
 - checking the machine or equipment and the immediate area around the machine or equipment to ensure that non-essential items have been removed and that the machine or equipment components are operationally intact,
 - checking the work area to ensure that all employees have been safely positioned or removed from the area, and
 - removing the lockout devices and re-energizing the machine or equipment. (Note: The removal of some forms of blocking may require re-energizing the machine before safe removal.)
 - Lockout equipment
 - Lockout and tagout devices shall be durable, marked, color-coded, or otherwise identified for each factory and shall be supplied to authorized personnel. Tags

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must state, at a minimum, DO NOT START, DO NOT OPERATE, or DO NOT OPEN and must state who placed the tag, the date placed, and reason.

- Lockout usually entails using a lock-out device and a padlock to secure the power source, and the owner of the lock has the only key.
- Appropriate employees shall be provided with individually keyed personal safety locks.
- Training
 - Authorized and affected employees must be trained and annually retrained.
 - Remedial training should be provided as needed when individual actions reflect nonconformance with program requirements.
- Suppliers shall develop a confined space program including, but not limited to, the following:
 - A list of confined spaces within relevant factory locations, consisting of the location, hazards, and whether a permit is required.
 - Permit-required confined-space entries that include (at least) the following elements:
 - Identification of location and work being conducted in confined space
 - Testing or monitoring equipment with effective calibration record
 - Emergency equipment and description of rescue procedure
 - Date and time the permit was issued and the expiration date of the permit
 - Documentation of atmospheric testing prior to entry and during the work for the following: oxygen (%), explosive limit (% lower flammable limit), and toxicity (ppm)
 - Name of the responsible entry supervisor, list of authorized entry personnel, and the attendant.
 - Suppliers shall inform contractors of the confined-space locations and ensure that appropriate confined-space entry procedures are followed.
 - Permit-required confined spaces shall be labeled with signs such as "DANGER - Permit-Required Confined Space, Do Not Enter" or an equivalent warning in the local language.
 - Suppliers shall ensure that annual training is conducted for the affected personnel.
- Suppliers shall establish a Hot Work Permit System for cutting, welding, and brazing done outside the designated welding area; this system shall include but is not limited to following elements:
 - A fire safety officer required to sign off on each permit shall be appointed.
 - The area within 11 meters (35 feet) of the hot work area shall be maintained free of flammable and combustible materials.
 - The atmosphere shall be monitored with a gas detector. If a flammable or combustible gas exceeds 6% of the lower explosive level (LEL), the work must be stopped.
 - A fire watch shall be conducted under the following conditions:
 - during the hot work event and
 - for one hour after the completion of the hot work event.
 - Hot Work Permits shall be required for each hot work event and retained for at least one year.
- Explosion-proof electrical equipment shall be installed in areas where flammable and combustible liquids are used or stored.
- Cryogenic liquids (such as nitrogen, oxygen, argon, helium, and hydrogen) shall be stored, handled, and transferred properly. A safety procedure for the storage and handling of cryogenic liquids shall be established and shall include at least the following elements:
 - Unprotected parts of the body must never be allowed to touch uninsulated pipes or vessels that contain cryogenic fluids.
 - Workers handling cryogenic liquids must use eye and hand protection to protect against splashing and cold-contact burns.

- Analyzers with alarms shall be installed to alert workers to oxygen-deficient atmospheres.
- Only equipment and containers designed for the intended product, service pressure, and temperature shall be used.
- Cryogenic containers must be clean and made from materials suitable for cryogenic temperatures, such as austenitic stainless steels, copper, and certain aluminum alloys.
- When Dewar containers are used, it must be ensured that no ice accumulates in the neck or on the cover. This could cause a blockage and subsequent pressure buildup.
- An emergency plan must be in place in case of a large spillage or accidental release.
- All personnel handling cryogenic liquids must be trained in specialized equipment designed for the storage, transfer, and handling of these products.
- Suppliers shall ensure that workers are not exposed to other potential safety hazards (e.g., dust, explosions, vehicles, and fall hazards) and that these are controlled through proper design, engineering, and administrative controls and safe work procedures, including all of the following:
 - Buildings shall be structurally sound and conform to local building code requirements.
 - In areas where powered industrial vehicles are used, pedestrian walkways shall be clearly delineated and physically separated, where possible, from vehicle operation areas.
 - Workers exposed to a fall hazard greater than 2.0 meters shall be provided with adequate guardrails or a full body harness for fall protection.
 - Standard guardrails shall be provided wherever aisle or walkway surfaces are elevated more than 1.3 meters above any adjacent floor or the ground.
 - Pits and floor openings shall be covered or otherwise guarded.
 - Temporary barricades shall be in place to restrict traffic around the renovation area.
 - All connections on drums and piping with combustible vapors and liquids shall be tight.
 - All flammable liquids shall be kept in closed containers when not in use (e.g., parts cleaning tanks, pans, etc.).
 - Workers shall be protected from sharp objects which might pierce the feet or cut the hands (e.g., machinery or tools used for food handling and storage, sawing, and cutting).
 - Mats, grating, etc. shall be used where drainage is needed.
 - Work surfaces shall be kept dry, or appropriate measures shall be taken to ensure they are slip-resistant.
- Suppliers shall ensure that appropriate personal protective equipment (PPE), such as safety glasses, ventilators, safety shoes, and hardhats, are provided and consistently and correctly used where required to minimize or control safety hazards and worker exposure.
- Suppliers shall take gender responsive measures, such as avoiding the assignment of pregnant women and nursing mothers to work environments that could be hazardous to them or their child, and providing reasonable accommodation for nursing mothers.

