

Computer Connection of CNY., Inc. dba CCNY Tech

**ENVIRONMENTAL, OCCUPATIONAL HEALTH & SAFETY
AND RESPONSIBLE RECYCLING (R2: 2013) MANUAL**

EHS-001

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ii **MANUAL APPROVAL:** This manual has been approved, released for circulation, used by the employees and available at the following locations:

<u>Location</u>	<u>Controlled Copy Number</u>	<u>Number of Copies</u>
President's Office	Stamped Original	1

Approved by:



iii CHANGE CONTROL HISTORY:

The Management Representative controls this EH&S Manual and is the designee for distribution and issue control. All others should be verified against the Master List of Documents. If the Manual is revised, all applicable sections and/or paragraphs shall reflect the latest changes. The portions that are changed are described in the table below. The signature of the President/CEO indicates approval of this Manual.

Date	Revision	Section	Reason	Approved By
1/2/20	1.0	All	First Issue	President

For reasons of brevity, Computer Connection of CNY., Inc. dba CCNY Tech will be referenced as CCNY Tech throughout EHS documentation.

SCOPE of CCNY Tech’s Environmental, Health & Safety Management System (EH&SMS):

EH&SMS Scope: CCNY Tech, located at 11206 Cosby Manor Road, Utica, NY 13502, is an electronics recycling firm dedicated to providing its customers with the full range of life cycle management services. CCNY Tech operates in a 35,000 square foot (approximately) facility. CCNY Tech is a small business. Small business is defined as under 50 employees. The facility is leased from MAE CNY NET LLC owned by a principle of CCNY Tech. As the leaseholder, CCNY Tech is responsible for all internal and external structural maintenance, fire prevention systems and building security. There are certain activities which are not part of the scope including CCNY Tech’s on-site managed services, the configuration and installation of networking systems and fingerprinting services that take place in the entry foyer of CCNY Tech with the exception of a chemical used in the fingerprinting. Those persons coming on-site for fingerprinting services sign in and out when visiting the entry foyer. Additionally, an unattached building on the property is not part of the scope as it houses personal property not part of CCNY Tech.

The scope of the EH&SMS per standard is as follows:

R2:2013, ISO 14001:2015 and ISO 45001:2018: Collection, dismantling and sorting operations for resale, reuse and recycling of electronic equipment, components and computers; data destruction services.

The President has appointed the Vice President as the Management Representative, who irrespective of all other duties and responsibilities, shall be responsible and have authority that includes:

- a) Ensuring that the EH&SMS conforms to the requirements of ISO 14001:2015, ISO 45001:2018, R2:2013 and CCNY Tech’s own requirements, procedures, process and related work instructions;
- b) Reporting on the performance of the EH&SMS, including environmental performance to top management.

CCNY Tech has adopted the Responsible Recycling Practices and adheres to a policy based on a reuse, recover and disposal hierarchy for managing both its on-site activities and the selection of our downstream vendors. Our scope of operations includes the recycling chain as it relates to both used and end-of-life electronics equipment, components and materials, including but not limited to, focus material, equipment containing focus material, equipment destined for reuse or disposal and transportation. CCNY Tech exercises due diligence in preserving the security of the data in the equipment and components we receive for recycling and in monitoring our downstream vendors to ensure none are operating in contradiction to this policy and we are committed to continually improving our EH&S Management System and our Responsible Recycling performance.

The purpose of this Manual is to describe the policies, requirements and the processes including the Interaction of Processes that make up the EH&SMS of CCNY Tech. This Manual enables CCNY Tech to define the responsibilities, authorities, and the interrelationships of the key operating management segments (reference Appendix B), and to provide the direction for each of the functional activities including controls that ensure the requirements for EH&SMS and the R2: 2013 Standard will be met. Although not required by R2, this manual and its supporting procedures are structured along a process model approach.

CCNY Tech established this Manual as its documented EH&S/R2. It has been designed, maintained, and implemented based on a “Plan-Do-Check-Act” model for continual improvement in order to meet all of the R2: 2013 Standard requirements, internal requirements and customer specified requirements. It clearly defines how CCNY Tech controls materials, processes, and verification activities; ensuring that materials are processed/recycled in a well-defined and controlled manner.

Implementation includes:

PLAN

- a) Determining the processes needed for our EH&SMS and their application throughout CCNY Tech,
- b) Determining the sequence and interaction of all applicable processes.
- c) Determining the criteria and various methods necessary for assuring that the operation and control of all implemented processes are effective throughout CCNY Tech.
- d) Identifying environmental, worker health/safety and data security impacts, and legal and regulatory requirements;
- e) Establishing environmental, health & safety and data security goals, objectives and targets;
- f) Planning actions that work toward achieving identified goals;
- g) Plan for emergency preparedness;

DO

- h) Ensure that all necessary resources and information/documentation that is required to support operation and control of all processes are available and implemented. Ensure all applicable personnel are trained and that training is effective.
- i) Establishing roles and responsibilities for the EHSMS and provide adequate resources;
- j) Ensuring that staff are trained and capable of carrying out responsibilities;
- k) Establishing a process for communicating about the EHSMS;

CHECK

- l) Monitoring key activities and track performance, measuring where applicable, and analyzing these processes by the use of inspection, internal audits and management reviews;
- m) Identifying and correcting problems and preventing recurrence;
- n) Providing a measurement system;

ACT

- o) Conducting annual progress reviews;
- p) Acting to make necessary changes to the EHSMS;
- q) Creating a plan and implementing all necessary actions in order for CCNY Tech to achieve their planned results and continual improvement of these processes.

ENVIRONMENTAL, HEALTH & SAFETY POLICY

CCNY Tech is committed to following the R2: 2013, ISO 45001:2018 and ISO 14001: 2015 requirements and to maintain conformance to the requirements of our EH&S management system and scope. We are equally committed to meet or exceed our customer requirements, to continually improve our processes and to maintain compliance with relevant environmental, Occupational Health and Safety and data security legislation and regulations. The goal of CCNY Tech's operation is to have a positive impact on the environment through responsible recycling requirements that includes the conservation of metals, plastic and other non-renewable resources. Consistent with these core operations, it is CCNY Tech's overall goal to accomplish its business objectives while meeting and exceeding the environmental and health & safety expectations of our management, employees, customers, suppliers and regulators.

We will continually improve our systems while striving to minimize adverse impacts on the environment by managing and tracking through the recycling chain used and end-of-life electronic equipment, components and materials, including focus materials as identified in the R2: 2013 Standard –with respect to both on-site activities and the selection of downstream vendors - using a “reuse, recover, dispose” hierarchy of responsible management strategies.

To achieve the above stated objectives, CCNY Tech is committed to:

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- Ensuring that these policies are appropriate to our operations, and its potential environmental impacts and health and safety risks of CCNY Tech’s activities, products and services;
 - Commitment to fulfill and comply with all relevant EH&S legal requirements, compliance obligations, customer and product requirements, industry guidelines and any other EH&S commitments made by CCNY Tech;
 - Striving for continual improvement to enhance EH&S performance;
 - Provide safe and healthy working conditions for the prevention of work-related injury and ill health;
 - Eliminate hazards and reduce risks
 - Providing the framework for setting & reviewing EH&S goals, which are established and are compatible with the strategic direction and the context of CCNY Tech;
 - Protecting the environment and preventing pollution;
 - Consultation and participation of workers, and workers’ representatives
 - Ensuring that this system and policies are communicated and understood by all persons working for or on behalf of CCNY Tech;
 - Making the EH&SMS policy available to the public and interested parties and;
 - Ensuring that this EH&S policy is reviewed and amended, as necessary and appropriate.

We recognize that the responsibilities for protection of the environment and worker health & safety are shared, requiring cooperation between our employees and top management. CCNY Tech will continually improve its environmental and health & safety performance through responsible recycling requirements. This will include setting goals, taking into consideration our business, financial, operational and legal and compliance requirements and obligations, as well as the views of interested parties.



President

Date: 1/2/20

ISO 14001:2015

4 Context of CCNY Tech

4.1 Understanding CCNY Tech and its context (CC-P08)

CCNY Tech has determined external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its EMS. These issues include environmental conditions being affected by or capable of affecting CCNY Tech.

4.2 Understanding the needs and expectations of interested parties (CC-SOP10)

CCNY Tech has determined:

- a) The interested parties that are relevant to the EMS;
- b) The relevant needs and expectations (i.e. requirements) of these interested parties;
- c) Which of these needs and expectations become its compliance obligations.

4.3 Determining the scope of the environmental management system

CCNY Tech determines the boundaries and applicability of the EMS to establish its scope.

When determining the scope, CCNY Tech has considered:

- a) The external and internal issues referred to in 4.1;
- b) The compliance obligations referred to in 4.2;

-
- c) Its organizational units, functions and physical boundaries;
 - d) Its activities, products and services;
 - e) Its authority and ability to exercise control and influence.

