



## RPQ-006-T-2019

# VIRGIN ISLANDS WASTE MANAGEMENT AUTHORITY

The Virgin Islands Waste Management Authority is hereby soliciting Request for Price Quotations (RPQ-006-T-2019) for Palletizing and Loading of E-waste Disposal Trailer, St. Thomas, Virgin Island.

Prospective submitters may secure a package for their review from the Authority's Procurement and Property Division, St. Thomas-St. John district office at 3200 Demarara, St. Thomas, Virgin Islands. All questions pertaining to the scope of services to be rendered should be forwarded to Ms. Sandra David, Director of Procurement and Property by calling 340-715-9170 or in a hard copy format to:

Virgin Islands Waste Management Authority  
Procurement and Property Division  
(3200 Demarara)  
St. Thomas, VI 00802  
Tel: (340) 715-9170  
Fax: (340) 715-9179

[sdavid@viwma.org](mailto:sdavid@viwma.org) and [jthomas-blyden@viwma.org](mailto:jthomas-blyden@viwma.org)

Quotations will be received until Friday, April 12, 2019 at 10:00 a.m., at the Authority's Procurement & Property Division, 3200 Demarara, Modular #3, St. Thomas, Virgin Islands or by email at [sdavid@viwma.org](mailto:sdavid@viwma.org).

The Virgin Islands Waste Management Authority reserves the right to waive any non-substantive informalities, technicalities or irregularities, or reject any or all qualifications and proposals/bids; or to re-advertise for proposals/bids/price quotations, and to award or refrain from awarding the contract for the work.

*Adrian Taylor*  
*Interim Executive Director*

VIRGIN ISLAND  
WASTE MANAGEMENT AUTHORITY

Request for Price Quotation

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To: ..... Date: March 21, 2019

..... RPQ-006-T-2019

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Pursuant to the Procurement Policies and Procedures the Virgin Islands Waste Management Authority, will receive Quotations for the work described below. Quotations will be received until **Friday, April 12, 2019 at 10:00 A.M.** Responses will be received at the Authority's Procurement & Property Division, 3200 Demarara, Modular #3, or by email at [sdavid@viwma.org](mailto:sdavid@viwma.org) and [jthomas-blyden@viwma.org](mailto:jthomas-blyden@viwma.org).

**DESCRIPTION OF WORK**

The Virgin Islands Waste Management Authority is requesting Quotations from qualified companies for the following services: **Palletizing and Loading of E-waste Disposal Trailer, St. Thomas, V.I.**

SCOPE OF SERVICES: ATTACHED

**Please submit the following with your quotations:**

- 1. V.I. Business License**
- 2. Insurance**
- 3. Qualification Statement with References**
- 4. Scope of Services with Cost per trailer**

## SCOPE OF SERVICES PACKING REQUIREMENTS

1. Packing company must provide all materials, equipment and personnel necessary to complete the task (forklift, pallets, shrink wrap, pallet jack, tape, 2x4's, etc.).
2. Packing company must shrink wrap and package electronic devices in a manner which minimizes breakage and damage.
3. Packing company must pack trailers.
4. Packing company must provide VIWMA with a detailed manifest of all items placed in the trailer on the form in attachment.
5. Packing company must **"tuck and chuck"** the trailer to ensure that when trailer is opened items do not fall out or cause injury.
6. Packing company must segregate broken and damaged electronic devices and pack them in an appropriate container that can be closed and sealed for shipment.
7. Packing company must label all pallets containing electronic devices with the words **"SPENT ELECTRONIC WASTE"**.
8. Packing company must palletize and shrink wrap CRT's separately. The pallets must have labels marked: "USED" or "BROKEN" CRT MONITORS and include the phrases: "USED CATHODE RAY TUBES CONTAINS LEADED GLASS" or "LEADED GLASS FROM TELEVISIONS OR COMPUTERS". Each pallet must be labeled: "DO NOT MIX WITH OTHER GLASS MATERIALS".
9. Packing company must sort electronic devices by groups (CRT's, monitors, CPU's, printers, etc.) for easier packing and storage.
10. Packing company must ensure that shipment is free of all debris to include cardboard boxes, paper, plastic, dirt and metal.
11. Packing company must provide copies of their current general liability insurance, workman compensation and a V.I. business license.
12. Packing company must agree to provide services on an as needed basis for a two-year period with an option for a one-year extension.
13. Packers must ensure that all debris is collected and disposed prior to leaving the Packing area.
14. Packing Company must ensure all packed material is submitted no later than 5 business days to the staff at the Bovoni Household Hazardous Waste Center.
15. VIWMA requires all employees to wear the proper personnel safety equipment for task accomplishment and OSHA compliance.

