

## ENVIRONMENTALLY PREFERABLE PURCHASING SPECIFICATIONS FOR TONER CARTRIDGES

### Suggested Tasks Before Finalizing Bid Documents

- Inventory all imaging equipment and record toner cartridges needs for black toner only.
- Determine the highest volume of toner cartridges used (black toner only).

### Suggested Heirarchy, in order of preference, for purchasing toner cartridges (black toner) is:

- Remanufactured High-yield Cartridges
- High-yield OEM
- Remanufactured Standard Cartridges

### General Requirements of Bidder

- High-yield remanufactured and manufacturers' (OEM) toner cartridges for all imaging equipment of purchasing entity.
- Remanufactured toner cartridges that have been fully remanufactured to specifications equal to, or exceeding OEM cartridge standards of quality and performance and approved remanufactured toner cartridge industry standards. Toner cartridges furnished to this specification shall meet or exceed the latest remanufactured toner cartridge standards, or the guidelines adopted by the Standardized Test Methods Committee (STMC), the American Society for Testing and Materials (ASTM) and the International Safe Transit Association (ISTA), including the ASTM F 1856 Standards, ASTM F 335 and F 2036 Standards and ISTA–Integrity Procedure 1A Standards (ISTA 1A).
- Laser jet toner cartridges that are Ecologo certified. **??? See Bob's comment**
- Certify that its remanufactured toner cartridges have been tested in accordance with the above standards and guidelines and that its cartridges have met or exceeded those tests. It is also desirable that all remanufacturers of products offered on this contract be certified by the International Standard for Organization (ISO) 9001 series for Quality Management Systems and ISO 14001 series for Environmental Management Systems. If not certified at the time of bidding, the **PMT** reserves the right to require such remanufacturers to obtain such a certification within a reasonable period of time during the contract term. Upon request by the PMT, the contractor may be required to have cartridges tested by an independent third party laboratory, such as Rochester Institute of Technology (RIT), Buyers Lab, or equal at no charge to the purchasing entity. See <http://www.cims.rit.edu/facilities.aspx> for details.
- Furnish documentation with the bid stating the number of company personnel who have completed the training for the STMC Guidelines. This includes the standardized testing certification for ASTM F 1856-98, ASTM F 2036, and ISTA 1A VERSION-99.
- Shall have facilities, skilled personnel, equipment and parts available to completely service, maintain, overhaul and repair all brands of copiers and printers that are associated with the brand of cartridges listed in this solicitation.
- Must include bids for all toner cartridges listed in the solicitation.
- Furnish documentation indicating the current and expected failure rate of toner cartridges supplied under the contract.

**Comment [rm1]:** Requiring Ecologo certified will severely limit available cartridges. To my knowledge, only 1 remanufacturing company offers Ecologo cartridges and most OEM's are not Ecologo certified. HP offers only a handful of Ecologo certified OEM cartridges. If this language needs to be included, I suggest that Ecologo cartridges are "desired", but not required.

**Comment [MA2]:** What does PMT mean?

**Comment [rm3]:** This will effectively eliminate bidders that are distributors and not the actual remanufacturer of the products.

## Cartridge Remanufacturing Process

- The term "Remanufactured" is defined as an OEM cartridge which has been completely disassembled ~~and~~ cleaned, and any worn, damaged, or end of life-cycle components replaced. ~~replacing with a new long-life optical photo-conductive (OPC) drum with a minimum rating of 30,000 page lifespan and with all brand new parts except using the existing casing.~~
- The term "remanufactured" includes, at a minimum, the following:
- Assessment to determine if the cartridge can be remanufactured. This includes ensuring the cartridge to be remanufactured does not contain any patent infringements in design or components which may be reused as part of the rebuild process.
- Complete disassembly of toner cartridge to thoroughly clean and check all internal and external components against the original manufacturer's specifications. Worn, damaged, or end of life-cycle components should be replaced.
- Replacement of the original OEM drum with a new drum (which may include an extended life-drum). If the returned toner cartridge is equipped with an extended-life drum, bidder shall inspect it, clean, or replace it with a new extended-life drum or new aftermarket drum.
- Replacement of all seals with an OEM-type heat seal, card seal, or pressure sensitive seal.
- Replacement of the primary charge roller (PCR) with a re-coated or new PCR.
- Replacement of wiper blade meeting OEM specifications or the latest remanufactured toner cartridge industry standards adopted by the STMC or the latest guidelines adopted by ASTM for remanufactured toner cartridges.
- Replacement of any parts not meeting OEM specifications or the latest remanufactured toner cartridge industry standards adopted by the STMC or the latest guidelines adopted by ASTM for remanufactured toner cartridges.
- ~~Chemically cleaning or replacing the corona wire assembly (where applicable).~~
- Provision of one fuser wand (where applicable) with high temperature resistant felt wiper and one cotton swab shall be provided with each cartridge.
- The hopper shall be filled to capacity with new toner meeting or exceeding OEM standards.
- A toner hopper seal/separator meeting or exceeding OEM standards shall be inserted to prevent spillage of toner ~~or ink~~ during shipping.
- Print yield shall be equal to or exceed OEM rating for each cartridge. Yield shall be determined by the use of a standard pattern that features 5 percent coverage.
- Exterior surfaces shall be thoroughly cleaned, with all traces of old labels ~~and ink~~ or toner removed entirely.

