



**ELECTRONICS PRODUCT STEWARDSHIP CANADA (EPSC)**

**RECYCLER QUALIFICATION PROGRAM  
FOR END-OF-LIFE ELECTRONICS RECYCLING**

**- OCTOBER 27, 2010 -**

*In association with:*



# RECYCLER QUALIFICATION PROGRAM FOR END-OF-LIFE ELECTRONICS RECYCLING

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The *Recycler Qualification Program* (RQP) for End-of-Life Electronics (EOLE) Recycling defines the minimum requirements for EOLE Processors and Recyclers to be considered for use under the provincial electronics recycling Stewardship Program ('Stewardship Program'). The intent of the RQP is to ensure that EOLE products are managed in an environmentally sound manner that safeguards worker health and safety, and the environment from the point of primary processing to the point of final disposition. The RQP applies to both Processors and Recyclers, referred to jointly as 'Recyclers', and it does not replace or absolve the Recycler from any applicable Federal, Provincial/State/Territorial or other local regulatory requirements. Where any requirement of the RQP or ERS conflicts with a legal requirement, the applicable legal requirement shall apply.

The RQP consists of 8 parts:

**PART A - ELECTRONICS RECYCLING STANDARD (ERS):** Defines the minimum requirements for handling EOLE and materials for the Primary and all Downstream Recyclers until each material reaches the point of final disposition. The ERS includes environmental, occupational health and safety, and material handling requirements that are the auditable criteria that Recycler assessments and approvals are based upon. Recyclers are responsible for maintaining objective evidence of conformance to all requirements of the ERS.

**PART B - IMPLEMENTATION GUIDE:** Supplements the ERS by providing guidance to both Recyclers and ERS Auditors on the application of the elements of the ERS and also provides resources on some of the key environmental, health and safety issues associated with handling and processing EOLE. Not all examples provided in the Implementation Guide will be applicable to all organizations. However, where applicable, the Implementation Guide defines the minimum best practices required. If a Recycler chooses to implement an element other than defined in the Implementation Guide, the Recycler must demonstrate that the alternative measures provide an equivalent level of control.

**PART C - RECYCLER ASSESSMENT AND APPROVAL PROCESS:** Defines the steps for initiating and conducting Recycler assessments under the RQP and also outlines the communication protocols between the Stewardship Program, ERS Auditor, Primary and Downstream Recyclers.

**PART D - ONGOING RECYCLER SURVEILLANCE AND RE-VERIFICATION:** Defines the processes for the ongoing monitoring and surveillance of approved Recyclers to ensure their continuing ability to meet the requirements of the ERS, and includes: the steps to request changes to an approved process; Recycler reporting and spot audit requirements; and the re-verification process to maintain recognition under the RQP following the initial approval phase.

**PART E - AUDIT PROTOCOLS:** Defines the criteria for classifying audit findings, and communicating audit results to the auditee and the Stewardship Program.

**PART F - APPROVED RECYCLER RECOGNITION:** Defines the framework for recognizing Recyclers that are audited and approved for use under the Stewardship Program.

**PART G - TERMS AND DEFINITIONS:** A glossary of acronyms and key terminology.

**PART H - FORMS:**

- H.1 Recycler Application Form
- H.2 Audit Report Form

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*EPSC may from time to time issue Technical Bulletins to provide further clarification to the Recycler Qualification Program, including the application of the Electronics Recycling Standard. Consult the EPSC website for further information.*

## **PART A**

### **ELECTRONICS RECYCLING STANDARD**

#### **1.0 ENVIRONMENTAL, HEALTH AND SAFETY MANAGEMENT SYSTEM (EHSMS)**

Recyclers shall implement and maintain a documented environmental, health and safety (EHS) management system to ensure the identification and adequate control over the environmental, health and safety impacts associated with the organization's operations. The EHSMS shall be updated as required to ensure that it is effective and current to the operations. As part of the EHSMS, Recyclers shall maintain at a minimum:

- 1.1. A written policy reviewed and approved by senior management on an annual basis, detailing the organization's commitment to regulatory compliance, sound EHS management practices and continual improvement in EHS performance.
- 1.2. An EHS training program to provide at a minimum new hire training, annual worker refresher training, and contractor training on the following core EHS components:
  - 1.2.1. Potential EHS risks and controls associated with the position or overall job responsibilities;
  - 1.2.2. Safe material handling and storage practices;
  - 1.2.3. Spill prevention;
  - 1.2.4. Equipment safety;
  - 1.2.5. Proper use and care of personal protective equipment (PPE); and
  - 1.2.6. Emergency response.
- 1.3. A documented process for workers to report, record and track any accidents, injuries, spills or releases, or other incidents that have or could have resulted in injury or unapproved release to the environment.
- 1.4. An EHS committee that monitors and evaluates the effectiveness of the EHS programs, procedures and controls on an ongoing basis and meets at least on a quarterly basis to:
  - 1.4.1. Review any changes in the operations or workplace;
  - 1.4.2. Review results of the risk assessments, EHS sampling, workplace inspections, worker accident/incident reports, Electronics Recycling Standard (ERS) conformance audits, regulatory compliance audits, and any corrective or preventive actions undertaken; and
  - 1.4.3. Make recommendations to management for operational or workplace improvements.
- 1.5. A process to retain all records required by the ERS for a minimum of three years, including training records; worker accident/incident reports; EHSMS annual review minutes; EHS sampling and inspection results; and waste records including the chain of custody of all end-of-life electronics (EOLE) and materials processed.
- 1.6. An annual review of the EHSMS by senior management that provides an assessment of the adequacy and effectiveness of the EHS policy, procedures and other controls. The management review shall consider at a minimum the results of and any corrective or preventive actions undertaken as a result of:

- 1.6.1. The annual risk assessment;
- 1.6.2. EHS sampling;
- 1.6.3. Workplace inspections;
- 1.6.4. Worker accident/incident reports;
- 1.6.5. ERS conformance audits;
- 1.6.6. Regulatory compliance audits; and
- 1.6.7. Recommendations from the EHS committee.

## **2.0 LEGAL AND OTHER REQUIREMENTS**

Recyclers shall identify and comply with all applicable legal and other requirements. At a minimum, Recyclers shall:

- 2.1. Maintain a documented process to identify and track any changes to regulatory and other applicable requirements on an ongoing basis and as a result of any changes in operations or legislation.
- 2.2. Maintain a current summary of applicable legal and other requirements, their relevance to the operations and any associated controls.
- 2.3. Possess and adhere to all necessary permits and/or approvals to operate.
- 2.4. Possess Comprehensive or Commercial General Liability Insurance including coverage for bodily injury, property damage, complete operations and contractual liability with combined single limits of not less than \$2 000 000 per occurrence, \$2 000 000 general aggregate.
- 2.5. Possess adequate workers compensation coverage.
- 2.6. Not use child or prison labour.
- 2.7. Maintain a documented procedure to provide notice to the Stewardship Program of any of the following incidents that have occurred either at the Recycler's facility or a Downstream Recycler within 5 business days of the incident:
  - 2.7.1. Fines or regulatory orders;
  - 2.7.2. Environmental incidents such as fires or spills to the natural environment;
  - 2.7.3. Any incidents requiring notification to a regulatory agency or dispatch of a 'first responder'; or
  - 2.7.4. Data security breaches such as theft or other loss of Program products or data.
- 2.8. Maintain a process to provide notice to the Stewardship Program of any changes in name or ownership of the organization within 5 business days of completion.

## **3.0 EHS RISK ASSESSMENT**

Recyclers shall maintain a documented process to conduct an annual EHS Risk Assessment. The risk assessment shall be planned and conducted in a manner to identify and assess the potential environmental impacts of the operations,

and any workplace hazards under both normal and abnormal conditions. The Risk Assessment shall cover all aspects of the Recycler's operations and include at a minimum:

- 3.1. A process to identify and record physical, chemical and ergonomic hazards.
- 3.2. A process to assess risk of identified hazards considering the potential probability and severity of the hazard.
- 3.3. A process to determine the appropriate level of control necessary to eliminate or effectively control the hazards.
- 3.4. A process to assess the need and frequency for EHS monitoring and sampling, including:
  - 3.4.1. Monitoring and tracking of facility emissions, effluent or wastes;
  - 3.4.2. Facility-wide air sampling and analysis for airborne contaminants such as metal content and dusts;
  - 3.4.3. Surface sampling for contaminants that may not be released under normal operating conditions, or may be released in quantities below detectable air sampling limits, but over time may accumulate to hazardous levels or pose other risk of worker exposure;
  - 3.4.4. Analysis of noise levels in processing areas; and
  - 3.4.5. Medical examinations, including hearing assessments and blood testing, where required by regulations or if sampling reveals elevated exposure levels.
- 3.5. A process to record and track the results of the risk assessment to facilitate the identification of recurring issues or trends.
- 3.6. A process to communicate risks and their associated controls to applicable workers and make the overall results of the risk assessment available to all workers.
- 3.7. A process to conduct subsequent risk assessments, either facility-wide or task specific, as a result of any changes in operations that may affect exposure levels.

#### **4.0 ENVIRONMENTAL CONTROLS**

Considering the results of the risk assessment, sampling, audits, inspections, worker accident/incident reports, fines or regulatory orders, and any other key indicators, Recyclers shall implement and maintain adequate environmental controls to prevent unapproved releases to the environment. At a minimum, Recyclers shall:

- 4.1. Identify and communicate to workers materials that may be processed mechanically, where suitable controls exist to prevent exposure to hazardous substances and other releases to the environment as a result of the processing.
- 4.2. Maintain documented procedures for the manual removal of any materials prior to mechanical processing, such as mercury bearing lamps, ink and toner cartridges, and batteries, where suitable processing controls to prevent exposure to hazardous substances and other releases to the environment do not exist.

- 4.3. Maintain a documented procedure for the safe handling of substances of concern, and any hazardous materials and wastes, including labelling and storage requirements.
- 4.4. Maintain a current inventory with associated storage limits, noting both the maximum acceptable quantity of materials and maximum permitted length of time in storage, for any substances of concern and other hazardous materials or wastes.
- 4.5. Ensure EOLE and materials are processed in accordance with Table 1: *Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition*, where:
  - 4.5.1. Disposition and audit applicability are defined for single stream, non-contaminated materials only;
  - 4.5.2. Processing of mixed or contaminated materials must satisfy criteria for all contained materials;
  - 4.5.3. Incineration without energy recovery is not permitted for any materials;
  - 4.5.4. Export of materials or components is only permitted to downstream vendors located in a country legally permitted to accept the material or component as determined by the authority of the importing country; and
  - 4.5.5. Export of clean material, including to a non-OECD/EU country, as a raw material feedstock in a manufacturing process is permitted and not subject to audit where the material:
    - 4.5.5.1. Has been cleaned in an OECD/EU country (i.e. washed leaded glass cullet);
    - 4.5.5.2. Is fully consumed in the manufacturing process;
    - 4.5.5.3. No additional pre-processing of the material in the non-OECD/EU country is required; and
    - 4.5.5.4. Where applicable, the destination country has provided prior informed consent for the import of the material.



**Table 1: Material Disposition Hierarchy, and Acceptable Processes and Points of Final Disposition**

		Disposition Hierarchy			Acceptable Processes & Points of Final Disposition							
		Material Recovery Required	Energy recovery Permitted	Other disposition Permitted	Manual dismantling and material separation	Mechanical material separation	Extraction/purification/refinement	Smelting to reclaim metal	EFW Incineration (use of material as an energy substitute)	Landfill	Hazardous Waste Landfill	Export to a non-OECD/EU country for processing
Electronic Scrap	EOLE	★			✓	✓	✗	✗	✗	✗	✗	✗
	Components (hard drives, chips, etc)	★			✓	✓	✓	✓	✗	✗	✗	✗
	Wires / Cables	★			✓	✓	✓	✓	✗	✗	✗	✗
	Copper Yokes	★			✓	✓	✓	✓	✗	✗	✗	✗
	Circuit Boards	★			✓	✓	✓	✓	✗	✗	✗	✗
	Metal / plastic laminates	★			✓	✓	✓	✓	✗	✗	✗	✗
Non Hazardous	Metal	★							✗	✗	✗	✗
	Mixed Metals	★							✗	✗	✗	✗
	Metal dusts (bag house)	★							✗	✗	✗	✗
	Non-leaded Glass	★						✗	✗	✗	✗	✗
	Plastic		★	★				✗			✗	✓
	Mixed Plastics		★	★				✗			✗	✓
	Wood		★	★				✗			✗	✗
	Leather, cotton and other fibres		★	★				✗			✗	✗
Insulation (Fibreglass / composite)		★	★				✗			✗	✗	
Substances of Concern	Leaded Glass	★			✓	✓	✓	✓	✗	✗	✗	✗
	Washed leaded glass cullet	★			✗	✓	✓	✓	✗	✗	✗	✗
	Mercury Lamps	★			✗	✓	✓	✗	✗	✗	✗	✗
	Mercury	★			✗	✓	✓	✗	✗	✗	✗	✗
	Batteries	★			✗	✓	✓	✓	✗	✗	✗	✗
	Ink / Toner Cartridges		★		✓	✓	✓	✓	✓	✗	✗	✗
	Ink / Toner		★		✗	✓	✓	✗	✓	✗	✗	✗
	Phosphor Powder			★	✗	✓	✓	✗	✗	✗		✗
	Ethylene Glycol			★	✗	✓	✓	✗	✗	✗		✗

In accordance with the Disposition Hierarchy material recovery is always preferential over other disposition methods for all materials but only required where indicated with an '★'.

Where the use of the material for energy recovery, or other disposition methods is permitted, they are indicated with an '★'.