Note: Electronic devices are regulated by the **Standards for the Proper Recycling and Disposal of Electronic Devices with Hazardous Constituents 1560-500-800** attached.

## **Standards for the Proper Recycling and Disposal of Electronic Devices with Hazardous Constituents**

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### **1560-500-1 TITLE**

**Standards for the Proper Recycling and Disposal of Electronic Devices with Hazardous Constituents**

### **1560-500-2 INTERPRETATION**

The definitions, rules, and regulations found in sections 1560-500-1 through 1560-500-8 shall only apply to the Standards for the Proper Recycling and Disposal of Electronic Devices with Hazardous Constituents.

### **1560-500-3 PURPOSE**

The purpose of this amendment to these Solid and Hazardous Waste Management Rules and Regulations is to provide new standards in order to protect the public health, safety, and the environment by encouraging the proper recycling and/or disposal of electronic devices. Peripherals are excluded from this amendment; and therefore shall be managed in accordance with all other applicable provisions of these Solid and Hazardous Waste Regulations

### **1560-500-4 DEFINITION**

***Authorized representative*** means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

***Cathode ray tube or CRT*** means a vacuum tube, composed primarily of glass, which is the visual or video display component of an electronic device. A used, intact CRT means a CRT whose vacuum has not been released. A used, broken CRT means glass removed from its housing or casing whose vacuum has been released.

***Collection*** means accumulation and transportation to an authorized storage, disposal or recovery facility, but does not include storage, disposal or recovery.

***Collection Center*** means a facility, including a HHWCC, designated for acceptance, sorting, and accumulating of electronic devices for no longer than 270 days.

**Container** means any portable unit in which a material is accumulated, stored, transported, treated, disposed of, or otherwise handled.

**Department** means the Department of Planning and Natural Resources.

**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 source 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 waters, including ground waters.

**Disposal facility** means an authorized facility or part of an authorized facility at which hazardous waste is intentionally placed into or on any land or water source, and at which waste will remain after closure. The term disposal facility does not include a corrective action management unit into which remediation wastes are placed.

**Electronic Devices** means devices with hazardous constituent utilizing electrons and electric circuit that may include but not limited to, computer monitors, household appliances, televisions recording and playing devices for music or video tapes, compact discs and digital technology. Peripherals are not included in this definition.

**EPA hazardous waste number** means the number assigned by EPA to each hazardous waste listed in 40 CFR part 261, subpart D, of part 261 and to each characteristic identified in part 261, subpart C.

**EPA identification number** means the number assigned by EPA to each generator, transporter, and treatment, storage, or disposal facility.

**Facility** means all contiguous land, and structures, other appurtenances, and improvements on the land, used for generating and storing electronic devices. A facility may consist of several storage or disposal operational units.

**Generator** means any facility or person whose act first causes an electronic devices to be recycled or whose act or process produces electronic devices which are composed of constituents that are identified or listed in 40 CFR Part 261 or whose act first causes an electronic device to be classified as a hazardous waste.

**HHWCC** means household hazardous waste collection center.

**Hazardous waste constituent** means a constituent listed in 40 CFR Part 261, subpart D, or a constituent listed in table 1 of §261.24.

**Hazardous waste generator** means a facility or person whose act first causes a solid waste to become subject to regulation or whose act or process produces a hazardous waste listed in 40 CFR Part 261, Subpart D or a hazardous waste that exhibits the characteristics identified in 40 CFR §261.21 through §261.24.

**Household Hazardous Waste (HHW)** means any electronic devices to be either disposed of or recycled that are derived from households (single family or multi-family dwellings).