All activities, products and services of CCNY Tech within the scope are included in the EMS.

The scope is maintained as documented information and is available to interested parties.

4.4 Environmental management system

To achieve the intended outcomes, including enhancing its environmental performance, CCNY Tech has established, implemented, maintains and continually improves an EMS, including the processes needed and their interactions, in accordance with the requirements of this International Standard.

CCNY Tech has considered the knowledge gained in 4.1 and 4.2 when establishing and maintaining the EMS.

5 Leadership

5.1 Leadership and commitment

Top management demonstrates leadership and commitment with respect to the environmental management system by:

- a) Taking accountability for the effectiveness of the EMS;
- b) Ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of CCNY Tech;
- c) Ensuring the integration of the EMS requirements into CCNY Tech's business processes;
- d) Ensuring that the resources needed for the EMS are available;
- e) Communicating the importance of effective environmental management and of conforming to the EMS requirements;
- f) Ensuring that the EMS achieves its intended outcomes;
- g) Directing and supporting persons to contribute to the effectiveness of the EMS;
- h) Promoting continual improvement;
- i) Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

5.2 Environmental policy (CC-P08)

Top management has established, implemented and maintains an environmental policy that, within the defined scope of its EMS:

- a) Is appropriate to the purpose and context of CCNY Tech, including the nature, scale and environmental impacts of its activities, products and services
- b) Provides a framework for setting environmental objectives
- c) Includes a commitment to the protection of the environment, including prevention of pollution and other specific commitment(s) relevant to the context of CCNY Tech
- d) Includes a commitment to fulfil its compliance obligations
- e) Includes a commitment to continual improvement of the EMS to enhance environmental performance.

The environmental policy is:

- Maintained as documented information
- Communicated within CCNY Tech
- Available to interested parties;

5.3 Organizational roles, responsibilities and authorities

Top management ensures that the responsibilities and authorities for relevant roles are assigned and communicated within CCNY Tech via job descriptions/organizational chart.

6 Planning

6.1 Actions to address risks and opportunities (CC-P03)

6.1.1 General

CCNY Tech has established, implemented and maintains the processes needed to meet the requirements in 6.1.1 to 6.1.4.

When planning for the environmental management system, CCNY Tech has considered:

- a) The issues referred to in 4.1;
- b) The requirements referred to in 4.2;
- c) The scope of its EMS;

And has determined the risks and opportunities, related to its environmental aspects (see 6.1.2), compliance obligations (see 6.1.3) and other issues and requirements, identified in 4.1 and 4.2, that need to be addressed to:

- give assurance that the EMS can achieve its intended outcomes;
- prevent or reduce undesired effects, including the potential for external environmental conditions to affect CCNY Tech;
- achieve continual improvement.

Within the scope of the EMS, CCNY Tech has determined potential emergency situations, including those that can have an environmental impact.

CCNY Tech maintains documented information of it's

- Risks and opportunities that need to be addressed;
- Processes needed in 6.1.1 to 6.1.4, to the extent necessary to have confidence they are carried out as planned.

6.1.2 Environmental aspects (CC-P03)

Within the defined scope of the EMS, CCNY Tech has determined the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective.

When determining environmental aspects, CCNY Tech takes into account:

- a) Change, including planned or new developments, and new or modified activities, products and services;
- b) Abnormal conditions and reasonably foreseeable emergency situations.

CCNY Tech determines those aspects that have or can have a significant environmental impact, i.e. significant environmental aspects, by using established criteria.

CCNY Tech communicates its significant environmental aspects among the various levels and functions of CCNY Tech, as appropriate.

CCNY Tech maintains documented information of it's:

- Environmental aspects and associated environmental impacts;
- Criteria used to determine its significant environmental aspects;
- Significant environmental aspects.

6.1.3 Compliance obligations (CC-P02)

CCNY Tech has:

- a) Determined and has access to the compliance obligations related to its environmental aspects;
- b) Determined how these compliance obligations apply to CCNY Tech;
- c) Has taken these compliance obligations into account when establishing, implementing, and maintaining and continually improving its EMS.

CCNY Tech maintains documented information of its compliance obligations.

6.1.4 Planning action

CCNY Tech has planned:

- a) To take actions to address its:
 - 1) Significant environmental aspects;
 - 2) Compliance obligations;

-
- 3) Risks and opportunities identified in 6.1.1;
 - b) How to:
 - 1) Integrate and implement the actions into its EMS processes (see 6.2, Clause 7, Clause 8 and 9.1), or other business processes
 - 2) Evaluate the effectiveness of the actions (see 9.1).

When planning these actions, CCNY Tech considers its technological options and its financial, operational and business requirements.

6.2 Environmental objectives and planning to achieve them (CC-P08)

6.2.1 Environmental objectives

CCNY Tech has established environmental objectives at relevant functions and levels, taking into account CCNY Tech's significant environmental aspects and associated compliance obligations, and considering its risks and opportunities.

The environmental objectives are:

- a) Consistent with the environmental policy;
- b) Measurable (if practicable);
- c) Monitored;
- d) Communicated;
- e) Updated as appropriate.

CCNY Tech maintains documented information on the environmental objectives.

6.2.2 Planning actions to achieve environmental objectives

When planning how to achieve its environmental objectives, CCNY Tech has determined:

- a) What will be done;
- b) What resources will be required;
- c) Who will be responsible;
- d) When it will be completed;
- e) How the results will be evaluated, including indicators for monitoring progress toward achievement of its measurable environmental objectives (see 9.1.1).

CCNY Tech considers how actions to achieve its environmental objectives can be integrated into CCNY Tech's business processes.

7 Support

7.1 Resources

CCNY Tech determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the EMS.

7.2 Competence (CC-P10)

CCNY Tech:

- a) Determines the necessary competence of person(s) doing work under its control that affects its environmental performance and its ability to fulfil its compliance obligations;
- b) Ensures that these persons are competent on the basis of appropriate education, training or experience;
- c) Determine training needs associated with its environmental aspects and its EMS;
- d) Where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

CCNY Tech retains appropriate documented information as evidence of competence.

7.3 Awareness (CC-P10)

CCNY Tech ensures that persons doing work under CCNY Tech's control are aware of:

-
- a) The environmental policy;
 - b) The significant environmental aspects and related actual or potential environmental impacts associated with their work;
 - c) Their contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance;
 - d) The implications of not conforming to the EMS requirements, including not fulfilling CCNY Tech's compliance obligations.

7.4 Communication (CC-P05)

7.4.1 General

CCNY Tech has established, implemented and maintains the process (es) needed for internal and external communications relevant to the EMS, including:

- a) On what it will communicate;
- b) When to communicate;
- c) With whom to communicate;
- d) How to communicate.

When establishing its communication process (es), CCNY Tech:

- takes into account its compliance obligations;
- ensures that environmental information communicated is consistent with information generated within the EMS and is reliable.

CCNY Tech responds to relevant communications on its EMS.

CCNY Tech retains documented information as evidence of its communications, as appropriate.

7.4.2 Internal communication

CCNY Tech:

- a) Internally communicates information relevant to the EMS among the various levels and functions of CCNY Tech, including changes to the EMS, as appropriate;
- b) Ensures its communication process (es) enable(s) persons doing work under CCNY Tech's control to contribute to continual improvement.

7.4.3 External communication

CCNY Tech externally communicates information relevant to the EMS, as established by CCNY Tech's communication process (es) and as required by its compliance obligations.

7.5 Documented information (CC-P01)

7.5.1 General

CCNY Tech's EMS includes:

- a) Documented information required by this International Standard;
- b) Documented information determined by CCNY Tech as being necessary for the effectiveness of the EMS.

7.5.2 Creating and updating

When creating and updating documented information, CCNY Tech ensures appropriate:

- a) Identification and description (e.g. a title, date, author, or reference number);
- b) Format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- c) Review and approval for suitability and adequacy.

7.5.3 Control of documented information

Documented information required by the EMS and by this International Standard is controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, CCNY Tech addresses the following activities as applicable:

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- Distribution, access, retrieval and use;
 - Storage and preservation, including preservation of legibility;
 - Control of changes (e.g. version control);
 - Retention and disposition.

Documented information of external origin determined by CCNY Tech to be necessary for the planning and operation of the EMS is identified, as appropriate, and controlled.

8 Operation (CC-P07)

8.1 Operational planning and control

CCNY Tech has established, implemented, controls and maintains the processes needed to meet EMS requirements, and to implement the actions identified in 6.1 and 6.2, by:

- establishing operating criteria for the process (es);
- implementing control of the process (es), in accordance with the operating criteria.

CCNY Tech controls planned changes and reviews the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

CCNY Tech ensures that outsourced processes are controlled or influenced. The type and extent of control or influence to be applied to the process (es) is defined within the EMS.