Process/application not permitted under the ERS	✗
Process/application is permitted under the ERS & subject to on-site audit	✓
Process/application is permitted under the ERS & subject to document review and verification	

## **5.0 HEALTH AND SAFETY CONTROLS**

Considering the results of the risk assessment, sampling, audits, inspections, worker accident/incident reports, fines or regulatory orders, and any other key indicators, Recyclers shall implement and maintain adequate health and safety controls to prevent accidents, injuries or other exposure to hazardous substances. At a minimum, Recyclers shall:

- 5.1. Implement, communicate and enforce policies for worker, contractor and visitor access to and hygiene practices while in and leaving processing areas, including restrictions for eating, drinking and smoking in the workplace to reduce exposure to contaminants.
- 5.2. Implement and maintain a thorough housekeeping program to prevent physical hazards (i.e. slips, trips and falls), and ensure any hazardous materials and contaminants are under suitable control.
- 5.3. Implement a program for the proper use and care of Personal Protective Equipment (PPE) to reduce exposure to hazards such as noise, dusts and flying objects with provisions to:
  - 5.3.1. Provide and enforce the use of necessary PPE ;
  - 5.3.2. Ensure that PPE is appropriate, properly rated, and fit-test to individual needs where required; and
  - 5.3.3. Post notice of areas requiring the use of PPE.
- 5.4. Provide physical guards on hazardous mechanical processes to prevent access to hazardous areas while in operation and an emergency shut-off system for immediate shut down of automated mechanical equipment.
- 5.5. Maintain a lockout/tagout program to ensure that mechanical and electrical equipment remains in a de-energized state during any setup, cleaning, maintenance or other activity that may require the removal of physical guards or other worker access to a hazardous area.
- 5.6. Maintain a mechanical air handling system with appropriate controls for fire suppression to collect airborne particulate from automated shredding, grinding and other mechanical processing equipment that generates gasses, dust or particulates, and provide adequate ventilation to the work area to maintain acceptable air quality levels.
- 5.7. Maintain a process for the safe removal and replacement of filters from processing equipment ventilation systems to prevent exposure to dusts and particulate.

## **6.0 OPERATIONAL CONTROLS**

Recyclers shall maintain effective controls to ensure that EOLE and materials are handled, stored and processed in a secure manner to protect from hazards, release or unauthorized access. At a minimum, Recyclers shall:

- 6.1. Maintain a process to track and report the quantity and chain of custody of program materials received, processed, and shipped, as well as provide certificates of recycling for all material once processed.

- 6.2. Maintain effective procedures and security measures to prevent:
  - 6.2.1. Unauthorized access to the premises and storage areas, and
  - 6.2.2. Unapproved removal of any material or equipment from the facility.
- 6.3. Ensure that all processing is conducted indoors.
- 6.4. Ensure that all Substances of Concern are stored indoors.
- 6.5. Ensure that Electronic Scrap is stored indoors or sufficiently covered and contained to prevent exposure to weather and leaching into the surrounding natural environment.
- 6.6. Ensure that materials are not stored in a location, manner or quantity creating increased susceptibility to fire, spill or other release.
- 6.7. Ensure that materials are stored within established and appropriate storage limits, both in terms of quantity of material and length of time in storage, when accumulating material for shipment. Materials may not be stockpiled or otherwise stored without an approved downstream market for the material.
- 6.8. Maintain adequate fire suppression equipment for the type and size of the facility.
- 6.9. Maintain a contingency plan for handling Stewardship Program materials in the event the Recycler is unable to process materials or ship to an approved Downstream Recycler.
- 6.10. Maintain a documented closure plan that at a minimum identifies the financial requirements upon closure of the facility to remove, transport and process all materials under the ownership of the Recycler in accordance with the requirements of the ERS, and further provides the financial mechanism for ensuring the availability of such funds.

## **7.0 DATA SECURITY**

Recyclers shall maintain adequate controls to ensure that data containing products, processed materials and any information contained on either, are received, stored and processed in a manner to protect from unauthorized access or theft. Where data containing products are handled, Recyclers shall at a minimum:

- 7.1. Maintain a process to identify and communicate to workers, products and components that may contain data, such as computers, hard drives, data cards, PDAs, cellular phones, printers and cameras.
- 7.2. Maintain a documented procedure for the secure receiving, storage and handling of data containing products.
- 7.3. Maintain a documented procedure to destroy all information contained on data storage products through physical means.
- 7.4. Maintain an internal audit program to test and verify the effectiveness of the data destruction process.
- 7.5. Maintain a procedure to investigate and respond to any data security breaches.

## **8.0 SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS**

Recyclers shall maintain programs to schedule and conduct any sampling, audits, inspections or other assessments to test and verify the effectiveness and adequacy of EHS programs and controls, and to demonstrate regulatory compliance and conformance to the ERS. At a minimum the programs shall:

- 8.1. Include the following activities:
  - 8.1.1. Regular workplace inspections;
  - 8.1.2. Emission, effluent, or waste sampling required by regulation, approval to operate or through the risk assessment;
  - 8.1.3. Air contaminant, surface sampling, noise analysis or medical evaluations required by regulation, approval to operate or through the risk assessment;
  - 8.1.4. ERS conformance audits; and
  - 8.1.5. Regulatory compliance audits.
- 8.2. Define the schedule, criteria, process, qualifications and responsibilities for conducting, recording, analysing and tracking the results of the activity.
- 8.3. Define the process for assessing the results of the activity in conformance with the requirements of the EHSMS, regulatory requirements and industry best practices, including where applicable, recognized industrial hygiene standards.

## **9.0 CORRECTIVE ACTION PLANS**

Recyclers shall maintain a process to initiate, record, and track corrective and/or preventive actions for any issues identified through sampling or monitoring; audits, inspections or other assessments; accident/incident reports; fines or regulatory orders; security breaches; complaints; or other programs, that pose a risk of noncompliance or nonconformance. At a minimum, the corrective action process shall define:

- 9.1. Responsibility for developing and implementing the corrective/preventive action plan.
- 9.2. Requirements to review the effectiveness of any corrective and/or preventive actions undertaken following implementation.
- 9.3. The process to communicate to applicable workers the outcome of, and any corrective or preventive actions undertaken as a result of the activity.

## **10.0 EMERGENCY PLANNING AND RESPONSE**

Recyclers shall identify any potential emergency situations associated with the operations, such as spills, fires, or medical emergencies, and maintain documented response procedures. The emergency response procedures shall at a minimum:

- 10.1. Define the responsibilities and actions for responding to the incident.

- 10.2. Provide a list of emergency contacts and telephone numbers.
- 10.3. Provide for a readily available supply and direction to response resources, such as first aid supplies and spill clean-up materials.
- 10.4. Detail the requirements for reporting the incident internally, and where applicable to the Stewardship Program and regulatory authorities.
- 10.5. Be tested on at least an annual basis and records of the test and response maintained.
- 10.6. Be reviewed following any test or actual response to an emergency, and revised as necessary considering the effectiveness of the response in preventing or mitigating any environmental, health or safety hazards.

## **11.0 TRANSPORTATION**

Recyclers shall ensure that all material is transported in a safe and environmentally sound manner, in accordance with regulatory requirements. At a minimum, Recyclers shall:

- 11.1. Maintain a documented procedure to identify when export/import regulations, Transportation of Dangerous Goods, or equivalent regulations, apply to shipments and the specific requirements the applicable materials must be shipped under.
- 11.2. Provide specific training for those workers that handle, offer for transport, or transport dangerous goods or other regulated materials.
- 11.3. Maintain a documented process to evaluate third-party Transporters and assess their ability to handle material in a safe and environmentally sound manner, in accordance with regulatory requirements.
- 11.4. Maintain evidence of the Transporter's relevant regulatory permits/approvals, including where applicable permits/approvals for:
  - 11.4.1. Transporting regulated materials; and
  - 11.4.2. Storing regulated materials where storage or consolidation services may be used.
- 11.5. Maintain evidence of the Transporter's insurance coverage.

## **12.0 DOWNSTREAM RECYCLERS**

Recyclers shall maintain a documented process to evaluate Downstream Recyclers to assess their ability to handle material in a safe and environmentally sound manner, in accordance with the ERS and regulatory requirements. At a minimum, Recyclers shall:

- 12.1. Document the downstream flow and handling of materials from the Recycler's facility to each Point of Final Disposition, including details on how the goods are processed at each point, and the percentage of processed materials sent to each Downstream Recycler.
- 12.2. Maintain evidence of the service provider's relevant regulatory permits/approvals, including where applicable any permits/approvals to:

- 12.2.1. Accept, process and store waste materials;
  - 12.2.2. Generate or dispose of regulated waste; and
  - 12.2.3. Release process emissions or effluent.
- 12.3. Maintain evidence of the Downstream Recycler's insurance coverage.

## **PART B**

### **IMPLEMENTATION GUIDE**

#### **13.0 GUIDANCE FOR EHSMS REQUIREMENTS**

An effective environmental, health and safety management system (EHSMS) is an optimal tool to facilitate Recyclers in safeguarding the environment and worker health & safety while ensuring compliance to legal requirements and conformance to the ERS.

- 13.1. The ERS requires that recyclers both implement and maintain a documented EHSMS:
  - 13.1.1. Implementation requires the Recycler to demonstrate that the EHSMS is operational, i.e. known, understood and practiced by workers, including, regular employees, contract employees and other contractors.
  - 13.1.2. Maintenance requires that the EHSMS contain processes to review, assess and improve the system and procedures to ensure they are current and adequate.
  - 13.1.3. The EHSMS must be adequately documented to demonstrate conformance with all requirements of the ERS and the documents must be updated where required to reflect any changes in the EHSMS or procedures as a result of regular maintenance and improvements, or as a result of any corrective actions.
  - 13.1.4. In addition, records of EHS and operational activities and performance indicators in line with the requirements of the EHSMS must be maintained to demonstrate conformance with the ERS and EHSMS and compliance with regulatory requirements. Records may include but are not limited to: operational permits/approvals; accident/incident reports; meeting minutes (EHS Committee and Senior Management annual EHSMS Reviews); worker training records; material chain of custody; and results of audits and any other workplace sampling, inspections or assessments.
  - 13.1.5. While the ERS does not define a precise framework for the EHSMS the ISO 14 001 structure is considered a generally accepted standard.
  - 13.1.6. Recyclers will be required to demonstrate independent third-party verification/certification of their EHSMS within 18 months of the release of the RQP.
- 13.2. The Recycler may implement a single combined environmental, health and safety policy, or may implement separate policies, either of which requires annual review and approval by a senior officer of the organization. The Recycler should maintain a schedule or process to ensure that annual reviews and approvals are conducted within the necessary timeframe.
- 13.3. The EHS training program should be designed to utilize the results of the annual risk assessment; any sampling, audits or inspections; worker accident/incident reports; fines or regulatory orders; or other

pertinent activities to identify the need for worker and contractor training as well as determine the effectiveness of training already provided.

- 13.4. The EHS training program should:
  - 13.4.1. Define the qualifications and specific training requirements by job function, as well as the frequency for any subsequent refresher training courses for both workers and contractors; and
  - 13.4.2. Ensure necessary training is scheduled and completed prior to undertaking the associated tasks.
- 13.5. Worker training for core EHS components is required at minimum on an annual basis.
- 13.6. Contractor training should be provided commensurate with the level of risk of the tasks undertaken and the frequency of occurrence of the activity.
- 13.7. EHS training may be provided on the job, through paper or electronic means, classroom format, external certification, or any combination of each, and where necessary, should be supplemented with suitable written procedures or work instructions.
- 13.8. Consideration should be given to incorporating processes to assess knowledge retention following any training to ensure that the training provided is effective and adequate. Training assessments may include written tests, task observation or worker performance reviews, and the results of these activities should be used to determine the refresher and upgrade training requirements and schedule.
- 13.9. Records of all completed training and assessments should be appropriately maintained.
- 13.10. The worker accident/incident reporting process should not only require workers to report, but should also provide direction on when and how to report potentially hazardous situations including:
  - 13.10.1. Spills or other releases to the environment;
  - 13.10.2. Accidents, injuries or near misses; and
  - 13.10.3. Unsafe or hazardous conditions.
- 13.11. Records of worker accident/incident reports should be maintained and assessed from time-to-time to identify any trends in incidents or reports, in order to develop new and/or improve existing EHS or process controls.
- 13.12. The number of members on the EHS committee will vary depending on the size of the Recycler however the committee should be comprised of at least one representative from the workers and one representative from management. Additionally, effort should be made to ensure that the committee has representation from the different operational areas of the organization.
- 13.13. The EHS committee should maintain a documented schedule to ensure meetings are held as required and cover the necessary items for review.



- 13.14. A process should be maintained for the EHS committee to report recommendations to management, and for management to report back to the committee on any actions taken as a result of the recommendations.
- 13.15. Records retention procedure should identify which records are to be maintained, the length of storage, the storage location and the individual or position responsible for maintaining the records.
- 13.16. The requirements for an annual policy review and annual EHS core training has been set to establish a minimum frequency for items considered to be critical to effective EHS management. The annual review of the EHSMS should be attended by the majority of the senior management team and include any other individuals with the responsibility and authority to initiate change in the EHSMS or workplace.
- 13.17. The annual review should cover all aspects of the EHSMS and operational performance, and be used to determine if the EHSMS:
- 13.17.1. Has been properly implemented and maintained according to procedures and in-line with the requirements of the ERS;
  - 13.17.2. Has been effective in controlling environmental releases and workplace hazards; and
  - 13.17.3. Continues to be adequate to the size and scope of the operations.
- 13.18. A schedule should be maintained for the annual review to ensure that meetings are held as required and cover the necessary items for review.
- 13.19. Determination should be made and documented in regard to who or which positions are required to participate in the annual review as well as the number of senior management representatives required at the meeting for a quorum. Annual reviews should only be conducted when those required to participate are present and quorum has been reached.
- 13.20. Minutes of the annual review meetings should be maintained.

