

**AGENCY OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WASTE MANAGEMENT AND PREVENTION DIVISION**

**PROCEDURE FOR THE ENVIRONMENTALLY SOUND MANAGEMENT
OF ELECTRONIC DEVICES FOR COLLECTORS, TRANSPORTERS,
AND RECYCLERS**

§ 1. AUTHORITY

This procedure is adopted under the Secretary's authority pursuant to 10 V.S.A. §7559(7)

§ 2. PURPOSE

It is the purpose of this procedure to:

- (1) Establish guidelines for the proper environmental management of electronic devices collected, transported, and recycled in the State of Vermont; and
- (2) Provide guidance on how to register as a collector, transporter, or recycler under Vermont's electronic waste management law.

§ 3. DEFINITIONS

As used in this procedure, the terms shall have the meaning given in 10 V.S.A. § 7551, and as follows:

- (1) "Accredited certifying body" means:
 - (A) For the Responsible Recycling practices (R2), a certifying body that has certified by ANAB as accredited to certify companies to the R2 Practices.
 - (B) For the E-Stewards standards, a certifying body that has been certified by ANAB as accredited to certify companies to the E-Stewards standard.
- (2) "Agency" means the agency of natural resources.
- (3) "Banned electronic devices" means an electronic device banned from disposal in a landfill pursuant to 10 V.S.A. § 6621a.
- (4) "Collection" means the aggregation of electronic devices and includes all the activities up to the time the electronic device is delivered to a recycler.
- (5) "Collector" means a public or private entity that receives electronic devices that performs any of the following:

- (A) arranges for the delivery of the electronic devices to a recycler.
 - (B) sorts electronic devices.
 - (C) consolidates electronic devices.
 - (D) provides data security services in a manner approved by the secretary.
- (6) “Disassembly” means the dismantling of an electronic device (1) for the purpose of marketing, reselling, reusing or recycling the components of electronic devices; (2) in a manner that is protective of human health and the environment; (3) without treating the device or any component thereof; and (4) without breaking the cathode ray tube. Disassembly includes the destruction of a hard drive (including shredding and crushing) in accordance with the National Association of Standards and Technology Guidelines for Media Sanitation, as may be amended. Disassembly does not mean the shredding, crushing, or otherwise treating the electronic devices or any component thereof that may contain focus materials, or that break the cathode ray tube in any electronic device.
- (7) “Disposal” means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any ground or surface waters.
- (8) “Electronic device” means a: computer; computer monitor; computer peripheral; device containing a cathode ray tube; printer; or television regardless of who deposits the device with the collector, transporter, or recycler. "Electronic device" does not include: any motor vehicle or any part thereof; a camera or video camera; a portable or stationary radio; a wireless telephone; a household appliance, such as a clothes washer, clothes dryer, water heater, refrigerator, freezer, microwave oven, oven, range, or dishwasher; equipment that is functionally or physically part of a larger piece of equipment intended for use in an industrial, library, research and development, or commercial setting; security or antiterrorism equipment; monitoring and control instruments or systems; thermostats; handheld transceivers; a telephone of any type; a portable digital assistant or similar device; a calculator; a global positioning system receiver or similar navigation device; commercial medical equipment that contains a cathode ray tube, a cathode ray tube device, a flat panel display, or similar video display that is not separate from the larger piece of equipment; or other medical devices, as the term "device" is defined under 21 U.S.C. § 321(h) of the Federal Food, Drug, and Cosmetic Act, as that section is amended from time to time.
- (9) “Focus materials” means electronic devices or components of electronic devices that include any of the following components:
- (A) Polychlorinated biphenyls (PCBs);

- (B) Mercury;
 - (C) Batteries;
 - (D) Cathode ray tubes (CRTs) and leaded glass; or
 - (E) Circuit boards, whether whole or shredded.
- (10) “Local reuse” means reuse at locations within the United States of America.
 - (11) “Non-local reuse” means reuse at locations not within the United States of America.
 - (12) “Person” means any individual, partnership, company, corporation, association, unincorporated associations, joint venture, trust, municipality, the State of Vermont or any agency, department or subdivision of the state, federal agency, or any other legal or commercial entity.
 - (13) “Program Year” means the period from October 1 through September 30.
 - (14) “Recycler” means a person who accepts electronic devices for the purpose of recycling. A person who takes electronic devices solely for reuse, refurbishment, or repair is not a recycler.
 - (15) “Recycling” means the process of collecting and preparing electronic devices for use in the manufacturing processes or for recovery of useable materials followed by delivery of such materials for use. Recycling does not include treatment or destruction by incineration; waste-to-energy incineration, or other such processes; or land disposal.
 - (16) “Refurbish” means to repair electronic devices to restore or improve it so that it may be used for the same purpose for which it was originally purchased.
 - (17) “Reuse” means electronic device changes ownership and is used, as is, for the same purpose for which it was originally purchased.
 - (18) “Transporter” means a person that moves electronic devices from a collector to either another collector or to a recycler.

