



**TRUE**

**TRUE Rating System**

September 2017

*Accompanying Addenda provided separately*

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# PREFACE

TRUE (Total Resource Use and Efficiency) is a zero waste certification program used by facilities to define, pursue and achieve their zero waste goals, cutting their carbon footprint and supporting public health.

GBCI is the world's leading sustainability and health certification and credentialing body. Established in 2008, GBCI exclusively administers project certifications and professional credentials and certificates within the framework of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) green building rating systems, as well as the PEER standard for power systems, the WELL Building Standard, the Sustainable SITES Initiative (SITES), EDGE (Excellence in Design for Greater Efficiencies), TRUE certification for zero waste and Investor Confidence Project (ICP) for energy efficiency retrofits.

The goal of business, nonprofit and government facilities participating in the TRUE certification program is to divert all solid waste from the landfill, incineration (waste-to-energy) and the environment. Facilities achieve certification by meeting 7 minimum program requirements and attaining at least 31 points on the TRUE scorecard.

TRUE is a whole systems approach aimed at changing how materials flow through society, resulting in no waste. TRUE encourages the redesign of resource life cycles so that all products are reused. TRUE promotes processes that consider the entire lifecycle of products used within a facility. With TRUE, your facility can demonstrate to the world what you're doing to minimize your waste output.

TRUE certified spaces are environmentally responsible, more resource efficient and help turn waste into savings and additional income streams. By closing the loop, they cut greenhouse gases, manage risk, reduce litter and pollution, reinvest resources locally, create jobs and add more value for their organization and community. TRUE certified facilities:

- **SAVE MONEY:** Waste is a sign of inefficiency and the reduction of waste reduces costs.
- **PROGRESS FASTER:** A zero waste strategy improves upon production processes and environmental prevention strategies, which can lead to larger, more innovative steps.
- **SUPPORT SUSTAINABILITY:** A zero waste strategy supports the three P's – people, planet and profit.
- **IMPROVE MATERIAL FLOWS:** A zero waste strategy uses fewer new raw materials and sends no waste materials to landfills, incineration (waste-to-energy) and the environment.

Implementing the requirements and credits of the TRUE Rating System has the following benefits to any facility looking for a better approach to resource use and facility operations:

- Helps eliminate pollution — in our air, water and land — which threaten public health and ecosystems
- Improves their bottom line by reducing costs
- Cuts the ecological footprint by reducing materials, using recycled and more benign materials, and giving products longer lives by increasing reparability and ease of disassembly at end of life.
- Promotes positive forces for environmental and economic sustainability in the built environment by protecting the environment, reducing costs, driving the development of new markets, and producing jobs throughout our economy.
- Fosters strong total participation including training of all employees and zero waste relationships with vendors and customers
- Allows the facility to showcase their responsibility and commitment to the local and global community and the environment

# HISTORY

The U.S. Zero Waste Business Council created the certification in 2013 as the first third-party zero waste rating system for facilities that meets the zero waste definition of the Zero Waste International Alliance. GBCI assumed responsibility for the ongoing management and evolution of the certification program on November 1, 2016. The original contributors to the development of the rating system included:

## STAFF AND COMMITTEE LEADERSHIP

- **SUE BEETS-ATKINSON:** Certification Committee Chair and former President USZWBC; Director of Sustainability, SBM Management
- **GARY LISS:** Former President and Vice President USZWBC; Gary Liss & Associates
- **RICK ANTHONY:** Former USZWBC Board Member; Richard Anthony Associates
- **STEPHANIE BARGER:** USZWBC Founder and Former Executive Director; Director, Market Transformation & Development - TRUE Certification, USGBC
- **EMILY DeCREMER:** Former USZWBC Zero Waste Associate; Certification Program Lead, Zero Waste, GBCI

## FORMER USZWBC BOARD AND BUSINESS ADVISORY

- **ANA WYSSMANN:** Industrial Solid Waste and Recycling Program Manager, JLL
- **BOB HOLLIS:** Principal, The Mobius Network
- **ANGELA, T. HOWE:** Legal Director, Surfrider Foundation
- **MIKE CAREY:** Sustainability Coordinator, Orange Coast College
- **CHERI CHASTAIN:** Sustainability Manager, Sierra Nevada Brewing Co.
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- **JUDI GREGORY:** Owner, Go2Zero Strategies
- **STEPHEN GRONER:** President, SGA Inc.
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- **CURT SMITH:** Manager Refuse & Recycling, Vons/Safeway Company
- **TOM WRIGHT:** Sustainability Consultant, Sustainable Bizness Practices

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The following individuals supported the program on the former GBCI Zero Waste Advisory Council:

### **GBCI ZERO WASTE ADVISORY COUNCIL**

- **RICK ANTHONY:** President, Richard Anthony Associates
- **SUE BEETS-ATKINSON:** Director of Sustainability, SBM Management (Chair)
- **MIKE CAREY:** Sustainability Coordinator, Orange Coast College
- **CHERI CHASTAIN:** Sustainability Manager, Sierra Nevada Brewing Co
- **STEPHEN GRONER:** President, SGA Inc.
- **BOB HOLLIS:** Principal, The Mobius Network
- **GARY LISS:** President, Gary Liss & Associates
- **SCOTT LUTOCKA:** Facilities Manager, Piazza Produce

### **Guidance Revisions**

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Quarterly Addenda are also published via the TRUE [Resources Page](#) and should be referenced in conjunction with the TRUE Rating System.

# SCOPE

## ZERO WASTE DEFINITION

GBCI defines zero waste according to the Zero Waste International Alliance (zwia.org) definition:

“Zero waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing zero waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.”

## PROJECT

The TRUE Rating System applies to physical facilities and their operations. The facility (or group of facilities on one property) applying for certification is defined as a “project.” A project is defined by the legal property boundary, which may or may not include multiple buildings. For projects located on publicly owned land, within a greater facility not seeking certification, or campuses that do not have internal property lines, the project boundary may use the legal limits of the campus or define an alternative boundary that is wholly contained within the legally owned site. It may not exclude sections of the property to create boundaries in unreasonable shapes for the sole purpose of achieving certain credits. The current rating system does not certify the owner/organization or their products or services as zero waste.