#### **14.0 GUIDANCE FOR LEGAL AND OTHER REQUIREMENTS**

- 14.1. Regulatory requirements are operational and jurisdictional dependent, therefore each recycler is required to assess the requirements applicable to their operations and in their jurisdiction. Not only must the Recycler identify and comply with all applicable regulatory requirements but they must also maintain valid, objective evidence of compliance with the requirements.
- 14.2. To identify applicable regulatory requirements, Recyclers may employ the services of an individual or organization knowledgeable in Federal, Provincial and local regulatory requirements to conduct a compliance audit/gap analysis. This process should identify the regulations applicable to the Recycler's operations, as well as the specific requirements within the regulations that the Recycler must demonstrate compliance to.
- 14.3. In order to demonstrate compliance to regulatory requirements, the Recycler must maintain evidence that

a comprehensive assessment of regulatory requirements has been conducted, applicable regulatory requirements have been identified and adequate controls are in place to ensure compliance to the requirements. This information will provide the initial basis for the Recycler's summary of legal and other requirements but must be reviewed on an ongoing basis and updated as required to ensure that it is current and adequate.

- 14.4. Recyclers must maintain a process to identify changes in the regulations on an ongoing basis. Various publications and/or services such as internet subscriptions may be used to identify new or modified regulatory requirements and maintain access to the relevant regulations however the Recycler must further maintain a process to assess the impact/applicability of these regulations on the operations. Also, when using such services, the Recycler must ensure that supplemental processes are in place to maintain access to other requirements such as municipal requirements and those of the Stewardship Program.
- 14.5. Where practical, Recyclers shall employ the use of multiple sources of information to validate requirements. Consideration may be given to trade associations or publications, independent legal counsel, and continuing education courses as alternate means to validate regulatory requirements.
- 14.6. Recyclers must also maintain a process to re-evaluate regulatory applicability following changes in operations, such as the implementation of a new process or any modification to an existing processing method or rate that may impact upon compliance. This may be incorporated into a change management or other change approval process, but should be completed prior to the initiation of the new or revised operation.
- 14.7. Where an exemption to a regulation exists, written confirmation of the exemption from the regulating authority or other suitable evidence must be maintained.
- 14.8. Typical regulatory requirements to consider include:
  - 14.8.1. Business/operating permits
  - 14.8.2. Regulatory permits or certification for accepting, transferring, transporting, processing, or disposing of EOLE and/or materials;
  - 14.8.3. Processing permits or certification for process air exhausts, water discharges or waste generation;
  - 14.8.4. Hazardous waste or other controlled substance management regulations (storage, handling, and shipping);
  - 14.8.5. Transportation regulations;
  - 14.8.6. Privacy and protection of personal information; and
  - 14.8.7. Occupational health and safety regulations.
- 14.9. Comprehensive or general liability insurance coverage in the amount of \$2 000 000 is considered the minimum acceptable coverage to suitably mitigate the potential risks associated with the processing of

EOLE and materials, however, consideration should also be given to maintaining environmental pollution liability coverage in the amount of \$5 000 000. Recyclers should assess and determine any additional coverage necessary commensurate with the size and scope of their particular operations. In doing so, Recyclers should not only assess coverage limits, but should also consider the need for supplementary coverage such as first party and third party pollution coverage, professional liability coverage for data security breaches, and crime coverage for theft of contents.

14.10. Compliance can be demonstrated through various means but may include records of:

- 14.10.1. Current permits or approvals;
- 14.10.2. Tests, inspections or sampling;
- 14.10.3. Transfer of ownership of materials;
- 14.10.4. Material shipping or other movement documents;
- 14.10.5. Regulatory compliance audits; or
- 14.10.6. Submitted compliance reports.

14.11. Adequate worker's compensation coverage is dependent on the size of the work force and the type of operations undertaken. Coverage must be sufficient to insure all workers in the event of need. Coverage may be obtained through provincial program or through a private insurance policy, and evidence of coverage may be in the form of an insurance certificate from the Recycler's insurance company or broker, or confirmation of participation in the provincial workers' compensation plan, or equivalent.

14.12. The use of child and/or prison labour is prohibited for any functions associated with the processing, transportation or handling of EOLE. The minimum age requirement for workers should be either the local legal minimum age or 14 years old, whichever is higher.

14.13. The documented procedure to notify the Stewardship Program within 5 days of receiving any fines, orders or other reportable incidents should detail:

- 14.13.1. How the fine/order/incident will be identified or flagged internally to the individual(s) responsible for notifying the Stewardship Program;
- 14.13.2. The actual method to notify the Stewardship Program (email, letter, etc.);
- 14.13.3. Who the notification will be issued to on behalf of the Stewardship Program; and
- 14.13.4. The timeline and individual/position responsible for issuing the notification, to ensure that it is completed within the 5 day timeframe.

14.14. Notification of fines, orders or other reportable incidents does not require the disclosure of confidential or other business information that may be subject to an investigation or other review. However, following such an incident, the Stewardship Program may request a summary of any internal investigation of the situation, any actions taken to mitigate any health, safety or environmental impacts as a result of the incident as well as any preventive actions to prevent any further occurrence of the incident.

- 14.15. Recyclers must communicate any changes in their company name, ownership or other contact details to the Stewardship Program within 5 business days of the change.

## **15.0 GUIDANCE FOR EHS RISK ASSESSMENT REQUIREMENTS**

- 15.1. A risk assessment is a systematic process to identify hazards and evaluate the potential risks associated with them.
- 15.2. The risk assessment should consider physical, chemical and ergonomic hazards under both normal and abnormal conditions. Examples of hazards associated with the processing of EOLE include:
- 15.2.1. Physical – equipment noise and vibration; sharp or rough surfaces of materials and tools
  - 15.2.2. Chemical – gas, dust and fume from shredding, grinding or heating; hazardous substances such as lead and mercury
  - 15.2.3. Ergonomic – awkward work posture; heavy lifting; repetitive tasks; excessive force
- 15.3. When evaluating risks, consideration should be given to the potential probability and severity of the hazard.
- 15.3.1. Probability: The likelihood of occurring.
  - 15.3.2. Severity: The scale or impact of any occurrence.
- 15.4. The documented results of any risk assessments should be used to determine the appropriate level of control necessary to eliminate or effectively control the hazard. The adequacy of a hazard control is determined by its ability to effectively protect the environment and worker health and safety, using the highest rank of control feasible. Where required, multiple or redundant controls may be necessary to properly control a hazard. Hazard controls are categorized as follows, in descending order of preference;
- 15.4.1. Primary control: engineering controls – eliminating a hazard at the source;
  - 15.4.2. Secondary control: administrative controls – implementing safe work procedures and other training;
  - 15.4.3. Tertiary control: personal protective equipment – controls at the worker.
- 15.5. Monitoring and evaluating the effectiveness of any implemented controls may be part of the Recycler's corrective action process, but should also be a planned component of regular workplace audits, inspections and other assessments.
- 15.6. The risk assessment shall be conducted at a minimum on an annual basis and should cover all aspects of the Recycler's operations. Regardless of the planned schedule of the risk assessments, an assessment should take place as a result of any changes in the operations (i.e. implementation of a new process) or regulatory requirements (i.e. new waste handling or noise level requirements) that have not been previously assessed.
- 15.7. As a result of the risk assessment the Recycler should make a determination of the processes that it is able

to undertake in a safe and responsible manner, and as a result, identify the acceptable products and waste materials that the organization is capable of handling.

- 15.8. The individual(s) conducting the risk assessment and evaluating identified risks must be appropriately trained in and knowledgeable of hazard identification and evaluation practices.
- 15.9. The need for sampling, monitoring and other workplace or worker evaluations may be defined by regulation, be a condition of a regulatory permit or approval, or may be subject to operational conditions (i.e. where a risk of exposure is identified through the risk assessment), however, all Recyclers should consider establishing sampling, monitoring and worker evaluation programs for certain air contaminants, such as lead, and generally for dusts or fumes; noise; and worker blood samples for levels of lead and other heavy metals.
- 15.10. When assessing the need for sampling or monitoring, special consideration should be given to low level or infrequent releases, such as those from the breakage of a mercury containing CCFL during manual removal, that on their own may not be detectable through conventional sampling methods, however, overtime could pose a risk as a result of cumulative quantities.
- 15.11. Further, as airborne contaminants can pose hazards through other routes of entry, such as contact with eyes and absorption through skin, the recycler should consider and evaluate all potential routes of entry and associated hazards from airborne particles, and not just inhalable dusts.
- 15.12. Where applicable, Recyclers should make annual medical exams available to employees if interested, at the Recycler's cost.
- 15.13. The risk assessment process should consider sampling, monitoring and evaluation requirements in the context of operational conditions and exposure limits to determine the risk of exposure and the frequency for ongoing sampling, monitoring or evaluations activities required.
- 15.14. The results of any sampling, monitoring and evaluations should be compared not only against regulatory limits but also recognized industry standards, and used to determine the appropriate types and levels of controls necessary to eliminate or effectively control any hazards.
- 15.15. The results of risk assessments should be recorded and promptly communicated to workers.

## **16.0 GUIDANCE FOR ENVIRONMENTAL CONTROL REQUIREMENTS**

- 16.1. Suitable controls should be implemented and maintained to ensure that EOLE and materials are appropriately processed and handled in accordance with regulatory requirements and a manner to prevent unapproved releases to the environment including air emissions, effluent or wastes. At a minimum, worker should be trained on and provided with written operational procedures or work instructions for any task or operation where their absence could result in improper operation leading to a breach in a regulatory requirement or environmental impairment.

- 16.2. Recyclers should be knowledgeable of the EOLE equipment stream and any substances of concern that the products may contain as well as the special handling or processing requirements these items may have. For general information on substances of concern in EOLE and materials, Recycler's may consult the following:
- 16.2.1. *Toxic and Hazardous Materials in Electronics* by Five Winds International, LP; and
  - 16.2.2. *Technical Guidance For The Environmentally Sound Management of Specific Waste Streams: Used and Scrap Personal Computers* (ENV/EPOC/WGWPR(2001)3/FINAL) by the OECD.
- 16.3. Recyclers should conduct and document a review of their processing operations particularly in respect to the substances of concern contained within the EOLE and determine those items that can be handled and processed in a safe and environmentally sound manner that does not result in an uncontrolled release of a hazardous substance.
- 16.3.1. The term 'hazardous' is often used to indicate 'regulated' materials, however, as regulations vary greatly between jurisdictions, the ERS defines hazardous material broadly as "any material that poses a risk to the worker or the environment if not maintained under suitable control." This means that materials do not need to be regulated to be considered hazardous, thus requiring all recyclers to suitably control any material that poses a threat to the environment or workers.
- 16.4. Releases may occur frequently and through the actual processing methods used, such as dusts generated as a result of shredding or grinding of material. As a result, suitable controls such as mechanical ventilation and filtration systems must be implemented to manage those releases.
- 16.5. Alternately, releases may occur less frequently and as a result of unintended incidents such as breakage of a mercury containing CCFL during manual removal. Control measures should also be implemented to manage these incidental releases not only following the release but also to prevent any hazards associated with the cumulative release of the hazardous substance.
- 16.6. Items may only be mechanically processed where proper controls have been implemented to prevent any uncontrolled release of a hazardous substance.
- 16.7. Where suitable controls to effectively manage any potential releases from mechanical processing have not been implemented, documented procedures for the manual dismantling of the item and removal of the hazardous substances must be in place. Procedures should outline the hazards associated with the item and the proper handling procedures to prevent any unintended release through handling, breakage, etc.
- 16.8. All substances of concern, and hazardous materials or wastes should be suitably identified, properly handled and stored in accordance with documented procedures that define the proper storage location, condition and storage limits for the materials. Recyclers should ensure that storage areas are secure and

equipped with impermeable flooring, and regular inspections of the condition of the storage area are undertaken.

- 16.9. Inventories of substances of concern, and hazardous materials or wastes should be tracked to ensure conformance with the documented procedures and regulatory storage limits. Inventories should note the type, quantity and location of material, and should be accessible in the event of emergency, particularly where electronic files are used.
- 16.10. Substances of concern, and hazardous materials or wastes stored longer than 90 days, should have appropriate authorization from the local regulatory authority where required and a plan for their eventual disposition including estimated timelines in storage.
- 16.11. The *Disposition Hierarchy* (Table 1) defines when material recovery from EOLE and materials is required and when other disposition methods are permitted. Recyclers are required to either process materials to meet the defined requirements of the hierarchy or use the services of a suitable approved Downstream Recycler to meet the requirements.
- 16.12. While material recovery from all materials is preferable, the Disposition Hierarchy permits other disposition methods to allow for the proper treatment of problematic materials that may not have suitable, established material to material end use markets. For instance, plastics containing brominated flame retardants are not required for material recovery as their use in the production of food containers or toy applications would pose alternate hazards from the reuse of the material in such applications. As a result, landfill or energy recovery from plastics is considered acceptable. Where material recovery is occurring, Recyclers should ensure that suitable processes are in place to communicate to any downstream recycler or reuse market, the source of, and where known, the types of plastic being supplied and that they may contain brominated flame retardants.
- 16.13. Table 1 also defines the *Acceptable Processes and Points of Final Disposition* for EOLE and materials, and classifies the processes/applications in three categories; those that are:
  - 16.13.1. Not permitted under the ERS;
  - 16.13.2. Permitted under the ERS and subject to an on-site audit; or
  - 16.13.3. Permitted under the ERS and subject to a documentation review and verification.
- 16.14. Priority is given to domestic processing of material to minimize the transboundary movement of materials and wastes wherever possible in order to limit other environmental impacts associated with the movement of the materials. Certain export of materials may be permitted by the stewardship program on a case-by-case basis and only where the recycler can demonstrate that adequate processing facilities exist for the management of the material in a safe and environmentally sound manner. Any process or application not specifically outlined in the *Acceptable Processes and Points of Final Disposition* table is subject to review and approval by the Stewardship Program.