**Comment [rm4]:** A general comment about this entire section; I would not mandate the replacement of specific components within a cartridge. It is the remanufacturers job to provide a quality product to the customer. They may have a proprietary process which allows for inspection/treatment of a component that provides them with a competitive advantage.

**Comment [rm5]:** Goes to my comment about mandating replacement of specific parts.

**Comment [rm6]:** Same as above

**Comment [rm7]:** Same as above

**Comment [rm8]:** This is better restated as high yield cartridge

**Comment [rm9]:** The 5% area coverage is a reference to the ASTM F1856 page yield test method. OEM cartridges and many reman cartridges are measured using the ISO 19752 test method which uses a standard page rather than % area coverage. I would not include the 5% AC statement.

## Cartridge Packaging And Labeling Requirements

- Packaging for the cartridges shall be constructed to permit users to re-package spent cartridges for return to bidder. All corrugated packaging contain a minimum of 35% post-consumer recycled content and provide certification from the carton manufacturer/supplier to verify the actual percentage of recycled content.

## Cartridge Testing

- All cartridges are to be tested after remanufacturing by installing the cartridge in an applicable printer, running and inspecting test copies. It is required that a copy of a test page be included with the finished product.

## Warranty

- Warranty for remanufactured cartridges against defects in material and workmanship for a minimum of one (1) year from the date of manufacture will be included.
- If problems occur with printers or copiers due to a vendor's defective remanufactured toner cartridge, vendor shall provide: (1) a competent factory-trained authorized service technician to repair printer or copier within one (1) business day, or (2) shall reimburse the buyer for any printer

or copier repair service performed due to the bidder's defective cartridge. If the printer or copier cannot be repaired or restored to its previous condition. Bidder shall replace the printer or copier at no cost to the Buyer.

- Shall warrant that the use of remanufactured cartridges will not void any manufacturer's warranty on the printers or copiers. All cartridges supplied under the contract shall have a 100% replacement warranty. This warranty shall be provided with each cartridge and shall cover defects in the cartridge, material used in the cartridge, workmanship and damage during shipment.

#### **Used Cartridge Recycling Collection**

- Shall provide in-person or third party collection of all used and empty cartridges or provide a prepaid shipping/mailling label for returning each empty cartridge.
- Toner cartridges for recycling shall be picked up. Cartridge packaging must be conducive to repackaging empty cartridges.
- Bidder shall recycle end-of-life cartridges and provide buyer with details of its recycling program upon request.

#### **Waste Toner Recycling Or Disposal**

- Shall ensure that remaining toner in used cartridges is recycled or disposed of in a manner that complies with all environmental and human health and safety laws.
- At buyer's request, vendor shall provide manifests and any other documentation needed to confirm the proper disposal of material.

#### **Special Provisions**

- A Material Safety Data Sheet (MSDS) shall be provided in each container.
- Each shipping container shall have, on at least one of the long sides, a label which clearly states: "IMPORTANT: SAVE THIS BOX AND ALL INTERNAL PACKAGING FOR RETURN OF THE EMPTY CARTRIDGE."
- Each cartridge shall be provided with complete instructions for installation and maintenance of the cartridge to optimize the performance and life of the cartridge.

#### **DEFINITIONS**

- ASTM—American Society for Testing Materials
- EcoLogo CCD-039—standard for remanufactured cartridges with specifications for the remanufacturing process, cartridge quality, and end-of-life management
- High-yield Cartridge—a cartridge filled with ink or toner to obtain maximum number of copies of printed material.
- International Imaging Technology Council (I-ITC) -global trade association of the imaging supplies industry and institutional host of the Standardized Test Methods Committee (STMC)
- International Safe Transit Association (ISTA) -testing and standard setting organization for packaging used for shipping goods
- Remanufactured Cartridges—a used OEM toner cartridge that has been emptied, cleaned, and any worn, damaged, or end of life-cycle components replaced.
- OEM Cartridge—a cartridge developed by the original equipment manufacturer.

- Compatible cartridge-new built, non-OEM cartridge produced and sold under a 3<sup>rd</sup> party brand. Compatibles are built using 100% new non-OEM parts.
- Standard Cartridge—a cartridge that is partially full with ink or toner.
- Standardized Test Methods Committee (STMC)— a global committee, created by the International Imaging Technology Council, to promote standardized test methods for the printer cartridge industry
- STMC certification for remanufactured toner cartridge vendors that signifies that the vendor's employees are trained in and use STMC test methods.