§ 4. STANDARDS FOR COLLECTORS

- (a) **Applicability.** These standards apply to a person that collects, sorts, or consolidates electronic devices or provides data security services in a manner approved by the Agency.

- (b) Registration. A collector shall register with the Secretary by completing the form provided by the Secretary.
- (c) Prohibited activities. A collector is prohibited from the following:
 - (1) Disposing of any electronic device;
 - (2) Placing any electronic device for scrap metal recycling; and
 - (3) Initiating a shipment of electronic devices to any person, except the following:
 - (A) A destination within the United States, for reuse of whole devices that are functional and are used for the same purpose for which it was originally purchased.
 - (B) A facility in Vermont that is a registered recycler of electronic devices.
 - (C) An out-of-state recycling facility that is operated in accordance with that state's laws and regulations.
- (d) Facility management standards. A registered collector shall manage its facility (ies) located in Vermont in the following manner:
 - (1) Access to the collection location shall be controlled at all times. An attendant shall be present to ensure that electronic devices are appropriately separated, to perform record keeping and to ensure that collection is conducted in accordance with this procedure during the hours of operation;
 - (2) Employees have been trained on the materials that can be accepted at the collection location, materials management standards in subsection (e) of this section, the record keeping required by subsection (f) of this section, and how to respond to releases from broken or poorly maintained electronic devices;
 - (3) The facility shall have a written procedure in place to address releases from electronic devices; and
 - (4) The facility shall provide access to Agency personnel to inspect the facility, review any records, or conduct any other sampling or auditing to determine the proper operation of 10 V.S.A. Chapter 166.
- (e) Materials management standards. A registered collector shall manage electronic devices in a way that prevents releases from any electronic device, or component of an electronic device, to the environment. Registered collectors shall:
 - (1) Store electronic devices on an impervious surface within a structure or transportation unit such that the electronic device is protected from precipitation. Outdoor storage is prohibited at any time;

- (2) Maintain adequate storage space to accommodate periods of peak deliveries;
 - (3) Package electronic devices in a manner adequate to prevent breakage during transportation, storage, and handling. Such packaging must lack evidence of damage that could cause breakage under reasonably foreseeable conditions;
 - (4) Clean up broken and damaged electronic devices immediately. All clean-up materials and debris shall be managed in accordance with the guidance set forth by the Agency.
 - (5) A collector may not accumulate electronic devices for longer than one year from the date the electronic device is delivered to the facility;
 - (6) Containers, pallets, or packages containing electronic devices shall be clearly marked with the words “electronic waste,” “used electronics” or another term approved by the Secretary.
- (f) Recordkeeping and reporting requirements. Reporting for the second program year of October 1, 2012 through September 30, 2013, and all subsequent years thereafter, shall be due annually by November 1. The following shall be reported to the Secretary on a form provided by the Secretary:
- (1) For collectors operating under the State Standard or Manufacturer Opt-Out Plan:
 - (A) The types of electronic waste collected from covered entities (e.g. computer, television, mouse, etc.);
 - (B) The amount of electronic waste, by weight, sent to another collector or recycler from all covered entities during the preceding program year;
 - (C) The amount of electronic waste, by weight that was collected under the State Standard Plan, or an approved Manufacturer Opt-Out Plan;
 - (D) The amount of electronic waste and banned electronic devices, by weight, that was collected from covered entities; and
 - (E) The amount of electronic waste, either by weight or number of devices that was removed at the point of collection for local reuse or refurbishment.
 - (2) For collectors operating outside of an approved plan:
 - (A) The types of electronic devices collected (i.e., computer, monitor, television, computer peripherals, or desktop printer).

- (B) The total weight of electronic devices collected during the preceding program year.

§ 5. STANDARDS FOR TRANSPORTERS

- (a) **Applicability.** These standards apply to a person who transports electronic devices from a collector to a recycler, from collector to collector, or from a recycler to a recycler.
- (b) **Registration.** A transporter shall register with the Secretary on a form provided by the Secretary.
- (c) **Prohibited activities.** A transporter is prohibited from the following:
 - (1) Disposing of any electronic device;
 - (2) Placing any electronic device for scrap metal recycling; and
 - (3) Delivering an electronic device to any person except the following:
 - (A) A facility in Vermont that is a registered recycler or collector; and
 - (B) An out-of-state facility that is operated in accordance with that state's laws and regulations.
- (d) A transporter may consolidate collected electronic devices into a larger vehicle at a transfer facility certified pursuant to 10 V.S.A. § 6605 in accordance with the terms of that certification.
- (e) **Materials management standards.** A registered transporter shall manage electronic devices in a way that prevents releases from any electronic device or component of an electronic device to the environment. Registered transporters shall:
 - (1) Transport electronic devices in a transportation unit that is covered such that the electronic device is protected from precipitation and will remain in the transportation unit;
 - (2) Transport electronic devices in a manner to adequately prevent breakage during transportation and handling; and
 - (3) Clean up broken and damaged electronic devices immediately. All clean-up materials and debris shall be managed in accordance with the guidance set forth by the Agency.
- (f) **Recordkeeping and reporting requirements.**