The standard underlying the “TRUE Made in a certified zero waste facility” certification is that the products are manufactured in a facility which has achieved one of the four “TRUE” certification levels by GBCI according to the TRUE rating system.

Other criteria for defining the project are as follows:

- All operations must occur within the defined project boundary and be consistently accounted for in requirements and credit documentation
- The entire area contained within the project boundary must be held by the same ownership, property manager, or developer, or maintained under one operating body
- The facility (or facilities) included in the project must be operational for a minimum of 12 months and have a defined baseline period for waste diversion data.
- There is no maximum or minimum size for a project to be considered eligible for certification.

While the TRUE rating system can be applied worldwide, some references are specific to the United States; therefore, projects in other countries are responsible for referencing and documenting comparable local resources.

## MATERIALS SCOPE

TRUE certification encompasses all solid, non-hazardous discards (referred to as “materials” herein) generated within the project boundaries. This includes materials generated during regular operations as well as those generated during episodic activities (Construction and demolition, special events, etc.). Hazardous materials are defined by the project’s local jurisdiction, state, or country. Liquid wastes are included in the scope of materials if they are accepted in the landfill by the local jurisdiction, state, or country. Wastewater is not included.

## DIVERSION

All those seeking certification must provide waste diversion calculations. These numbers should be used consistently across all requirements and credits. The diversion rate should represent all activities within the project boundaries and include all materials generated within that boundary. Diversion should be calculated by weight as follows:

$$\text{Diversion Rate} = \frac{\text{Materials diverted from landfill, incineration (WTE), and the environment}}{\text{Total Generation}}$$

GBCI does not require a standard unit of measure. However, all materials must be tracked and calculated using the same unit of measure chosen. For more details on calculation of diversion, please see the Diversion credit section.

The following activities are all considered acceptable forms of diversion and may be included in the diversion calculations:

- **REDUCTION** – Efforts to reduce the generation of materials can be recognized in the diversion calculations provided that the reductions are documented from an established baseline representing previous operations
- **REUSE** – Avoided disposal resulting from the reuse of items
- **COMPOSTING** – Organic matter decomposed by micro-organisms into a soil amendment
- **RECYCLING** – Materials converted into manufacturing feedstock material and used in creation of new products (excludes use as fuel substitute or for energy production)
- **ANAEROBIC DIGESTION** – Organic matter broken down by microorganisms into a soil amendment in the absence of oxygen (byproducts must be recovered for productive use in nature)
- **OTHER PROCESSING TECHNOLOGIES**, not including incineration or waste-to-energy, in which the end product is recovered for productive use in nature or the economy

# CERTIFICATION PROCESS

TRUE is an Assessor-based zero waste certification program that rates how well facilities perform in minimizing their non-hazardous solid wastes and maximizing their efficiency in the use of resources. The Assessor is an impartial third party that delivers services under the direct supervision of GBCI, and is expected to review and assess compliance with the rating system requirements. The certification process includes the following steps:



Please see *GBCI's Guide to TRUE Certification* for more details.



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# MINIMUM PROGRAM REQUIREMENTS

The following seven policies and practices are required for a project to earn and maintain TRUE certification:

- Company or project seeking certification has a zero waste policy in place.
- Project has achieved an average 90% or greater overall diversion from landfill, incineration (WTE), and the environment for solid, non-hazardous wastes (referred to as “materials” herein) for the most recent 12 months. Diverted materials are reduced, reused, recycled, composted and/or recovered for productive use in nature or the economy.
- Project meets all federal, state/provincial and local solid waste and recycling laws and regulations. Project complies with all air, water and land discharge permits required for collection, handling or processing of materials.
- Project has data documenting a base year of waste diversion data, and measurements since the base year that adjust for changes in size, type and nature of business.
- Project does not exceed a 10% contamination level for any materials that leave the site.
- Project submits 12 months of waste diversion data to GBCI annually to keep the certification current.
- Company submits a case study of zero waste initiatives.

# RATING SYSTEM OVERVIEW

This document contains the base requirements and credits of the TRUE Rating System. The rating system consists of a total of 81 possible credits. All minimum program requirements must be met if a project is to be considered for certification. Credits in the rating system are organized into 15 categories that reflect all aspects of a successful zero waste program. All credits are considered optional; however, 31 credit points must be earned for a project to achieve certification. Not all credits will apply to every project, but the array of credits provides multiple opportunities to achieve certification. It is not required to earn a credit in every category and there are no minimum categories in which credits must be earned.

Each credit and its corresponding requirements are detailed using the following format:

- **INTENT:** describes the objective or benefit of the credit.
- **REQUIREMENTS:** actions, measures or benchmarks a project must meet to achieve the credit.
- **POTENTIAL STRATEGIES:** practices that a project team can use to fulfill the credit. The strategies listed in this section are not all-inclusive, and we encourage projects to use creative site-specific solutions to meet the requirements of a credit.
- **SUBMITTAL DOCUMENTATION:** specifies what a project can submit to demonstrate compliance with the credit requirements. This documentation may include a policy or plan detailing specific criteria, calculations demonstrating a site's performance, or a narrative explaining procedures undertaken to meet the requirements. This documentation will support and inform the on-site verification.

## Addenda

Addenda are official updates that incorporate changes and improvements to the TRUE Rating System and other published guidance documents to help clarify, correct, interpret, or provide alternative language. These should be referred to in conjunction with the TRUE Rating System, and other published guidance documents.

The [TRUE v1 Addenda Table](#) is published and updated regularly via the TRUE [Resources Page](#).