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2.7.2 Emergency Preparedness

All likely types of emergency situations and events that may impact the site, including but not limited to natural disasters, pandemics, workplace incidents, and other potential business interruptions, shall be identified and assessed, and their impact shall be minimized through the implementation of adequate and effective emergency plans and response procedures that include clearly defined roles and responsibilities, emergency reporting with root-cause investigation and implementation of corrective actions, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities, contact information for emergency responders, and recovery plans/business continuity plans. Suppliers shall ensure that relevant procedures are established, maintained, and evaluated to comply with legal requirements. Suppliers shall conduct regular

reviews and updates of their emergency plans and procedures to ensure they remain effective and relevant.

Adequate and effective fire detection, alarm, and suppression systems shall be in place and shall include the following:

- Automatic fire sprinklers (if required by law or insurance company), portable fire extinguishers, heat and smoke detection, and an alarm and notification system, which shall be inspected, tested, and maintained on a regular basis, as required by law, insurance company, and/or common practice as follows:
 - The inspection should be conducted at least monthly.
 - Testing and maintenance frequency shall not be less than that required/recommended by the manufacturer, local code, or insurance company, whichever is more stringent.
 - The inspection, testing, and maintenance procedure, frequency, and results shall be documented.
- Sprinkler heads for the fire suppression system shall not be blocked or obstructed to prevent proper water dispersion. There must be at least 0.5 meters between the sprinkler and the top of storage.
- The factory shall be equipped with visual alarms (e.g., flashing red lights) in areas where ear protective equipment is used.
- Emergency exits, aisles, and stairways, adequate in number and location, shall be readily accessible and properly maintained.
 - Exit doors shall open easily from the inside.
 - Exit doors shall open from the direction of exit travel without the use of a key or any special knowledge or effort when the building is occupied.
 - Aisle widths shall be maintained. Aisle width shall not be less than 1 meter across at its narrowest point. The minimum width of any single door opening shall be at least 81 cm (32 in.). If the local regulation has specific requirements, the local regulation shall be followed.
 - Exit routes shall be located as far away from each other as practical, in case one is blocked by fire or smoke. The minimum requirement is to keep exit routes 5 meters apart.
 - The maximum distance of an evacuation route to an emergency door shall be less than 60 meters in a workshop.
- Employees shall receive appropriate training/communication on fire and other emergencies and the corresponding preparedness and response plans/procedures.
- Adequate and effective fire and other emergency evacuation and response drills shall be conducted with all employees, and records shall be maintained.
 - Drills shall be conducted at least annually (or more often if legally required). If worker turnover since the last drill is more than 20%, a new drill shall be required. Other emergency drills may be conducted based on likelihood of occurrence (e.g., severe weather, flood, earthquake, etc.).
 - All drills shall be documented with lessons learned and corrective action plans to improve the emergency evacuation situation.
 - Corrective action plans shall be implemented or scheduled.
- Designated emergency response personnel shall be given adequate and effective PPE and training annually.
- Suppliers shall have an adequate set of written emergency response plans and procedures in the event of a release of a chemical or material that could pose a hazard to the environment.
- Eyewash stations and safety showers shall meet following requirements:
 - Eyewash stations and emergency showers shall be installed in the immediate area where

corrosive materials are used (e.g., battery servicing areas, cooling towers, storage of corrosive material, and electroplating), in locations with irritant chemicals (such as methanol, 100% isopropyl alcohol, and lithography photoresist), and in areas where common solvents are used (e.g., for paint mixing, chemical storage and dispensing, and solvent distillation).

- Eyewash stations and emergency showers shall be installed within ten seconds of walking time from a hazard's location. Accessing the equipment shall not require going up or down stairs or ramps, and the path of travel from the hazard to the equipment shall be free of obstructions and as straight as possible.
- Eyewash stations and safety showers shall be tested once per week to verify correct operation; tests shall be documented, and any inadequacies shall be noted and corrected immediately.
- Eyewash stations shall meet all the following specifications:
 - Two eye spouts with protectors
 - Fifteen-minute continuous flow
 - Temperate water
- Showers shall meet all the following specifications:
 - Fifteen-minute continuous flow
 - Temperate water
- Workers who may be exposed to a chemical splash shall receive annual training on these procedures.

2.7.3 Occupational Injury and Illness

Procedures and systems shall be in place to prevent, manage, track, and report occupational injury and illness, including accidents and near-misses; these procedures and systems shall include provisions to encourage worker reporting, classify and record cases of injury and illness, provide necessary medical treatment, investigate cases, implement corrective actions to eliminate causes, and facilitate the return of workers to work. Suppliers shall allow workers to remove themselves from imminent harm, and not return until the situation is mitigated, without fear of retaliation.

- Injury/illness and incident data shall be analyzed and utilized to reduce accidents. Suppliers shall also set company/site-level targets (as appropriate) to reduce occupational injuries and illnesses and absence rates.
- All employees shall have access to first aid and emergency care provided by assigned first-aid teams, an on-site health center, or a nearby hospital/clinic.
- Employees who sustain injuries through their work shall receive medical support as per the legal requirements.
- First-aid kits shall be available in production and office areas, placed in visible and accessible locations, kept properly stocked and replenished, and inspected monthly. At a minimum, the following supplies are required for each first-aid kit:
 - Gauze pads
 - Box adhesive bandages (band-aids)
 - One package gauze roller bandage at least two inches wide
 - Two triangular bandages
 - Wound cleaning agent, such as sealed moistened towelettes
 - Scissors
 - Tweezers
 - Adhesive tape
 - Latex gloves

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First-aid training shall be provided according to applicable local statutes or voluntarily if not mandated by law. First responders shall be clearly identified in work areas by badges, colored attire, and/or office/work area signage and be designated as first responders in the emergency response plan.

2.7.4 Industrial Hygiene

Potential worker exposure to chemical, biological, and physical agents shall be identified, evaluated, and controlled. Proper design and/or engineering or administrative controls shall be used to control exposure when eliminating or isolating the cause is not possible. When hazards cannot be adequately controlled, worker health is protected by appropriate training and personal protective equipment.