Consistent with a life cycle perspective, CCNY Tech:

- a) Establishes controls, as appropriate, to ensure that its environmental requirements are addressed in the design and development process for the product or service, considering each life cycle stage;
- b) Determines its environmental requirement(s) for the procurement of products and services, as appropriate;
- c) Communicates its relevant environmental requirement(s) to external providers, including contractors;
- d) Considers the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services.

CCNY Tech maintains documented information to the extent necessary to have confidence that the processes have been carried out as planned.

8.2 Emergency preparedness and response (CC-P06)

CCNY Tech has established, implemented and maintains the process (es) needed to prepare for and respond to potential emergency situations identified in 6.1.1.

CCNY Tech:

- a) Prepares to respond by planning actions to prevent or mitigate adverse environmental impacts from emergency situations;
- b) Responds to actual emergency situations;
- c) Takes action to prevent or mitigate the consequences of emergency situations, appropriate to the magnitude of the emergency and the potential environmental impact;
- d) Periodically tests the planned response actions, where practicable;
- e) Periodically reviews and revises (as necessary) the process (es) and planned response actions, in particular after the occurrence of emergency situations or tests;
- f) Provides relevant information and training related to emergency preparedness and response, as appropriate, to relevant interested parties, including persons working under its control.

CCNY Tech maintains documented information to the extent necessary to have confidence that the process (es) is (are) carried out as planned.

9 Performance evaluation (CC-P08)

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

CCNY Tech monitors, measures, analyses and evaluates its environmental performance. CCNY Tech determines:

- a) What needs to be monitored and measured;
- b) The methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- c) The criteria against which CCNY Tech will evaluate its environmental performance, and appropriate indicators;
- d) When the monitoring and measuring shall be performed;
- e) When the results from monitoring and measurement shall be analysed and evaluated.

CCNY Tech ensures that calibrated or verified monitoring and measurement equipment is used and maintained, as appropriate.

CCNY Tech evaluates its environmental performance and the effectiveness of the EMS.

CCNY Tech communicates relevant environmental performance information both internally and externally, as identified in its communication process (es) and as required by its compliance obligations.

CCNY Tech retains appropriate documented information as evidence of the monitoring, measurement, analysis and evaluation results.

9.1.2 Evaluation of compliance (CC-P09)

CCNY Tech has established, implemented and maintains the process (es) needed to evaluate fulfilment of its compliance obligations.

CCNY Tech:

- a) Determines the frequency that compliance will be evaluated;
- b) Evaluates compliance and take action if needed;
- c) Maintains knowledge and understanding of its compliance status.

CCNY Tech retains documented information as evidence of the compliance evaluation results.

9.2 Internal audit (CC-P09)

9.2.1 General

CCNY Tech conducts internal audits at planned intervals to provide information on whether the EMS:

- a) Conforms to:
 - 1) CCNY Tech's own requirements for its EMS;
 - 2) The requirements of this International Standard;
- b) Is effectively implemented and maintained.

9.2.2 Internal audit programme

CCNY Tech has established, implemented and maintains an internal audit programme, including the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

When establishing the internal audit programme, CCNY Tech takes into consideration the environmental importance of the processes concerned, changes affecting CCNY Tech and the results of previous audits.

CCNY Tech:

- a) Defines the audit criteria and scope for each audit;
- b) Selects auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- c) Ensures that the results of the audits are reported to relevant management.

CCNY Tech retains documented information as evidence of the implementation of the audit programme and the

audit results.

9.3 Management review (CC-P08)

Top management reviews CCNY Tech's EMS, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

The management review includes consideration of:

- a) The status of actions from previous management reviews;
- b) Changes in:
 - 1) External and internal issues that are relevant to the EMS;
 - 2) The needs and expectations of interested parties, including compliance obligations;
 - 3) Its significant environmental aspects;
 - 4) Risks and opportunities;
- c) The extent to which environmental objectives have been achieved;
- d) Information on CCNY Tech's environmental performance, including trends in:
 - 1) Nonconformities and corrective actions;
 - 2) Monitoring and measurement results;
 - 3) Fulfilment of its compliance obligations;
 - 4) audit results;
- e) Adequacy of resources;
- f) Relevant communications from interested parties, including complaints;
- g) Opportunities for continual improvement.

The outputs of the management review include:

- Conclusions on the continuing suitability, adequacy and effectiveness of the EMS;
- Decisions related to continual improvement opportunities;
- Decisions related to any need for changes to the EMS, including resources;
- Actions, if needed, when environmental objectives have not been achieved;
- Opportunities to improve integration of the EMS with other business processes, if needed;
- Any implications for the strategic direction of CCNY Tech.

CCNY Tech retains documented information as evidence of the results of management reviews.

10 Improvement (CC-P04)

10.1 General

CCNY Tech determines opportunities for improvement (see 9.1, 9.2 and 9.3) and implements necessary actions to achieve the intended outcomes of its EMS.

10.2 Nonconformity and corrective action

When a nonconformity occurs, CCNY Tech:

- a) Reacts to the nonconformity and, as applicable:
 - 1) Takes action to control and correct it;
 - 2) Deals with the consequences, including mitigating adverse environmental impacts;
- b) Evaluates the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
 - 1) Reviews the nonconformity;
 - 2) Determines the causes of the nonconformity;
 - 3) Determines if similar nonconformities exist, or could potentially occur;
- c) Implements any action needed;
- d) Reviews the effectiveness of any corrective action taken;
- e) Makes changes to the environmental management system, if necessary.

Corrective actions are appropriate to the significance of the effects of the nonconformities encountered, including the environmental impact(s).

CCNY Tech retains documented information as evidence of:

- The nature of the nonconformities and any subsequent actions taken;
- The results of any corrective action.

10.3 Continual improvement

CCNY Tech continually improves the suitability, adequacy and effectiveness of the EMS to enhance environmental performance.

ISO 45001:2018

4 Context of CCNY Tech

4.1 Understanding CCNY Tech and its context

CCNY Tech has determined external and internal issues that are relevant to its purpose and that affect its ability to achieve the intended outcomes of its OHS management system.

4.2 Understanding the needs and expectations of workers and other interested parties (CC-SOP10)

CCNY Tech has determined:

- a) The interested parties that are relevant to the OHSMS, in addition to workers;
- b) The relevant needs and expectations (i.e. requirements) of workers and interested parties;
- c) Which of these needs and expectations are, or could become, legal and other requirements.

4.3 Determining the scope of the OH&S management system

CCNY Tech determines the boundaries and applicability of the OH&SMS to establish its scope.

When determining the scope, CCNY Tech has:

- a) Considered the external and internal issues referred to in 4.1;
- b) Take into account the interested party and workers requirements referred to in 4.2
- c) Take into account the planned or performed work activities.

All activities, products and services within CCNY Tech's control or influence that can impact CCNY Tech's OH&S performance are included in the OHSMS.

The scope is maintained and available as documented information.

4.4 OH&S management system

CCNY Tech has established, implemented, maintains and continually improves an OH&SMS, including the processes needed and their interactions, in accordance with the requirements of this International Standard.

5 Leadership

5.1 Leadership and commitment

Top management demonstrates leadership and commitment with respect to the OH&SMS by:

- a) Taking overall; responsibility and accountability for the prevention of work-related injury and health, as well as the provision of safe and healthy workplaces and activities;
- b) Ensuring that the OH&S policy and related OH&S objectives are established and are compatible with the strategic direction of CCNY Tech;
- c) Ensuring the integration of the OH&SMS requirements into CCNY Tech's business processes;
- d) Ensuring that the resources needed to establish, implement, maintain and improve the OH&SMS are available;
- e) Communicating the importance of effective OH&S management and of conforming to the OH&SMS requirements;
- f) Ensuring that the OH&SMS achieves its intended outcomes;
- g) Directing and supporting persons to contribute to the effectiveness of the OH&SMS;
- h) Ensuring and promoting continual improvement;

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- i) Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.
 - j) Developing, leading and promoting a culture in CCNY Tech that supports the intended outcomes of the OH&SMS.
 - k) Protecting workers from reprisals when reporting incidents, hazards, risks and opportunities.
 - l) Ensuring CCNY Tech establishes and implements a process for consultation and participation of workers.
 - m) Supporting the establishment and functioning of health and safety committees.

5.2 OH&S policy (CC-P08)

Top management has established, implemented and maintains an OH&S policy that:

- a) Includes a commitment to provide safe and healthy working conditions for the prevention of work-related injury and ill health and is appropriate to the purpose, size and context of CCNY Tech and to the specific nature of its OH&S risks and OH&S opportunities;
- b) Provides a framework for setting OH&S objectives;
- c) Includes a commitment to fulfill legal and other requirements;
- d) Includes a commitment to eliminate hazards and reduce OH&S risks;
- e) Includes a commitment to continual improvement of the OH&SMS;
- f) Includes a commitment to consultation and participation of workers, and, where they exist, workers' representatives.