16.15. Provision of a clean material for use as a feedstock in a manufacturing process is permitted, including to non-OECD/EU member countries, and not subject to an on-site audit, providing that the material has been separated and cleaned in an OECD/EU country, is completely used in the manufacturing process, and no additional pre-processing of the material is required. Where applicable, the destination country should provide prior informed consent for the import of the material prior to shipment. Conditions qualifying material as feedstock will be assessed during the Recycler's on-site audit and are also subject to interim review or assessment as per the Ongoing Surveillance process.

16.16. Example applications of Table 1:

- 16.16.1. The *Disposition Hierarchy* indicates that 'material recovery' is required for EOLE, therefore preventing EOLE from being land filled, incinerated or otherwise disposed of in an unapproved manner; and the *Acceptable Processes & Points of Final Disposition* indicate that both manual and mechanical material separation of EOLE into sub material groups is permitted, with both processes being subject to an on-site audit. The resultant material streams from the manual and/or mechanical separation of EOLE (i.e. metals, plastics, batteries and lamps) would then be individually assessed to determine the disposition requirements and acceptable processes for each stream.
- 16.16.2. The *Disposition Hierarchy* indicates that Metals separated from EOLE must go through a material recovery process. Metal and mixed metal streams may be manually or mechanically separated, and may go through processes for extraction, purification or refinement, or may be smelted to reclaim metal. Processing of clean single stream metals or mixed metal streams are not subject to an on-site audit but would require a document review and verification.
- 16.16.3. Material recovery from mercury lamps is required, however a mechanical process is required to dismantle and separate the lamp materials, as manual separation of mercury lamps is not permitted. This does not imply that mercury bulbs may not be manually removed from EOLE but rather that the bulbs themselves may not be manually dismantled for material separation. Therefore mercury lamps must be mechanically processed and go through an extraction/purification or refinement process to reclaim materials such as metal, glass, mercury and phosphor powder.
- 16.16.4. Material recovery from batteries is required, however manual dismantling and material separation of batteries is not permitted. This does not imply that batteries may not be manually removed from EOLE but rather that the batteries themselves may not be manually dismantled. Therefore removed batteries must be mechanically processed and go through an extraction, purification or refinement process, or be smelted to reclaim metal, of which, all processes are subject to an on-site audit.



## 17.0 GUIDANCE FOR HEALTH AND SAFETY CONTROL REQUIREMENTS

- 17.1. Suitable controls should be implemented and maintained to prevent accidents, injuries and exposure to other hazards such as noise, vibration, or hazardous substances.
- 17.2. Consideration should be given to various possible routes of exposure to hazardous substances including inhalation, absorption and ingestion.
- 17.3. At a minimum, written operational procedures or work instructions should be provided for any task or operation where their absence could result in improper operation leading to a breach in a regulatory requirement, accident or injury.
- 17.4. Where possible, it is optimal to eliminate a hazard altogether at the source. This can be accomplished through various process design changes or by substituting hazardous materials or processes with less hazardous alternatives.
- 17.5. Where it is not possible to eliminate a hazard, key elements of the health and safety control program should include any of the following elements in descending order of preference, or a combination of elements as may be necessary to effectively control the hazard:
  - 17.5.1. Engineering controls;
  - 17.5.2. Administrative controls;
  - 17.5.3. Personal protective equipment (PPE); and
  - 17.5.4. Personal Hygiene.

### 17.6. ENGINEERING CONTROLS

If eliminating a hazard is not practical or possible, consideration should be given to isolating the hazard from workers, or removing the hazard from the work area. One of the most effective means to isolate physical hazards is through the use of physical barriers, such as walls, mechanical guards, or acoustic panels, while airborne contamination may be removed from the work area by means of mechanical ventilation.

- 17.6.1. All mechanical controls should be suitably rated or tested to ensure adequate protection from the hazard, for instance:
  - 17.6.1.1. Physical barriers must be designed to withstand any process related forces as well as external forces such as those applied by a worker.
  - 17.6.1.2. Ventilation systems must be equipped to remove the intended contaminants and must maintain adequate flow rates.
- 17.6.2. Wherever mechanical controls are used, suitable preventive maintenance programs should be implemented to monitor performance of the equipment and ensure proper functioning to the approved specifications.

- 17.6.3. Preventive maintenance programs should be developed based upon the manufacturer's suggested tasks and frequencies. Specifically for ventilation systems, preventive maintenance tasks should include airflow testing, ductwork inspections and filter replacements.
- 17.6.4. The Recycler should maintain a program that defines when and how equipment is to be de-energized and locked out. The lockout program should be employed any time a mechanical control must be removed or otherwise deactivated such as for cleaning, setup or maintenance. The program should require that the equipment is de-energized, the energy source is physically locked in the off position and the equipment is tagged with the information of the individual responsible for the locked out condition of the equipment and the reason why the lockout is in effect.

### 17.7. ADMINISTRATIVE CONTROLS

If it is not possible to eliminate a hazard or suitably manage the hazard through engineering controls, the Recycler should implement administrative controls such as safe work procedures and training programs.

- 17.7.1. Safe work procedures are documented processes that clearly outline the potential hazards associated with performing a task, the approved steps for completing the task to prevent the occurrence of a hazard, as well as appropriate emergency response information in the event of an operational or procedural failure. At a minimum, safe work procedures or other work instructions should be provided for tasks or operations where their absence could result in improper operation leading to a breach in a regulatory requirement or a hazardous condition.
- 17.7.2. Safe work procedures should be communicated to all applicable workers, including contractors, and made available for reference at the point of use.
- 17.7.3. In addition to safe work procedures, workers should be provided with various training to identify and prevent workplace hazards, as is applicable to their responsibilities. Typical examples of training include Workplace Hazardous Materials Information System (WHMIS), Transportation of Dangerous Goods (TDG), as well as process and equipment specific training.
- 17.7.4. In addition to safe work procedures and training programs, the facility should employ appropriate signs and labels to clearly identify significant risks such as restricted or hazardous areas, equipment hazards, hazardous materials, and areas requiring personal protective equipment.

### 17.8. PERSONAL PROTECTION EQUIPMENT (PPE)

Where it is determined that engineering and/or administrative controls may not be sufficient to prevent worker or visitor exposure to a hazard, the use of personal protective equipment (PPE) may be required.

- 17.8.1. PPE may include the use of safety glasses or face shields where there is a danger of flying parts or debris; hearing protection in areas of elevated noise; steel toe shoes to protect from

dropped or falling objects; gloves for handling sharp or hazardous materials; smocks, uniforms or other specialized clothing for protection from chemicals, dusts and debris; and respiratory protection where airborne contaminants are present.

- 17.8.2. The Recycler should use the results of risk assessments and workplace sampling to determine the appropriate type of PPE as well as degree of protection required.
- 17.8.3. The Recycler must not only provide PPE to workers, but also train workers on the proper use and care for PPE, and enforce its use.
- 17.8.4. Where specialized or custom fit PPE such as respirators, prescription safety glasses, or custom hearing protection are used, workers should be initially assessed and periodically re-assessed for proper fit and function.
- 17.8.5. All areas requiring the use of PPE should be appropriately identified, and where regulated, exposure levels should be posted, such as noise levels exceeding permissible limits.

#### **17.9. PERSONAL HYGIENE**

In addition to other health and safety controls, a personal hygiene program should be implemented to define the hygiene practices in the workplace for workers and other visitors to reduce potential exposure to contaminants.

- 17.9.1. The hygiene program should specify areas of the facility identified as 'clean areas'. Clean areas should be enclosed environments, separate from processing areas that are independently ventilated from the processing area with fresh air makeup.
- 17.9.2. A transition area should be provided between clean areas and processing areas for workers and visitors to remove any contaminated clothing and wash hands after leaving the processing area and prior to entering a clean area.
- 17.9.3. Food and drink consumption should only be permitted in clean areas.

#### **18.0 GUIDANCE FOR OPERATIONAL CONTROLS REQUIREMENTS**

18.1. Adequate facilities and effective operational controls should be maintained to provide for the safe and secure receiving, storage, handling and processing of incoming and processed materials, including:

- 18.1.1. Ensuring the facility is adequately sized to hold all processed and unprocessed inventory;
- 18.1.2. Protecting materials and data from removal or other unauthorized access;
- 18.1.3. Ensuring that all dismantling and other processing operations, as well as storage areas for substances of concern, are located in an indoor area equipped with adequate containment systems such as impervious floors; and
- 18.1.4. Ensuring that any outdoor storage is covered and contained to prevent exposure or leaching.

- 18.2. Materials may not be over-accumulated or stored in a manner that leaves them susceptible to leaking, damage, fire or other release.
- 18.3. Only materials for which there is an approved Downstream Recycler are permitted to be handled and stored. Other materials must be transported in whole form to an approved Downstream Recycler for processing. For example, if the Recycler does not have an approved Downstream Recycler for mercury bulbs, the bulbs may not be removed from equipment, processed or collected in any way for future use. Instead, the whole unit, i.e. LCD screen, must be sent to an approved Downstream Recycler for processing.
- 18.4. Adequate fire suppression equipment for the type and size of the facility should be maintained, particularly in areas where mechanical processing such as grinding and shredding is undertaken, consideration should be given to the installation of sprinkler systems. At a minimum, the facility should be equipped with readily accessible and charged fire extinguishers suitable for the size and type of fire.
- 18.5. Material tracking processes should be used to demonstrate the chain of custody and account for and report to the Stewardship Program all received, in-process and processed materials. The tracking process should be able to identify system leakage or reporting inconsistencies and also be used to ensure that materials are not stored longer than the regulated or otherwise specified limits.
- 18.6. It is recognized that in-process and outbound material may be a combination of multiple input streams and thus while individual lots or batches of materials received are not required to be separated in the processing or shipping stages, they should be suitably accounted for in each stage of processing, such as: in receipt; in process; processed; and transported.
- 18.7. Chain of custody should include records of movement of the material as well as any transfers of ownership; i.e. what material is received, from whom and when, as well as when subsequent materials are shipped and/or transferred.
- 18.8. The Certificate of Recycling (CoR) is intended to be issued once the batch/lot of received material has been processed. The CoR should note the material identifier(s) (i.e. lot or batch number); type of material processed; quantity; and date processed. The CoR may only be issued after all material from the lot/batch has been processed.
- 18.9. The contingency plan should address any temporary interruptions in service that may prevent the Recycler from accepting or processing Stewardship Program materials, or from shipping these processed materials to a Downstream Recycler.
- 18.10. Situations to consider that could lead to a temporary interruption in service include planned facility shutdown, work stoppage, equipment failure, fire, or regulatory order.
- 18.11. The use of an alternate downstream recycler is an acceptable contingency plan to address temporary interruptions in service, as long as the recycler has been prior approved by the stewardship program for use by the upstream recycler.

18.12. The contingency plan should include at a minimum:

- 18.12.1. Details on how and when the interruption will be communicated to the Stewardship Program;
- 18.12.2. Any temporary solution to handle specific Stewardship Program materials;
- 18.12.3. An alternate approved Recycler in the event of extended interruptions; and
- 18.12.4. Detail on when alternate processing plans will be initiated.

18.13. The closure plan should define the steps required to close the facility, if the operations cease for any reason, to ensure that all products and materials onsite or otherwise under the ownership of the Recycler are properly handled in accordance with the requirements of the ERS. At minimum, the closure plan should detail the following:

- 18.13.1. The requirements to immediately cease acceptance of new materials, upon initiation of the closure plan;
- 18.13.2. A communication plan to notify all suppliers of the impending closure of the operations;
- 18.13.3. A process to identify and quantify any materials under the ownership of the Recycler that may be onsite, or in transit to or from the facility;
- 18.13.4. Roles and responsibilities for quantifying, tracking and transferring all materials to approved Recyclers; and
- 18.13.5. Roles and responsibilities for assessing site conditions and initiating any necessary remediation activities.

18.14. The closure plan should also identify and provide for adequate financial assurance equal to the cost of removing, transporting and processing all materials under the ownership of the Recycler in accordance with the requirements of the ERS. Financial assurance should be calculated based on the following:

- 18.14.1. The total amount of material permitted on-site, or if not specified in a permit or approval, the maximum storage capacity (including both processed and unprocessed materials), plus the maximum amount of weekly input that may be in transit to the facility.
- 18.14.2. The estimated cost to load, transport and process all materials in accordance with the requirements of the ERS.

18.15. The closure plan should also address financial costs associated with any site remediation including the following:

- 18.15.1. The proper clean up and removal of any materials and/or contaminants from processing equipment, air handling equipment, duct work, filter systems, etc.
- 18.15.2. Where materials are stored outdoors, the Recycler should also provide an assessment of and financial assurance for the cost of any remediation that may be necessary on site or at adjacent lands as a result of the operations. The assessment should be based on the size and use of the outdoor area (i.e. types, quantities and condition of materials stored outdoors), and associated

costs for the cleanup and remediation of soil and/or water from any release of material such as emissions, spills or leaks.