- All required permits, licenses, and test reports for industrial hygiene shall be in place, and a process shall be implemented to ensure permits and licenses are always up to date.
- Suppliers shall have documented programs in place to identify, evaluate, and control worker exposure to chemical, physical, and biological agents, including a risk assessment program and an annual plan for the factory, which shall be kept up to date.
- Engineering controls (e.g., exhaust ventilation, enclosures) shall be in place and designed to reduce worker exposure to chemical, biological, and physical agents.
 - Odors, dust, and emissions from painting, roof repair, and other contaminant-producing activities shall be isolated.
 - If a potential toxic gas/fume/vapor is present, monitoring equipment shall be used to determine the level of exposure and whether ventilation is adequate so as not to exceed the permissible exposure level.
 - Signs shall be posted warning of the presence of any airborne contaminants or gases.
 - Operating procedures shall be readily available to employees who work in or maintain a chemical process.
 - Engineering controls shall be used to reduce excessive noise levels. Where engineering controls are determined to not be feasible, administrative controls (e.g., limiting worker exposure time, job rotation) shall be used to minimize individual exposure.
- Administrative controls (e.g., limiting worker exposure time, job rotation) shall be designed to reduce worker exposure and ensure proper marking of all chemical, biological, and physical agents.
- Industrial-hygiene testing reports shall be in place, available for review, and in compliance with permits, licenses, or other legal requirements.
- Testing shall be performed as often as required by permits and licenses, and the time between testing shall not exceed one year. If a change in the process or regulatory requirements requires more frequent testing, Suppliers shall follow such requirements.
- A health-risk assessment with associated industrial-hygiene sampling and testing shall be completed when a new chemical, biological, or physical agent is introduced into the work environment or when an existing process is changed and may trigger an employee health risk.
- Medical checks shall be conducted according to legal requirements. Medical surveillance records covering respiratory evaluations shall be available to determine whether workers are being harmed by exposure to chemical, biological, or physical agents or are suffering hearing loss or any other medical concerns related to specific job activities.
- If the use of personal protective equipment (PPE), such as respirators and hearing protection, is required to control worker exposure, Suppliers shall ensure that PPE is consistently provided to workers free of charge where required based on potential workplace hazards.

- Each work area shall be evaluated for the following hazards: falling objects, electrical contact, chemical splashes, flying particulates, exposure to chemicals and dust, light radiation, punctures, penetrations, and noise level.
- Hazard-evaluation documentation shall include the workplace's evaluation, its date, and the name of the person certifying it.
- All affected employees shall be trained in the use of PPE.
- Signs indicating PPE requirements shall be posted in areas where PPE is required.

2.7.5 Physically Demanding Work

Potential worker exposure to the hazards of physically demanding tasks, including manual material handling and heavy or repetitive lifting or motions, prolonged standing, and highly repetitive or forceful assembly tasks, shall be identified, evaluated, and controlled.

- A documented program for identifying, evaluating, and controlling physically demanding work shall be in place and up to date.
 - Risk assessments shall be completed at least once per year unless regulatory requirements require more frequent assessments.
 - Suppliers shall implement, manage, and monitor the effectiveness of ergonomic control strategies using all of the following:
 - Periodic ergonomic task analyses
 - Key performance indicators that include but are not limited to worker discomfort survey data, worker/supervisor feedback, job-specific turnover rates, and job-specific defect rates
- Suppliers shall ensure that controls to reduce or eliminate physically demanding work (e.g., heavy or repetitive lifting, prolonged standing) are in place and effective. Such controls include
 - engineering controls, such as palletizers, lift tables, or adjustable work platforms,
 - mechanical material-handling equipment, such as lifts, cranes, conveyers, etc., to reduce lifting risks, and
 - administrative controls, such as limiting worker exposure time, job rotation, etc.

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2.7.6 Machine Safeguarding

Production and other machinery shall be evaluated for safety hazards. Physical guards, interlocks, and barriers shall be provided and properly maintained where machinery poses a risk of injury to workers.

Suppliers shall have documented procedures for machine safeguarding that includes all the following:

- A machine risk-assessment program to identify machine-safeguarding needs (pre-purchase/pre-installation hazard review of all machinery)
- Appropriate methods for ensuring that safeguarding is implemented as needed to control the identified hazards
- Regular inspection and maintenance of machines and their safeguards and emergency stops
- Adequate and up-to-date machine and safeguard inspections and preventive maintenance records
- Work instructions (if necessary or required) available in a language understood by the worker at the machine (or within its proximity)
- Safe machine operation documentation in place and available In addition, the following requirements shall be met:
- All moving chains and gears shall be properly guarded. Rotating or moving parts of

equipment shall be guarded to prevent physical contact.

- Fan blades shall be protected with a guard having openings no larger than 12.5 mm when operating within 2 meters above the floor.
- Foot-operated switches shall be guarded or arranged to prevent accidental actuation by personnel or falling objects.
- Splash guards shall be mounted on machines that use coolant to prevent the coolant from reaching employees.
- A power shut-off switch shall be mounted within reach of the operator's position at each machine.
- Machine guards shall be secure and installed so that they do not pose a hazard in their use.
- All material hoists shall be inspected and tested prior to use, including engaging the upper and lower limit stops.
- The load ratings of the load block, hoist motor, and rail shall match. If not, the load ratings shall be set at the lightest rating that the system will support.
- Prior to operation, forklifts shall undergo a safety inspection that includes all the following elements:
 - Forklift operators shall be trained and licensed/certified in the operation of each type of forklift that they are authorized to operate.
 - The safety permit for the forklift shall be on the premises, if applicable.
 - Records of daily inspections of controls, brakes, tires, and other moving parts shall be made available for inspection.
 - Defective brakes, controls, tires, horns and lights, power supplies, load-engaging mechanisms, lift systems, steering mechanisms, and signal equipment shall be repaired before trucks can be returned to service.
- Safeguard-inspection and preventive-maintenance records of safety devices shall be available for inspection.