The OH&S policy is:

- Available as documented information;
- Communicated within CCNY Tech;
- Available to interested parties, as appropriate;
- Relevant and appropriate.

5.3 Organizational roles, responsibilities and authorities

Top management ensures that the responsibilities and authorities for relevant roles within the OH&SMS are assigned and communicated at all levels within CCNY Tech and maintained as documented information. Workers at each level of CCNY Tech assume responsibility for those aspects of the OH&SMS over which they have control.

5.4 Consultation and participation of workers

CCNY Tech has established, implemented and maintains a process for consultation and participation of workers at all applicable levels and functions, and, where they exist, workers' representatives, in the development, planning, implementation, performance evaluation and actions for improvement of the OH&S management system.

The organization shall:

- a) provide mechanisms, time, training and resources necessary for consultation and participation;
- b) provide timely access to clear, understandable and relevant information about the OH&S management system;
- c) determine and remove obstacles or barriers to participation and minimize those that cannot be removed;
- d) emphasize the consultation of non-managerial workers on the following:
 - 1) determining the needs and expectations of interested parties;
 - 2) establishing the OH&S policy;
 - 3) assigning organizational roles, responsibilities and authorities, as applicable);
 - 4) determining how to fulfil legal requirements and other requirements;
 - 5) establishing OH&S objectives and planning to achieve them;
 - 6) determining applicable controls for outsourcing, procurement and contractors;
 - 7) determining what needs to be monitored, measured and evaluated;
 - 8) planning, establishing, implementing and maintaining an audit program;
 - 9) ensuring continual improvement
- e) emphasize the participation of non-managerial workers in the following:
 - 1) determining the mechanisms for their consultation and participation;
 - 2) identifying hazards and assessing risks and opportunities;

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- 3) determining actions to eliminate hazards and reduce OH&S risks;
 - 4) determining competence requirements, training needs, training and evaluating training;
 - 5) determining what needs to be communicated and how this will be done;
 - 6) determining control measures and their effective implementation and use;
 - 7) Investigating incidents and nonconformities and determining corrective actions.

6 Planning

6.1 Actions to address risks and opportunities (CC-P03)

6.1.1 General

When planning for the OH&SMS, CCNY Tech has considered the issues referred to in 4.1 (context), the requirements referred to in 4.2 (interested parties) and the scope of its OH&SMS and determine the risks and opportunities that need to be addressed to:

- a) give assurance that the OH&SMS can achieve its intended outcomes;
- b) prevent or reduce undesired effects
- c) Achieve continual improvement.

When determining the risks and opportunities for the OH&SMS and its intended outcomes that need to be addressed, CCNY Tech takes into account:

- hazards
- OH&S risks and other risks
- OH&S opportunities and other opportunities
- Legal and other requirements

CCNY Tech, in its planning processes, determines and assesses the risks and opportunities that are relevant to the intended outcomes of the OH&SMS associated with changes in CCNY Tech, its processes or the OH&SMS. In the case of planned changes, permanent or temporary, this assessment shall be undertaken before the change is implemented.

CCNY Tech maintains documented information on:

- risks and opportunities
- The processes and actions needed to determine and address its risks and opportunities to the extent necessary to have confidence that they are carried out as planned.

6.1.2 Hazard identification and assessment of risks and opportunities

6.1.2.1 Hazard Identification

CCNY Tech has established, implemented and maintains a process for the ongoing and proactive hazard identification. The process takes into account, but not limited to:

- a) How work is organized, social factors (including workload, work hours, victimization, harassment and bullying) leadership and the culture in CCNY Tech;
- b) routine and non-routine activities and situations, including hazards arising from:
 - 1) infrastructure, equipment, materials, substances and the physical condition of the workplace;
 - 2) product and service design, research, development, testing, production, assembly, construction, service delivery, maintenance and disposal;
 - 3) human factors;
 - 4) how the work is performed;
- c) past relevant incidents, internal or external to CCNY Tech, including emergencies and their causes;
- d) potential emergency situations;
- e) people, including consideration of:
 - 1) those with access to the workplace and their activities, including workers, contractors, visitors and other persons;
 - 2) those in the vicinity of the workplace who can be affected by the activities of the CCNY Tech
 - 3) workers at a location not under the direct control of CCNY Tech
- f) other issues, including consideration of:
 - 1) the design of work areas, processes, installations, machinery/equipment, operating procedures and

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- work organization, including their adaptation to the needs and capabilities of the workers involved;
 - 2) Situations occurring in the vicinity of the workplace caused by work-related activities under the control of CCNY Tech.
 - 3) Situations not controlled by CCNY Tech and occurring in the vicinity of the workplace that can cause injury and ill health to persons in the workplace;
 - g) Actual or proposed changes in CCNY Tech, its operations, processes, activities and the OH&SMS
 - h) Changes in knowledge of, and information about hazards.

6.1.2.2 Assessment of OH&S risks and other risks to the OH&SMS

CCNY Tech has established, implemented and maintains a process to:

- a) Assess OH&S risks from the identified hazards, while taking into account the effectiveness of existing controls;
- b) Determine and assess the other risks related to the establishment, implementation, operation and maintenance of the OH&SMS.

CCNY Tech's methodology and criteria for the assessment of the OH&S risks is defined with respect to CCNY Tech's scope, nature and timing to ensure they are proactive rather than reactive and are used in a systematic way. Documented information shall be maintained and retained on the methodology and criteria.

6.1.2.3 Assessment of OH&S opportunities for the OHSMS

CCNY Tech has established, implemented and maintains a process to assess: for hazard identification and risk assessment is:

- a) OH&S opportunities to enhance OH&S performance, while taking into account planned changes to CCNY Tech, its policies, processes or its activities and:
 - 1) Opportunities to adapt work, work organization and work environment to workers;
 - 2) Opportunities to eliminate hazards and reduce OH&S risks;
- b) Other opportunities for improving the OH&SMS

6.1.3 Determination of legal and other requirements

CCNY Tech has established, implements and maintains a process to:

- a) determine and have access to up-to-date legal requirements and other requirements that are applicable to its hazards, OH&S risks and OH&S management system;
- b) determine how these legal and other requirements apply to CCNY Tech and what needs to be communicated;
- c) take these legal and other requirements into account when establishing, implementing, maintaining and continually improving its OH&S management system;

CCNY Tech maintains and retain documented information on its legal and other requirements and ensures that it is updated to reflect any changes.

6.1.4. Planning Action

CCNY Tech plans:

- a) actions to:
 - 1) address risks and opportunities;
 - 2) address legal and other requirements;
 - 3) prepare for and respond to emergency situations
- b) how to:
 - 1) integrate and implement the actions into its OH&S management system processes or other business processes;
 - 2) Evaluate the effectiveness of these actions.

CCNY Tech takes into account the hierarchy of controls and outputs from the OH&S management system when planning to take action.

When planning its actions, CCNY Tech considers best practices, technological options and financial, operational and business requirements.

6.2 OH&S objectives and planning to achieve them

6.2.1. OH&S objectives

CCNY Tech has established OH&S objectives at relevant functions and levels in order to maintain and continually improve the OH&SMS and OH&S performance.

The OH&S objectives are:

- a) Consistent with the OH&S policy;
- b) Measurable (if practicable) or capable of performance evaluation;
- c) Take into account:
 - 1) Applicable requirements;
 - 2) the results of the assessment of risks and opportunities;
 - 3) the results of consultation with workers and, where they exist, workers' representatives;
- d) be monitored;
- e) be communicated;
- f) Be updated as appropriate.

6.2.2 Planning to achieve OH&S objectives

When planning how to achieve its OH&S objectives, CCNY Tech has determined:

- a) What will be done;
- b) What resources will be required;
- c) Who will be responsible;
- d) When it will be completed;
- e) How the results will be evaluated, including indicators for monitoring;
- f) How the actions to achieve OH&S objectives will be integrated into CCNY Tech's business processes.

CCNY Tech maintains and retains documented information on the OH&S objectives and plans to achieve them.

7 Support

7.1 Resources

CCNY Tech determines and provides the resources needed for the establishment, implementation, maintenance and continual improvement of the OH&SMS.

7.2 Competence (CC-P10)

CCNY Tech:

- a) Determines the necessary competence of workers that affects or can affect its OH&S;
- b) Ensures that workers are competent (including the ability to identify hazards) on the basis of appropriate education, training or experience;
- c) Where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken;
- d) Retains appropriate documented information as evidence of competence.

7.3 Awareness (CC-P10)

Workers shall be aware of:

- a) The OH&S policy and objectives
- b) Their contribution to the effectiveness of the OH&SMS, including the benefits of improved OH&S performance;
- c) The implications and potential consequences of not conforming to the OH&SMS requirements;
- d) incidents and the outcomes of investigations that are relevant to them;
- e) hazards, OH&S risks and actions determined that are relevant to them;
- f) the ability to remove themselves from work situations that they consider present an imminent and serious danger to their life or health, as well as the arrangements for protecting them from undue consequences for doing so.