**Large Electronic Generator** means a facility that generates greater than 100 kg (about 220 lbs) of electronic devices per month.

**Manifest** means the EPA form 8700-22 used for identifying the quantity, composition, and the origin, routing and destination of hazardous electronic devices during its transportation from the point of generation to the point of disposal, treatment or storage.

**Peripheral** means a keyboard, printer, or any other device designed exclusively for external use with a computer and which provides input or output into or from a computer.

**Recyclable electronic devices** means the process by which electronic devices are collected, separated or processed and reused or returned to use in the form of raw materials or products and that is not considered a solid waste.

**Recycling facility** means an approved facility that beneficially uses or reuses or legitimately recycles or reclaims solid waste.

**Recycling** means the process by which solid waste, or materials which would otherwise become solid waste, are collected, separated, or processed and reused or returned to use in the form of raw materials or products.

**Small Electronic Generator** means facilities that generate less than 100 kg (about 220 lbs) of electronic devices per month.

**Standard Operating Procedures (SOPs)** means step by step instructions for carrying out a specific activity, process or operation.

**Toxicity Characteristic Leaching Procedure (TCLP)** means the EPA test method 1311 used to determine the amount of hazardous constituents contained in hazardous electronic devices.

**Transfer facility** means any transportation-related facility, including loading docks, parking areas, storage areas and other similar areas where shipments of electronic devices or are held during the normal course of transportation.

**Transportation** means the movement of electronic devices by air, rail, highway, roadway, or water.

**Transporter** means a person or facility engaged in the offsite disposal and transportation of hazardous electronic devices by air, rail, highway, or water.

## 1560-500-5 EXCLUSION AND EXEMPTIONS TO SOLID AND HAZARDOUS WASTE RULES AND REGULATIONS

All electronic devices, sent for recycling are either exempt or excluded from the other provisions of these Solid Hazardous Waste Rules and Regulations provided that the public health, safety and environment must be protected and that the conditions and requirements set forth below are adhered to:

- (a) **Household Hazardous Waste Generator:** Household Hazardous Waste is excluded as a solid waste pursuant to 40 CFR 261.4(b).
  - 1. Household hazardous waste generated from a household can be taken to a household hazardous waste collection center (HHWCC) for proper recycling; or
  - 2. A household can individually recycle its household hazardous waste in accordance with the following suggested requirements:
    - a. **Generation and Storage:** The storage area must be adequately covered to protect the environment and human health, stored in appropriate containers so that liquids, including rainwater cannot enter the container.
    - b. **Labeling:** Each container should be clearly marked to identify its contents (i.e. spent electronic devices).
  
- (b) **Small Electronic Generator:** Recyclable Electronic devices generated and/or stored at a small electronic generator are exempt from any other provisions of these Solid and Hazardous Waste Regulations.
  - 1. Recyclable Electronic devices generated and/or stored at a small electronic generator can be brought to and comingled at a HHWCC for proper recycling; or
  - 2. The small electronic generator that chooses not to utilize the HHWCC, and elects to recycle its recyclable electronic devices must comply with section 1560-500-7 and must ship the items to an approved recycling facility.
  
- (c) **Large Electronic Generator:** Recyclable Electronic devices generated and/or stored at a large electronic generator is exempt from any other provisions of these Solid and Hazardous Waste Regulations.
  - 1. Large electronic generator that elects to recycle its recyclable electronic devices must comply with section 1560-500-7 and must ship the items to an approved recycling facility. A large electronic generator cannot utilize any HHWCC in the Territory.

## 1560-500-6 DISPOSAL REQUIREMENTS

All electronic devices, classified as a solid waste, prior to disposal, must comply with the following:

(a) **Waste Determination:** The generator must first conduct a hazardous waste determination and should utilize at least one of the following methods:

- (1) TCLP testing
- (2) Prior knowledge of the material
- (3) Based on Material Safety Data Sheet
- (4) Based on product label.