- (1) For transporters operating under the State Standard or Manufacturer Opt-Out Plan:
 - (A) Transporters that transported electronic waste (as defined in 10 V.S.A. § 7551) outside the state shall report on a form provided by the Secretary, the total amount of electronic waste, by weight, and whether the electronic waste was collected under the State Standard Plan, or an approved Manufacturer Opt-out Plan.
 - (B) Reporting for the second program year of October 1, 2012 through September 30, 2013, and all subsequent years thereafter, shall be due annually by November 1.
- (2) For transporters operating outside of an approved plan:
 - (A) Transporters that transported electronic devices (as defined in §3) outside the state shall report on a form provided by the Secretary, the total amount of electronic devices, by weight.
 - (B) Reporting for the second program year of October 1, 2012 through September 30, 2013, and all subsequent years thereafter, shall be due annually by November 1.

§ 6 STANDARDS FOR RECYCLERS

- (a) **Applicability.** These standards apply to a person that recycles, reuses, or refurbishes electronic devices within the state of Vermont or to recyclers operating under the State Standard Plan, or an approved Manufacturer Opt-Out Plan.
- (b) The only treatment allowed at a Vermont facility registered under this section is disassembly, testing, bailing, repair or reuse. A facility that undertakes additional treatment or recycling activities shall obtain a permit under either 10 V.S.A. § 6605 or 10 V.S.A. § 6606.

Note: A person who solely reuses, refurbishes or repairs electronic devices is not a recycler under this Procedure and is not required to register with the Secretary.

- (c) **Registration.** A recycler shall register with the Secretary on a form provided by the Secretary.
- (d) **Prohibited activities.** A recycler is prohibited from:
 - (1) Disposing of any electronic device. A recycler may initiate a shipment of parts that are not recyclable to a facility that is permitted or certified to accept those materials; and

- (2) Initiate a shipment of electronic devices to any person, except the following:
- (A) Another in-state recycling facility that complies with all standards set forth in §6;
 - (B) An out-of-state recycling facility that is operated in accordance with that state's laws and regulations; or
 - (C) A foreign destination shipped in a manner consistent with their facility management standards and is consistent with federal law.
- (e) Facility management standards. During the 2011 program year, a recycler shall submit either a self certification or a certification by an accredited certifying body that the recycler conforms to either the Responsible Recycling Practices (R2) or the E-Stewards Standard. In the 2012 program year and for any new registration thereafter, a recycler shall submit a copy of a certification by an accredited certifying body that the recycler conforms to either the Responsible Recycling Practices (R2) or the E-Stewards Standard unless the recycler has obtained a variance pursuant to subsection (g) of this section. Notwithstanding the requirements of either the E-Stewards Standard or R2, in no case shall the regulatory requirements of this Procedure be more restrictive than 40 C.F.R. Part 262 Subparts E or H.
- (f) Vermont E-Waste Recycling Standard. A facility that elects to obtain a certification under the R2 Practices shall also self-certify that the recycler complies with this Procedure on a form provided by the Agency unless the recycler has obtained a variance pursuant to subsection (g) of this section. The certification shall include the following:
- Note: A recycler located outside of the State of Vermont who wishes to participate in the State Standard Plan or an approved Manufacturer Opt-Out Plan may provide an alternative to this section for review and consideration by the Secretary. The alternative shall be written and shall describe in detail its facility management practices and regulations in place in its state of jurisdiction that apply to the facility. This alternative shall demonstrate how the facility's standards are functionally equivalent or more stringent than the standards established by this subsection. If the Secretary, in writing, approves the alternative standards as equivalent or more stringent, then the out-of-state facility may utilize an alternative standard for their operations and have a third party certify to that alternative standard.
- (1) Releases. The Recycler must have in place a written plan for responding to and reporting releases, accidents, spills, fires, explosions, and other similar events that pose risks to worker safety, human health, or the environment consistent with Section 7-105 of the Vermont Hazardous Waste Management Regulations. This plan shall be provided to local emergency responders;
 - (2) Ban on certain disposal methods. Under no circumstance, shall an electronic device recycler utilize energy recovery, incineration, or land disposal as a

management strategy for Focus Materials or equipment and components containing Focus Materials;

