**Concepts for Enhancing Existing Fee and Payment Model**
**Adding Printers as CEW**

The purpose of this document is to explore the concept of expanding the definition of covered electronic devices (CED) under the **current** California Covered Electronic Waste (CEW) recovery and recycling program using a specific product as an example. We selected printers for this scenario because they are frequently mentioned when discussing expansion of the covered electronic waste definition. Please note this is NOT a CalRecycle proposal to add printers; instead, it is an example for discussion purposes of necessary legislation and actions that CalRecycle staff thinks would be needed to add a particular product category as a CED. Also note that CalRecycle is separately considering whether and how to make other changes to the existing CEW program that do not require legislation, including how to provide multiple payment rates for existing covered devices and whether and how to modify specific waste processing (cancellation) documentation requirements.

**Legislation** – The addition of any device to the current CEW recycling program other than video display devices would necessarily require legislation and statutory change. At a minimum, definitions contained in the Public Resources Code section 42463 would need to scope what is and is not a CED relative to the universe of printers, as well as identify mechanisms to address exceptions and exclusions. Legislation may need to provide structure to both fees charged at retail sale and the recycling payment rates. Currently, CED determination requires the Department of Toxic Substances Control (DTSC) to find that covered devices exhibit hazardous characteristics when disposed. Depending on the scope of printers targeted for inclusion, there is a possibility that changes would be needed in how CED determinations are made. This would require coordination with DTSC to determine if Health and Safety Code (25141.10.1) also needs revision.

**Regulations** – Pursuant to new enabling legislation, make extensive revisions to current regulations governing the Electronic Waste Recovery and Recycling Program to include printers as covered devices. Concepts of cancellation, residual management, recordkeeping, claims, etc., would require significant analysis and vetting.

**Implementation**
- Scope
    o Covered products – Desktop and business printers/scanners/fax machines. For the remainder of this document, we use the term "printers" as shorthand to include all of these covered products.
    o Covered entities – Specified consumers of specified devices (fee payers). Households, schools, businesses, government entities, non-profit organizations.
    o Includes all printers sold for use in California by any manufacturer or retailer, including internet sales.
    o Includes any and all printers used by a person in California prior to its discard.
    o Existing manufacturer responsibility and reporting requirements would be extended to printers that become CED.
- Rationale for adding printers:
    o Weight, recyclability, difficult and expensive to properly manage, short life span, may fail hazardous waste test for certain metals, low material value.
    o May include regulated lamps. Toner management is a challenge.
    o Common item discarded along with other IT-related devices.

- o Supports waste reduction and circular economy by recovering materials when printers are dismantled and material reclaimed.
- o Avoids hazardous waste from being disposed.
- Data Needed
  - o Identify the distribution chain: manufacturers/producers/retailers – System will be expanded to include new products that fall into definition of CED printer.
  - o Identify potential new retailers that are not included in the existing CED system.
    - Involve the Board of Equalization in process of identification and notification. Determine if current BOE registration system is adequate to capture new CEDs and CED retailers.
  - o Sales data – Estimate of annual printer sales in California.
  - o Net costs of recycling data – Collect data from recyclers that are currently managing printers. Determine degree of variability across range of legacy devices (simple printers vs multi-function, etc.).
  - o Current processes for recycling printers; options, hazards, markets, end-uses.
- Determine consumer fee
  - o New category of CED: Currently, CED fee based solely on need to maintain fund solvency while paying for legacy CEW recovery, recycling, and administration.  Should fee on printers be based on size, weight, hazardous material in the device, difficulty of recycling or another factor?
  - o Is it possible for consumer fee to more closely reflect actual costs to collect and recycle printers?
  - o Fee must be based clear objective(s).
- Determine recovery and recycling payments
  - o New category of CEW: Historically, recovery and recycling payments have been tied to weight; CalRecycle understands one size may not fit all.  Should recycling payment rates be based on size, weight, hazardous material in the device, difficulty of recycling or another factor?
  - o Based on net cost data collected and stakeholder input.
  - o Recyclers might receive a different recycling payment rate for recycling printers than for other CEWs.  Printers of different capabilities could be considered a "major category" under PRC 42478.
- Materials management standards
  - o What constitutes cancelation of a printer?
  - o Determine minimum management standards for processing printers and printer residuals to minimize negative environmental impacts from collecting and recycling activities: Is compliance with DTSC-administered regulations sufficient?
  - o Determine required or allowable cancelation methods and records.
- Processing documentation
  - o Identify documentation needed to determine if printers are generated from a California source.  How to ensure material is:
    - eligible
    - properly weighed
    - dismantled
    - residuals are properly handled

- Criteria and mechanisms to claim payments
  - Will different CEWs categories require separate payment claims?
    - Currently CRT and non-CRT are claimed separately, but can be combined into single claim package.
    - Will inclusion of printers require different residual management (criteria to fulfill) before claims are submitted? (Toner, lamps, batteries?)
    - What period of action or operation would constitute a reporting month or period?

**Pros and Cons of Adding Printers as a CED under existing CEW system**

Pros
- No disruption to existing collection and recycling infrastructure; most collectors currently accept printers as a part of doing business.
- Cost-free and convenient collection opportunities for consumers.
- Printer manufacturers may already familiar with and involved in the CEW program.
- Printers and their residuals would be handled in a manner consistent with current CEW regulatory structure and environmental oversight.
- Existing CEW public education and outreach materials can be easily expanded to include printers.
- CalRecycle internal procedures would remain relatively intact; adding printers would require some new review procedures; tools and databases would require revisions.

Cons
- Requires legislation and revised regulations.
- Requires identification of new manufacturers and retailers to the CED feed collection; may involve expansion of BOE audits
- Additional resources may be needed for CalRecycle and BOE; no reduction in state administrative costs.
- Does not incentivize reuse.
- Due to the potentially wide range of technologies, it would be difficult to obtain data on "average net cost to recycle" printers in order to determine appropriate payment rate.

Challenges and Issues to Address
- Potential challenge for BOE to collect fees from new retail locations.
- Coordination with DTSC regarding identification of printers as a covered electronic device.
- Obtaining data on sales of printers and costs to recover and recycle.
- Determining what constitutes cancellation for printers in California.
- Researching and determining appropriate materials management standards and end use destinations for printers and derived residuals claimed in the program.
- Determining appropriate documentation requirements; verification of CA-generated printers.