(b) **Hazardous Waste:** If it is determined that the electronic device is a hazardous waste then the generator or collection center must comply with the following:

(1) **Storage:** All electronic devices must be stored in a manner that prevents breakage and minimizes adverse impacts to the environment and must be stored in suitable containers that are in good condition.

a. Used, broken CRTs must either be:

- i. Stored in a building with a roof, floor and walls; or
- ii. Placed in a container (i.e. a package or vehicle) that is constructed, filled, closed to minimize releases of CRT glass (including fine, solid materials) to the environment.

(2) **Packaging:** Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must package the waste in accordance with the applicable Department of Transportation regulations on packaging.

(3) **Labeling:** Before transporting or offering hazardous waste for transportation off-site, a generator must label each package as follows:

(a) Clearly show the date upon which storage began;

(b) Provide a description of waste;

(c) Label with the words "Hazardous Waste"; and

- i. Used, broken CRTs must be clearly labeled or marked with one of the following phrases: "Used cathode ray tube(s)—contains leaded glass or leaded glass from televisions or computers."
- ii. CRT container labels must also display the following instructions: "Do not mix with other glass materials."

(d) Comply with all applicable DOT requirements.

(4) **Recordkeeping:** A generator must keep a copy of each manifest signed, for three years or until it receives a signed copy from the disposal facility which received the waste. The generator's record must specify the amount total amount



of waste generated per month. This signed copy must be retained as a record for at least three years from the date the waste was accepted by the initial transporter.

(5) **Destination:** Must be a permitted facility to accept/process hazardous electronic devices.

(6) **Speculative accumulation and use constituting disposal:** Hazardous electronic devices, including used, broken CRTs are subject the limitations on speculative accumulation (40 CFR, Part 261, §261.2).

(7)**Transporter:** A transporter must have a valid EPA ID number and an approved DPNR Hazardous Waste Permit.

(8)**Transfer Facility:** A transporter can store hazardous electronic devices for disposal for a period of ten (10) days or less at a transfer facility.

- (c) **Solid Waste:** If the hazardous waste determination concludes that the electronic device is not a hazardous waste, then the electronic device is exempt from this amendment and the generator must comply with all other applicable provisions of these Solid and Hazardous Waste Regulations.

#### 1560-500-7 RECYCLING REQUIREMENTS

All recyclable electronic devices must be stored in a manner that will not contaminate surrounding air, land or water, or injure the public health or environment, or create offensive conditions and must comply with the following:

- (a) **Generation and Storage:** The storage area must be adequately covered to protect the environment and human health, stored in appropriate containers so that liquids, including rainwater cannot enter the container.
- (b) **Labeling:** Each container should be clearly marked to identify its contents.
- (c) **Record Keeping:** The owner or operator of an HHWC shall keep a precise and accurate accounting record for each electronic device it generates and stores for recycling.
- (d) **Transportation:** All shipping papers and other required documents must be retained for at least three (3) years to clearly demonstrate that the electronic devices were shipped to a recycling facility for recycling (e.g. bill of lading) or recycled in the Territory.

At minimum, recycling records must provide the following information:

1. The type of electronic devices being shipped;
2. The amount of material recycled by weight and volume.
3. The frequency of shipments;
4. A one time description from each facility of how the electronic devices will be recycled;

5. The physical address of the recycling facility; and
6. Contact information for the owner/operator of the recycling facility.

Recyclable electronic devices at a HHWCC are not subject to this section but must comply with applicable provisions in section 1560-500-5.

#### **1560-500-8 COLLECTION CENTER DUTIES AND RESPONSIBILITIES**

Owners and operators of collection centers have the duty and responsibility to comply with the following requirements:

- (a) **Record Keeping:** Keep a precise and accurate accounting record for all electronic devices received.
- (b) **Reporting:** Submit to the Department an annual report specifying the total number of items sent for recycling, including proof of recycling (e.g. certificate of recycling).
- (c) **Standard Operating Procedure ("SOP"):** Develop an SOP for collection and processing of electronic devices. The SOP must be signed by the authorized representative and submitted to DPNR for approval, no less than thirty (30) calendar days prior to operation. The required SOP shall be reviewed and amended, as needed, every three years from the date of approval.
- (d) **Disposal:** Any electronic device classified as a solid waste must comply with section 1560-500-6 of this amendment.