# CREDITS

## CERTIFICATION LEVELS

**CERTIFIED:** 31-37 points    **SILVER:** 38-45 points    **GOLD:** 46-63 points    **PLATINUM:** 64-81 points

## OVERVIEW OF CATEGORIES & POINTS

<b>REDESIGN</b>	<b>4</b>	<b>LEADERSHIP</b>	<b>6</b>
<b>REDUCE</b>	<b>7</b>	<b>TRAINING</b>	<b>8</b>
<b>REUSE</b>	<b>7</b>	<b>ZERO WASTE ANALYSIS</b>	<b>5</b>
<b>COMPOST (RE-EARTH)</b>	<b>7</b>	<b>UPSTREAM MANAGEMENT</b>	<b>4</b>
<b>RECYCLE</b>	<b>3</b>	<b>HAZARDOUS WASTE PREVENTION</b>	<b>5</b>
<b>ZERO WASTE REPORTING</b>	<b>4</b>	<b>CLOSED LOOP</b>	<b>4</b>
<b>DIVERSION (MIN 90%)</b>	<b>5</b>	<b>INNOVATION</b>	<b>3</b>
<b>ZERO WASTE PURCHASING</b>	<b>9</b>	<b>TOTAL POINTS</b>	<b>81</b>

## CREDIT REDESIGN

- Credit 1 Right size collection containers and service levels
- Credit 2 Restructure solid waste collection agreements for zero waste
- Credit 3 Review all 9 points of generation
- Credit 4 Complete review of supply chain

## CREDIT REDUCE

- Credit 1 Document materials reduced by commodity
- Credit 2 Implement tracking programs to eliminate waste before it occurs
- Credit 3 Adopt a goal to reduce the overall size/amount of product packaging
- Credit 4 Go paperless for at least one major office function
- Credit 5 Set all printers to duplex print
- Credit 6 Practice grasscycling for all mowed surfaces
- Credit 7 Reduce yard trimming waste through native landscaping or xeriscaping

## CREDIT REUSE

- Credit 1 Develop systems that emphasize reuse
- Credit 2 Document pallet and shipping container reuse
- Credit 3 Implement reusable transport containers
- Credit 4 Establish program to reuse office supplies and materials
- Credit 5 Use reusable/durable food service ware
- Credit 6 Donate all food safe for human consumption
- Credit 7 Participate in animal feed program for inedible food

## **CREDIT COMPOST (RE-EARTH)**

- Credit 1 Collect compostables separately from other materials
- Credit 2 Compost, digest or reuse yard trimmings
- Credit 3 Compost food scraps and/or soiled paper on-site
- Credit 4 Compost food scraps and/or soiled paper off-site
- Credit 5 Utilize/reuse compost or mulch onsite
- Credit 6 Implement other process technologies for organic materials
- Credit 7 Use compost from site for on-site food production

## **CREDIT RECYCLE**

- Credit 1 Meet highest and best use for 80% of materials by weight
- Credit 1.2 Meet highest and best use for 100% of materials by weight
- Credit 2 Determine end markets for recycled commodities

## **CREDIT ZERO WASTE REPORTING**

- Credit 1 Document diversion by commodity or waste
- Credit 2 Track financial data for diversion and waste disposal
- Credit 3 Generate climate impact report using the U.S. EPA WARM Model
- Credit 4 Become an active participant of the U.S. EPA Waste Wise Program

## **CREDIT DIVERSION FROM LANDFILL, INCINERATION (WTE), AND ENVIRONMENT**

- Credit 1.1 Diversion is 90.1%-94.9%
- Credit 1.2 Diversion is 95%-96.9%
- Credit 1.3 Diversion is 97%-98.9%
- Credit 1.4 Diversion is 99%-99.9%
- Credit 1.5 Diversion is 100%

## **CREDIT ZERO WASTE PURCHASING**

- Credit 1 Adopt an Environmentally Preferred Purchasing (EPP) guideline or policy
- Credit 2 Include preference for durable goods in EPP policy or guideline
- Credit 3 Give preference to sustainably produced paper and wood products
- Credit 4 Identify EPP items in purchasing catalogs
- Credit 5 Track purchase of environmentally preferred products
- Credit 6 Give preference to used, refurbished, and/or remanufactured goods
- Credit 7.1 Any additional EPP practice(s)
- Credit 7.2 Any additional EPP practice(s)
- Credit 7.3 Any additional EPP practice(s)

## **CREDIT LEADERSHIP**

- Credit 1 Adopt zero waste goal at upper management level
- Credit 2 Review monthly diversion activities with upper management
- Credit 3 Encourage and incentivize employee participation
- Credit 4 Take responsibility for company products and packaging
- Credit 5 Require vendors to take responsibility for products and packaging
- Credit 6 Promote zero waste in the community utilizing upper management personnel

## **CREDIT TRAINING**

- Credit 1 Provide zero waste goal/policy to all employees
- Credit 2 Incorporate zero waste into employee orientation
- Credit 3 Communicate with employees about zero waste activities quarterly
- Credit 4 Clearly label all collection receptacles
- Credit 5 Train purchasing agents
- Credit 6 Include zero waste in evaluation process and/or bonus structure
- Credit 7 Dedicate at least one person for zero waste leadership role
- Credit 8 Provide all employees access to zero waste training

## **CREDIT ZERO WASTE ANALYSIS**

- Credit 1 Conduct annual physical waste audit
- Credit 2 Analyze results of annual waste audit and implement recommendations
- Credit 3 Complete annual physical audit of recyclables
- Credit 4 Add rejected recyclables back into waste stream documentation
- Credit 5 Engage employees in waste audit and/or analysis

## **CREDIT UPSTREAM MANAGEMENT**

- Credit 1 Work with vendors to eliminate non-recyclable packaging
- Credit 2 Give preference to vendors who embrace zero waste goals
- Credit 3 Request vendors use 100% recyclable packaging
- Credit 4 Request vendors redesign products for reuse and recycling

## **CREDIT HAZARDOUS WASTE PREVENTION**

- Credit 1 Properly handle hazardous materials
- Credit 2 Save records for at least 3 years
- Credit 3 Reuse or recycle universal waste
- Credit 4 Reduce the use of hazardous chemicals/materials
- Credit 5 Collect universal wastes from employees and/or customers

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**CREDIT    CLOSED LOOP**

- Credit 1    Require a minimum of 30% post-consumer recycled content for office paper
- Credit 2    Require a minimum of 20% post-consumer recycled content for janitorial paper products
- Credit 3    Purchase compost from a local source
- Credit 4    Ensure material remains in local markets and comes back on site

**CREDIT    INNOVATION**

- Credit 1    Participate in upcycling programs
- Credit 2    Commit to reduce total discards annually
- Credit 3    Implement innovative waste reduction activity

# REDESIGN

## REDESIGN CREDIT 1: RIGHT SIZE COLLECTION CONTAINERS AND SERVICE LEVELS

**INTENT:** To ensure container volume, amount, and number of pick-ups for each material type is accurate and appropriate to the generation of materials.

