

# Sanctioned Interpretations for e-Stewards Standard V4.1

## Adopted May 22<sup>nd</sup>, 2024

Additions and changes are in blue

### Sanctioned Interpretation 1:

**Description:** *Amendment to battery load testing requirements*

**Section:** 8.5.1 b) 2) i. E

Approved and published in May 2023

### Sanctioned Interpretation 2:

**Description:** *Clarifying when certification is granted to Processors*

**Section:** 3 – Definitions

#### **3.11 – e-Stewards Processor**

*Original:*

A Processor certified to the e-Stewards Standard. Certifications are only granted once a Processor has passed the requisite audits administered by a Certification Body and has executed a License Agreement with the e-Stewards Administrator.

*Proposed:*

A Processor certified to one of the e-Stewards Standards. **e-Stewards certification is** only granted once a Processor has:

- a) **achieved certification to NAID as required; and**
- b) **successfully completed Stage 1 and Stage 2 e-Stewards and approved EMS audits administered by a Certification Body; and**
- c) executed a License Agreement with the e-Stewards Administrator.

*Reason:*

Makes it explicit that the required additional certifications and both audit stages must be complete in order to achieve certification to the e-Stewards standards

*Note: guidance for this section can be removed if SI is approved*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### Sanctioned Interpretation 3:

**Description:** *Adding category of Electronic Waste implied in definition of HEW*

**Section:** 3 – Definitions

#### **3.13 – Electronic Waste**

*Original:*

New or used Electronic Equipment and/or components that are:

- a) intended for Recycling, energy recovery, or Final Disposal, all or in part; or
- b) intended for Repair/Refurbishment, but not Direct Reuse
- c) Tested and Fully Functional but for which a Direct Reuse Market has not been affirmed according to the requirements

of this standard; or

d) Deemed waste or banned for importation by any country involved in an applicable Transboundary Movement

*Proposed:*

New or used Electronic Equipment and/or components that are:

a) **Untested, or tested and found not to be fully functional.**

b) intended for Recycling, energy recovery, or Final Disposal, all or in part; or

c) intended for Repair/Refurbishment, but not Direct Reuse

d) Tested and Fully Functional but for which a Direct Reuse Market has not been affirmed according to the requirements of this standard; or

e) Deemed waste or banned for importation by any country involved in an applicable Transboundary Movement

**NOTE: Tested Fully Functional Electronic Equipment is not considered Electronic Waste if it has a demonstrated market for Direct Reuse that meets the requirements of this standard.**

*Reason:*

Makes it explicit that Electronic Equipment is considered waste if it is nonfunctional or untested, which has always been implied by the definition of HEW but is frequently overlooked. Clarifies the point where EE is no longer considered waste

*Note: Remove guidance for this section*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

#### **Sanctioned Interpretation 4:**

**Description:** *Adjusting to the Basel Convention's recent changes on plastic wastes and e-wastes and removing the Annex II wastes from being considered as hazardous waste and adding them as PCMs*

**Section:** 3 – Definitions

#### **3.21 – Hazardous Electronic Waste/Hazardous e-Waste (HEW)**

*Original:*

Electronic Waste or residues of Electronic Waste:

a) For which the hazardous characteristics and constituents are not known; and/or

b) That are deemed hazardous waste or banned for importation by any country involved in an applicable Transboundary Movement regardless of the type of destination or condition of equipment at the time of said Transboundary Movement; and/or

c) That consist of, contain, or are contaminated by:

1) Asbestos

2) Batteries

▶ Of any kind containing intentional inputs of lead, mercury, and/or cadmium; and/or

▶ Which are unsorted, or for which the chemistry is unknown; and/or

▶ Containing flammable organic solvents, e.g. lithium-ion batteries; and/or

▶ Containing any other hazardous materials listed in Basel Convention Annex I and possessing an Annex III hazardous characteristic.

3) Cathode ray tubes (CRTs), CRT glass, CRT cullet, CRT fines, Phosphors, coatings, and frit from CRT glass, and any materials contaminated with these;

NOTE: The following are exempt from the definition of HEW:

▶ CRT glass that is non-leaded and is thoroughly cleaned of Phosphors, coatings, frit, and fines, as determined by a toxics characteristic leaching procedure or equivalent test method; and

- ▶ The metal band around the CRT front panel, and/or the shadow mask, unless they are contaminated with Phosphors.
- 4) Polychlorinated biphenyls (PCBs) with levels that exceed actual concentrations >50 mg/kg;
  - 5) Waste materials or components containing radioactive substances emitting radiation, including alpha particles, nucleons, electrons, and gamma rays which are the result of human design or inputs such as some smoke detectors and contaminated devices used in nuclear medicine;
  - 6) Plastics listed on VIII or Annex II of the Basel Convention;
  - 7) Any Electronic Equipment (including circuit boards, lamps, switches, assemblies, housings, plastics, cables, and wires) that contains any of the following substances as intentional inputs, in unknown levels, or in levels exceeding threshold limits indicated below<sup>1</sup> (determined using US EPA's TCLP Method 1311):

*Proposed:*

Electronic Waste or residues of Electronic Waste:

- a) For which the hazardous characteristics and constituents are not known; and/or
- b) That are listed in the Basel Convention's Annex VIII (see current listing A1180, and, effective 2025, A1181 in particular); and/or
- c) Contain or are contaminated with any other hazardous materials listed in Basel Convention Annex I while possessing an Annex III hazardous characteristic; and/or
- d) That are deemed hazardous waste or banned for importation by any country involved in an applicable Transboundary Movement regardless of the destination, [type of processing or disposal operation involved](#), or condition of equipment at the time of said Transboundary Movement; and/or
- e) That consist of, contain, or are contaminated by:
  - 1) Asbestos
  - 2) Batteries
    - ▶ Of any kind containing intentional inputs of lead, mercury, and/or cadmium; and/or
    - ▶ Which are unsorted, or for which the chemistry is unknown; and/or
    - ▶ Containing flammable organic solvents, e.g. lithium-ion batteries; and/or
  - 3) Cathode ray tubes (CRTs), CRT glass, CRT cullet, CRT fines, Phosphors, coatings, and frit from CRT glass, and any materials contaminated with these;

NOTE: The following are exempt from the definition of HEW:

- ▶ CRT glass that is non-leaded and is thoroughly cleaned of Phosphors, coatings, frit, and fines, as determined by a toxics characteristic leaching procedure or equivalent test method; and
  - ▶ The metal band around the CRT front panel, and/or the shadow mask, unless they are contaminated with Phosphors.
- 4) Polychlorinated biphenyls (PCBs) with levels that exceed actual concentrations >50 mg/kg;
  - 5) Waste materials or components containing radioactive substances emitting radiation, including alpha particles, nucleons, electrons, and gamma rays which are the result of human design or inputs such as some smoke detectors and contaminated devices used in nuclear medicine;
  - 6) Any Electronic Equipment (including circuit boards, lamps, switches, assemblies, housings, plastics, cables, and wires) that contains any of the following substances as intentional inputs, in unknown levels, or in levels exceeding threshold limits indicated below<sup>1</sup> (determined using US EPA's TCLP Method 1311):

### **3.35 – Problematic Components or Materials (PCMs)**

*Original:*

- Plastics with halogenated additives or constituents, such as those containing brominated flame retardants other than those listed on Annex II or VIII of the Basel Convention; and/or
- Other components and materials identified by the Organization as problematic.

*Proposed:*

- Plastics with halogenated additives or constituents, such as those containing brominated flame retardants other than those [plastics listed in Annex VIII](#) of the Basel Convention; and/or
- [Plastics listed in Annex II of the Basel Convention \(Y48\)](#); and/or
- [As of January 1, 2025, any Electronic Waste not considered an HEW but listed in Annex II of the Basel Convention \(Y49\), including black mass or other mixtures of modified or partially processed batteries](#); and/or
- Other components and materials identified by the Organization as problematic.

*Reason:*

To avoid confusion when categorizing and planning for the disposition of Y48 and Y49 waste, and to more accurately reflect Annex II wastes

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 5:**

**Description:** *Removing drive and media shredders as Potentially Hazardous Processing Technologies (PHPTs)*

**Section:** *3 – Definitions, 8.3.1 – PHPTs, 8.4.2 – Processing Controls, A.8.3.1 PHPT Testing Requirements, and A.C(c) – Client Applications*

**3.32 – Potentially Hazardous Processing Technologies (PHPTs)**

*Original:*

Technologies, activities, or operations that process Electronic Equipment and have the potential to release hazardous substances, or otherwise harm human health or the environment.

*Proposed:*

Technologies, activities, or operations that process Electronic Equipment and have the potential to release hazardous substances, or otherwise harm human health or the environment.

[Shredders manufactured solely for drive destruction or flash media shredding \(including mobile phones\) do not qualify as PHPTs, as long as they are used properly and for their intended purpose. See section 8.4.2.1 for specific requirements.](#)

**8.3.1(a)(3) – Potentially Hazardous Processing Technologies (PHPTs)**

*Original:*

Noise monitoring is conducted in all areas where workers may be exposed to excessive noise, including the operation of balers and shredders. Noise monitoring technology that measures impact, continuous, and intermittent noise shall be used in order to ensure the risk assessment accurately measures the workers’ ongoing workday exposures;

*Proposed:*

Noise monitoring is conducted in all areas where workers may be exposed to excessive noise, including the operation of balers and [PHPT](#) shredders. Noise monitoring technology that measures impact, continuous, and intermittent noise shall be used in order to ensure the risk assessment accurately measures the workers’ ongoing workday exposures;

**8.4.2 – Processing Controls and Restrictions**

*Original:*

8.4.2.1 - n/a

*Proposed:*

[8.4.2.1 – Non-PHPT Shredding](#)

For the purposes of the e-Stewards standards, shredding of hard drives, solid state drives, or media is not considered a Potentially Hazardous or Problematic Technology if using equipment manufactured for that purpose. (See 3.32.) However, when performing non-PHPT shredding, precautions must be taken to prevent potential emissions, particularly from dust contaminated with heavy metals such as lead and cadmium, or other harm. Such non-PHPT shredding operations must:

- a) Prevent batteries from being shredded (e.g., in mobile phones)
- b) Ensure adequate ventilation
- c) Ensure operator utilizes PPE, if appropriate
- d) Implement measures to prevent injury of operator(s)
- e) Ensure shredded material, including dust, is contained, and only transported to approved IDPs capable of properly managing the material

*NOTE: Renumber all current references to 8.3.1 as 8.3.2.*

**Appendix A.8.3.1 – PHPT Hazard Testing requirements**

*Original:*

If an Organization is performing the following PHPT operations...	...then it shall perform and document Industrial Hygiene tests for the following hazards at a minimum:
1) Breaking, cutting, crushing, shredding, or pulverizing devices with cathode-ray tubes, regardless of technologies or containment controls	▶ Lead, cadmium, barium, chromium, and compounds containing these metals, silica dust
2) Processing, removal, replacement, and/or disposal of mercury-containing components	▶ Mercury and mercury compounds, including in worker breathing zones and in dust or on surface areas below and around the mercury-removal and storage areas
3) Using power machinery to shred, cut, break, pulverize, crack, crush, bale, or chip Hazardous Electronic Equipment or Problematic Components or Materials which may contain these hazardous substances	▶ Lead, beryllium, cadmium, asbestos, mercury, including compounds of these elements*
4) Using a shredder dedicated to hard drives (which contain circuit boards), but not using any other shredding or mechanical size-reduction	▶ Lead, beryllium, cadmium, including compounds of these, as well as fiberglass
5) Baling and/or shredding separated circuit boards	▶ Lead, beryllium, fiberglass
6) Using thermal processes for melting, smelting, or combustion of Electronic Equipment	▶ Inhalable hydrocarbons, the elements beryllium, lead, mercury, and cadmium, and all compounds of these elements*
7) Using acids or solvents for precious metals or plastics Materials Recovery, or cleaning processes	▶ Workplace exposure tests for any acid or solvent that is indicated as an inhalation hazard in the relevant SDSs, as well as related digestive acid gases, nitrous oxide, and other identified chemical hazards

*Proposed:*

If an Organization is performing the following PHPT operations...	...then it shall perform and document Industrial Hygiene tests for the following hazards at a minimum:
1) Breaking, cutting, crushing, shredding, or pulverizing devices with cathode-ray tubes, regardless of technologies or containment controls	▶ Lead, cadmium, barium, chromium, and compounds containing these metals, silica dust
2) Processing, removal, replacement, and/or disposal of mercury-containing components	▶ Mercury and mercury compounds, including in worker breathing zones and in dust or on surface

	areas below and around the mercury-removal and storage areas
3) Using power machinery to shred, cut, break, pulverize, crack, crush, bale, or chip Hazardous Electronic Equipment or Problematic Components or Materials which may contain these hazardous substances (See 4 & 5 below for requirements specific to drives or separated circuit boards)	▶ Lead, beryllium, cadmium, asbestos, mercury, including compounds of these elements*
4) <a href="#">Shredding drives using a dedicated PHPT shredder (see 3.32)</a>	▶ Lead, beryllium, cadmium, including compounds of these, as well as fiberglass
5) Baling and/or shredding separated circuit boards	▶ Lead, beryllium, fiberglass
6) Using thermal processes for melting, smelting, or combustion of Electronic Equipment	▶ Inhalable hydrocarbons, the elements beryllium, lead, mercury, and cadmium, and all compounds of these elements*
7) Using acids or solvents for precious metals or plastics Materials Recovery, or cleaning processes	▶ Workplace exposure tests for any acid or solvent that is indicated as an inhalation hazard in the relevant SDSs, as well as related digestive acid gases, nitrous oxide, and other identified chemical hazards

**Appendix C(c)(8) – Client Applications to CBs for e-Stewards Certification and Scope of Certification**

*Original:*

Potentially Hazardous Processing Technologies (PHPTs) that are employed at each facility (e.g., shredding, crushing, thermal or chemical processes); and

*Proposed:*

Potentially Hazardous Processing Technologies (PHPTs) that are employed at each facility (e.g., compactors, [PHPT shredders](#), retorts, solvent extractors; see 3.32); and

*Reason:*

Shredders manufactured solely for drive/media shredding have been shown to produce little environmental hazard if used properly.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 6:**

**Description:** *Listing additional QSCs*

**Section:** 3 – *Definitions*

**3.39 – Qualified Smaller Components**

*Original:*

The following commonly used low-value Electronic Equipment components or peripherals as long as they do not have data-bearing capabilities and/or contain batteries: mice, chargers, power supply units, voltage/plug adapters, keyboards, fans, ink/toner cartridges, integrated circuits, and printed circuit boards including RAM. It does not include printers or monitors. Other items may qualify for this definition if the e-Stewards Program Administrator first provides written approval.