2.7.7 Sanitation, Food, Housing

Workers shall be given ready access to clean toilet facilities, potable water, and sanitary food preparation, storage, and eating facilities. Sanitation must include methods, procedures and cleaning materials used to clean food processing equipment, facilities, and workers. Worker dormitories provided by the Supplier or a labor agent shall be maintained in a clean and safe manner and provide appropriate emergency exits, hot water for bathing and showering, adequate lighting, and adequate conditioned ventilation, individually secured accommodations for storing personal and valuable items, and reasonable personal space. Workers in such dormitories shall also have reasonable entry and exit privileges.

- Dormitories shall be provided to workers at a reasonable cost and on a voluntary basis. If worker security and safety requirements are met, all workers shall be allowed to freely leave and return to their dormitory during their non-working hours.
- Drinking water testing reports shall be available for review, and drinking water shall be tested regularly (at least every six months or in accordance with local regulatory requirements, whichever is more stringent). If test results are available from public sources, then these must be obtained and validated at least once per year. In the absence of local law, at least the following parameters must be tested:
 - color, turbidity, odor, particulate matter, and visible organisms
 - pH
 - COD
 - total coliforms and total bacteria
 - residual chlorine

The quality of drinking water shall meet all applicable standards; where there are no standards, the World Health Organization (WHO) Guidelines shall be followed.

- Toilet and washing areas shall be clean, sanitary, and safe.
 - Toilet facilities shall be situated near all work areas and provided for each dormitory room or on each dormitory floor.
 - Toilet and toilet facilities shall be clean, maintained, and functional.
 - Floors shall not be slippery.
 - Uniform lighting, adequate ventilation, and trash bins shall be provided.
 - Toilets shall be equipped with doors to ensure privacy.
- Dormitories shall provide workers with sufficient personal space.
 - Employees shall have their own bed.
 - There shall be at least 3 square meters of usable area per employee or as local law requires. The more stringent requirement shall be followed.
 - A minimum ceiling height of 2.8 meters shall be provided if double-deck bunks are used. Triple-deck bunks are prohibited.
 - Individual lockers for private secured storage shall be available.
- Canteens (cafeterias) shall be clean, well-maintained, and managed in compliance with local health regulations, and the following requirements shall be met:
 - All legally required food, sanitation, and housing permits shall be in place, available for review, and valid.
 - Food-service workers shall have received all necessary health checks/certificates and training to help prevent the transmission of communicable disease.
 - Food-service workers shall wear masks, hairnets, and gloves as necessary to prevent food contamination when processing foods.
 - Kitchens and canteens shall have adequate ventilation.
 - Floors shall not be slippery.
 - Canteens shall have adequate hand-washing facilities.
 - Pest control shall be effective.
 - Exhaust fans and hoods shall be clean and free of grease and food.
 - Covered garbage cans shall be provided.
 - Lights shall be installed to ensure uniform lighting.

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2.7.8 Communication

Suppliers shall have processes in place for communicating relevant health and safety information and for providing adequate training to all employees, including contractors and visitors working on the Supplier premises, in the language of the employee or in a language the employee can understand for all identified workplace hazards that workers are exposed to, including but not limited to mechanical, electrical, chemical, fire, and physical hazards. Health and safety related information shall be clearly posted in the facility or placed in a location identifiable and accessible by workers. Health information and training shall include content on specific risks to relevant demographics, such as gender and age, if applicable. Training is provided to all workers prior to the beginning of work and regularly thereafter.

Suppliers are encouraged to ensure worker education and input regarding health and safety issues (e.g., by initiating and supporting worker health and safety committees). Employees shall have the right to refuse to work under unsafe working conditions without retaliation. They shall be allowed and encouraged to report any such cases to their employer without delay.

2.8 ENVIRONMENT

Microsoft recognizes its social responsibility to protect the environment, conduct environmental due diligence, and promote environmental sustainability. We expect Suppliers to share our corporate commitments to proactively reduce carbon emissions, reduce water consumption, and minimize waste generation. Without limitation, Suppliers must meet the following requirements:

- comply with all applicable environmental laws and regulations and international treaties, including those that mandate Environmental, Social and Governance (ESG) related reporting and/or regulate hazardous materials (including the manufacture, transportation, storage, disposal, and release to the environment of such materials), air emissions, noise pollution, waste, wastewater discharges, and land degradation.
- comply with all applicable laws, regulations, and Microsoft requirements regarding the prohibition or restriction of specific substances in products, packaging, and manufacturing, including labeling for recycling and disposal, and seek for opportunities to substitute hazardous or carbon-intensive materials whenever possible;
- prevent or eliminate waste of all types, including water discharges and energy losses, by implementing appropriate conservation measures in Supplier facilities, by means of using conservation-minded maintenance and production processes, and by implementing strategies to reduce, reuse, and recycle materials (in that order), whenever possible, prior to disposal;
- seek and use renewable energy whenever possible;
- obtain, maintain, and keep current all required environmental permits, regulatory approvals, and registrations and follow the operational and reporting requirements of such permits and approvals; and
- identify any chemicals, waste, or other materials that may be released, and which may pose a threat to the environment and manage them appropriately and in compliance with applicable laws and regulations to ensure their safe handling, movement, storage, use, recycling, reuse, and disposal.

2.8.1 Environmental Permits and Reporting

- Suppliers shall obtain, maintain, and keep current all required environmental permits, approvals, and registrations and follow the operational and reporting requirements of such permits. Typical permits and approvals include but are not limited to the following:
 - Environment impact assessment (EIA) report and EIA approval
 - Acceptance checks for environmental protection facilities after construction completion
 - Pollutant discharge or elimination permit
 - Drainage permit
 - Radiation safety permit
- Suppliers shall meet all legal reporting requirements and report to environmental authorities as required by law and ensure that such reporting (e.g., declaration and registration for pollution discharge) is performed promptly.