- 18.16. The financial instrument for the financing of the material handling and site remediation upon closure may include but is not limited to a: letter of credit; surety bond or insurance policy.
- 18.17. The Recycler should annually reassess the Closure Plan and financial assurance to ensure its adequacy, taking into account the types and volumes of materials accepted, stored and processed on site, as well as any known instances of release.
- 18.18. In the event of a sale or other change of ownership of the facility, either the closure plan should be initiated, or ownership of all products and materials should be contractually transferred to the new owner.

## **19.0 GUIDANCE FOR DATA SECURITY REQUIREMENTS**

- 19.1. Data security requirements are applicable only to those Recyclers that handle data containing devices or materials. Where deemed not applicable, the Recycler must be able to demonstrate that controls are in place to ensure that data containing devices are not accepted at the facility.
- 19.2. Data security controls should be designed and implemented to protect whole electronic products, components (i.e. disk drives), and accessories (i.e. data cards), as well as any information contained on or within any of these items from unauthorized access or theft.
- 19.3. As part of data security controls, the Recycler should:
  - 19.3.1. Ensure that all workers are knowledgeable through both training and operating procedures, of those products potentially containing user data;
  - 19.3.2. Establish and limit access to secure areas for receiving and storing data containing products;
  - 19.3.3. Establish procedures for receiving and immediately moving data containing products to the secure storage area; and
  - 19.3.4. Ensure that only trained and approved workers have access to and handle data containing products.
- 19.4. Various processes to clear and sanitize data are available, however, some processes are only appropriate for and effective on specific devices. Recyclers must ensure that any process employed is adequate for the type of device and test to verify its effectiveness. For general information on the clearing, sanitizing and destruction of data containing devices, as well as security concerns surrounding these activities, Recyclers may consult *Clearing and Declassifying Electronic Storage Devices (ITSG-06)* by the Communications Security Establishment Canada.
- 19.5. Physical destruction of data containing devices should at a minimum include one of the following means: shredding, crushing, shearing, or perforating the memory resident material to render them unreadable through conventional means.

- 19.6. Periodic internal data security audits should be conducted to test and verify the effectiveness of the data destruction process. The audit program should consider the receiving, storage, handling and processing activities.
- 19.7. The procedure to investigate and follow up on any data security breaches should be used to determine the cause and extent of the breach, and initiate the necessary notification and corrective action processes.

## **20.0 GUIDANCE FOR SAMPLING, AUDITS, INSPECTIONS AND OTHER ASSESSMENTS REQUIREMENTS**

- 20.1. Regulated requirements for sampling and other monitoring activities are dependent on both the jurisdiction of operation as well as the type of operations, i.e. manual vs. mechanical processing, however, the sampling, monitoring and assessment requirements outlined in the ERS are intended to represent typical minimum requirements of environmental, health and safety legislation and/or an EHS management system. As a result, recyclers are required to determine the need for sampling and measurement based in part on regulatory requirements but also the results of the risk assessment.
- 20.2. The purpose of sampling, audits, inspections and other assessment processes is to review on a regular basis, through a structured format, the various elements of the Recycler's operations, to determine if they are operating in compliance with regulatory requirements, and in conformance with the ERS and the Recycler's operating policies and procedures. Sampling and measurement activities should be used to test and verify the adequacy of the Recycler's EHS controls.
- 20.3. Sampling, audits, inspections and other assessments may be required by regulation or as an approval to operate, but may also be required where results of the EHS Risk Assessment reveal a possible risk of a particular hazard, emission or release in exceedance of permissible limits.
- 20.4. Although sampling, monitoring and evaluation programs for emissions, effluents, or wastes, may not be required, Recyclers should give particular consideration to establishing sampling, monitoring and worker evaluation programs for certain air contaminants, such as lead, or generally for dusts or fumes; noise; any process effluents; and worker blood samples for levels of lead and other heavy metals.
- 20.5. Sampling, audit, inspection and other assessment programs should be designed to ensure that the activity is scheduled and conducted on a periodic basis, and the results of the activity are used to assess the effectiveness of the health, safety and environmental controls. At a minimum, programs should define:
  - 20.5.1. The responsibility for undertaking the activity, including any training, knowledge or qualification requirements for those responsible;
  - 20.5.2. The process or procedure for undertaking the activity, including any pertinent assessment criteria;
  - 20.5.3. Requirements for recording, reporting and tracking results; and
  - 20.5.4. A schedule for conducting the activity on a regular basis.

- 20.6. Audits, inspections and other assessments may be undertaken by trained and competent internal workers or third party auditors or assessors however, sampling should only be undertaken by qualified individuals, such as an industrial hygienist, registered nurse or other professional as applicable to the type of sampling.
- 20.7. Any laboratory analysis of workplace or worker samples should be conducted by an accredited laboratory.
- 20.8. The process for assessing the results of any sampling, audits, inspections or other assessments should define: who is responsible for the assessment; when the assessment will take place; what standard or criteria the results will be compared against; and what will trigger the initiation of a corrective action.
- 20.9. Results of the EHS sampling should be evaluated against regulatory limits, if any, and recognized industrial hygiene standards to assess worker exposure levels and identify areas where control measures to reduce or eliminate exposure may be required.

## **21.0 GUIDANCE FOR CORRECTIVE ACTION PLANS**

- 21.1. All noncompliance, nonconformances and other issues identified through sampling or monitoring; audits, inspections or other assessments; accident/incident reports; fines or regulatory orders; security breaches; complaints; or other programs that are deemed to be a potential risk to worker health or safety, or result in a release to the environment in exceedance of permissible limits should be promptly addressed and managed through the Recycler's corrective action process.
- 21.2. The Recycler's corrective action process should be designed to facilitate the development and implementation of actions to correct or mitigate any issues that may have already occurred as well as to prevent any further occurrences. The corrective action process should include mechanisms to:
  - 21.2.1. Assign responsibility for developing and implementing any corrective action plans to an individual capable of ensuring the plan is adequate and properly implemented;
  - 21.2.2. Define timing requirements for the development and implementation of corrective action plans, taking into consideration the magnitude of the issue and any imminent hazard;
  - 21.2.3. Review the actions to ensure that the plan has been implemented and is effective in controlling and/or preventing the issue; and
  - 21.2.4. Communicate to workers any changes in operations as a result of corrective action plans.

## **22.0 GUIDANCE FOR EMERGENCY PLANNING AND RESPONSE**

- 22.1. Notwithstanding the overall environmental, health and safety controls, Recyclers should identify and maintain procedures to respond to potential emergency situations. Emergency situations will typically be identified through the risk assessment process, and may include but are not limited to spills, accidents, worker injury and fire.



- 22.2. Recyclers should establish documented procedures and provide training for all workers on the proper steps to respond to an emergency situation.
- 22.3. Recyclers should ensure that an appropriate number of individuals are trained in fire response, spill response and in the administration of first aid, and are available on site during normal operating hours.
- 22.4. Recyclers should maintain a stock of the necessary supplies for emergency response, including fire extinguishers, first aid supplies and spill cleanup materials.
- 22.5. In areas where workers may be exposed to eye injuries from contact with dust, debris or chemical splashes, emergency eye wash stations should be provided (preferably plumbed and maintained units to ensure adequate flow). Safety showers should also be provided where workers may be exposed to skin hazards from exposure to hazardous or other irritating substances.
- 22.6. The emergency response plan should provide details on when and how to contact external emergency response assistance such as fire or ambulance if required, and also provide information on transportation to the nearest hospital or other location for external medical support.
- 22.7. All facilities should be equipped with an emergency notification system, such as pull stations, horns, bells or lights to notify workers in the event of an emergency.
- 22.8. Emergency exits should be clearly identified, including illuminated signs, and clear and unencumbered access to emergency exit routes should be maintained at all times.
- 22.9. Where required, emergency response procedures should be reviewed and approved by the appropriate local regulatory authority.

### **23.0 GUIDANCE FOR TRANSPORTATION REQUIREMENTS**

- 23.1. EOLE, components, and some materials generated from processing EOLE may be considered hazardous or controlled substances and thus subject to regulation for transportation. The Recycler should identify the materials they transport, both directly as well as through third-party, and determine any requirements for transport and ensure compliance with any such requirements. Specifically, requirements should be identified for materials that contain lead or mercury, as well as batteries that may have specific transportation and labelling requirements.
- 23.2. Consideration should be given to the transportation requirements in the jurisdiction of the Recycler, any regions the material is transported through, as well as the destination location.
- 23.3. Where regulated, the material should not be transported unless in compliance with all prescribed safety requirements, and the material is:
  - 23.3.1. Properly packaged to prevent breakage or release, and the package and transportation vehicle are equipped with the necessary labels and/or other safety marks;
  - 23.3.2. Accompanied by all applicable movement documents;

- 23.3.3. Offered for transport and/or transported by a worker trained and knowledgeable in the transportation requirements;
- 23.3.4. Transported by an authorized carrier to an approved Recycler; and
- 23.3.5. Suitable emergency response plans are in place.
- 23.4. Shipments of regulated material should never exceed the maximum allowable quantities specified in permits or approvals and mixed loads of regulated materials may only be shipped where permitted.
- 23.5. In addition, certain material transfers or shipments may require prior informed consent from the destination jurisdiction to approve. The Recycler should determine where prior informed consent is required and maintain a process to obtain such prior to transfer of any materials.
- 23.6. Training for workers offering hazardous or other regulated material for shipment should include details on packaging, labelling and other special transportation requirements, as well as applicable emergency response information.
- 23.7. The evaluation process for third-party transporters should be designed to assess and ensure that transporters are knowledgeable of and operate in compliance with regulatory requirements, and have appropriate emergency response plans and adequate insurance to address any potential accidents or other incidents during transport.
- 23.8. Individual shipments may also be periodically evaluated to ensure that the transporters are properly licensed, and trucks and trailers appear to be in good working condition and are suitable for the shipment.
- 23.9. At a minimum the Recycler should maintain records of the shipment for any hazardous or other regulated materials with the following information:
  - 23.9.1. The nature and quantity of the material;
  - 23.9.2. The addresses and the sites of the exporter, the importer, and any carriers;
  - 23.9.3. Proof of written contracts between exporters, importers and carriers;
  - 23.9.4. The point of final disposition for the material; and
  - 23.9.5. Proof of receipt of the material at the intended location.

#### **24.0 GUIDANCE FOR DOWNSTREAM RECYCLER REQUIREMENTS**

- 24.1. Recyclers are responsible for ensuring that all materials associated with the processing of EOLE are handled in a safe and environmentally sound manner, and in accordance with regulatory requirements until the point of final disposition as defined in Table 1.
- 24.2. The process to evaluate downstream recyclers should be designed to assess and ensure that :
  - 24.2.1. The Recycler is able to handle the material in a safe and environmentally sound manner, according to applicable regulatory requirements;

- 24.2.2. Materials are not stockpiled, dumped or exported to processors or jurisdictions without adequate facilities to handle them; and
  - 24.2.3. OECD member countries that have not ratified the Basel convention are not used as transit country for material destined for non-OECD/EU member countries.
- 24.3. Copies of all applicable permits and approvals for Downstream Recyclers should be maintained to demonstrate compliance.
- 24.4. The flow of all materials from the point of primary processing until the point of final disposition should be documented and the approximate quantities of each material stream should be indicated. This may be completed in chart or flow diagram format, indicating the material accepted; the process method, and resultant materials and approximate quantities; and the approved Downstream Recycler for each material.

## **PART C**

### **RECYCLER ASSESSMENT AND APPROVAL PROCESS**

#### **25.0 OVERALL ASSESSMENT AND APPROVAL PROCESS FLOW**

- 25.1. The Recycler Assessment and Approval Process consists of the following steps:
  - 25.1.1. Recycler Application;
  - 25.1.2. Application Review and Verification;
  - 25.1.3. Recycler Audit;
  - 25.1.4. Submission of the Audit Report; and
  - 25.1.5. Stewardship Program Approval.
- 25.2. Recycler approvals are based on an entire material stream and are only granted following the complete assessment and approval of all recyclers associated with the processing of the material until it reaches the point of final disposition as detailed in Table 1.
- 25.3. Recycler audits will be conducted in reverse order to the material flow; upstream recycler audits will only be initiated after the audit and approval of all Downstream Recyclers.
- 25.4. All recyclers must consent to the sharing of final audit reports amongst the Stewardship Programs, to permit the recognition of approval across programs auditing to the same version of the ERS.

#### **26.0 RECYCLER APPLICATION**

- 26.1. Recyclers seeking approval for use under the Provincial Stewardship program are responsible for completing the *Recycler Application Form* and submitting to the Stewardship Program along with necessary documentation providing supporting evidence to the application.
- 26.2. The Primary recycler must define and document the downstream flow of all materials.
- 26.3. The downstream material flow must account for all materials and components segregated from the source materials and indicate one Downstream Recycler per material stream.
- 26.4. A completed application form and necessary supporting documentation must be submitted for each Downstream Recycler identified in the downstream flow.
- 26.5. Once the recycler application has been submitted, no changes to the downstream flow of materials will be permitted unless otherwise approved by the Stewardship Program and in accordance with the *Request for Amendment to an Application* process.

#### **27.0 APPLICATION REVIEW AND VERIFICATION**

- 27.1. The Stewardship Program will perform an initial review of the recycler application package to determine if the application is complete and the required background evidence has been provided.