7.4 Communication (CC-P05)

7.4.1 General

CCNY Tech has established, implemented and maintains the processes needed for internal and external communications relevant to the OH&SMS, including determining:

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- a) On what it will communicate;
 - b) When to communicate;
 - c) With whom to communicate;
 - 1) Internally among the various levels and functions of CCNY Tech;
 - 2) Among contractors and visitors to the workplace;
 - 3) Among other interested parties
 - d) How to communicate.

CCNY Tech takes into account diversity aspects (e.g. gender, language, culture, literacy, disability) when considering its communication needs.

CCNY Tech ensures that the views of external interested parties are considered in establishing its communication processes.

When establishing its communication processes, the organization shall:

- take into account its legal and other requirements;
- ensure that OH&S information to be communicated is consistent with information generated within the OH&S management system, and is reliable.

CCNY Tech responds to relevant communications on its OH&S management system.

CCNY Tech retains documented information as evidence of its communications, as appropriate.

7.4.2 Internal communication

CCNY Tech:

- a) Internally communicates information relevant to the OH&SMS among the various levels and functions of CCNY Tech, including changes to the OH&SMS, as appropriate;
- b) Ensures its communication processes enables workers to contribute to continual improvement.

7.4.3 External communication

CCNY Tech externally communicates information relevant to the OH&SMS, as established by CCNY Tech's communication processes and taking into account its legal and other requirements.

7.5 Documented information (CC-P01)

7.5.1 General

CCNY Tech's OH&SMS includes:

- a) Documented information required by this International Standard;
- b) Documented information determined by CCNY Tech as being necessary for the effectiveness of the OH&SMS.

7.5.2 Creating and updating

When creating and updating documented information, CCNY Tech ensures appropriate:

- a) Identification and description (e.g. a title, date, author, or reference number);
- b) Format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- c) Review and approval for suitability and adequacy.

7.5.3 Control of documented information

Documented information required by the OH&SMS and by this International Standard is controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, CCNY Tech addresses the following activities as applicable:

- Distribution, access, retrieval and use;
- Storage and preservation, including preservation of legibility;
- Control of changes (e.g. version control);

— Retention and disposition.

Documented information of external origin determined by CCNY Tech to be necessary for the planning and operation of the OH&SMS is identified, as appropriate, and controlled.

8 Operation (CC-P07)

8.1 Operational planning and control

8.1.1 General

CCNY Tech has planned, implemented, controls and maintains the processes needed to meet OH&SMS requirements, and to implement the actions identified in clause 6, by:

- a) establishing criteria for the processes;
- b) implementing control of the processes, in accordance with the criteria;
- c) maintaining and retaining documented information to the extent necessary to have confidence that the processes have been carried out as planned;
- d) adapting work to workers

At multi-employer workplaces, the organization shall coordinate the relevant parts of the OH&S management system with the other organizations.

8.1.2 Eliminating hazards and reducing OH&S risks

CCNY Tech has established, implemented and maintains a process for the elimination of hazards and reduction of OH&S risks using the following hierarchy of controls:

- a) eliminate the hazard;
- b) substitute with less hazardous processes, operations, materials or equipment;
- c) use engineering controls and reorganization of work;
- d) use administrative controls, including training;
- e) use adequate personal protective equipment

8.1.3 Management of change

CCNY Tech has established processes for the implementation and control of planned temporary and permanent changes that impact OH&S performance, including:

- a) new products, services and processes, or changes to existing products, services and processes, including:
 - Workplace locations and surroundings;
 - work organization;
 - working conditions;
 - Equipment;
 - work force;
- b) changes to legal and other requirements;
- c) changes in knowledge or information about hazards and OH&S risks;
- d) developments in knowledge and technology

8.1.4 Procurement

8.1.4.1 General

CCNY Tech has established, implemented and maintains a process to control the procurement of products and services in order to ensure their conformity to its OH&SMS.

8.1.4.2 Contractors

CCNY Tech coordinates its procurement processes with its contractors, in order to identify hazards and to assess and control the OH&S risks arising from:

- a) the contractors' activities and operations that impact the organization;
- b) CCNY Tech's activities and operations that impact the contractors' workers;
- c) The contractors' activities and operations that impact other interested parties in the workplace.

CCNY Tech ensures that the requirements of its OH&S management system are met by contractors and their workers. CCNY Tech's procurement process defines and applies occupational health and safety criteria for the

selection of contractors.

8.1.4.3 Outsourcing

CCNY Tech ensures that outsourced functions and processes are controlled.

CCNY Tech ensures that its outsourcing arrangements are consistent with legal and other requirement and with achieving the intended outcomes of the OH&S management system.

The type and degree of control to be applied to these functions and processes shall be defined within the OH&S management system.

8.2 Emergency preparedness and response (CC-P06)

CCNY Tech has established, implemented and maintains the processes needed to prepare for and respond to potential emergency situations identified in 6.1.2.1, including:

- a) establishing a planned response to emergency situations, including the provision of first aid;
- b) providing training for the planned response;
- c) periodically testing and exercising the planned response capability;
- d) evaluating performance and, as necessary, revising the planned response, including after testing and, in particular, after the occurrence of emergency situations;
- e) communicating and providing relevant information to all workers on their duties and responsibilities;
- f) communicating relevant information to contractors, visitors, emergency response services, government authorities and, as appropriate, the local community;
- g) taking into account the needs and capabilities of all relevant interested parties and ensuring their involvement, as appropriate, in the development of the planned response

CCNY Tech maintains and retains documented information on the processes and on the plans for responding to potential emergency situations.

9 Performance evaluation (CC-P08)

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

CCNY Tech has established, implemented and maintains a process for monitoring, measurement, and analysis and performance evaluation.

CCNY Tech determines:

- a) what needs to be monitored and measured, including:
 - 1) the extent to which legal and other requirements are fulfilled;
 - 2) its activities and operations related to identified hazards, risks and opportunities;
 - 3) progress towards achievement of CCNY Tech's OH&S objectives;
 - 4) effectiveness of operational and other controls;
- b) the methods for monitoring, measurement, analysis and performance evaluation, as applicable, to ensure valid results;
- c) the criteria against which CCNY Tech evaluates its OH&S performance;
- d) when the monitoring and measuring shall be performed;
- e) when the results from monitoring and measurement shall be analysed, evaluated and communicated

CCNY Tech evaluates the OH&S performance and determines the effectiveness of the OH&S management system.

CCNY Tech ensures that monitoring and measuring equipment is calibrated or verified as applicable, and is used and maintained as appropriate.

CCNY Tech retains appropriate documented information:

- as evidence of the results of monitoring, measurement, analysis and performance evaluation;
- on the maintenance, calibration or verification of measuring equipment

9.1.2 Evaluation of compliance

CCNY Tech has established, implemented and maintains a process for evaluating compliance with legal and other requirements

CCNY Tech:

- a) determines the frequency and method for the evaluation of compliance;
- b) evaluate compliance and take action if needed
- c) maintain knowledge and understanding of its compliance status with legal and other requirements;
- d) retain documented information of the compliance evaluation results

9.2 Internal audit

9.2.1 General

CCNY Tech conducts internal audits at planned intervals to provide information on whether the OH&S management system:

- a) conforms to:
 - 1) CCNY Tech's own requirements for its OH&S management system, including the OH&S policy and OH&S objectives;
 - 2) the requirements of this document;
- b) is effectively implemented and maintained

9.2.2 Internal audit programme

CCNY Tech:

- a) has planned, established, implemented and maintains an audit programme, including the frequency, methods, responsibilities, consultation, planning requirements and reporting, which takes into consideration the importance of the processes concerned and the results of previous audits;
- b) Defines the audit criteria and scope for each audit;
- c) Selects auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- d) ensure that the results of the audits are reported to relevant managers; ensure that relevant audit results are reported to workers, and, where they exist, workers' representatives, and other relevant interested parties;
- e) take action to address nonconformities and continually improve its OH&S performance;
- f) retain documented information as evidence of the implementation of the audit programme and the audit results

9.3 Management review (CC-P08)

Top management reviews CCNY Tech's OH&SMS, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness.

The management review includes consideration of:

- a) The status of actions from previous management reviews;
- b) Changes in external and internal issues that are relevant to the OH&SMS, including:
 - 1) The needs and expectations of interested parties
 - 2) Legal and other requirements;
 - 3) Risks and opportunities;
- c) The extent to which OH&S policy and the OH&S objectives have been met;
- d) Information on the OH&S performance, including trends in:
 - 1) Incidents, nonconformities, corrective actions and continual improvement;
 - 2) Monitoring and measurement results;
 - 3) Results of evaluation of compliance with legal and other requirements
 - 4) audit results;
 - 5) consultation and participation of workers
 - 6) risks and opportunities;
- e) Adequacy of resources for maintaining an effective OH&SMS
- f) Relevant communications with interested parties;
- g) Opportunities for continual improvement.