2.8.2 Pollution Prevention and Resource Conservation

Suppliers shall work to minimize or eliminate emissions and discharges of pollutants, harmful soil change, generation of waste and noise pollution that impairs human rights and other ecosystem or land degradation, including water and energy waste/pollution, at the source or by implementing appropriate conservation measures in their facilities, such as adding pollution control equipment; by modifying production methods, by means of conservation-minded maintenance and production processes, by reducing, reusing, and recycling materials, by

substituting less toxic and hazardous materials where feasible, and by establishing adequate and effective programs to a) eliminate, reduce, or control pollution (emissions, discharges, waste) and b) conserve resources (energy, water, materials).

Suppliers shall identify significant environmental aspects and establish an Environmental Management System (EMS) to monitor and control these aspects and shall conduct regular reviews to identify opportunities for improvement in the EMS (at least once per year).

2.8.3 Hazardous Substances

Suppliers shall identify chemicals, waste, and other materials that are being released, discharged, or managed off-site and may pose a hazard if released to the environment and shall manage them in accordance with all legal requirements to ensure their safe handling, movement, storage, use, recycling or reuse, and disposal.

Suppliers shall establish and implement effective processes and procedures to request and obtain the EHS department's approval when a new chemical is to be purchased.

- A written program shall be established to track, review, and approve the use of all hazardous chemicals, and internal approvals shall be obtained in advance for all new purchases of hazardous chemicals. If applicable, authority approvals shall be obtained for purchasing certain hazardous chemicals.
- The purchasing department shall notify the EHS department when new chemicals are to be purchased or when there is a new chemical supplier.
- When a new chemical is requested, the EHS department shall ensure that any applicable Material Safety Data Sheet (MSDS) is obtained from the manufacturer/dealer.
- A hazard identification and risk assessment shall be conducted for the new chemical.

Chemical and waste storage areas shall be designed and maintained to prevent leaks and inadvertent mixing of incompatible materials.

- All hazardous chemical containers shall be labeled with the chemical name and a hazard warning (e.g., flammable, corrosive).
- Certain process chemicals are banned from being used during manufacturing and maintaining the related equipment. Please refer to Table 7 of Microsoft's Restricted Substances for Hardware Products Specification (H00594) for details.
- A Material Safety Data Sheet (MSDS) shall be readily available for each hazardous substance used, and the MSDS shall be in the primary native languages of the Supplier's workers.
- Workers who work with hazardous substances shall receive adequate and effective training.
- Hazardous substances, including waste, shall be properly categorized, handled, stored, transported, and disposed of using government-approved and/or licensed vendors in accordance with local laws and the Basel Convention.
- Suppliers shall audit waste vendor(s) including hazardous e-waste vendor(s) at least annually to verify that waste is handled, stored, and disposed of in accordance with local regulations, permit conditions, and contract requirements.
- Hazardous waste data shall be tracked and documented.

2.8.4 Solid Waste

Solid waste generated from operations, industrial processes, and sanitation facilities shall be characterized, stored, monitored, controlled, and/or treated, as legally required, prior to discharge, recycling, or disposal.

- Suppliers that provide end-of-life management for generated waste shall ensure such

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management is appropriately authorized and licensed, shall maintain records demonstrating environmentally sound disposal, and shall meet any Microsoft end-of-life management requirements that apply to such waste materials.

- Suppliers shall record information on how much waste (of all categories) is generated and its final disposal (i.e., how much waste is reused, recycled, subject to energy recovery, disposed via landfill, or incinerated without energy recovery, etc.) and shall provide waste records to Microsoft upon request.
- Suppliers shall develop and implement a workable plan to achieve at least 90% waste diversion rate within 3 years after onboarding, or within a shorter period as required by Microsoft.
- If a vendor is used for waste disposal including e-waste, Suppliers shall ensure that the vendor is appropriately authorized and licensed and shall maintain records demonstrating environmentally sound disposal and meet any Microsoft end-of-life management requirements that apply to such waste materials.
- Suppliers shall audit waste vendor(s) including e-waste vendor(s) at least triennially to verify that waste is handled, stored, and disposed of in accordance with local regulations, permit conditions, and contract requirements.

2.8.5 Air Emissions

Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone-depleting substances, and combustion by-products generated from operations shall be characterized, routinely monitored, controlled, and treated as required by all applicable laws, permits, and regulations prior to discharge. Ozone-depleting substances shall be effectively managed and phased out in accordance with the Montreal Protocol and phase out emissions of hydrofluorocarbons (HFC) in accordance with the Kigali Amendment, and applicable regulations.

- Air emissions shall be identified, characterized, routinely monitored, controlled, and treated prior to discharge and shall meet the discharge limits for regulated constituents. Air-emission control systems shall be routinely monitored for performance.
 - Suppliers shall implement emergency preparedness and response actions in case of any malfunctions, failures, maintenance, and/or modifications of the air-emissions control system.
 - If past non-conformances have occurred, a procedure shall be in place for analyzing their root causes and taking corrective actions to address the non-conformances.
- Upon receipt of any community complaints, Suppliers shall do all the following:
 - Conduct air-emissions monitoring to verify the air-emissions status and implement corrective actions, if any, in a timely manner
 - Notify all appropriate regulatory and other agencies as required by applicable regulations if an unusual environmental event occurs
- At least annual (or more frequent if required by local law) monitoring and reporting records from the past five years shall be available for review. The monitoring and reporting records shall be in line with legal requirements. At least three annual analytical test results, showing compliance with the legal and permit requirements, shall be available for review.
- Environmental noise levels shall be within regulatory limits.
 - Boundary noise levels shall be evaluated annually against the boundary-noise-level criteria. If there are any changes to the "Receiving Land Use Category" in the neighborhood of the factory, or if there are any community noise complaints, boundary-noise-level criteria shall be set accordingly.
 - Appropriate boundary-noise-control devices shall be installed and maintained to

control boundary noise levels as per applicable regulations. Monitoring and reporting shall be performed at least annually (or more frequently if required by law).