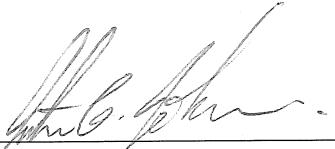
- (3) Downstream audits. An electronic device recycler shall confirm, through audits, or other similarly effective means approved by the Secretary, that each downstream vendor in the recycling chain to which requirement 5(e) of the R2 standards applies continues to conform to the requirements of that section for as long as it receives FMs directly or indirectly from the recycler. Audits performed under this Procedure shall be performed once every three years. If a recycler determines that a downstream vendor no longer meets the requirements of 5(e) of the R2 standards, it shall cease using that downstream vendor;
- (4) Minimum insurance requirements. A recycler shall possess Comprehensive or Commercial General Liability Insurance including coverage for bodily injury, property damage, pollutant releases, accidents and other emergencies with coverage limits of \$1,000,000 per occurrence and an annual aggregate of at least \$2,000,000, exclusive of legal defense costs;
- (5) Closure plan. A recycler shall develop a written plan for the proper closure of the facility; a closure plan shall be based upon the following closure requirements:
 - (A) A description of how final closure of the facility will be conducted;
 - (B) An estimate of the maximum inventory of electronic devices ever on-site over the active life of the facility and a detailed description of the methods to be used during closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all electronic devices; and
 - (C) A detailed description of the steps needed to remove or decontaminate all harmful residues and contaminated containment system components, equipment, structures, and soils during closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to satisfy the Secretary.
- (6) Amendment of closure plan. The recycler may amend the closure plan at any time prior to the notification of partial or final closure of the facility. A recycler with an approved closure plan must submit a written request to the Secretary to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approval by the Secretary; the recycler must amend the closure plan whenever:
 - (A) Changes in operating plans or facility design affect the closure plan; or

- (B) In conducting closure activities, (unexpected events require a modification of the closure plan).
- (7) Cost-estimate for closure. The following are the minimum requirements to be considered when developing a cost estimate for the closure of a facility:
- (A) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan;
 - (B) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator;
 - (C) The closure cost estimate may not incorporate any salvage value that may be realized with the sale of electronic devices, facility structures or equipment, land, or other assets associated with the facility at the time of closure; and
 - (D) The owner or operator may not incorporate a zero cost as electronic devices might have an economic value.
- (8) Adjustments to closure cost estimates. During the active life of the facility, the recycler must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year. The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business\ . The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year;
- (A) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate; and
 - (B) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.
- (9) Amendment to closure cost estimate. During the active life of the facility, the recycler must revise the closure cost estimate no later than 30 days after a revision has been made to the closure plan which increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the Secretary has approved the request to

modify the closure plan, if the change in the closure plan increases the cost of closure;

- (10) Allowable financial instruments. A financial instrument provided to the Secretary shall be in the form required by 40 C.F.R. § 258.74(b), (c), (e) – (h);
 - (11) Storage. Store electronic devices on an impervious surface within a structure or transportation unit such that the electronic device is protected from precipitation. Outdoor storage is prohibited at any time.
- (g) A recycler may apply to the secretary for a variance from the requirements of subsection (e) or (f) of this section. Applications for a variance under this subsection shall be posted on the Agency website and subject to a public comment period of 30 days. Any variance issued under this section shall be for a period of not longer than two years. The secretary may approve a variance provided that the recycler has demonstrated:
- (1) The recycler processes 250 tons or less of electronic devices per year;
 - (2) The recycler has identified the provisions of R2 or Section (f) that the recycler cannot conform to, provides a description of why the recycler cannot comply, and has developed an alternative to the standard or a plan to attain compliance with the standard that is protective of human health and the environment and does not conflict with any other state or federal law or rule.
- (h) Recordkeeping and reporting requirements. Reporting for the second program year of October 1, 2012 through September 30, 2013, and all subsequent years thereafter, shall be due annually by November 1. The following shall be reported to the Secretary on a form provided by the Secretary:
- (1) The types of electronic waste managed;
 - (2) The total weight of all electronic waste and banned electronic devices from covered entities;
 - (3) The total weight of electronic waste recycled during the preceding program year (and if any waste was collected directly from a covered entity at the recycling location that weight identified separately);
 - (4) The amount of electronic waste, by weight that was collected under the State Standard Plan, an approved Manufacturer Opt-Out Plan, or outside of an approved plan;
 - (5) The amount of electronic waste, by weight, that was removed for non-local reuse; and
 - (6) The amount of electronic waste, by weight, that was removed for local reuse.

- (i) Record retention. A recycling facility must retain records for shipments, export, and records identified in subsection (h) for at least three years from the date a shipment of electronic devices, electronic devices for reuse, or components containing focus materials left, or was received at, the facility.

By: 

Date: 10/2/2012

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