The outputs of the management review include decisions related to:

- the continuing suitability, adequacy and effectiveness of the OH&SMS in achieving its intended outcomes;
- continual improvement opportunities;
- any need for changes to the OH&SMS
 - resources needed;
- Actions, if needed;
- Opportunities to improve integration of the OH&SMS with other business processes;
- Any implications for the strategic direction of CCNY Tech.

CCNY Tech's top management communicates the relevant outputs of management review to workers, and, where they exist, workers' representatives.

CCNY Tech retains documented information as evidence of the results of management reviews.

10 Improvement (CC-P04)

10.1 General

CCNY Tech determines opportunities for improvement and implements necessary actions to achieve the intended outcomes of its OH&SMS.

10.2 Incident, nonconformity and corrective action

CCNY Tech has established, implemented and maintains a process, including reporting, investigating and taking action, to determine and manage incidents and nonconformities.

When an incident or nonconformity occurs, CCNY Tech:

- a) Reacts to the incident or nonconformity and, as applicable:
 - 1) Takes action to control and correct it;
 - 2) Deals with the consequences;
- b) Evaluates, with the participation of workers, and the involvement of other relevant interested parties, the need for corrective action to eliminate the root cause of the incident or nonconformity, in order that it does not recur or occur elsewhere, by:
 - 1) investigating the incident or reviewing the nonconformity;
 - 2) determining the cause of the incident or nonconformity;
 - 3) determining if similar incidents have occurred, if nonconformities exist, or if they could potentially occur;
- c) review existing assessments of OH&S risks and other risks, as appropriate;
- d) determine and implement any action needed, including corrective action, in accordance with the hierarchy of controls and the management of change;
- e) assess OH&S risks that relate to new or changed hazards, prior to taking action;
- f) Reviews the effectiveness of any action taken, including corrective action;
- g) Makes changes to the OH&SMS, if necessary.

Corrective actions are appropriate to the effects or potential effects of the incident or nonconformities encountered.

CCNY Tech retains documented information as evidence of:

- The nature of the incidents or nonconformities and any subsequent actions taken;
- The results of any action and corrective action, including their effectiveness.

CCNY Tech communicates this documented information to relevant workers, and, where they exist, workers' representatives, and other relevant interested parties.

10.3 Continual improvement

CCNY Tech continually improves the suitability, adequacy and effectiveness of the OH&SMS by:

- a) enhancing OH&S performance;
- b) promoting a culture that supports an OH&S management system;
- c) promoting the participation of workers in implementing actions for the continual improvement of the OH&S management system;

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- d) communicating the relevant results of continual improvement to workers, and, where they exist, workers' representatives;
 - e) maintaining and retaining documented information as evidence of continual improvement

R2: 2013 STANDARD

Provision 1: Environmental, Health and Safety Management System

CCNY Tech has developed and uses an Environmental, Health & Safety Management System to plan and monitor its environmental, health & safety practices, including the activities it undertakes to conform to each requirement of the R2: 2013 Standard. CCNY Tech's EH&SMS will be certified to R2:2013, ISO 14001:2015 and ISO 45001:2018. (see section 4.0 of this manual).

- (a) CCNY Tech has documented the scope of activities included in the R2: 2013 and EHSMS certifications, including any allowance to the R2: 2013 standard expressly listed in the R2 Code of Practices and authorized in writing by our certification body (CB).
- (b) CCNY Tech will remain certified throughout the duration of our R2 certification to ISO 14001:2015 and ISO 45001:2018 by an accredited CB.
- (c) CCNY Tech has developed, documented, fully implemented and reviews at least annually through internal audits, and updates as needed its written EHSMS, which includes:
 - (1) Written goals and procedures covering and requiring CCNY Tech to systematically manage our onsite and downstream environmental, health & safety and data security matters in a manner consistent with each requirement of the R2: 2013 standard, and
 - (2) a list of the activities necessary to conform to each requirement of R2: 2013, a list of the documentation necessary to show conformity with the requirements and a commitment to take corrective action to address any issues of nonconformance.

Provision 2: Hierarchy of Responsible Management Strategies (CC-F13)

- (a) CCNY Tech has developed a written policy, to which we adhere, stating how we manage used and end-of-life electronics equipment, components, and materials – with respect to both onsite activities and the selection of downstream vendors – that is based on a hierarchy of responsible management strategies:
 - (1) Reuse – CCNY Tech takes all practical steps to direct tested equipment and components to reuse and resale, and directs equipment capable of repair to qualified refurbishers, unless a customer directs otherwise,
 - (2) Materials Recovery – CCNY Tech takes all practical steps to separates as appropriate, through manual dismantling and/or mechanical processing, the materials in equipment and components that are not directed to reuse or refurbishment and directs them to properly equipped materials recovery facilities.
 - (3) Energy Recovery or Disposal – CCNY Tech will not direct material to incineration, energy recovery or land disposal facilities unless no reuse or recycling options are viable.
- (b) This policy incorporates and is consistent with the Focus Material Management Plan (CC-SOP-06) that CCNY Tech has developed in accordance with Provision 5 of the R2: 2013 standard.

Provision 3: Legal Requirements (CC-P02)

(a) In order to maintain full compliance with all applicable environmental, health, and safety and data security legal requirements applicable to our operations, as well as all applicable importing, transit and exporting countries' laws covering shipments of FMs and shipments of untested or non-functioning equipment or components containing FMs, CCNY Tech has developed and implemented a plan covering these matters that is included as a section of its EH&SMS. The plan identifies and documents:

- (1) Facility Compliance - The environmental, health, and safety and data security legal requirements that cover CCNY Tech operations. CCNY Tech keeps the plan up to date, identifies and implements the steps necessary to comply with each requirement, documents the implementation of these steps, periodically evaluates its compliance with the requirements, and takes corrective action to address any issues of non-compliance (Procedure CC-P11).
- (2) Import/Export Compliance – the legality under the laws of the exporting, transit and importing countries - of all international shipments of FMs and untested or non-functioning equipment or components containing FMs that have passed through CCNY Tech's facility or control. Prior to shipment, CCNY Tech identifies the countries that are receiving or transferring such shipments, obtains documentation demonstrating that each such country legally accepts the shipments and demonstrates compliance of each shipment with the applicable export and import laws.
The documentation will be in a language understandable to CCNY Tech and consists of original documentation from the importing or exporting country's Competent Authority or a copy of a law or court ruling that demonstrates the import country legally accepts such imports and the export country legally allows such exports.
- (3) Legal Compliance – CCNY Tech keeps the legal compliance plan up to date, identifies and implements the steps necessary to comply with each requirement and documents the implementation of these steps. CCNY Tech also periodically audits its compliance with legal requirements and takes corrective to address any issues of noncompliance.

Provision 4: On-Site Environment, Health and Safety (CC-P03)

CCNY Tech uses practices and controls at our facility(s) that protect worker and public health & safety and the environment under both normal and (reasonably foreseeable) exceptional circumstances.

- (a) CCNY Tech possesses the expertise, knowledge and technical capability to process each type of equipment, component, and material we accept in a manner that is legal and protective of worker safety, public health, and the environment.
- (b) CCNY Tech adheres to good housekeeping standards, including keeping all work and storage areas clean and orderly. Clean up operations for all areas of the facility are planned, regularly implemented, and monitored.

Workforce and Environmental Protection

- (c) CCNY Tech conducts on an ongoing basis (e.g., as new types of materials are processed or new processes are utilized) a hazards identification and assessment of occupational and environmental risks that exist or could reasonably be expected to develop at the facility. Such risks could result from any sources, including but not limited to emissions of and/or exposure to substances, noise, ergonomic factors, thermal stress, substandard machine guarding, cuts and abrasions, etc. The hazards identification and assessment are captured in writing and incorporated as a component of EH&S/R2: 2013.

(d) CCNY Tech manages the hazards and minimizes the releases we identify using an appropriate combination of strategies, including but not limited to:

(1) Engineering controls such as:

- (A) Substitution (e.g., replacing a toxic solvent with one less toxic),
- (B) Isolation (e.g., automating a process to avoid employee exposure), or
- (C) Ventilation and, if appropriate, capture (e.g., fume hood),
- (D) Dust control, capture, and clean up,
- (E) Emergency shut-off systems, and
- (F) Fire suppression system,

(2) Administrative and work practice controls, including appropriate combinations of:

- (A) Regular, documented health and safety training that covers information from the hazards assessment, as well as safe management handling, spill prevention, engineering controls, equipment safety, and use and care of personal protection equipment; with training for new hires and refresher courses for all employees that is understandable to them, taking into consideration their language and level-of-education,
- (B) Job rotation as feasible given workforce size,
- (C) Safe work practices,
- (D) Medical surveillance,
- (E) Safety and environmental meetings,

(3) Personal protective equipment, including respirators, protective eyewear, cut-resistant gloves, etc., as appropriate for the risks involved in the tasks being performed.