- If past non-conformances have occurred, a procedure shall be in place for analyzing their root causes and taking corrective actions to address the non-conformances.

2.8.6 Water Management

Suppliers shall implement a water management program that documents, characterizes, and monitors water sources, use, and discharge; seeks opportunities to conserve water; and controls channels of contamination. All wastewater shall be characterized, monitored, controlled, and treated as required prior to discharge or disposal. Suppliers shall routinely monitor the performance of their wastewater treatment and containment systems to ensure optimal performance and regulatory compliance.

Effluent discharges (industrial/process wastewater and sewage) shall be managed to prevent water pollution and shall meet all legally required discharge limits for regulated constituents. Wastewater treatment systems shall be routinely monitored for performance.

- Untreated process wastewater shall not be discharged into the surrounding environment (except when allowed and permitted by applicable laws and regulations).
- Emergency response actions shall be implemented in case the on-site process wastewater treatment system exceeds its capacity or malfunctions.
- Annual (or more frequent if required by local law) test results shall be available showing compliance with legal compliance and permit requirements.
 - Monitoring and reporting records from the past five years shall be complete and available for review.
 - If past non-conformances have occurred, a procedure shall be in place for analyzing their root causes and taking corrective actions to address the non-conformances.

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2.8.7 Carbon Emissions Management

In 2020, Microsoft set bold sustainability goals to become carbon negative, zero waste, and water positive by 2030.

In alignment with the carbon negative goal and the Microsoft Supplier Code of Conduct, Suppliers are required to develop, implement, and disclose plans to reduce carbon emissions in their operations related to production of Microsoft products with the minimum elements outlined below. Suppliers must:

- Formalize their Greenhouse Gas (GHG) emissions inventories and establish baselines for Scope 1² and 2³ GHG emissions within one year and Scope 3⁴ within two years of engagement with Microsoft on this requirement.

² Scope 1 GHG emissions cover direct emissions from sources or sinks inside organizational boundaries that are owned or controlled by the organization, such as fuels used in equipment including boilers, heaters, generators, and company-owned automobiles.

³ Scope 2 GHG emissions cover indirect emissions from the production of electricity or heat that a company purchases and uses, such as emissions from the traditional energy sources that power office buildings.

⁴ Scope 3 GHG emissions cover indirect emissions from sources located outside organizational boundaries for all other company activities. This includes all parts of a company's supply chain, from raw materials, business travel, manufacturing and product lifecycle to the electricity customers consume in relation to the company's products and services.

- Upon request by Microsoft, respond with complete, consistent, and accurate Scope 1, 2, and 3 GHG emissions and GHG reductions, energy consumption, as well as any relevant ESG data reasonably necessary for Microsoft to meet its ESG reporting requirements, using Microsoft proprietary reporting templates. Suppliers may also be required to provide independent or third-party assurance of disclosed data.
- Respond to Microsoft sustainability data requests annually through the CDP Supply Chain Program and/or a Microsoft data tool annually.
- Set science-based carbon reduction targets with the Science Based targets Initiative (SBTi)⁵ and have the target approved by SBTi within two years of engaging with Microsoft on this requirement.
- Set and disclose to Microsoft, 100% carbon-free electricity⁶ goals in manufacturing facilities for Microsoft products by 2025. Additional details, including specific requirements for data disclosure, method, assurance, , and reporting achievement of planned reductions will be set forth in other written communication(s) from Microsoft to Supplier.
- Where applicable, suppliers should additionally seek opportunities to improve abatement rates of greenhouse gases, including installing point-of-use abatement systems that treat process gases, process optimization to reduce the amount of fluorinated greenhouse gases (F-gas) use, real-time monitoring to minimize F-gas overuse and leaks, substituting high global warming potential (GWP) F-gases with lower impact alternatives among others.
- All Microsoft final assembly and key component⁷ suppliers shall achieve ISO 50001 third-party certification or a nationally adopted version of ISO 50001⁸ . The third-party certification(s) shall be obtained from a certification body accredited by a body that is a signatory to the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA) with a scope of accreditation that includes the ISO 50001 standard. A facility may be certified as a standalone facility, or as part of a multi-site organization certification.
- Adopt manufacturing and processing methods that improve energy efficiency and minimize energy consumption at manufacturing facilities for Microsoft including reducing material use and scrap at Microsoft production facilities where applicable.
- Cascade Microsoft Sustainability requirements in their supply chain to sub-tier suppliers that support Microsoft products.
- Participate in Supplier reviews and supplier trainings to explore continuous improvement opportunities and establish demonstrable improvement plans.

2.8.8 Product Content/Manufacturing Restrictions

- Suppliers shall adhere to all applicable environmental, health, and safety laws and regulations and Microsoft restrictions applicable to the supplied product, process, or service.

⁵ Learn more at: <https://sciencebasedtargets.org/>

⁶ For further information and guidance on carbon-free electricity criteria, please visit the [SCoC CFE Guidance](#).

⁷ Key components are the priority components defined below:

- a) main printed circuit board,
- b) integrated circuits: central processing units (CPUs), solid state drives (SSDs), hard disk drives (HDDs), random access memory (RAM), graphic processing unit (GPUs),
- c) power supply units, and
- d) display panels.

⁸ Examples of nationally adopted versions of ISO 50001 include ANSI/ MSE 50028-1, China's Green Factory Certification program (GB/T 23331), and Japan Industrial Standard, JIS Q 50001:2019.