*Proposed:*

The following commonly used low-value Electronic Equipment components or peripherals as long as they do not have data-bearing capabilities and/or contain batteries:

- Barcode scanners
- Cables, cable splitters
- Chargers, charging blocks, power adapters
- Docking stations
- Fans
- Headsets
- Ink and toner cartridges
- CPUs, GPUs, and other integrated circuits
- Keyboards
- Mice
- Power supply units
- Printed circuit boards (e.g., RAM, graphics cards, network adapters)
- RFID readers/writers
- Switch modules
- Trackpads
- Transceivers
- Voltage and plug adapters

Printers, monitors, RFID tags, and LCD assemblies are not considered QSCs.

Other items may qualify for this definition if the e-Stewards Program Administrator first provides written approval.

*Reason:*

Encourages reuse of low-risk, low-value items

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 7:**

**Description:** Adding definition for Repair Facility

**Section:** 3 – Definitions

**3.42 – Repair Facility**

*Original:*

[n/a]

*Proposed:*

Any Processing Facility that does not operate PHPTs or directly engage in Materials Recovery, but primarily conducts sanitization of customer data, Repair, and Refurbishment of Electronic Equipment for the purpose of resale or donation for Direct Re-use. Such facilities may potentially conduct component harvesting, limited disassembly, collection, and storage of electronic equipment, whether for their primary purpose or for downstream recycling by their approved vendors.

*Reason:*

Reduces confusion when referring to this type of facility, particularly in relation to the new Repair Standard

*NOTE: Renumber subsequent definitions, including those from SI #8*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

## Sanctioned Interpretation 8:

**Description:** Adding definitions for Stewardship Aspects and Stewardship Impacts

**Section:** 3 – Definitions

### **3.47 – Stewardship Aspect [3.48]**

*Original:*

[n/a]

*Proposed:*

An aspect of the Organization's activities, products, or services that can interact with the environment, health and safety, data security, or social responsibility. Aspects may cause Impacts, such as metal compacting causing high noise levels, vehicle operation causing air pollution, or effective data sanitization causing a reduction in breach risk.

### **3.48 – Stewardship Impact [3.49]**

*Original:*

[n/a]

*Proposed:*

Any impact on the environment, health and safety, data security, or social responsibility that may result from the Organization's Aspects, whether positive or negative.

*Reason:*

Reduces confusion when planning actions surrounding Aspects and Impacts (see 6.1.2)

*NOTE: Renumber subsequent definitions*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

## Sanctioned Interpretation 9:

**Description:** Removing the treatment of all MOCs as HEW for transboundary movement

**Section:** 6.1.3 – Compliance Obligations

### **6.1.3.1 International Waste Trade Agreements and National Laws**

*Original:*

- a) The Organization's compliance obligations shall include...
- b) For the purposes of this standard, MOCs shall be treated as if they are hazardous wastes with respect to transboundary movements, and where such transboundary movements of hazardous wastes are generally prohibited by any country involved, all such trade in MOCs will be prohibited.
- c) The organizations shall apply the Basel Convention's Article 4A...

*Proposed:*

- a) The Organization's compliance obligations shall include...
- b) For the purposes of this standard, all HEW is considered hazardous waste as defined in the Basel Convention, and as such shall be managed in accordance with the Convention's requirements. Where countries that have not ratified the Basel Convention are involved in the trade, the prohibition on trade between Parties and non-Parties applies in the absence of a valid Article 11 agreement allowing such trade.
- c) For the purposes of this standard, all PCMs that are included in Basel Convention Annex II (e.g., Y48 and Y49) shall be managed in accordance with the Convention's requirements for Annex II "other" wastes. When countries that have not



ratified the Basel Convention are involved in the trade, the prohibition on trade between Parties and non-Parties applies in the absence of a valid Article 11 agreement allowing such trade.

*Reason:*

Aligns more closely with Basel Convention requirements and simplifies matters by combining Basel obligations with Basel's Article 4a.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 10:**

**Description:** *Requiring provision of evidence to e-Stewards that unannounced onsite performance verification is disallowed by compliance obligations*

**Section:** 6 – Planning

#### **6.1.4 – Performance Verification**

*Original:*

a) Management commitment to cooperate with inspectors in all regards, unless evidence is provided that the inspection is disallowed by the Organization's compliance obligations;

*Proposed:*

a) Management commitment to cooperate with inspectors in all regards, unless evidence that the inspection is disallowed by the Organization's **legal** compliance obligations has been provided to **and acknowledged by the Administrator prior to inspector arrival**;

*Reason:*

Provides assurance that exemption from this requirement is warranted and prevents unnecessary travel to Processor facilities

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 11:**

**Description:** *Clarifying that permission to interview employees is included in the PV plan requirements*

**Section:** 6 – Planning

#### **6.1.4 – Performance Verification**

*Original:*

Permission for the inspectors to access all areas and structures under the scope of the SMS, unless evidence is provided that inspection of certain areas is disallowed by the Organization's compliance obligations;

*Proposed:*

d) Permission for the inspectors **to interview employees and** to access all areas and structures under the scope of the SMS, unless evidence is provided that inspection of certain areas is disallowed by the Organization's **legal** compliance obligations;

*Reason:*

To avoid confusion when planning for performance verification and clarify what is meant by compliance in this instance.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 12:**

**Description:** *Specifying that logistics must be included in closure cost estimates*

**Section:** 6.4.1(b)(5)

*Original:*

5) Closure cost estimates, including a breakdown for:

- ▶ Final Disposition of each type of Electronic Equipment; and
- ▶ Clean-up, including cleaning, remediation, and decontamination activities; and
- ▶ Industrial Hygiene monitoring; and
- ▶ Closure certification, if required by law.