(e) CCNY Tech utilizes monitoring and sampling protocols to provide assurances that the requirements we employ are effectively and continuously managing the risks we have identified. This includes complying with all applicable Federal or State EPS, OSHA requirements and permissible exposure limits (PELs) for sampling and/or monitoring.

(f) CCNY Tech treats our entire workforce, including volunteer workers, temporary workers, consultants and anyone else performing activities under our direction, using the standard of care established pursuant to Provision 4, Section (d) of this provision.

(g) CCNY Tech designates a qualified employee or consultant to coordinate our efforts to promote worker health and safety. This individual is identified to all employees and two-way communication is encouraged between employees and this individual regarding potential hazards and how best to address them.

(h) CCNY Tech has identified probable emergency situations and exceptional circumstances. CCNY Tech has prepared, periodically tests and updates as appropriate and necessary an emergency plan(s) for responding to the identified emergency situations and exceptional circumstances to protect workers, the public and the environment. Occurrence of emergency events, including exceptional releases, accidents, spills, fires, explosions shall be reported to the required authorities.

Provision 5: Focus Materials (CC-SOP06, CC-SOP09)

Development and Adherence to the FM Management Plan

(a) CCNY Tech analyzes, plans, regularly reviews and updates as necessary how the FMs that pass

through our facility or control will be properly managed both on-site and down the Recycling Chain (The FM Management Plan). The FM Management Plan states how CCNY Tech and our downstream vendors conform to the requirements set forth in the rest of Provision 5.

Removal of FMs

- (b) Prior to shredding or materials recovery of equipment or components, FMs (as well as print and toner cartridges) are removed using safe and effective mechanical processing or manual dismantling, with two exceptions:
 - (1) Items containing mercury if
 - (A) they are too small to remove safely at reasonable cost, and
 - (B) workers are protected from the potential risks of handling mercury and
 - (C) the materials recovery occurs in facilities that meet all the applicable regulatory requirements to receive and process mercury, and that uses technology designed to safely and effectively manage equipment or components containing mercury.
 - (2) CRTs, batteries, and circuit boards contained in equipment or components destined for materials recovery need not be removed prior to shredding and/or materials recovery if the shredding and/or materials recovery occurs in facilities that meet all regulatory requirements to receive these FMs and that use technology designed to safely and effectively manage equipment or components containing these FMs.

Processing, Recovery and Treatment of FMs

- (c) CCNY Tech sends removed FMs to processing, recovery, or treatment facilities that meet all applicable regulatory requirements to receive the FMs, and that utilize technology designed to safely and effectively manage, the FMs. This includes:
 - (1) For items containing mercury – mercury retorting or other legal methods, excluding incineration,
 - (2) For circuit boards – removal of batteries and mercury and processing for metals recovery, and
 - (3) For items containing PCBs – technology specifically designed for PCB destruction, occurring in facilities that meet all applicable regulatory requirements and that use technology designed to safely and effectively manage equipment or components containing these FMs.

Prohibition on Energy Recovery, Incineration, and Land Disposal of FMs

- (d) CCNY Tech does not utilize energy recovery, incineration, or land disposal as a management strategy for FMs or equipment and components containing FMs unless applicable law requires the use of a specific technology (e.g., thermal destruction of PCBs). However, if documented extreme and rare circumstances beyond our control disrupt our normal management of an FM, we may consider these technologies to the extent allowed under applicable law until normal management is again possible.

Selection and On-Going Due Diligence of Downstream Vendors for FMs

- (e) For shipments of removed FMs, and shipments of equipment and components containing FMs, CCNY Tech selects both domestic and international downstream vendors that:
 - (1) Conform to CCNY Tech's FM Management Plan, (CC-SOP-06)

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- (2) Adherence to a documented system to manage environmental, health, and safety risks and legal requirements. The management system will include, at minimum, the components of Provision 3, and
 - (3) Comply with all applicable environmental, health & safety legal requirements and maintain a current list of its environmental permits and copies of each, and
 - (4) Conform to Section (e) and Section (1) below or allow CCNY Tech to confirm this information with each of our relevant downstream vendors, thereby establishing that each facility in the Recycling Chain conforms to these subsections, and,
 - (5) Conform to Provision 6 (Reuse), if applicable, and
 - (6) Conform to Provision 7 (Tracking Throughput), and
 - (7) Conform to Provision 10 (Physical Security), ensuring security of the equipment down the recycling chain.

(f) CCNY Tech confirms at least annually and documents through audits or other similarly effective means that each downstream facility to which Section (e) applies continues to conform to the requirements of Section (e) for as long as it receives FMs directly or indirectly from CCNY Tech.

(g) Where CCNY Tech uses an R2: 2013 certified downstream facility, then verification of conformance to 5(e)(1) and 5(e)(6) satisfies the due diligence requirements of 5(e) and 5(f)

Non-Focus Materials Requiring Specific Management

(h) CCNY Tech manages print cartridges in accordance with Provision 2 through print cartridges remanufacturers, recyclers or Original Equipment Manufacturers in facilities that meet all applicable regulatory requirements to receive these print cartridges, including both ink and toner.

Provision 6: Reusable Equipment and Components (CC-SOP07)

- (a) CCNY Tech does not allow equipment or components to be sold or donated for reuse if contrary to commercial agreements.
- (b) CCNY Tech, with respect to equipment and components we ship downstream:
 - (1) Label and sort each shipment in a manner sufficient to track throughput in conformity with Provision 7 of the R2: 2013 Requirements (Tracking Throughput).
 - (2) Ensure that all data is sanitized in conformity with Provision 8, and
 - (3) Handle and package shipments in conformity with Provision 12 (Transport)
- (c) CCNY Tech, prior to shipping used equipment and components that contain FMs, either domestically or internationally, assures and identifies each shipment as either (1) *Tested for Full Functions, R2/Ready for Reuse*, or (2) *Tested for Key Functions, R2/Ready for Resale*, and/or (3) *Evaluated and Non-Functioning, R2/Ready for Repair*.

(1) Tested for Full Functions, R2/Ready for Reuse

CCNY Tech, prior to shipping equipment and components that contain FMs to an end user and that will be identified and shipped as Tested for Full Function/R2 Ready for Reuse will:

- (A) Use effective test methods to confirm that all functions for equipment and components

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- are working properly and ready for reuse, including properly configured with appropriate legally licensed software where required for operation of equipment and components and device specific drivers within the product's hardware, and
 - (B) Implement a written Quality Assurance Plan and policy to verify the accuracy of the test methods, testing equipment (e.g., calibration) and maintain records of effective testing methods, equipment and results, and
 - (C) Implement a written Product Return Plan and policy appropriate for the final destination of the equipment and components, and
 - (D) Ensure that all equipment and components are clean and free of major cosmetic defects such as defined in Section (c)(1)(B), and
 - (E) Ensure that the equipment or components meet requirements of the recipient

(2) Tested for Key Functions, R2/Ready for Resale

CCNY Tech, prior to shipping equipment and components that contain FMs to a recipient vendor and that will be identified and shipped as Tested for Key Functions, R2/Ready for Resale will:

- (A) Use effective test methods to confirm that key functions of the equipment and components are working properly, and
- (B) Implement a written Quality Assurance Plan and policy to verify the accuracy of the test methods, testing equipment (e.g., calibration) and maintain records of effective testing methods, equipment and results, and
- (C) Disclose in writing to buyers any functions that are not working properly and provide a description of the cosmetic defects and missing components for each shipment as applicable, and
- (D) Implement a written Product Return Plan and policy appropriate for the final destination of the equipment and components, and
- (E) Ensure that the equipment or components meet requirements of the recipient vendor or end user.

(3) Evaluated and Non-Functioning, R2/Ready for Repair

CCNY Tech, prior to shipping equipment and components that contain FMs to a recipient vendor or end user and that will be identified and shipped as Evaluated and Non-Functioning, R2/Ready for Repair will:

- (A) Implement a written Quality Assurance Plan and policy to evaluate equipment and components to ensure the condition, functionality and sales price of the unit or component is capable of repair and refurbishment in the destination market, and
- (B) Confirm through an appropriate combination of contractual agreements, detailed materials tracking, recordkeeping and auditing that equipment and components containing FMs are only shipped to:
 - i) Electronics recyclers that are certified to R2: 2013 and verified in accordance with Provision 5(g), or
 - ii) Recipient vendors that can assure that all equipment and components will be resold Ready for Reuse or Ready for Resale, and
 - iii) Recipient vendors that can manage all equipment and components containing FMs and residual FMs resulting from repair and refurbishing operations in conformance with Provision 3 and 5, and
- (C) Ensure that equipment or components meet the specifications of the recipient vendor
- (D) CCNY Tech need not conform to Section (c) for sales of "Collectible Electronics" and their associated components or "Specialty Electronics" that CCNY Tech does not possess the technical capability to test or repair. Such sales are restricted to 1% of total individual units by

quantity sold on a /rolling 12-month average. Sales under this provision include returns at no cost to the buyer.