**REQUIREMENTS:** Evaluate all containers to ensure appropriate size and schedules are in place. Implement a strategy for the periodic review of these containers and adjust container sizes and pick-up frequencies with service provider accordingly.

**POTENTIAL STRATEGIES:** Physical observation of the container prior to hauling can be used for open containers. Review of certified weight tickets can also be used to compare the actual weight of containers to the potential volume. The evaluation should cover an appropriate period of time to adequately address temporal variations in material generation and pick-up schedules. Trash/landfill containers should be reallocated to storage areas or used for reusables, recyclables, or compostables.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how containers have been right-sized and the periodic review strategy
- Documentation showing adjustments in service levels (such as amended contracts or agreements, change orders, or written requests), or documentation (such as photographs, calculations, etc.) demonstrating that containers are sized appropriately

## REDESIGN CREDIT 2: RESTRUCTURE SOLID WASTE COLLECTION AGREEMENTS FOR ZERO WASTE

**INTENT:** To incentivize all parties to reduce waste through solid waste collection agreements.

**REQUIREMENTS:** Review solid waste collection agreements for ALL vendors handling waste and reusable/recyclable materials. Identify and implement modifications to at least one agreement that incentivizes the reduction of waste to landfill, incineration (WTE) and the environment.

**POTENTIAL STRATEGIES:** Partner with the service providers to explore tactics for a win/win relationship. Work to reduce contamination to ensure high value materials for resale or engage service provider in other services (training, waste auditing, etc.). The service provider may be able to explore profit sharing models from the sale of recyclables or set contracts to fluctuate based on the volume and/or weight of materials hauled from the site. Recycling, composting, or reuse services can be added or increased as landfill waste is reduced. As the facility reduces the amount of waste hauled from the site, the cost of hauling is decreased. This system incentivizes the generator to reduce waste.

### SUBMITTAL DOCUMENTATION:

- Narrative listing all vendor agreements, the review process undertaken, and the resulting changes to service for at least one agreement/vendor
- Documentation highlighting adjustments made to vendor contract(s) (such as amendments, change orders, or written requests)

### REDESIGN CREDIT 3: REVIEW ALL 9 POINTS OF GENERATION

**INTENT:** To ensure thorough review of all aspects of waste generation in every area of the facility.

**REQUIREMENTS:** Review all applicable points of generation for opportunities to ensure each material meets highest and best use in that area as compared to baseline practices.

**POTENTIAL STRATEGIES:** Determine which of the 9 points of generation (Warehousing & Distribution, Offices, Food Services, Grounds, Construction, Manufacturing, Vehicular Maintenance, Retail, Housing & Hospitality) exist in the company. Review materials generated in each applicable point of generation and identify opportunities to design out wasting. Implement waste reduction strategies identified.

**SUBMITTAL DOCUMENTATION:**

- Narrative listing points of generation applicable to the facility and how materials in each area are currently being diverted via the highest method possible on the zero waste hierarchy. Narrative must also describe review process. Documentation could also include written reports or meeting minutes, if applicable.

### REDESIGN CREDIT 4: COMPLETE REVIEW OF SUPPLY CHAIN

**INTENT:** To design out or eliminate wasting in the supply chain

**REQUIREMENTS:** Review purchasing records and supply chain agreements to determine opportunities to design out or eliminate wasting from vendors. Take at least one action that reduces waste from a vendor.

**POTENTIAL STRATEGIES:** Catalogue supply chain and conduct a review of the products and materials purchased from each vendor. Review all materials for opportunities to redesign practices to minimize waste. Open a dialogue with vendor partners to refuse products and materials that will be wasted at the facility, require them to take those materials back, or to select less wasteful options.

**SUBMITTAL DOCUMENTATION:**

- Narrative describing the review process and the resulting changes in agreements or products/materials purchased
- Documentation highlighting adjustments made to vendor contract(s) or changes in product purchasing (purchasing reports, receipts, invoices, etc.). Meeting minutes or written communications requesting the vendor to make changes may also be provided.



# REDUCE

## REDUCE CREDIT 1: DOCUMENT MATERIALS REDUCED BY COMMODITY

**INTENT:** To ensure reduction in materials are documented from an established baseline to quantify the benefits of ongoing reduction efforts.

**REQUIREMENTS:** Identify at least one material that is being reduced and collect documentation of the material volumes from a determined baseline period that is representative of ongoing operations. Establish a methodology to appropriately calculate the reduction by weight or volume for each material. Calculate reduction and display results by commodity.

**POTENTIAL STRATEGIES:** Document material generation for a given baseline period, usually one calendar or fiscal year prior to the implementation of waste reduction activities for that material. Then calculate the current volume of the same material generated as a result of waste reduction activities. This exercise should be carried out for each material type targeted for reduction.

### SUBMITTAL DOCUMENTATION:

- Narrative describing which material(s) were reduced and the methodology used to calculate waste reduction for each
- Documentation of the volume and/or weight of materials generated for a baseline period and for the present. Documentation should also include the calculated reduction/difference.

## REDUCE CREDIT 2: IMPLEMENT TRACKING PROGRAMS TO ELIMINATE WASTE BEFORE IT OCCURS

**INTENT:** To prevent waste before it occurs by discovering upstream waste reduction opportunities in daily operations.

**REQUIREMENTS:** Identify and implement at least one program or tool to assist in the periodic review of operations and associated waste generation. The program or tool must help users identify and eliminate waste upstream.

**POTENTIAL STRATEGIES:** Examine existing programs and develop a tool or tools to track the flow of materials throughout facility operations. Establish regular reviews of data to identify wasteful activities. Alternatively, consult 3rd party providers for tracking/monitoring software packages or online tools that benefit your facility's operations.