*Proposed:*

5) Closure cost estimates, including a breakdown for:

- ▶ Final Disposition of each type of Electronic Equipment; and
- ▶ Clean-up, including cleaning, remediation, and decontamination activities; and
- ▶ Industrial Hygiene monitoring; and
- ▶ Closure certification, if required by law; and
- ▶ **Logistics costs for management of remaining EE, including all MOCs**

*Reason:*

Requirement is implied by (b)(1) but not explicit in (5)

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 13:**

**Description:** *Stipulating that prospective e-Stewards-certified customers must be provided with full Recycling Chain information for materials under inquiry*

**Section:** 7.4.3 – External communication and 8.8.1 – Downstream Disposition Chart

*Original:*

7.4.3(b) Confidential communication with upstream customers and the e-Stewards Administrator shall include, upon request, the following information:

*Proposed:*

7.4.3(b) **Upon request, all information listed below shall be disclosed to the e-Stewards Administrator. The listed information associated with the specific materials under inquiry shall also be disclosed upon request to current and prospective upstream customers, subject to a signed confidentiality agreement:**

*Original:*

8.8.1(f) e-Stewards Certification status.

*Proposed:*

8.8.1(f) e-Stewards Certification status.

Upon request, all information in the Downstream Disposition Chart shall be disclosed to the e-Stewards Administrator in all cases. Disposition Charts relevant to the materials under inquiry shall also be disclosed to current and prospective upstream customers, subject to a signed confidentiality agreement. (See also 7.4.3(b).)

*Reason:*

e-Stewards-certified Processors cannot approve a Downstream Processor to receive shipments without evidence that the entire Recycling Chain for those materials meets the requirements of the e-Stewards standards.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 14:**

**Description:** *Specifying additional precautions for certain materials*

**Section:** 8.3.1 – *Materials with Heightened Operational Risks*

*Original:*

n/a

*Proposed:*

#### **8.3.1 – Materials with Heightened Operational Risks**

Processors involved in the following operations must create and implement a health and safety plan to mitigate associated risks to workers and the environment:

- a) Extraction, storage, or transport of lithium batteries and black mass (processed lithium batteries);
- b) Storage, transport, or disposition of whole and broken Cathode Ray Tubes;
- c) Manual removal, storage, or transport of mercury phosphor-containing lamps, such as Cold Cathode Fluorescent Lamps (CCFLs);
- d) Storage or transport of toner.

*Reason:*

These operations can be performed without the use of PHPTs, but still pose heightened risks.

*NOTE: Renumber current references to 8.3.1 as 8.3.2.*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 15:**

**Description:** *Allowing consideration of hazard mitigation due to PPE use and hearing conservation planning when determining required noise monitoring intervals*

**Section:** 8.3.1 – *Potentially Hazardous Processing Technologies (PHPTs)*

#### **8.3.1(c)(2)**

*Original:*

The Organization shall monitor applicable noise hazards and those hazards specified in A.8.3.1 in accordance with testing frequency requirements in **Table 1**.

*Proposed:*

The Organization shall monitor applicable noise hazards and those hazards specified in A.8.3.1 in accordance with testing frequency requirements in **Table 1**. Testing for noise hazards may be performed as if they were consistently below 50% of the applicable regulatory limit if all following conditions are met:

- i) noise hazards cannot be reduced further; and
- ii) effective PPE is required and consistently in use; and
- iii) a hearing conservation plan is implemented that meets the relevant requirements of 8.3.1(f) (Medical Surveillance & Biological Monitoring).

*Reason:*

Noise from certain PHPTs may be impossible to fully reduce with engineering or administrative controls, but proper PPE use and hearing conservation planning can mitigate the risk sufficiently.

*NOTE: Renumber all current references to 8.3.1 as 8.3.2.*

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 16:**

**Description:** *Providing more clarity on mechanical Processing restrictions*

**Section:** 8.4.2 – *Processing Controls and Restrictions*

*Original:*

8.4.2(c) – Safely remove, separate, and prevent mechanical processing (de-pollution) of items listed in Table 2, unless using a closed-system Processing technology specifically designed to effectively control any potentially hazardous releases and/or exposure.

*Proposed:*

8.4.2(c) – Safely remove, separate, and store items listed in Table 2. Any additional mechanical Processing (e.g., shredding) of such items is not permitted unless using a closed-system Processing technology specifically designed to effectively control any potentially hazardous releases and/or exposure.