- Suppliers shall comply with the most recent version of Microsoft's Restricted Substances for Hardware Products Specification (H00594) and Restricted Substances Control System for Hardware Products (H00642) and with related environmental requirements. This shall include but is not limited to the following:
 - Providing Microsoft with a declaration of full material content of all products/parts/materials supplied to Microsoft as per Microsoft specification
 - Collecting, maintaining, and verifying/testing accurate material content data of products/parts/materials supplied to Microsoft as per Microsoft specification
 - Establishing and maintaining programs and procedures for tracking and implementing substance and material management regarding the supplied product, process, or service
 - Extending Microsoft's material restriction requirements to sub-tier suppliers and ensuring conformance to the aforementioned substance specifications and maintaining documented evidence of such supply chain conformance
 - Establishing and maintaining effective processes and procedures for requesting and obtaining relevant chemical composition information, including certificates and analytical reports, from sub-tier suppliers

2.9 RESPONSIBLE SOURCING OF RAW MATERIALS (RSRM)

Consistent with Microsoft's Supplier Code of Conduct, Microsoft requires its Suppliers to source responsibly, including with respect to raw materials. The overarching requirements are set forth in our Supplier Code of Conduct and Responsible Sourcing of Raw Materials (RSRM) Policy, which are incorporated into our hardware and packaging contracts with Suppliers. Suppliers are expected to incorporate these requirements into their own sourcing policies and contracts with their sub-tier suppliers.

For the sourcing of minerals, Suppliers should follow the steps set out by the Organization for Economic Co-operation and Development (OECD) [Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas](#) ("OECD Due Diligence Guidance").

Suppliers shall require smelters, refiners, and processors of minerals in their supply chains to participate in the Responsible Minerals Initiative (RMI) [Responsible Minerals Assurance Program \(RMAP\)](#) or an equivalent smelter validation program that is recognized as being aligned with the [OECD Due Diligence](#) Guidance, and to be audited and conformant to the RMAP Standard or recognized equivalent.

Suppliers shall engage with their own supply chain to encourage or, where practical and applicable, require sourcing of raw materials from mines that are third-party audited through the [Initiative for Responsible Mining Assurance \(IRMA\)](#) or an equivalent mine certification scheme. Suppliers must conform with any and all Microsoft requests to engage with any suppliers, smelters, refiners or processors in their supply chain to encourage sourcing of raw materials from mines that are third-party audited through the IRMA or equivalent mine certification scheme, or alternatively to encourage existing mines in their supply chain to commence such third-party audit processes.

The following five areas are minimum RSRM requirements:

1. A RSRM policy that includes a policy commitment setting forth principles for managing raw materials consistent with the OECD Due Diligence Guidance
2. A RSRM Management System that supports supply-chain due diligence consistent with the OECD Due Diligence Guidance

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3. The identification and assessment of risks in the raw-material supply chain, particularly for materials designated as higher-risk or actually or potentially originating from conflict-affected and high-risk areas, consistent with the OECD Due Diligence Guidance
4. A risk-management strategy that responds to identified risks in the raw-materials supply chain consistent with the OECD Due Diligence Guidance
5. Audit and remediation expectations for upstream Suppliers consistent with the OECD Due Diligence Guidance

Suppliers shall incorporate these requirements into their own sourcing policy and contracts. Microsoft may request evidence of these policies and their implementation.

2.9.1 RSRM Policy

Suppliers shall adopt a company policy for raw-material sourcing and commit to conducting due diligence with regard to the responsible sourcing of raw materials and shall clearly communicate such policy and commitment to their suppliers and the public. The scope of the raw materials shall be unbounded by origin location. The scope of the specific raw materials

shall include all regulated “conflict minerals” (including tantalum, tin, tungsten, gold, collectively referred to as “3TG”), all higher-risk minerals prioritized by Microsoft (including aluminum, cobalt, copper, gallium, lithium, nickel, silicon (to include silica and polysilicon), germanium, graphite, rare earth elements, and any other minerals subsequently prioritized as such), and any additional raw materials that may be identified by the Supplier’s own raw-materials risk assessment.

2.9.2 RSRM Management System

Suppliers shall ensure that they and their sub-suppliers operate in conformance with all requirements while working on behalf of Microsoft. An effective management system for measuring and tracking performance in a systematic way is necessary and expected by Microsoft. Suppliers shall incorporate the RSRM minimum requirements into their SEA management systems and actively look for opportunities to improve performance and implement improvement actions.

At a minimum, a RSRM management system shall have at least four key components:

- **Accountability:** The Supplier representative(s) responsible for ensuring implementation of the management systems and associated programs, including regular senior management reviews of the status of the management system, should be clearly identified. Management team(s) responsible for systems designed to ensure compliance with applicable laws, regulations, and customer requirements related to this specification should function with adequate independence to ensure sufficient autonomy, available resources, and team incentive.
- **Documentation:** A documented management system should be in place to ensure effective planning, operation, and control of raw-material supply-chain risks and to ensure regulatory compliance and conformity to the RSRM minimum requirements.
- **Supplier Engagement:** A supply-chain policy should be incorporated into contracts and/or agreements with Suppliers, consistent with the Microsoft RSRM minimum requirements.
- **Grievance mechanism:** A company-level grievance mechanism should be in place as part of an early-warning risk-awareness system.

Suppliers shall, upon request, share with Microsoft the particulars of their RSRM management system. If applicable, all Suppliers of batteries to Microsoft shall ensure the design and implementation of their due diligence systems conform to the requirements of Regulation (EU) 2023/1542 Concerning Batteries and Waste Batteries (EU Battery Regulation).

2.9.3 Identifying and Assessing Risks in the Raw-Material Supply Chain

Origin identification: Suppliers shall establish a system for gathering, examining, and verifying traceability information for required raw materials. It is required that Suppliers request their sub-tier suppliers to disclose the origins of raw materials under mutually agreed conditions. The minimum requirement is to identify the location of extraction or harvesting activities or recycling sources in the raw-material supply chain. Actions needed are outlined in the Reasonable Country of Origin (RCOI) procedure of the OECD Guidelines.

Suppliers shall, upon request, share with Microsoft (or facilitate the collection of) traceability information for designated regulated, high-risk, or prioritized raw materials in their supply chain, including but not limited to countries of origin of raw materials and identification of mines, smelters, refiners, processors, or other “upstream” supply chain actors from which such raw materials are sourced.