### SUBMITTAL DOCUMENTATION:

- Narrative describing each program or tool that is employed to help eliminate waste upstream
- Documentation showing what program(s) and management practices are established to track material flow (spreadsheets, reports generated, screenshots)

### REDUCE CREDIT 3: ADOPT A GOAL TO REDUCE THE OVERALL SIZE/ AMOUNT OF PRODUCT PACKAGING

**INTENT:** To reduce packaging waste generated at the facility as well as downstream.

**REQUIREMENTS:** Define reduction goals for inbound and outbound packaging. Create and implement a strategy to meet all goals. Gather documentation on baseline size and amount of packaging for both inbound and outbound materials.

**POTENTIAL STRATEGIES:** Review total amount of product packaging generated for inbound and outbound materials. For inbound materials, work with upstream vendors to identify materials that may have excessive or unnecessary packaging. Then find a solution to eliminate or reduce the packaging. For outbound materials, work with manufacturing, operations and/or packaging departments to identify opportunities to reduce internally generated packaging materials.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative defining packaging reduction goals and describing the strategy to meet the goal
- Documentation of written, adopted goal(s) to reduce the overall size/amount of product packaging for both inbound and outbound packaging
- Data on baseline size and amount of product packaging for inbound and outbound materials

### REDUCE CREDIT 4: GO PAPERLESS FOR AT LEAST ONE MAJOR OFFICE FUNCTION

**INTENT:** To prevent paper waste and conserve resources by using available technologies.

**REQUIREMENTS:** Identify one or more office functions that currently use paper that would be suitable for a paperless program. Implement the paperless program for at least one chosen office function and estimate the reduction in paper waste.

**POTENTIAL STRATEGIES:** Determine which office functions may be opportunities for paperless operation (e.g. billing, scheduling, payroll, etc.). Evaluate special needs that must be met by the electronic execution of the selected function (e.g. confirmation receipt or confidentiality).

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the paperless-office program for at least one office function and how it meets the needs of the office without the use of paper
- Documentation of the estimated reduction in paper waste

### REDUCE CREDIT 5: SET ALL PRINTERS TO DUPLEX PRINT

**INTENT:** To reduce paper waste and conserve resources.

**REQUIREMENTS:** Ensure all printers within the facility are set to duplex printing.

**POTENTIAL STRATEGIES:** Employ the IT department and/or printer vendor to set the printer's default to duplex printing.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing how the strategy was implemented
- Documentation showing any policies or rules adopted

## REDUCE CREDIT 6: PRACTICE GRASSCYCLING FOR ALL MOWED SURFACES

**INTENT:** To eliminate grass clippings sent to landfills or incinerators (WTE).

**REQUIREMENTS:** Practice grasscycling by leaving grass clippings on all mowed surfaces.

**POTENTIAL STRATEGIES:** Include grasscycling as a requirement in the landscaping service contract's scope of work. Alternatively, work with landlord to establish this practice or create a grasscycling policy and train employees on the practice.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the practice
- If an outside company or service is used, provide the contract with the landscape service provider detailing the implementation of grasscycling or a written letter on company letterhead from landscaper stating the practice occurs.

## REDUCE CREDIT 7: REDUCE YARD TRIMMING WASTE THROUGH NATIVE LANDSCAPING OR XERISCAPING

**INTENT:** To prevent or reduce the amount of green waste generated at the facility.

**REQUIREMENTS:** Install plants or use landscaping techniques that require little to no trimming and disposal of waste material.

**POTENTIAL STRATEGIES:** Facility can consult with a landscape architect, landscape designer and/or landscape service providers to identify opportunities to implement appropriate native or xeriscape plantings. Favor plants that require little to no irrigation.

### SUBMITTAL DOCUMENTATION:

- Narrative describing plants or landscaping techniques that require little to no trimming and disposal of waste material
- Documentation (such as photographs) showing the landscape at the facility

# REUSE

## REUSE CREDIT 1: DEVELOP SYSTEMS THAT EMPHASIZE REUSE

**INTENT:** To reduce or eliminate the consumption of single-use, disposable materials.

**REQUIREMENTS:** Identify single-use materials and establish a program to help reduce or eliminate at least one material/item type. Develop systems that enable the reuse of materials either within the facility or downstream through third parties.

**POTENTIAL STRATEGIES:** Determine materials that are used one time and then discarded. Identify opportunities to replace one time use material with durable and reusable products. Waste materials with potential reuse value are generally universal, durable and generated in steady quantities. Some potential strategies include (but are not limited to): replacing paper towels with cloth rags and creating a system to wash them, using reusable cups for sampling or measurements, or refilling containers. Several organizations are available that connect reusable materials generators with those in need (e.g. Reuse alliance and Building Materials Reuse Association).

### SUBMITTAL DOCUMENTATION:

- Narrative describing the development of systems that enable the reuse of materials

## REUSE CREDIT 2: DOCUMENT PALLET AND SHIPPING CONTAINER REUSE

**INTENT:** To quantify reuse activity and reduce the need for new pallet and/or shipping container purchase.

**REQUIREMENTS:** Establish process to track and document the reuse of pallets, incoming shipping containers and outgoing shipping containers. Develop a methodology to quantify the number and monthly volume by weight of reused pallets and containers. If pallet vendors are used, provide documentation of volumes shipped from the site.

**POTENTIAL STRATEGIES:** Determine the needs of the operation and identify where used pallets and shipping containers can be used. Identify the flow of used pallets and containers into and out of the facility. Develop a tracking system to record numbers of pallets and containers reused each month and determine estimated or actual weights.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the methodology used to quantify the number and volume by weight of reused pallets, incoming shipping containers and outgoing shipping containers.
- Documentation showing tracking of monthly number and volume by weight of reused pallets, incoming shipping containers and outgoing shipping containers. If pallet vendors are used, documentation from vendor showing the same information can be submitted.