# Best Practices for Packing Electronic Devices



VIWMA Environmental Programs Division

02/01/2011



## Best Practices for Packing Electronic Devices

Proper packaging methods and practices will reduce the potential for accidental breakage and will optimize the cost and efficiency of transportation. VIWMA requires packing vendors to comply with the Best Practices outlined within this document.

*Materials required for appropriate packing practices:*

- Pallets (also called skids): Flat transport structures designed to be moveable by forklift or hydraulic pallet jack/ hand truck. Typically 4' x 4'.
- Gaylord boxes (or Cardboard Boxes placed onto pallets): reuseable triple wall corrugated cardboard boxes. Typically 4' x 4' and of variable height.
- Shrink wrap: polymer plastic film, generally available in rolls for packaging purposes.

### Preparing a pallet of CRT (televisions,) monitors and computer peripherals

The above materials must be placed on pallets for collection. All groupings must be packaged separately. For example, CRT's (televisions) are packaged separately from monitors. VIWMA requires packers to use palletization techniques as described below to help ensure that work areas are safe. Packers should use Gaylord boxes for computer peripherals (cords, mouse, keyboards, motherboards, etc.).

Packers should assure that all pallets and loads are secure from potential damage. Please be sure to review these instructions with your staff. If you are unsure about these requirements or instructions, please contact your VIWMA staff member.

#### **CRT (televisions) pallet**

There are many ways to package a CRT pallet. How you arrange the units on the pallet is largely dependent on the size and shape of the CRT's to be palletized. If possible, attempt to gather the units into similar sized groupings to create consistent layers of units. Large televisions (including those encased inside a wooden cabinet) should be placed at the bottom of the pallet so they do not damage any smaller units.

#### **Monitor pallet**

There are many ways to package a pallet of monitors. How you arrange the units on the pallet is largely dependent on the size and shape of the units to be palletized. If possible, attempt to gather the units into similar sized groupings to create consistent layers of units.

### Tips on Palletizing:

As a general rule, please be sure to:

- 1) Stack materials on each pallet only as high as you and your staff can manage comfortably.
- 2) Do not let pallet height (i.e. pallet and materials) exceed 5 feet.

### Steps for Palletizing Miscellaneous Electronics



1. Begin by placing a pallet in an open work area. If available, boxes may be used for smaller items (such as mice, keyboards, and cords). Boxes also work well for odd-shaped material (such as printers) which would otherwise be difficult to stack.



2. Place heavy and flat items on the pallet first. This will build a strong, stable foundation



3. Continue building up the pallet of material. A good stopping point is when the material is between waist-and-chest heights.



4. Use stretch-wrap to hold the material in place. 80-gauge stretch-wrap works well for wrapping electronics. To tightly wrap the pallet, pull the stretch-wrap tight as you go around the corners. When finished wrapping, give the material a push to check how tightly bound it is. Continue wrapping if needed.

## Steps for Palletizing Similar Electronics

### Computer Monitors



1. Begin placing computer monitors on a pallet. Start with one on each corner and one in the middle, all positioned facedown. Try to use the monitors with the flattest faces and backs for the first layer. **Optional:** Remove the monitors' bases and cables if it makes stacking easier.
2. Next, place monitors face up between face down monitors. The curves in the monitors should allow them to fit together snugly.



3. Start the second layer, placing the monitors the same way as the first layer. Next, use stretch-wrap to secure the load. 80-gauge stretch-wrap works well for wrapping monitors. To tightly wrap the pallet, pull the stretch-wrap tight as you go around the corners. When finished wrapping, give the stack a push to check how tightly bound it is. Continue wrapping if needed.
4. Start third layer, by placing the monitors the very same way as the first and second layers. The monitors can be stacked 3-rows high for efficiency in transporting. ***Only attempt stacking monitors 3-rows high if you are capable of securing them tightly to the pallet.***



### Televisions



1. Begin by placing a pallet in an open work area. If available, place the most flat, box-like televisions on the first layer. Typically, four televisions will fit on the first layer.
2. Secure the first layer with stretch wrap. 80-gauge stretch-wrap works well for wrapping electronics. ***Be certain the first layer is wrapped and secure before starting a second layer!***



3. Stack a second layer of televisions on top of the first. Don't rush this step. Plan out where you want to fit the remaining televisions. ***Be careful not to allow televisions to fall and break the screens.***
4. Secure the pallet with stretch-wrap. To tightly wrap the pallet, pull the stretch-wrap tight as you go around the corners. When finished wrapping, give the material a push to check how tightly bound it is. Continue wrapping if needed.