*Original:*

**Table 2: Items Restricted from Mechanical Processing (de-pollution)**

*Proposed:*

**Table 2: Items Restricted from Mechanical Processing**

*Reason:*

Clarifies the intention of 8.4.2(c) and Table 2.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### Sanctioned Interpretation 17:

**Description:** *Bringing Tolling requirements into alignment with 8.9 – Data Security*

**Section:** *8.4.4 – Tolling Operations*

*Original:*

8.4.4(a) – The Organization shall apply the e-Stewards Standard in full to its services while the tolled equipment is in its facility and to any fractions that will remain in the Control of the Organization;

*Proposed:*

8.4.4(a) – The Organization shall apply this Standard in full to its services while the tolled equipment is [under its Control](#) and to any fractions that will remain in the Control of the Organization;

*Reason:*

8.9 allows outsourcing of data sanitization to an IDP, specifically calling that out as being under the Organization’s Control

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### Sanctioned Interpretation 18:

**Description:** *Expanding Table 3 listing (exceptions to full functionality testing requirements) and specifying requirements for approval of additional exceptions*

**Section:** *8.5.1 – Test Electronic Equipment and Ensure Full Functionality & Data Sanitization*

*Original:*

**Table 3: Items exempted from Full Functionality Testing**

Type of Electronic Equipment exempt from Full Functionality requirements	Requirements for this type of Electronic Equipment prior to going for reuse
1) New equipment or components in original unopened packaging	<ul style="list-style-type: none"><li>▶ Determine that the devices are not known or suspected to be defective or subject to recall; and</li><li>▶ Demonstrate the Organization has clear title and authority to sell such products.</li></ul>
2) New components or parts in original packaging which has been opened to remove some but not all the new components	<ul style="list-style-type: none"><li>▶ Determine that the devices are not known or suspected to be defective or subject to recall; and</li><li>▶ Demonstrate the Organization has clear title and authority to sell such products; and</li><li>▶ Confirm that components are new, despite open packaging.</li></ul>
3) Used Unusual Equipment, capped Annually by the lesser of: <ul style="list-style-type: none"><li>▶ 5% of the Organization’s combined total Annual sales &amp; donation value</li><li>▶ 1% of the Organization’s combined total units sold &amp; donated Annually</li></ul>	<ul style="list-style-type: none"><li>▶ Ensure no Customer Data is present, unless shipping directly to a NAID-certified IDP; and</li><li>▶ Perform a thorough physical inspection to verify the equipment is not damaged and appears to be in good working order or is repairable; and</li><li>▶ Ensure the equipment is only exported in conformity with this Standard; and</li><li>▶ Provide notification that each item is:<ul style="list-style-type: none"><li>• Not tested for functionality; and</li><li>• Inspected for physical condition, including disclosure of results; and</li></ul></li></ul>

	<ul style="list-style-type: none"> <li>• Intended for Reuse or Repair/Refurbishment, not for Recycling or disposal; and</li> <li>• Warranted for at least 90% of value.</li> </ul> <p>▶ Retain the following records:</p> <ul style="list-style-type: none"> <li>• Unit quantity and the total value of EE sold under this exemption; and</li> <li>• Number or weight of units and/or parts returned.</li> </ul>
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Proposed:

**Table 3: Full Functionality Testing Exemptions**

Type of Electronic Equipment exempt from Full Functionality requirements	Requirements for this type of Electronic Equipment prior to going for reuse
1) New equipment or components in original unopened packaging	<ul style="list-style-type: none"> <li>▶ Determine that the devices are not known or suspected to be defective or subject to recall; and</li> <li>▶ Demonstrate the Organization has clear title and authority to sell such products.</li> </ul>
2) New components or parts in original packaging which has been opened to remove some but not all the new components	<ul style="list-style-type: none"> <li>▶ Determine that the devices are not known or suspected to be defective or subject to recall; and</li> <li>▶ Demonstrate the Organization has clear title and authority to sell such products; and</li> <li>▶ Confirm that components are new, despite open packaging.</li> </ul>
3) Used Unusual Equipment, capped Annually by the lesser of: <ul style="list-style-type: none"> <li>▶ 5% of the Organization’s combined total Annual sales &amp; donation value</li> <li>▶ 1% of the Organization’s combined total units sold &amp; donated Annually</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ensure no Customer Data is present, unless shipping directly to a NAID-certified IDP; and</li> <li>▶ Perform a thorough physical inspection to verify the equipment is not damaged and appears to be in good working order or is repairable; and</li> <li>▶ Ensure the equipment is only exported in conformity with this Standard; and</li> <li>▶ Provide notification that each item is:               <ul style="list-style-type: none"> <li>• Not tested for functionality; and</li> <li>• Inspected for physical condition, including disclosure of results; and</li> <li>• Intended for Reuse or Repair/Refurbishment, not for Recycling or disposal; and</li> <li>• Warranted for at least 90% of value.</li> </ul> </li> <li>▶ Retain the following records:               <ul style="list-style-type: none"> <li>• Unit quantity and the total value of EE sold under this exemption; and</li> <li>• Number or weight of units and/or parts returned.</li> </ul> </li> </ul>
4) Smartphones (exempted from wireless connectivity testing only)	<ul style="list-style-type: none"> <li>▶ Perform all other Full Functionality testing; and</li> <li>▶ Ensure no Customer Data is present, unless shipping directly to a NAID-certified IDP</li> </ul>

Original:

n/a

Proposed:

8.5.1.2 – Key Function testing exemption

Subject to prior authorization from the e-Stewards Program Administrator, an individual Key Function may be exempted from testing for a particular type of Electronic Equipment. In order to qualify for this exemption:

- a) All other Full Functionality testing and data sanitization shall be performed;
- b) Acceptable justification for the exclusion, including supporting data, shall be provided by the requesting Organization to the e-Stewards Program Administrator; and
- c) Written approval must be received from the Administrator prior to implementation of the testing exemption.