## REUSE CREDIT 3: IMPLEMENT REUSABLE TRANSPORT CONTAINERS

**INTENT:** To reduce waste in shipping and transport operations

**REQUIREMENTS:** Utilize reusable plastic, metal, wood, or other durable material containers for transporting items or supplies. Reusable containers can be used for outgoing shipping and/or receiving from vendors, inter-company shipments, or customers.

**POTENTIAL STRATEGIES:** Determine types of current transport containers and the amount used per month. Assess available options to replace any disposable or recyclable containers, including calculation of return on investment based on expected usage. Select best option and replace disposable or recyclable containers. Check with vendors on available returnable container programs. Track usage and avoided waste or recyclable material generation in diversion reports.

### SUBMITTAL DOCUMENTATION:

- Narrative explaining types of reusable containers used and what operations they are used for.

## REUSE CREDIT 4: ESTABLISH PROGRAM TO REUSE OFFICE SUPPLIES AND MATERIALS

**INTENT:** To extend the embodied value of office supplies and materials that have not yet reached end of life.

**REQUIREMENTS:** Establish a process to collect and redistribute unwanted office supplies and/or materials internally or externally.

**POTENTIAL STRATEGIES:** Designate a location for collection and redistribution of unwanted office supplies and/or materials and educate staff on the process. This can include office furniture and equipment. Additionally, allocate resources to sort and organize the collected materials. Assess opportunities to reuse internally or donate to local charities.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the process used to collect and redistribute office materials for extended life use.
- Documentation of program that may exist, including written policies or procedures. If reuse is outside of facility, copies of donation receipts, letters, or agreements.
- Photograph of the space where materials are being stored (optional).

## REUSE CREDIT 5: USE REUSABLE/DURABLE FOOD SERVICE WARE

**INTENT:** To reduce or eliminate waste generated by disposable food service ware.

**REQUIREMENTS:** Provide reusable/durable alternatives to disposable service ware in employee break rooms and common areas, and to customers if applicable. Outline the estimated reduction of waste materials and savings through the program.

**POTENTIAL STRATEGIES:** Identify products and processes that can replace any existing disposable service ware. Items that should be considered include (but are not limited to): flatware, to-go containers, plates, bowls and disposable cups. Implementation may require accommodations for on-site dishwashing and/or distribution, and collection of bus-tubs. Consider distributing reusable tumblers and hot beverage cups to employees to encourage the use of durable goods.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the implementation of reusable/ durable service ware, specifying which disposable items have been replaced.
- Documentation of reduction of waste materials and savings from implementing the program.

## REUSE CREDIT 6: DONATE ALL FOOD SAFE FOR HUMAN CONSUMPTION

**INTENT:** To utilize the inherent value of prepared foods for the highest and best use.

**REQUIREMENTS:** Identify all applicable food products that are safe for human consumption. Locate organizations within the area that need it, and arrange for food to be donated. Establish food safety processes to ensure the food stays safe for human consumption.

**POTENTIAL STRATEGIES:** Identify the generation points of food waste and determine where food fit for human consumption could be preserved and donated. Work directly with charity organizations that provide food to the needy, or work with an organization that connects food donors with organizations in need.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the implementation of food donations. The narrative should include methods used to identify applicable food products, maintenance of food safety and identify the organization(s) that are receiving and redistributing the food.
- Documentation of food donated (receipts, letters, agreements, reports).

## REUSE CREDIT 7: PARTICIPATE IN ANIMAL FEED PROGRAM FOR INEDIBLE FOOD

**INTENT:** To utilize the inherent value of prepared foods for the highest and best use.

**REQUIREMENTS:** Identify applicable food products that are safe for animal consumption. Locate organizations within the area that need it for feeding animals and arrange for them to take the food.

**POTENTIAL STRATEGIES:** Identify the generation points of food waste and determine where food fit for animal consumption could be preserved and redistributed. Work directly with farms, livestock operations, zoos, sanctuaries, animal feed manufacturers or other organization(s) providing animal care.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the implementation of food donations. The narrative should include methods used to identify applicable food products, and identify the farms or organization(s) utilizing the food scrap.
- Documentation of participation in animal feed program (receipts, letters, agreements, service contracts, reports).

# COMPOST (RE-EARTH)

## COMPOST CREDIT 1: COLLECT COMPOSTABLES SEPARATELY FROM OTHER MATERIALS

**INTENT:** To ensure organic materials are properly separated from the waste stream to promote the beneficial use of the material and minimize contamination of other materials.

**REQUIREMENTS:** Create process for the collection of source separated compostables. Separate collection should take place at front and back of house food service operations, break areas, and all other locations where organics are generated. Compostable material must remain separate from other materials at all times, including point of collection from service provider.

**POTENTIAL STRATEGIES:** Identify areas where organics are generated and provide collection bins that are labeled for organics. Further detail and photographs on bins regarding items that are accepted and prohibited will help to minimize or eliminate contamination. Train employees on proper sorting.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the process for collection of source separated organics.
- Photographs of collection system (optional).

## COMPOST CREDIT 2: COMPOST, DIGEST OR REUSE YARD TRIMMINGS

**INTENT:** To divert organic matter away from landfill and incineration (WTE) and towards creation of valuable, nutrient rich soil.

**REQUIREMENTS:** Create and implement a system for collecting then composting, digesting and/or mulching all green waste generated through landscaping activities.

**POTENTIAL STRATEGIES:** Determine materials generated through landscaping activities. Set expectations with the landscape department or landscape service provider (via contract or standard practice) that all yard trimmings should be composted, digested or mulched. If the facility disposes of materials, separate bins should be provided for green waste processing. Identify a composter, digester or reuse operation that can accept the materials generated at the site. If materials are taken off site by a landscape service provider, confirm proper processing.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the process for collecting, composting, digesting or mulching waste generated through landscaping activities. The narrative should describe the identification of materials, their disposition, and the organization(s) that are processing the material (if applicable).
- Documentation supporting practices including written company policies or contract with landscaping service provider. Verification of green waste collection services can be documented with invoices, agreements, weight tickets, or official letters from the service provider or processor.

### COMPOST CREDIT 3: COMPOST FOOD SCRAPS AND/OR SOILED PAPER ON-SITE

**INTENT:** To divert organic matter away from landfill and incineration (WTE) and towards creation of valuable, nutrient rich soil.