Risk assessment: Suppliers shall engage with sub-tier suppliers to identify any potential warning signs in the supply chain. Suppliers shall assess risks by reviewing relevant audit information and publicly available policies and reports and shall contract with a third party to perform systematic risk analyses. The findings of the risk assessment shall be reported to the company’s designated senior management.

Suppliers shall, upon request, share with Microsoft their risk assessment.

Supplier Tier	Minimum Traceability Requirement	Minimum Required Actions
Tier 1 ⁹ Tier 1.5 ¹⁰ and Tier 2 ¹¹	Trace tantalum, tin, tungsten, gold (3TG), aluminum, cobalt, copper, gallium, lithium, nickel, silicon, germanium, graphite, rare earth elements, and any additional minerals subsequently prioritized by Microsoft, and any additional raw materials identified by Supplier’s own risk assessment.	- Establish a risk profile for each of the critical raw materials within the traceability scope taking into account, at a minimum, potential social, environmental, and sourcing risks. - Conduct due diligence to trace minerals using the RCOI process. - Submit responses to the RSRM annual

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⁹ Tier 1: contract manufacturers (CM) and/or original design manufacturers (ODM) that manufacture and assemble a final product for consumers and commercial customers
¹⁰ Tier 1.5: manufacturers that supply components or sub-assemblies directly to CMs and are managed by dedicated on-site Microsoft factory management personnel due to factors such as high strategic value, complexity, customization, and/or supply-chain risk
¹¹ Tier 2: manufacturers that supply components or sub-assemblies directly to CMs or ODMs

Other Suppliers ¹²	Trace relevant priority raw materials as defined and required by customers from whom Microsoft sources.	surveys by the deadlines provided. - Take action as directed by Microsoft to ensure smelters, refiners and processors of priority raw materials are conformant to required standards. - Cascade down the same requirements and expectations to Suppliers.
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Suppliers shall establish a roadmap for meeting these requirements within one year of becoming subject to these requirements and use the following framework to determine criticality:

Risk to the Supply Chain	Risk of Issues	Ability to Influence
- Most-used materials used for production - Proximity of raw-material sub-suppliers - Risks associated with production - Availability of alternative sources or substitutes	High-profile issues (including but not limited to): - Human-rights violation - Child labor - Environment - Conflict - Corruption	- Influence over sub-supplier practices - Ability to cause sustainable or substantial impacts

2.9.4 Risk-Management Strategy

Where there are any potential risks or warning signs, Suppliers shall communicate such risks to Microsoft in a timely manner and propose a contingency plan and mitigation strategy to Microsoft. Alternatively, Microsoft may communicate to Suppliers risks identified in sub-tier suppliers, such as raw material smelters, refiners, processors, or other “upstream” supply chain actors.

Suppliers shall devise a strategy for risk management based on the criticalness of risks, existing and potential leverage points, and the company’s ability to influence. In general, there are three possible courses:

- Continuing trade without the course of measurable risk-mitigation efforts
- Suspending trade while pursuing ongoing measurable risk mitigation
- Disengaging with a sub-supplier after failed attempts at mitigation or when a company believes risk mitigation is not feasible or not acceptable

Suppliers shall implement the risk-management plan, monitor and track the progress of risk-mitigation efforts, and report back to the designated senior management. Suppliers must conform with all Microsoft requests to engage with and/or remove from their supply chain any smelters, refiners or processors that fail to conform to the RMAP or who otherwise present a critical risk to Microsoft.

¹² Other Suppliers: Suppliers that do not fall within the scope of Tier 1, 1.5, or 2

2.9.5 Audit

Suppliers are required to facilitate RMI's [Responsible Minerals Assurance Process \(RMAP\)](#) audits or independent third-party audits at sub-tier supplier facilities to address RSRM risks at identified points in their supply chain. Suppliers must confirm with Microsoft that 3TGs in their supply chain are sourced from available smelters, refiners, or processors that are conformant with the RMAP or an equivalent independent, third-party audit program for 3TGs.

2.9.6 Traceability

Suppliers must establish a system of controls showing chain of custody identifying all upstream Suppliers from raw materials to finished product or service being supplied to Microsoft. This system is to be supported by transactional and shipment documents such as purchase orders, invoices, packing lists, payment records, shipping records, bills of materials, certificates of origin, seller and buyer's inventory records, import and export records, and manufacturing records such as batch numbers, production quantity and ratios. Suppliers shall, upon request, provide Microsoft with the necessary supply chain mapping data to enable Microsoft to meet its supply chain due diligence obligations to demonstrate the origin and control of each raw material or input.

Where raw materials from Supplier are commingled, Suppliers must have an auditable process and evidence to demonstrate the origin and control of each raw material or input.

Find out more about our standards for responsible business practices among our suppliers at:

[Supply Chain Integrity | Microsoft CSR](#)

3. References

[Microsoft Supplier Code of Conduct \(SCC\).](#)

[Responsible Business Alliance \(RBA\) Code of Conduct.](#)

[Responsible Minerals Initiative \(RMI\).](#)

[United Nations Global Compact.](#)

[Universal Declaration of Human Rights.](#)

[United Nations Guiding Principles on Business and Human Rights.](#)

[International Labour Office \(ILO\) Core Labor Standards.](#)

ISO 14001: International Standards Organization standards for environmental management systems.

ISO 14064-1: International Standards Organization Specification with Guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

ISO 14064-3: International Standards Organization Specification with Guidance for the verification and validation of greenhouse statements.

ISO 50001: International Standards Organization Standards for Energy Management Systems.

ISO 45001: International Standards Organization Standards for Occupational Health and Safety Management Systems.

SA8000: Social Accountability International Labor Standard.

This document is the successor version of:

- Microsoft Corporate Social Responsibility Specification.
- Requirements Regarding Worker Conditions.
- All previous versions of H02050.