*Reason:*

As technology improves, the reliability of certain functions also improves. In these instances, a Key Function may pass testing consistently enough that such testing is no longer useful and requiring it may negatively impact the equipment's reusability.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 19:**

**Description:** *Allowing limited sample materials to be sent to IDPs for assessing processing capability*

**Section:** 8.8.2.1 – Processing Capability Evaluations

*Original:*

- b) Has appropriate insurance coverage in place.

*Proposed:*

- b) Has appropriate insurance coverage in place.

As part of this evaluation, the Organization may send a limited-quantity sample to the prospective IDP to verify their capability to process or dispose of the relevant MOCs according to requirements. This sampling shall not be presented as use of the prospective IDP for ongoing materials processing and shall be restricted to no more than a single 53-foot trailer unless written approval is received in advance from the e-Stewards Administrator.

*Reason:*

Allows better capability evaluation prior to performing full downstream due diligence, but prevents misrepresentation of the prospective IDP as part of the Organization's Recycling Chain

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 20:**

**Description:** *Allowing somewhat more flexibility for conducting internal audits*

**Section:** 9.2 – Internal Audits

*Original:*

Auditors shall not audit their own work.

*Proposed:*

Auditor objectivity and the impartiality of the internal audit process shall be ensured.

*Reason:*

Brings requirement in line with ISO 14001 and 9001 (ISO 14001: "[S]elect auditors and conduct audits to ensure objectivity and the impartiality of the audit process"). Previously addressed in guidance only, which cannot be audited.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 21:**

**Description:** *Requiring inclusion of current Downstream Disposition Chart and IDP weight totals in Annual database reporting*

**Section:** *A.6.1.4.1 – Annual Reporting to e-Stewards database*

*Original:*

e) A current copy of the site closure plan [Section 6.1.4] for each Processing facility.

*Proposed:*

e) A current copy of the site closure plan [Section 6.4.1] for each Processing facility;

f) A current copy of the downstream disposition chart [Section 8.8.1] for each Processing facility, and total weight shipped to each Immediate Downstream Processor during the reporting period (see 6.1.4.1).

*Reason:*

Provides clarity in materials flow

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

**Sanctioned Interpretation 22:**

**Description:** *Adding chemical recycling as a conditionally allowable method of Materials Recovery*

**Section:** *A.8.6.1 – Materials Recovery and Final Disposition Table*

*Original:*

14) Plastics with Halogenated additives, or other MOC-containing plastics

**CONDITIONALLY ALLOWABLE**

- Processed in an energy recovery facility using a thermal process that is licensed and permitted to process these materials, and which continuously monitors, captures, and restricts emissions from flue gas stacks

*Proposed:*

14) Plastics with Halogenated additives, or Annex II Y48 plastics under the Basel Convention

**CONDITIONALLY ALLOWABLE**

- Processed in an energy recovery facility using a thermal process that is licensed and permitted to process these materials, and which continuously monitors, captures, and restricts emissions from flue gas stacks
- Processed in a chemical recycling facility, including pyrolysis or gasification

*Reason:*



Discourages use of Chemical Recycling, as such technology is either unproven or is highly polluting or energy intensive and thus should not be encouraged. However, it may be necessary as a last resort where all other allowable options are infeasible.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 23:**

**Description:** *Clarifying certification address for mobile processing facilities*

**Section:** *Appendix C(f) – Multi-Site Certification*

*Original:*

An exception to the above rule is made for mobile Processing Facilities that are not dispatched from or associated with a non-mobile Processing Facility. ... Any company utilizing the sampling procedure in the first year for its mobile units shall have its headquarters audited in the first year as well.

*Proposed:*

An exception to the above rule is made for mobile Processing Facilities that are not dispatched from or associated with a non-mobile Processing Facility. ... Any company utilizing the sampling procedure in the first year for its mobile units shall have its headquarters audited in the first year as well. [The mobile processing facility certification address shall be that of the dispatching facility.](#)

*Reason:*

Original language is unclear regarding which address to record when issuing certification

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 24:**

**Description:** *Clarifying verification of conformity with materials management requirements*

**Section:** *Appendix C(g) – e-Stewards Audit Reporting Requirements*

*Original:*

1) Materials of Concern and/or equipment going for reuse are only exported in conformity with the e-Stewards Standard; and

...

5) Materials of Concern (including untested equipment and components destined for Refurbishment) are identified and followed to acceptable Final Disposition; and

6) Material balance accountings, as calculated by the Organization, are verified and compared to a sampling of corresponding downstream Shipping Records; and

7) The additional required certifications are maintained and valid (e.g., ISO 14001, RIOS, NAID AAA); and

8) A valid License Agreement is maintained with e-Stewards Program Administrator.