**REQUIREMENTS:** Create and implement a system for composting food scraps and/or soiled paper on-site. Ensure that food scraps are properly composted prior to redistribution as a soil amendment or other beneficial use.

**POTENTIAL STRATEGIES:** Determine an effective method for composting materials generated at the site. Methods employed could involve windrow composting, vermicomposting, or in-vessel units. Adequate resources and training should be provided to the staff assigned to manage the material to ensure proper feedstock composition, temperature control and output parameters are maintained. Ensure all local and state regulations for on-site composting are complied with.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing process for on-site composting of food scraps and soiled paper. Narrative should include details on timeframes, management of the process, and controls implemented to ensure that food scraps are properly composted prior to redistribution.
- Photographs of compost operation (optional).

### COMPOST CREDIT 4: COMPOST FOOD SCRAPS AND/OR SOILED PAPER OFF-SITE

**INTENT:** To divert organic matter away from landfill and incineration (WTE) and towards creation of valuable, nutrient rich soil.

**REQUIREMENTS:** Identify and utilize a composter for off-site composting of soiled paper and/or food.

**POTENTIAL STRATEGIES:** Identify a composter that can accept the materials generated at the site. Ensure adequate collection and hauling schedules are in place to handle the materials generated. Ensure that all parties (e.g. janitorial and food service) handling and disposing materials are trained on the process.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative identifying the organization(s) that are handling the composting of materials and a brief description of their process.
- Documentation verifying service (contracts, agreements, official letter, etc.).



## COMPOST CREDIT 5: UTILIZE/REUSE COMPOST OR MULCH ON-SITE

**INTENT:** To support the market value of compost and mulch. Create better soil for healthier plants on-site.

**REQUIREMENTS:** Identify areas where compost or mulch would be beneficial to site landscape, then purchase and apply it to these areas.

**POTENTIAL STRATEGIES:** Work with the landscape service provider or pertinent staff to identify areas where compost or mulch would be beneficial to site landscape. Find a retailer, preferably local, and purchase compost and/or mulch. Apply the materials as needed.

### SUBMITTAL DOCUMENTATION:

- Narrative describing purchase and application of compost or mulch on-site.
- Documentation supporting the purchase or use of compost or mulch for use in the landscape. Include the volume of material used and the time frame.

## COMPOST CREDIT 6: IMPLEMENT OTHER PROCESS TECHNOLOGIES FOR ORGANIC MATERIALS

**INTENT:** To promote beneficial, non-harmful use of organic materials and/or generate clean energy.

**REQUIREMENTS:** Utilize a separate process technology for organic materials that is beneficial, non-harmful and/or generates clean energy.

**POTENTIAL STRATEGIES:** Assess opportunities available in the community or on-site equipment for processing organic materials in an alternative, non-harmful way. This could include various types of digestion, such as anaerobic digestion. Strategies will vary significantly based on sector, site operations and processes, waste stream, and options available in local community.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the process technology and the benefits achieved through that process.
- Documentation of technology used, such as photographs of equipment or receipts of their purchase. If an outside service is used, documentation showing agreement/service provided.

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## COMPOST CREDIT 7: USE COMPOST FROM SITE FOR ON-SITE FOOD PRODUCTION

**INTENT:** To demonstrate commitment to the environment and the natural organics system by utilizing food waste to assist in propagation of new food for consumption by those who generated the waste.

**REQUIREMENTS:** Create a process of utilizing compost generated from the food waste on-site to grow new food for company use. If an off-site composter is used, any compost generated from the facility is purchased for use in the facility's program.

**POTENTIAL STRATEGIES:** If facility has implemented on-site composting of food waste and soiled paper, use the end product as a soil amendment in a plot designated for food crops. Off-site operations will purchase finished product from their composter. Food crops such as lettuce, greens, and vegetables harvested from the plot should be utilized in on-site food service operation or employee break rooms.

### **SUBMITTAL DOCUMENTATION:**

- Narrative detailing use of compost generated from on-site food waste for producing new food for company use. Volume and type of food generated, along with how food used, should be included. Compost used on-site should be detailed in the narrative.
- Photographs of garden (optional).

# RECYCLE

## RECYCLE CREDIT 1.1: MEET HIGHEST AND BEST USE FOR 80% OF MATERIALS BY WEIGHT

**INTENT:** To ensure highest and best use of materials is explored prior to recycling.

**REQUIREMENTS:** Identify which categories of materials are generated at the facility (see below). Identify the highest and best use for each material generated at the facility. Demonstrate that 80% of materials, by weight, are meeting the highest and best use. If 80% of all materials generated by weight consists of one material only, the next 3 largest waste streams by weight must also meet highest and best use.

Highest and Best Use: The end use of a discarded material that recovers the highest value of its embodied energy. Highest and best use is evaluated according to the following hierarchy from ZWIA:

1. Reuse of a product or material for its original purpose, an alternate purpose, or reuse of its parts
2. Recycling of inorganic materials in closed loop systems or single-use applications
3. Composting or mulching of organic materials to sustain soils, avoid use of chemical fertilizers, or reduce erosion and litter and retain moisture

**POTENTIAL STRATEGIES:** Review materials generated in the facility's operation across all 12 Master Categories of Commodities/Discards. Look for opportunities to reduce, reuse and upcycle materials prior to recycling. Increase awareness and engage employees creatively through contests or other initiatives to further identify opportunities available in area.

Below are the 12 Master Categories

- |                     |                   |                           |                            |
|---------------------|-------------------|---------------------------|----------------------------|
| <b>1. Reusables</b> | <b>2. Paper</b>   | <b>3. Plant trimmings</b> | <b>4. Putrescible/food</b> |
| <b>5. Polymers</b>  | <b>6. Wood</b>    | <b>7. Ceramics</b>        | <b>8. Textiles</b>         |
| <b>9. Soils</b>     | <b>10. Metals</b> | <b>11. Glass</b>          | <b>12. Chemicals</b>       |

### SUBMITTAL DOCUMENTATION:

- Narrative describing which categories are applicable to the facility. For each of those categories, narrative must describe how it meets highest and best use.
- Calculations showing that 80% of materials at the facility, by weight, are following the highest and best use. If 80% of all materials generated by weight consists of one material only, the next 3 largest waste streams by weight must also meet highest and best use.