CCNY Tech conforms to the legal requirements (including export) in Provision 3 for these sales/shipments.

CCNY Tech need not conform to the downstream requirements of Provision 5 for these sales/shipments.

(E) CCNY Tech need not conform to the downstream requirements of Provision 5 and the exporting requirements of Provision 3 for shipments that are Tested for Full Function/R2 Ready for Reuse or Tested for Key Functions, R2/Ready for Resale or are new and in original packaging.

Provision 7: Tracking

- (a) CCNY Tech maintains business records sufficient to demonstrate the material flow of equipment, components and materials that pass through its facility. CCNY Tech maintains for a minimum of three years all commercial contracts, bills of lading, and/or other commercially accepted documentation for all transfers of equipment, components, and materials. CCNY Tech is not required to track non-FMs beyond the first-tier downstream vendor.
- (b) CCNY Tech will provide to each customer that is R2 certified or in the process of R2: 2013 certification upon request and with appropriate intellectual property and commercial controls, as legally appropriate and required by the discloser, the names and locations of all downstream vendors in the recycling chain that handle our FMs.

Provision 8: Data Destruction (CC-SOP02)

- (a) CCNY Tech sanitizes, purges, or destroys data on hard drives and other data storage devices unless otherwise requested in writing by the customer. CCNY Tech adheres to the data sanitization, purging, or destruction requirements described in the NIST Guidelines for Media Sanitation: Special Publication 800-88, which lists categories of devices that need sanitization consideration, or another current generally accepted standard or be certified by a generally accepted certification program.
- (b) CCNY Tech documents our data destruction process (CC-SOP-02) and
- (c) Employees involved in data destruction receive appropriate training on a regular basis and are evaluated for competency in data destruction processing.
- (d) Our data destruction processes are reviewed and validated by an independent party on a periodic basis.
- (e) Quality controls are documented, implemented and monitored internally to ensure effectiveness of data sanitization, purging and destruction techniques.
- (f) Security controls that are appropriate to the most sensitive classification of media accepted at our facility is documented, implemented and maintained. Security controls consider physical security, monitoring, chain-of-custody, and personnel qualifications.
- (g) Adequate records of data destruction are maintained as well as each of our downstream vendors conducting data destruction.
- (h) In the event data destruction is performed by a downstream vendor,
 - (1) CCNY Tech maintains responsibility for data destruction and ensures appropriate security controls and processing techniques continue to conform to Provision 8 through audits or other similarly effective means.
 - (2) Media devices containing media with data must be tracked and secured during transport, storage and processing.
 - (3) Each downstream vendor must adhere to the requirements of Provision 8.

Provision 9: Storage

(a) CCNY Tech stores items and materials that may cause risk to worker health and safety or the environment if inappropriately stored, and equipment and components going to reuse in a legal and appropriate manner that:

- (1) Protects them from reasonably foreseeable adverse atmospheric conditions and floods and, as warranted, includes a catchment system, and
- (2) Is min full legal compliance, and
- (3) Is secure from unauthorized entrance, and
- (4) Is in clearly labeled containers and/or storage areas.

Provision 10: Security (CC-SOP02)

(a) CCNY Tech maintains a security program that controls access to all or parts of the facility in a manner and to a degree appropriate given the type of equipment we handle, sensitivity of the media containing data and the needs of our customers.

(b) CCNY Tech considers and includes necessary controls to secure electronic equipment upon acceptance of said equipment.

Provision 11: Insurance, Closure Plan, and Financial Responsibility (CC-SOP01)

(a) CCNY Tech can demonstrate that we have evaluated the risks arising from our certification activities and that we have adequate insurance or reserves to cover liabilities including environmental pollution and worker health and safety arising from our operations in each of our fields of activities and the geographic areas in which we operate.

(b) CCNY Tech has developed and maintains a current written plan and a sufficient financial instrument that assures proper closure of the facility and assures against abandonment of any electronics recycling products, components, or materials.

(1) Financial instruments are assigned to an independent party or corporate parent with responsibility for closure and the assignment will be consistent with applicable law, and

(2) Financial instruments consider the risks identified in Section (a) and applicable law including reasonably foreseeable costs of processing remaining inventory, sampling for environmental contamination, and site remediation to restore premise to sellable condition, and

(3) Closure plans consider the risks identified in Section (a) including details assigning responsibility for closure, funding information, and plans for inventory processing, environmental sampling and site remediation as needed.

Provision 12: Transport (CC-P08)

(a) CCNY Tech ensures that all equipment, components, and materials to be transported are packaged appropriately in light of the risk they could pose during transportation to public health or the environment and the level of care warranted by their intended use and secured in accordance with Provision 10

(b) CCNY Tech verifies that our transporters, including our own fleet, have all the necessary regulatory authorizations, maintains adequate insurance coverage consistent with the material and method of transportation, and maintains an acceptable vehicle and driver safety record during the previous 3 years.

Provision 13: Recordkeeping (CC-P01)

(a) CCNY Tech has access at the certified facility to documents and records necessary to demonstrate conformity to each requirement of the R2: 2013 standard.

Appendix A

Level II Procedure Number	Document/Procedure Title	Applicable Clause/Provision (ISO 14001:2015/ISO 45001:2018/R2: 2013)
CC-P01	Control of Documented Information and Records Procedure	EMS/OHSMS clause 7.5; R2:2013 Provision #13
CC-P02	Legal, Compliance and Other Requirements and Obligations Procedure	EMS/OHSMS clause 6.1.3, 6.1.4; R2: 2013 Provision #1(B), 3
CC-P03	Identification of Aspects/Hazards/Opportunities Procedure	EMS/OHSMS clause 6.1, 6.1.2, 6.1.4; R2: 2013 Provision #1(3)(D)
CC-P04	Incident Investigation, Nonconformity, Corrective and Preventive Action Procedure	EMS/OHSMS clause 10.1, 10.2, 10.3;
CC-P05	Communication, Participation and Consultation Procedure	EMS/OHSMS clause 5.4, 7.4;
CC-P06	Emergency Preparedness and Response Procedure	EMS clause 8.2; OHSMS: clause 8.6; R2: 2013 Provision #1(3)(E) and 4(h)
CC-P07	Operational Controls Procedure (including SOPs)	EMS/OHSMS clause 8.1; R2: 2013 Provision #1(3)(F) and 4(a)
CC-P08	Monitoring and Measurement Procedure	EMS/OHSMS clause 9.1; R2: 2013 Provision #4(e)
CC-P09	Internal and Compliance Audit Procedure	EMS/OHSMS clause 9.1, 9.2;
CC-P10	Competence, Training and Awareness Procedure	EMS/OHSMS clause 7.2, 7.3; R2:2013 #4(a)

Appendix B
R2: 2013 Cross-Reference Table

Applicable R2: 2013 Provision	Provision Title	Associated Procedure/SOP/Document
Provision 1	Environmental, Health and Safety Management System	EH&S Manual
Provision 2	"Reuse, Recover." Hierarchy of Responsible Management Strategies	CC-F13 EH&S Policy
Provision 3	Legal Requirements	CC-P02 Compliance with Legal and Other Requirements Procedure; CC-F07 Compliance with Legal & Other Requirements Form
Provision 4	On-site Environment, Health and Safety	CC-P03 Identification of Aspects/Hazards Procedure; CC-P06 Emergency Preparedness and Response Procedure; CC-SOP-04 Emergency Action Plan; CC-SOP-03 Hazard Communication; CC-F08 Evaluation of Impacts/Risks Form; CC-F04 Incident and Accident Report Form; CC-F16 Monthly Facility Inspection Checklist
Provision 5	Focus Material	CC-SOP-06 Focus Material Plan; CC-SOP-09 Downstream Vendor Control; CC-F10-12 Downstream Vendor Surveys; CC-F20 Downstream Vendor Checklist
Provision 6	Reusable Equipment and Components	CC-SOP-07 Used and End-of-Life Equipment
Provision 7	Tracking Throughput	EH&S Manual
Provision 8	Data Destruction	CC-SOP-02 Data Sanitization/Destruct SOP; CC-F14 Data Destruction Validation Form
Provision 9	Storage	CC-SOP-08 Universal Waste
Provision 10	Security	CC-SOP-02 Data Sanitization/Destruction
Provision 11	Insurance, Closure Plan and Financial Responsibility	CC-SOP-01 Closure Plan
Provision 12	Transport	CC-P08 Monitoring & Measurement Procedure
Provision 13	Recordkeeping	CC-P01 Control of Documented Information and Records Procedure

Appendix C

CCNY Tech's Interaction of Processes