#### ***Steps for Palletizing CPUs***

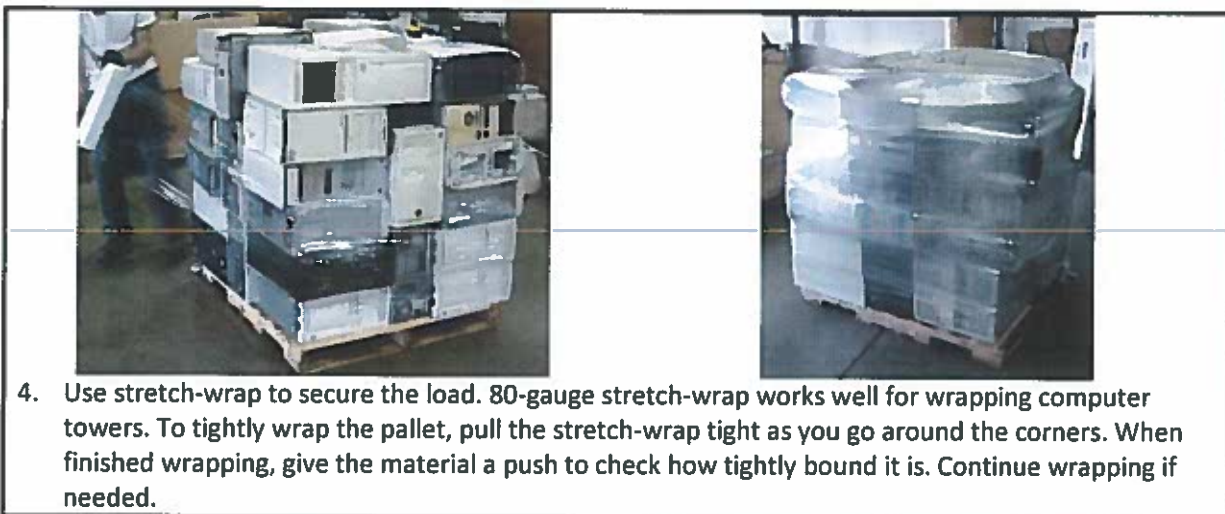


1. Begin by placing four computer towers on each corner of the pallet. Be sure that these towers are placed flat on the pallet (see below). Don't worry if towers are missing parts, or pieces fall off. Tower parts that fall off can be boxed and shipped to Total Reclaim for recycling.
2. Fill in the narrow spaces by placing computer towers upright between the towers in the corners.



3. Continue stacking the computer towers. Stack the towers flat on the corners and upright within the gaps. A good stopping point is when the towers are between waist-and-chest heights.





### Computer Peripherals – Gaylord Box

Computer peripherals such as cords, mouse, keyboards, motherboards, calculators, etc. can be placed in Gaylord boxes. The following is the recommended method for creating a pallet with monitors and medium to small sized televisions:

Use Gaylord boxes to store and ship Computer peripherals. Here are some simple rules for packing products in Gaylord boxes.

- 1) Place the Gaylord box on a pallet. Gently place all collected electronics into the Gaylord box, one at a time. DO NOT drop, toss, or throw electronics into the Gaylord box.
- 2) Place larger, heavier units into the bottom of the Gaylord box whenever possible and save small, more compact units (such as mice and keyboards) for placement between or on top of the larger pieces.
- 3) Store units with glass panel right side up to make sure that screens are not broken. Do not place heavy objects directly on top of the glass panels on these units.
- 4) When a Gaylord box is full, make sure the contents are packed tightly so that units shift as little as possible during transport.
- 5) A Gaylord box is considered full when the electronics in the Gaylord box are level or slightly below the upper rim of the Gaylord box. Make sure that electronics do not peak over the top ledge of the Gaylord box.