- 27.2. Applicants that have not addressed all requirements or have not provided suitable supporting evidence with the application will be notified that the application is incomplete and that further information is required prior to proceeding with an audit. Applicants will have 3 months from the time of notification to properly complete the application, after which the application will be closed and any further consideration of the recycler would be required under a complete new application.
- 27.3. The Stewardship Program will determine the need for an on-site audit for each recycler identified in the material flow, based on the audit applicability factors outlined in *Table 1* of the ERS, and existing approval, if any, taking into account the scope of the existing approval, including the specific facility assessed, the materials and processes covered under the assessment, the last date of approval, and the version of the ERS audited and verified to.
- 27.4. Acceptable processes and points of final disposition that are deemed not to require an on-site audit will be subject to a documentation review and verification. The documentation review may be conducted by the Stewardship Program or a third-party auditor, and will be used to determine if the Recycler is suitably permitted and approved to undertake the process identified in the application.
- 27.5. Where a process or point of final disposition that is not permitted under the ERS is identified, the applicant will be notified and required to submit the necessary information for an acceptable alternative prior to further consideration of the application.
- 27.6. Acceptable processes and points of final disposition, as well as the need for on-site audits will be at the sole discretion of the Stewardship Program.

## **28.0 INITIATION OF THE RECYCLER AUDIT**

- 28.1. The Stewardship Program will contact an approved ERS Auditor to initiate the audit process by providing the complete application package and a summary of on-site audits required.
- 28.2. The Auditor will commence the audit process beginning at the point of final disposition for each material stream identified on the summary of on-site audits required.
- 28.3. The Auditor will contact the Primary Recycler and each Downstream Recycler to notify them of the commencement of the audit process and will schedule audits directly with Auditee.
- 28.4. The Auditor will maintain a current audit schedule for the entire material flow noting each Recycler and the planned or completed audit dates as applicable.
- 28.5. The audit schedule will be communicated to the Stewardship Program and the Primary Recycler on an ongoing basis.
- 28.6. Following the completion of audits and approval of all Downstream Recyclers, the Auditor will initiate the on-site audit of the Primary Recycler.

## **29.0 ON-SITE AUDIT**

- 29.1. The Auditor will conduct a process-based audit focusing on significant aspects and risks associated with the processes, covering both operational activities and process controls.
- 29.2. The audit methods employed will include interviews, observations of activities, and reviews of documentation and records.
- 29.3. Through detailed site, operational and documentation reviews, the Auditor will assess procedural information and operational activities against the criteria of the ERS, taking in to account where applicable the direction provided by the Implementation Guide.
- 29.4. The Auditor will verify the incoming and outgoing material flow, and confirm or revise the scope of the audit based on the materials accepted and processing activities undertaken, to ensure the audit scope adequately defines the method of processing; the material type; and the result of the process.
- 29.5. The assessment will cover all obligated electronic products and materials handled by the facility for the on-site audit, but will only cover the designated program materials as indicated in the Recycler's application for the downstream review.
- 29.6. The Auditor will classify all audit findings in accordance with Part E - *Audit Protocols*, and immediately notify the Stewardship Program of any instances of a Major Nonconformance.
- 29.7. Where a Major Nonconformance is issued to a Recycler approved and operating under the Stewardship Program, the Stewardship Program will immediately cease shipment of material to the Recycler unless suitable corrective actions can be demonstrated by the Recycler.

## **30.0 INITIAL AUDIT REPORT**

- 30.1. Following the audit, the Auditor will complete the *Recycler Audit Report* form detailing a summary of the audit process and results of the audit including, key observations, nonconformances and an assessment of conformance to the ERS for recycler at the time of the assessment, and submit to the Stewardship Program for initial review.
- 30.2. The Stewardship Program will review the Auditor's report and may request additional follow-up or clarification of any issues or concerns identified in the report.
- 30.3. Following acceptance by the Stewardship Program, the Auditor will issue a copy of the audit report to the Auditee.

## **31.0 CORRECTIVE ACTION PLANS**

- 31.1. All nonconformances identified in the Audit Report shall be addressed through the Recycler's corrective action process, and shall include suitable actions to both correct the nonconformance, as well as to prevent reoccurrence.

- 31.2. An action plan to address any major nonconformances must be submitted to the auditor within 15 days of the auditor issuing the audit report.
  - 31.2.1. Following acceptance of the corrective action plan by the Auditor, the recycler will have 60 days to implement the controls identified in the corrective action plan.
  - 31.2.2. Evidence of actions taken shall be forwarded to the auditor for review within the allotted time period.
  - 31.2.3. Inability of the recycler to provide a satisfactory resolution to a major nonconformance within the 60 day corrective action period will result in the closure of the audit, with the final audit status indicated as 'not approved' and a subsequent complete on-site audit will be required prior to any further consideration of the recycler, unless otherwise approved by the Stewardship Program.
  - 31.2.4. The 60 day corrective action period is intended to provide the Recycler ample time to properly address a major nonconformance, however, recyclers must maintain suitable interim controls during the corrective action plan development and implementation for any items that pose risk of worker injury, release to the environment or regulatory noncompliance.
- 31.3. An action plan to address any minor nonconformances must be submitted to the auditor within 15 days of the auditor issuing the audit report.
  - 31.3.1. Following acceptance of the corrective action plan by the Auditor, the recycler will have 30 days to implement suitable controls identified in the corrective action plan.
  - 31.3.2. Evidence of actions taken shall be forwarded to the auditor for review within the allotted time period.
  - 31.3.3. Inability of the recycler to provide a satisfactory resolution to a minor nonconformance within the 30 day corrective action period will result in the escalation of the issue to a major nonconformance and an additional 30 days will be provided to resolve the escalated issue, after which, if it has not been satisfactorily resolved, the final audit report will be issued, with the final audit status indicated as 'not approved' and a subsequent complete on-site audit will be required prior to any further consideration of the recycler, unless otherwise approved by the Stewardship Program.
- 31.4. All nonconformances must be satisfactorily addressed to prevent reoccurrence prior to any further consideration by the Stewardship Program.
- 31.5. Records of all corrective action plans and evidence of completed actions shall be maintained by the recycler for tracking purposes and future follow up.

- 31.6. Audit observations do not require formal follow up action plans to the Auditor however an observation may be re-evaluated during a surveillance review, the re-verification audit or any other subsequent assessment by the Stewardship Program to ensure that it does not escalate into a nonconformance.

### **32.0 CLOSURE OF NONCONFORMANCES**

- 32.1. The Auditor will review and assess the adequacy of proposed corrective action plans and any additional information/evidence provided, in effectively addressing the identified nonconformance.
- 32.2. All Auditor assessments of the effectiveness of the corrective actions and decisions will be recorded on the Recycler Audit Report form as a means to track the progress and closure of the nonconformance.

### **33.0 FINAL AUDIT REPORT**

- 33.1. Once all corrective action plans have been suitably implemented to the Auditor's satisfaction, the Audit Report will be updated and issued to the Stewardship Program, providing a final assessment of the Recycler's conformance to the Standard.
- 33.2. The Stewardship Program will review the Auditor's final report and recommendation, and may request the auditor clarify or follow-up on additional issues in order to make a final decision on the approval of the Recycler under the RQP.
- 33.3. Following acceptance by the Stewardship Program, the Auditor will issue a copy of the final Audit Report to the Auditee, and notify the Primary Recycler of the status of the audit.
- 33.4. If the Downstream Recycler is not approved to the ERS, the Primary Recycler must initiate a Request for Amendment to a Recycler Application or Approved Process.
- 33.5. Recyclers verified to the ERS are required to maintain their approved processes, including all Downstream Recyclers during the term of approval, unless an amendment to the approval has been approved by the Stewardship Program.

### **34.0 STEWARDSHIP PROGRAM APPROVAL**

- 34.1. Once all Recycler audits have been completed for the entire material stream, including the Primary Recycler and all Downstream Recyclers, and satisfied that all program requirements have been addressed, the Stewardship Program may provide approval to a Primary Recycler for use under the program for a term of up to three years, subject to reporting and any other surveillance requirements established by the Stewardship Program.
- 34.2. Any approval granted by the Stewardship Program is valid on the approved scope and processes only.
- 34.3. Failing to meet any of the requirements of the Stewardship Program or the ERS will result in the revocation of the Recycler's approval.



## **35.0 MULTI-SITE APPROVALS**

- 35.1. At the Stewardship Program's discretion, Recyclers with multiple locations may be considered for a multi-site approval. Multi-site approval will still require the assessment and approval of each location, but will allow for a single assessment of common corporate-wide requirements such as the EHSMS programs and procedures.
- 35.2. Failure to demonstrate that corporate-wide programs and procedures have been adequately implemented will result in complete audits being required at each location.

## **36.0 REQUEST FOR AMENDMENT TO A RECYCLER APPLICATION**

- 36.1. In the event that a Downstream Recycler is not verified to the ERS, or where a Primary Recycler seeks to amend an application that has been submitted, a request must be submitted in writing to the Stewardship Program detailing the proposed process modification or Downstream Recycler change along with the necessary application and supporting information for the requested change.
- 36.2. The Primary Recycler may be responsible for any audit costs associated with the application amendment.

## **37.0 REQUEST FOR AMENDMENT TO AN APPROVED PROCESS**

- 37.1. Where a Recycler seeks to amend an approved process, or change a Downstream Recycler, a request must be submitted in writing to the Stewardship Program detailing the proposed process modification or Downstream Recycler change along with the necessary application and supporting information for the requested change.
- 37.2. At the Stewardship Program's discretion, a full on-site audit and re-approval of the Recycler may be required.
- 37.3. The Recycler may be responsible for any audit costs associated with the process amendment.

## **38.0 RECOGNITION OF APPROVAL FROM ANOTHER STEWARDSHIP PROGRAM**

- 38.1. Recycler approval under one Stewardship Program may be recognized by another Stewardship Program, conditional upon the following:
  - 38.1.1. The scope of the approval, i.e. the location, processing method, and material are identical;
  - 38.1.2. The approval was granted based on the same version of the ERS; and
  - 38.1.3. Verification to the ERS occurred within the past 3 years.
- 38.2. If the scope of the existing approval and proposed process are identical, the Stewardship Program will obtain a copy of the final Audit Report from the originating program and the approval will be recognized.

- 38.3. If the approval was granted based on a different scope or version of the ERS, or the audit was conducted prior to the last 3 years, the Stewardship Program will notify the Recycler that the approval cannot be recognized and the full Recycler Assessment and Approval Process is required.

### **39.0 AUDIT COMMUNICATION PROTOCOLS**

- 39.1. For any audit related issues, the ERS Auditor will be the first point of communications with the Recycler.
- 39.2. Issues that are unable to be resolved between the Auditor and the Recycler will be forwarded by the Auditor and/or the Recycler to the Stewardship Program for consideration.
- 39.3. Should the Auditor require technical support or other clarification on any audit issues not identified in the RQP, the Auditor will consult the Stewardship Program to ensure that consistency is maintained between audits and Auditors.
- 39.4. All audit results will be considered confidential and shared amongst the Stewardship Programs and the Auditee only.
- 39.5. All external inquiries regarding the ERS or audit process will be directed to the Stewardship Program.

### **40.0 FORFEITURE OF APPROVAL**

- 40.1. If for any reason a Recycler is deemed by the Stewardship Program to have provided false information or misrepresented any part of the recycling operations or processes undertaken, the Recycler's approval will immediately be forfeited and any contract with the Stewardship Program will be deemed null and void.
- 40.2. Falsified information may include but is not limited to:
- 40.2.1. Deliberately false or misleading information in a Recycler Application;
  - 40.2.2. Misrepresentation of the recycling processes undertaken, materials handled or downstream vendors used as part of the recycling process;
  - 40.2.3. Nondisclosure of pertinent site information including off-site material storage, regulatory inspections, or regulatory fines or orders; and
  - 40.2.4. Withholding any information specifically requested or otherwise pertinent to the application, audit, approval or good standing of the Recycler from the Stewardship program or Auditor.
- 40.3. Forfeiture of approval will be at the sole discretion of the Stewardship Program.

## **PART D**

### **ONGOING RECYCLER SURVEILLANCE AND RE-VERIFICATION**

#### **41.0 RECYCLER SURVEILLANCE**

- 41.1. The Stewardship Program may at its discretion conduct interim reviews or assessments to ensure approved Recyclers continue to operate in accordance with the requirements of the ERS.
- 41.2. The Recycler Surveillance Program will be determined in part by the Audit Assessment Criteria and Scoring from the recycler's final Audit Report.
- 41.3. The Recycler Surveillance Program may include but is not limited to:
  - 41.3.1. Site reviews;
  - 41.3.2. Document / record reviews; or
  - 41.3.3. Recycler reporting.
- 41.4. Site reviews may be conducted by Stewardship Program staff or third-party Auditor and may be used to confirm items such as operation within the approved process scope, proper storage and handling of materials, and processing of program materials within the Stewardship Program's acceptable time frame.
- 41.5. Document and/or record reviews may cover a variety of information including:
  - 41.5.1. Recycler procedures and process records;
  - 41.5.2. Environmental notifications, fines or complaints; or
  - 41.5.3. Insurance or workers compensation claim history.
- 41.6. Document and/or record reviews may be used to confirm items such as:
  - 41.6.1. Audits, inspections, assessments, sampling or monitoring are completed according to schedule;
  - 41.6.2. Corrective action plans have been implemented;
  - 41.6.3. Material flow to downstream recyclers;
  - 41.6.4. Spills, releases, workplace or transportation accidents;
- 41.7. Recycler reporting may be required to facilitate the Stewardship Program's tracking of material quantities and disposition, as well as operational efficiencies and effectiveness. Reporting may cover a variety of metrics such as the following:
  - 41.7.1. Quantity of program material received, awaiting processing, processed and shipped downstream;
  - 41.7.2. Average time to process program materials from time of receipt;
  - 41.7.3. Percent of material streams attributed to different EOLE products; or
  - 41.7.4. EHS complaints, incidents, accidents or releases.
- 41.8. Inability to demonstrate continued operation in accordance with the requirements of the ERS may result in the revocation of the Recycler's approval.