*Proposed:*

1) Materials of Concern (MOCs) and/or equipment going for reuse are only exported in conformity with the e-Stewards Standard, [including compliance with the Basel Convention requirements for all parties involved in the transboundary movement of HEW and Basel Annex II wastes.](#)

...

- 5) Materials of Concern (including untested equipment and components destined for Refurbishment) are identified and followed to acceptable Final Disposition, [including verification of Environmentally Sound Management on the part of End Processors and Final Disposal facilities](#); and
- 6) [Materials of Concern quantities shipped to IDPs correspond with MOC quantities received by those IDPs](#); and
- 7) Material balance accountings, as calculated by the Organization, [meet the requirements of the e-Stewards Standard](#); and
- 8) The additional required certifications are maintained and valid (e.g., ISO 14001, RIOS, NAID AAA); and
- 9) A valid License Agreement is maintained with the e-Stewards Program Administrator

*Reason:*

These areas have been inconsistently audited in the past.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Sanctioned Interpretation 25:**

**Description:** *Clarifying method of verifying data security*

**Section:** *Appendix C(g) – e-Stewards Audit Reporting Requirements*

*Original:*

- 2) Data security is assured for all customers; and

*Proposed:*

- 2) Data security is assured for all customers [through current NAID AAA certification and appropriate endorsements, as well as conformity with the relevant requirements of this standard, including identified security compliance obligations](#); and

*Reason:*

Original language does not specify what should be reported, unlike the other requirements of this section.

*Outcome:*

Adopted May 22<sup>nd</sup>, 2024

### **Technical Corrections (not subject to public comment/approval): ADOPTED MAY 22<sup>nd</sup>, 2024**

3.5.4(c)&(e) –

*Current:* reuse (including Repair)... storage for eventual reuse and Recycling

*Proposed:* [Reuse](#) (including Repair and [Repurpose](#)) ... storage for eventual [Reuse](#) and Recycling

8.3.1 –

[\[Rename this section \(PHPTs\) and all its subsections as 8.3.2, due to the addition of section for Materials with Heightened Operational Risks\]](#)

8.5.1(b)(2)i.C. –

*Current:* Express & record the difference between the two numbers as a percentage of original capacity; and

*Proposed:* Express & record [the last known full capacity \(as in B above\)](#) as a percentage of the original design capacity ([as in A above](#))

8.7(a) –

*Current:* The Organization shall manage all whole EE that has not been disassembled or shredded as HEW...

*Proposed:* The Organization shall manage all whole [or partially disassembled EE](#) as HEW...

8.9 –

*Current:*

#### **Sanitize all Customer Data**

The Organization shall ensure the effective sanitization of all Customer Data prior to its departure from the Organization's Control, which may include outsourced processing by an IDP, except in the case of Tolling or other circumstances where Control of Electronic Equipment is transferred directly back to the customer. In the case of Tolling, the customer shall be informed of the advantages of sanitization and the options for doing so, prior to any processing activities.

#### **Transition to NAID AAA Certification**

The Data Security provisions for those Organizations that are not yet NAID Certified are found in Appendix D. As of July 1, 2022, all organizations will be required to be NAID AAA Certified to the relevant Sanitization Standards applicable to their operations. IDPs that are conducting data sanitization for the Organization, however, will have until July 1, 2023, to become NAID AAA Certified. Until then, they can continue to provide the required Data Security via Appendix D.

*Proposed:*

##### **8.9.1 Sanitize all Customer Data**

The Organization shall ensure the effective sanitization of all Customer Data prior to its departure from the Organization's Control, which may include outsourced processing by an IDP, except in the case of Tolling or other circumstances where Control of Electronic Equipment is transferred directly back to the customer. In the case of Tolling, the customer shall be informed of the advantages of sanitization and the options for doing so, prior to any processing activities.

##### **8.9.2 IDP NAID AAA Certification**

[IDPs that conduct data sanitization for the Organization must be NAID AAA Certified to the relevant Sanitization Standards applicable to their operations.](#)

A.6.1.4.1 –

*Current:*

A current copy of the site closure plan [Section 6.1.4] for each Processing facility.

*Proposed:*

A current copy of the site closure plan [Section [6.4.1](#)] for each Processing facility.

#### **Appendix C**

*Current:*

Each adopted set of Sanctioned Interpretations will be incorporated into the Standard periodically and a new version of the entire Standard issued accordingly (e.g. V4.1, V4.2, etc.). The revisions will be identified and appended as Appendix E.

*Proposed:*

Each adopted set of Sanctioned Interpretations will be incorporated into the Standard periodically and a new version of the entire Standard issued accordingly (e.g. V4.1, V4.2, etc.). The revisions will be identified and appended [as Appendix D](#). [In the interim, the Sanctioned Interpretations can be found on the e-Stewards website.](#)

#### **Appendix D**

*Current:* Data Security

*Proposed:* [\[Appendix D requirements are no longer applicable; remove or mark as Reserved until such time as a new revision of the standard is released \(see above correction\)\]](#)