## **42.0 RE-VERIFICATION PROCESS**

- 42.1. Recycler verification to the ERS is for a maximum period of 3 years, but may be required sooner in the event of a change in the Recycler's operations, such as the materials processed, method of processing or a revised Downstream Recycler.
- 42.2. Re-verification to the ERS may require a complete assessment and approval or may be a targeted approval at the Stewardship Program's discretion based upon factors such as the frequency of usage of the recycler and history of performance.

## **PART E**

### **AUDIT PROTOCOLS**

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#### **43.0 ERS AUDIT OBJECTIVE**

- 43.1. The objectives of the ERS audit process are to:
  - 43.1.1. Provide an independent assessment of the Recycler's conformance to the ERS;
  - 43.1.2. Evaluate the ability of the Recycler to identify and comply with regulatory requirements; and
  - 43.1.3. Determine if the Recycler operates in accordance with its established programs and procedures.
- 43.2. The ERS Auditor will audit according to the requirements of the ERS and in line with the direction of the Implementation Guide, and provide a professional assessment of the ability of the Recycler to satisfy each of the audit objectives.
- 43.3. The audit will be conducted based on objective evidence available through on-site visual observations, conversations/interviews with workers, as well as through documented evidence maintained by the Recycler.
- 43.4. Objective evidence may include, but is not limited to policies, procedures, work instructions, shipping records, training materials, training records, communication materials, permits, certificates, worker interviews and general observations.
- 43.5. Auditors will review information provided by the Recycler and where necessary may request additional information to assess conformance to the ERS.
- 43.6. The Auditor will use the minimum acceptable examples provided in the Implementation Guide as the basis for assessment of the suitability or adequacy of the information provided. Where implementing an element of the ERS other than as defined in the Implementation Guide, it is Recycler's responsibility to demonstrate an equal alternative.
- 43.7. The Auditor may provide examples such as those identified in the Implementation Guide as suitable means to demonstrate conformance to the ERS, however, the onus is on the Recycler to ensure that evidence is adequate, as the Auditor is required to maintain a separation of duties and is not permitted to consult the Recycler.

#### **44.0 AUDIT SCOPE**

- 44.1. The Auditor is responsible for conducting the audit within the defined audit scope, however, the scope must be appropriate to the facility and operations, and not limit the audit from assessing all applicable operations.

- 44.2. The Auditor is responsible for confirming the scope of operations, including the facility, processes, materials, etc., and determining if the scope adequately addresses the operations, or if there need for the audit scope to be expanded or reduced.
- 44.3. The auditor will note any changes in the audit scope in the Audit Report and promptly notify the Stewardship Program.
- 44.4. The assessment should cover all obligated electronic products and materials handled by the facility for the on-site audit, but will only cover the designated program materials as indicated in the Recycler's application for the downstream review.
- 44.5. Where the audit scope covers only a portion of the Recycler's operations, the material and process specific operations should be assessed completely, while general requirements should be assessed across the organization.

#### **45.0 CLASSIFICATION OF AUDIT FINDINGS**

- 45.1. Where suitable evidence of conformance cannot be presented to satisfy the Auditor that an element of the ERS has been met, the Auditor will note the issue in the Audit Report and attribute one of the following audit finding classifications:
  - 45.1.1. Observation;
  - 45.1.2. Minor nonconformance; or
  - 45.1.3. Major nonconformance.

#### **46.0 OBSERVATIONS**

- 46.1. Observations are general opportunities for improvement for items that do not pose a threat the environment or worker safety, and are not a contravention of any element of the ERS.
- 46.2. Typically the observation classification will be used to note general comments on the facility or to outline suggested improvements for items such as housekeeping or other similar issues that do not meet current industry best management practices.

#### **47.0 MINOR NONCONFORMANCE**

- 47.1. Minor nonconformances are typically isolated incidents represented by a single observed lapse in the Recycler's programs or procedures that do not pose an immediate threat to the environment or worker health or safety.
- 47.2. Examples of minor nonconformances include:
  - 47.2.1. An instance where a process or operational activity that is undertaken is not in conformance with an approved procedure; or

- 47.2.2. Evidence of a process implemented in conformance with ERS but not adequately documented.

## **48.0 MAJOR NONCONFORMANCE**

- 48.1. Major nonconformances are often systematic issues and may be represented by multiple occurrences of a nonconformance or examples of the similar nonconformances across different operational or functional areas.
- 48.2. Major nonconformances represent significant issues in scale by either:
  - 48.2.1. The potential impact or hazard of a single occurrence;
  - 48.2.2. The number of lapses identified; or
  - 48.2.3. The wide scope of functions or operational areas affected by the issue.
- 48.3. Examples of major nonconformances include:
  - 48.3.1. Any issue that has the potential to pose an immediate threat to the environment or worker health or safety;
  - 48.3.2. A regulatory noncompliance or the inability to demonstrate regulatory compliance;
  - 48.3.3. Not adequately controlling a hazardous substance or material;
  - 48.3.4. Failure to implement an element of the ERS;
  - 48.3.5. Inability to demonstrate that corrective action has been taken in cases of nonconformance with the ERS or noncompliance with relevant regulatory requirements; or
  - 48.3.6. Failure to adequately address a minor nonconformance within the specified time.

## **49.0 AUDIT VERIFICATION**

- 49.1. Following the audit and consideration of the evidence reviewed, the Auditor will provide a professional assessment of the ability of the Recycler to satisfy each of the audit objectives and indicate one of the following statements in regard to the overall verification to the ERS:
  - 49.1.1. Verification to the ERS is withheld until satisfactory evidence of closure is provided to the Auditor for the identified nonconformance(s).
  - 49.1.2. The facility is recommended for 30 day conditional approval during which the identified minor nonconformance(s) must be satisfactorily addressed and closed out by the Auditor.
  - 49.1.3. The facility is recommended for approval to the ERS without any outstanding nonconformances.
- 49.2. Unresolved or outstanding critical audit findings, which may be any major nonconformance or several minor nonconformances, will result in verification to the ERS being withheld until the satisfactory closure of the issue by the Recycler and approval by the Auditor.
- 49.3. Where only a noncritical audit finding remains outstanding, the Recycler may be recommend for conditional approval for a period of 30 days to address the minor nonconformance.

## **PART F**

### **APPROVED RECYCLER RECOGNITION**

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#### **50.0 PURPOSE OF THE APPROVED RECYCLER RECOGNITION PROCESS**

- 50.1. The Approved Recycler Recognition process is intended to facilitate the Recycler's application requirements when seeking approval under another Stewardship Program operating to the same version of the ERS, or when seeking approval from the Stewardship Program to operate under a different Primary Recycler, without having to share final audit reports or other program specific information which may contain confidential information.
- 50.2. The Approved Recycler Recognition process is designed to acknowledge those recyclers that have successfully completed the ERS audit process, been verified by the independent third-party Auditor to be operating in conformance with the ERS and are approved for use under the Stewardship Program.
- 50.3. Approved Recycler Recognition is based in part on the results of the third-party audit commissioned for the Stewardship Program and is limited to the confirmation of approval for use under the Stewardship program, for the specific material(s), processing method(s) and location covered under the scope of the audit.
- 50.4. Recognition does not constitute a certificate of conformance to the ERS, and third-parties may not rely on this recognition as such certification.

#### **51.0 TERM OF RECOGNITION**

- 51.1. Recognition is provided for a maximum period of 3 years from the date of approval and for the version of the ERS audited and verified to only.
- 51.2. By recognizing a Recycler, the Stewardship Program does not make any representations, guarantees or warranties with regard to the Recycler and assumes no liability for any losses sustained by any person arising from the granting of approval of any Recycler, nor the recognition of the Recycler.

#### **52.0 RECYCLER RECOGNITION**

- 52.1. Approved Primary Recyclers will be recognized by the Stewardship Program in three ways:
  - 52.1.1. Provided a letter of recognition from the Stewardship Program;
  - 52.1.2. Noted in the Stewardship Program's Annual Report as an approved Primary Recycler; and
  - 52.1.3. The name of approved Primary Recyclers will be posted on the Stewardship Program's website.
- 52.2. Upon request from a Downstream Recycler, the Stewardship Program will provide a letter of confirmation of approval for use under the Stewardship Program, for the specific material(s), processing method(s) and location audited.



52.3. Recyclers may not misrepresent the terms of approval under the Stewardship Program or suggest any guarantees or other reliance upon the approval, recognition, or audit results.

## PART G

### TERMS AND DEFINITIONS

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**Chain of Custody (CoC):** Records of movement and transfer of ownership of program material.

**Certificate of Recycling (CoR):** Documented evidence from the Recycler that the received material has been processed through the approved process. CoR should detail the material identifier(s) (i.e. lot or batch number); type of material processed; quantity; and date processed.

**EOLE Material:** Any component or material separated from EOLE.

**Data Destruction:** The process of clearing and preventing any copying or other reproduction of any remnants of data from memory devices to ensure that the data is no longer accessible in whole or part.

**Disposition Hierarchy:** The preferential order of treatment of materials at end-of-life, beginning with material recovery; secondarily energy recovery; and lastly other approved methods of management.

**Downstream Recycler:** An entity that receives material from a Primary Recycler or other Downstream Recycler for the purpose of additional processing, refining and/or approved disposition of the material.

**Electronic Scrap:** Includes cables and wires, printed circuit boards, metal and plastic laminates, and other electronic components such as chips and hard drives.

**Electronics Recycling Standard (ERS):** Part A of the *Recycler Qualification Program* that defines the minimum requirements for Recyclers used by the Stewardship Program.

**End-of-life Electronics (EOLE):** Unwanted or discarded electronic equipment obligated under the Stewardship Program that is designated for recycling.

**Energy From Waste (EFW) Incineration:** The heat treatment of material to reclaim energy that is used to produce electricity or steam or reduce the energy already required in a process. This includes the use of plastics as a fuel substitute, but does not include direct incineration. Other than ash, materials are typically not reclaimed through EFW incineration.

**Environmental, Health and Safety Management System (EHSMS):** A system of policies and procedures used to identify and control the impact of the Recycler's activities, products, and services on workers and the environment to reduce the risk of injury or uncontrolled releases to the environment.

**ERS Auditor:** An individual trained and certified through an authoritative body to be an environmental auditor, that possesses a strong understanding of the *ISO 19 011 Standard*, the regulatory requirements in the jurisdiction of the Recycler, and the *Recycler Qualification Program*, including the *Electronics Recycling Standard*, *Implementation Guide* and the *Audit Protocols*.

**First Responder:** Police, Fire or Ambulance

**Hazardous Material:** Any material that poses a risk to the worker or the environment if not maintained under suitable control. Hazardous material includes substances of concern, toxic materials, as well as other potential contaminants, such as dusts and fumes, which may or may not be regulated but could pose a risk to worker health or the environment.

**Implementation Guide:** Part B of the *Recycler Qualification Program* that provides additional guidance and resources to Recyclers and ERS Auditors on the application of the ERS, as well as examples of suitable evidence that demonstrates conformance with the ERS.

**OECD Member Country:** A country that is a recognized member of the *Organization for Economic Co-operation and Development* ([www.oecd.org](http://www.oecd.org)).

**Point of Final Disposition:** The final acceptable step in handling or processing of an EOLE material. It is also the last step of processing a reclaimed material before it is transformed into a usable commodity.

**Primary Recycler:** An entity that receives EOLE and initiates the recycling process by dismantling the EOLE and sorting the materials through manual and/or mechanical means into various streams for the purpose of reclaiming recyclable materials and other approved management of residuals by Downstream Recyclers. This does not include consolidation, cross-docking, or brokering of received material without processing.

**Processing:** The dismantling and sorting of electronic products and/or materials into various materials for the reclaim of recyclable materials and other approved management of residuals.

**Raw Material:** Single stream of non-contaminated material this is being introduced into a manufacturing process for the creation of a new product or material, where all of the input material is consumed in the process. Raw material is considered to have surpassed the point of final disposition and is not subject to audit or assessment.

**Recycler Qualification Program (RQP):** Eight part publication that defines the Stewardship Program's requirements and approach to auditing and approving EOLE Recyclers to ensure that EOLE are handled in an environmentally sound and socially acceptable manner that protects the environment and safeguards worker health and safety.

**Recycling:** The recovery of materials from end-of-life electronics for use in manufacturing new products.

**Regulated Material:** A recyclable material or waste subject to regulatory control by the local governing authority or in the destination jurisdiction. Regulated material may be classified as Toxic, Dangerous Goods, Hazardous Materials or other similar terminology.

**Smelting:** The process of heat treating metal containing materials to reclaim metal. Through the smelting process some non-metal materials such as plastics may be consumed.

**Spill:** An uncontrolled release to the natural environment.

**Stewardship Program:** The organization that operates the provincial end-of-life electronics recycling program and utilizes the Recycler Qualification Program to audit and assess Recyclers prior to use.

**Substance of Concern:** Materials or components making up EOLE products that in their normal state and under normal conditions of handling by a consumer pose little or no risk to human health or the environment but when handled and processed at a recycling facility merit special environmental and safety controls, and may be subject to specific regulatory requirements. These materials include: CRT tubes and other leaded glass; phosphor powder; ethylene glycol; mercury and mercury bearing materials; batteries; and ink and toner cartridges.

**Worker:** Any full time, part time or contract worker.

**PART H**  
**FORMS**

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## H.1 RECYCLER APPLICATION FORM

Company Name:		Site/Facility:	
Address:			
City:		Contact Name:	
Province:		Phone:	
Postal Code:		Email:	

Description of Operations:	[Description on the method(s) of Processing, materials accepted and processed, and resultant materials]		
Recycler Type:	<input type="checkbox"/> Primary Recycler	<input type="checkbox"/> Downstream Recycler	
If currently or previously approved for use under a Provincial program, please indicate the program and approval date:			
Number of Employees:		Years in Operation:	

Indicate all applicable permits, approvals, certificates and insurance held by the Recycler and any details of coverage. Attach a copy of each.			
Permit/Insurance/Certificate:		Certificate/registration number or other details of coverage	
<input type="checkbox"/>	Regulatory permits (waste generator / disposal)		
<input type="checkbox"/>	Insurance coverage		
<input type="checkbox"/>	Worker compensation coverage		
<input type="checkbox"/>	ISO 9001/14001 certification		
Has your organization received any fines or regulatory orders received within the last 5 years, or had any other incident that required the notification or dispatch of first responders?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, describe:			

Primary Processor Products Accepted:			
<input type="checkbox"/>	CRT Displays	<input type="checkbox"/>	Portable Audio/Video Equipment
<input type="checkbox"/>	Projection Displays	<input type="checkbox"/>	Home Audio/Video Equipment
<input type="checkbox"/>	LCD Displays	<input type="checkbox"/>	Speakers
<input type="checkbox"/>	Plasma Displays	<input type="checkbox"/>	Vehicle Audio & Video Systems
<input type="checkbox"/>	Desktop Computers	<input type="checkbox"/>	Non-cellular Telephones and Answering Machines
<input type="checkbox"/>	Portable Computers	<input type="checkbox"/>	Cellular Devices
<input type="checkbox"/>	Desktop Printers		
<input type="checkbox"/>	Floor Standing Copy and Printer Devices	<input type="checkbox"/>	Other:

Downstream Processing Information		
Materials Generated by Primary Recyclers / Accepted by Downstream Recyclers	Description of Processing Method	Downstream Recycler & Final Disposition
<input type="checkbox"/> CRT Yokes		
<input type="checkbox"/> CRT Panel		
<input type="checkbox"/> CRT Funnel (leaded)		
<input type="checkbox"/> Mercury Bulbs (LCD, scanner, etc.)		
<input type="checkbox"/> Ethylene Glycol (Projection TV CRT)		
<input type="checkbox"/> LCD Panels		
<input type="checkbox"/> Plasma Panels		
<input type="checkbox"/> Circuit Boards		
<input type="checkbox"/> Wires and Cables		
<input type="checkbox"/> Rechargeable Batteries		
<input type="checkbox"/> Non-rechargeable Batteries		
<input type="checkbox"/> Components (Hard drives, chips, etc.)		
<input type="checkbox"/> Toner and Inks		
<input type="checkbox"/> Steel		
<input type="checkbox"/> Aluminum		

<input type="checkbox"/>	Copper		
<input type="checkbox"/>	Brass/Bronze		
<input type="checkbox"/>	Copper bearing materials		
<input type="checkbox"/>	Metal Fines		
<input type="checkbox"/>	Wood		
<input type="checkbox"/>	Glass (non-lead)		
<input type="checkbox"/>	Plastics		

All materials are processed in accordance with **Material Disposition Hierarchy** and meet the **Acceptable Processes and Points of Final Disposition**, as defined in **Table 1** of the ERS.

Yes

No

**Policies and Procedures - Attach a copy of the following:**

<input type="checkbox"/>	EHS Policy
<input type="checkbox"/>	EHS Training Program
<input type="checkbox"/>	Summary of training requirements
<input type="checkbox"/>	Policies and procedures for safeguarding the environment and worker health & safety
<input type="checkbox"/>	Procedure for identifying regulatory requirements
<input type="checkbox"/>	Summary of legal requirements and their applicability
<input type="checkbox"/>	EHS risk assessment process
<input type="checkbox"/>	Air, effluent and/or waste sampling programs
<input type="checkbox"/>	Current inventory of hazardous materials
<input type="checkbox"/>	Air, noise and/or medical sampling programs
<input type="checkbox"/>	Worker hygiene policies
<input type="checkbox"/>	Procedure for tracking and reporting program materials
<input type="checkbox"/>	Site closure plan
<input type="checkbox"/>	Evidence of a security/performance bond or similar financial instrument in the event of a site closure
<input type="checkbox"/>	Contingency plan for interruptions in service
<input type="checkbox"/>	Procedure for secure storage and handling of data containing products
<input type="checkbox"/>	Procedure to schedule and conduct audits
<input type="checkbox"/>	Audit schedule
<input type="checkbox"/>	Emergency Response Procedures
<input type="checkbox"/>	Process to evaluate Transporters
<input type="checkbox"/>	Process to identify when TDG or equivalent regulation applies to shipments
<input type="checkbox"/>	Process to evaluate Downstream Recyclers

**Confirmation of data and sign-off**

<input type="checkbox"/>	Check to confirm that all data provided in the application and associated documents is current and valid for your organization at the time of submission of the application.
<input type="checkbox"/>	Check to confirm that your facility currently operates, and will continue to operate, in compliance with all applicable regulatory requirements and the requirements of the ERS.

Application Submitted by:		Date:	
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## H.2 RECYCLER AUDIT REPORT

Recycler Name:		Site/Facility:	
Address:			
City:		Contact Name:	
Province:		Phone:	
Postal Code:		Email:	

The objectives of this audit were to:

- Assess the conformance of the facility and operations to the requirements of the Electronics Recycling Standard;
- Evaluate the ability of the Recycler to identify and comply with regulatory requirements; and
- Determine if the Recycler is operating in accordance with its established programs and procedures.

### 1.0 BACKGROUND

Audit Date: \_\_\_\_\_

Auditor: \_\_\_\_\_

Type of Audit:	Previous Audit Dates:
<input type="checkbox"/> Document	
<input type="checkbox"/> Document Follow Up	
<input type="checkbox"/> Combined Document & On Site	
<input type="checkbox"/> On Site	
<input type="checkbox"/> On Site Follow Up	

Standard Audited To:  EPSC Electronics Recycling Standard 2010

Program Audited By:  ACES       ARMA       ESABC       OES       SWEEP

### 2.0 AUDIT SCOPE

[Method of Processing – Material Type – Result]

Examples:

- Manual dismantling of EOLE for segregation into component parts / materials for further downstream processing.
- Manual removal of hazardous components and mechanical processing of EOLE for segregation into constituent materials for material reclaim and further downstream processing.
- Shredding of circuit boards for separation of metals from plastics for material reclaim and further downstream processing.
- Heat treatment of plastics for energy recovery.
- Smelting of leaded glass for lead recovery.

Recycler Type:	<input type="checkbox"/> Primary Recycler	Indicate programs used by:
	<input type="checkbox"/> Downstream Recycler	List all program related upstream material suppliers:

Has there been a change in audit scope during or as a result of this audit?

Yes

No

If yes, explain:

Is the Recycler currently approved for use under a Provincial Program?

Yes

No

If yes, indicate program and Standard verified to and date of approval:

### 3.0 PRIMARY RECYCLER INFORMATION

Products Accepted:			
<input type="checkbox"/>	CRT Displays	<input type="checkbox"/>	Portable Audio/Video Equipment
<input type="checkbox"/>	Projection Displays	<input type="checkbox"/>	Home Audio/Video Equipment
<input type="checkbox"/>	LCD Displays	<input type="checkbox"/>	Speakers
<input type="checkbox"/>	Plasma Displays	<input type="checkbox"/>	Vehicle Audio & Video Systems
<input type="checkbox"/>	Desktop Computers	<input type="checkbox"/>	Non-cellular Telephones and Answering Machines
<input type="checkbox"/>	Portable Computers	<input type="checkbox"/>	Cellular Devices
<input type="checkbox"/>	Desktop Printers		
<input type="checkbox"/>	Floor Standing Copy and Printer Devices	<input type="checkbox"/>	Other:

### 4.0 DOWNSTREAM RECYCLER INFORMATION

Materials Generated by Primary Recyclers / Accepted by Downstream Recyclers	Processing Method	Downstream Vendors & Final Disposition
<input type="checkbox"/> CRT Yokes		
<input type="checkbox"/> CRT Panel		
<input type="checkbox"/> CRT Funnel (leaded)		
<input type="checkbox"/> Mercury Bulbs (LCD, scanner, etc.)		
<input type="checkbox"/> Ethylene Glycol (Projection TV CRT)		
<input type="checkbox"/> LCD Panels		
<input type="checkbox"/> Plasma Panels		
<input type="checkbox"/> Circuit Boards		
<input type="checkbox"/> Wires and Cables		
<input type="checkbox"/> Rechargeable Batteries		
<input type="checkbox"/> Non-rechargeable Batteries		
<input type="checkbox"/> Components (Hard drives, chips, etc.)		
<input type="checkbox"/> Toner and Inks		
<input type="checkbox"/> Steel		
<input type="checkbox"/> Aluminum		
<input type="checkbox"/> Copper		
<input type="checkbox"/> Brass/Bronze		
<input type="checkbox"/> Copper bearing materials		
<input type="checkbox"/> Metal Fines		
<input type="checkbox"/> Wood		
<input type="checkbox"/> Glass (non-leaded)		
<input type="checkbox"/> Plastics		

All materials are processed in accordance with the *Materials Disposition Hierarchy* and meet the *Acceptable Processes and Points of Final Disposition*, as defined in Section 16 of the ERS.  Yes  No

### 5.0 AUDIT ASSESSMENT CRITERIA AND SCORING

Factor	Assessment	Score
1 Nature of Materials	Choose an item.	
2 Processing Method	Choose an item.	
3 Regulatory Oversight	Choose an item.	
4 Years in Operation	Choose an item.	
5 Processing Volume	Choose an item.	
6 Regulatory Compliance	Choose an item.	
7 ERS Conformance	Choose an item.	
8 Previous On Site Audit	Choose an item.	
TOTAL SCORE =		



## 6.0 DOCUMENTS / RECORDS SAMPLED

Document	Date / Version / Findings
<input type="checkbox"/> Environment / Health and Safety Manual	
<input type="checkbox"/> Environment / Health and Safety Policy	
<input type="checkbox"/> Organizational Chart	
<input type="checkbox"/> Job Descriptions and Responsibilities	
<input type="checkbox"/> Training Matrix	
<input type="checkbox"/> Training Programs	
<input type="checkbox"/> Orientation Checklist / Training	
<input type="checkbox"/> Employee Handbook	
<input type="checkbox"/> EHS Communication Materials	
<input type="checkbox"/> Training Records / Certificates	
<input type="checkbox"/> Visitor Information Package	
<input type="checkbox"/> Contractor Training / Agreements	
<input type="checkbox"/> Hazard / Incident / Accident Reports	
<input type="checkbox"/> Hazard / Incident / Accident Investigations	
<input type="checkbox"/> EHS Committee Meeting Minutes	
<input type="checkbox"/> EHS Annual Review Meeting Minutes	
<input type="checkbox"/> List of Legal and Other Requirements	
<input type="checkbox"/> Certificate of Insurance	
<input type="checkbox"/> Certificate of Workers Compensation	
<input type="checkbox"/> Risk Assessment Procedure & Schedule	
<input type="checkbox"/> Risk Assessment Ratings & Results	
<input type="checkbox"/> Sampling program & Schedule	
<input type="checkbox"/> Sampling Results (Air, Noise, Lead, etc.)	
<input type="checkbox"/> Hazardous Material Inventory	
<input type="checkbox"/> MSDS Inventory	
<input type="checkbox"/> Program Material Tracking	
<input type="checkbox"/> Closure Plan	
<input type="checkbox"/> Program Material Contingency Plan	
<input type="checkbox"/> Audit / Inspection Procedures & Schedule	
<input type="checkbox"/> Audit Report / Inspection Records	
<input type="checkbox"/> Emergency Response Plan / Procedures	
<input type="checkbox"/> Emergency Drill Records	
<input type="checkbox"/> Transporter Assessment & Approval Records	
<input type="checkbox"/> TDG Process	
<input type="checkbox"/> Material Shipment Records	
<input type="checkbox"/> Recycler Assessment & Approval Records	
<input type="checkbox"/> Downstream Material Flow	
<input type="checkbox"/> Work Instructions / Operating Procedures	
<input type="checkbox"/> Preventive Maintenance Program / Records	
<input type="checkbox"/> EHS Objectives and Targets	
<input type="checkbox"/> EHS Statistics	

## 7.0 AUDIT OBSERVATIONS

*Provide a description of the facility and processes. Indicate the audit process, significant audit trails followed and examples of evidence reviewed.*

## 8.0 NONCONFORMANCES

All nonconformances shall be addressed through the organization's corrective action process and any evidence of actions (corrective and preventive) undertaken to address the nonconformance shall be forwarded to the auditor for review within the allotted time period.

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

Nonconformance # of ##	<input type="checkbox"/> Major nonconformance	<input type="checkbox"/> Minor nonconformance
Details of Nonconformance:		ERS Reference:
Follow Up Actions: [Date – Details]		
<input type="checkbox"/> Nonconformance satisfactorily closed on [Date]		

## 9.0 AUDIT CONCLUSION

Based on the information assessed, the Recycler has provided satisfactory objective evidence to demonstrate that the organization:

- Operates in conformance and possesses the ability to continue operating in conformance to the ERS.  Yes  No
- Maintains the ability to identify and comply with regulatory requirements on an ongoing basis.  Yes  No
- Operates in accordance with its established environmental, health and safety programs and procedures.  Yes  No

As a result,

- Verification to the Standard is withheld until satisfactory evidence of closure is provided to the Auditor for the identified nonconformance(s).
- The facility is recommended for 30 day conditional approval during which the identified minor nonconformance(s) must be satisfactorily addressed and closed out by the Auditor.
- The facility is recommended for approval to the ERS without any outstanding nonconformances.