## RECYCLE CREDIT 1.2: MEET HIGHEST AND BEST USE FOR 100% OF MATERIALS

**INTENT:** To ensure highest and best use of materials is explored prior to recycling.

**REQUIREMENTS:** Identify the highest and best use for all materials generated at the facility. Demonstrate that 100% of materials, by weight, are meeting the highest and best use.

**POTENTIAL STRATEGIES:** See Recycle Credit 1.1

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing which categories are applicable to the facility. For each of those categories, narrative must describe how it meets highest and best use.
- Calculations showing that 100% of materials at the facility, by weight, are following the highest and best use.

## RECYCLE CREDIT 2: DETERMINE END MARKETS FOR RECYCLED COMMODITIES

**INTENT:** To understand the entire lifecycle of materials generated at the facility.

**REQUIREMENTS:** Acquire written documentation from every service provider on where recyclable commodities from the facility are sent for final processing.

**POTENTIAL STRATEGIES:** Identify all recycling vendors and locations, and understand their operations, processes, and end products. Compile documentation for recyclable commodities including the type of processing and the end product that they produce. Communicate directly with the vendor and consider visiting their operations center if available. Request as many materials as possible remain in local markets.

### **SUBMITTAL DOCUMENTATION:**

- Narrative listing all recycling service providers and their locations.
- Written documentation from every recycling service provider describing where materials from the facility are sent for final processing after leaving service provider site.

# ZERO WASTE REPORTING

## ZERO WASTE REPORTING CREDIT 1: DOCUMENT DIVERSION BY COMMODITY OR WASTE

**INTENT:** To understand generation of every commodity or waste at the facility and how these materials are processed.

**REQUIREMENTS:** Compile 12 months of data for each commodity and waste stream. Ensure commodity and waste data shows an overall annual average diversion from landfill, incineration (WTE), or environment of 90% or better. Data must be broken down by month. If certified or otherwise documented weights are not available, the use of guidelines from the EPA, state agency, or similar reference for volume to weight conversions are acceptable. This credit allows for the inclusion of reuse and reduce, provided each commodity in this category has been tracked.

Additionally, determine a baseline year and compile data for each commodity and waste stream in that year. Data should be displayed and calculated in a similar manner to 12 month reporting period data above. The base year could be the reporting year immediately preceding the most recent reporting year at a minimum (calendar or otherwise).

**POTENTIAL STRATEGIES:** Identify the various waste streams for the building, and determine if and how each is currently tracked. Develop and implement tracking procedures for all waste streams not already tracked. Strive to obtain actual weights for as many waste streams as possible. If obtaining weight is not a feasible option, ensure that the process implemented for tracking volume obtains accurate and useful data for the project. Work with team members to determine reliable and efficient ways to incorporate the tracking into their responsibilities.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the data collection and tracking process. If applicable, methodology used to estimate weights must be included in narrative or in diversion report.
- 12 months of ongoing tracking data for all waste streams. Data must be displayed by commodity and waste, be broken down by month, and calculate annual average diversion rate.
- 12 months of data for a baseline year. Data must be displayed by commodity and waste, be broken down by month, and calculate annual average diversion rate.
- Documentation that verifies values listed in tracking sheets for at least one month, including invoices that document weight, weight tickets, internal documentation, or any report from service provider (if available). If actual weights are not available, the documented process must quantify container size/volumes.

## ZERO WASTE REPORTING CREDIT 2: TRACK FINANCIAL DATA FOR DIVERSION AND WASTE DISPOSAL

**INTENT:** To understand fiscal impacts of zero waste initiatives.

**REQUIREMENTS:** Document diversion and associated costs (landfill disposal cost, avoided landfill cost, recycling hauling costs, any other fees/cost) and revenue (if applicable). Calculate actual annual cost and overall net for the program. Calculate at least one year's results including baseline data for each commodity. All financial data must be reported on a monthly and annual basis.

**POTENTIAL STRATEGIES:** Track all the expenses related to the diversion of waste from landfill and incineration (WTE). Collect information on all of the collection, sorting, hauling fees, and rebate revenue. Cost per ton of waste can be tracked to demonstrate net benefit over tons that went to incineration (WTE) and landfill.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing methodology for collecting financial data and how it is tracked.
- Tracking report of financial data meeting requirements, which can include landfill disposal costs, avoided costs from diversion efforts, and revenue from recycling commodities sales for baseline year and reporting year.
- Documentation verifying costs and revenues for at least one month, including invoices, receipts, rebate statements, checks, etc.

## ZERO WASTE REPORTING CREDIT 3: GENERATE CLIMATE IMPACT REPORT USING THE U.S. EPA WARM MODEL

**INTENT:** To understand environmental benefits of waste reduction activities.

**REQUIREMENTS:** Enter data into the U.S. EPA's WARM Model tool for all applicable material types on an annual basis, at a minimum. Generate and save report.

**POTENTIAL STRATEGIES:** Identify commodities diverted and waste disposed of that matches inputs of the WARM model. Collect and input weight data for baseline year/scenario and current year and answer all questions in tool. Generate report listing environmental benefits such as net greenhouse gas emissions saved (MTCE), total BTUs (million) saved, oil (barrels) saved, gas (gallons) saved and the reduction of "average" passenger cars on the road per year. The model can give a number of outputs that can be included in annual sustainability reports.

### **SUBMITTAL DOCUMENTATION:**

- Report generated from the EPA's WARM model.

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## **ZERO WASTE REPORTING CREDIT 4: BECOME AN ACTIVE PARTICIPANT OF THE U.S. EPA WASTEWISE PROGRAM**

**INTENT:** To share zero waste achievements and benchmark against others.

**REQUIREMENTS:** Register then submit current and baseline data for the U.S. EPA WasteWise program to become an active participant. Meet the requirements of annually posting project diversion rates, cost savings, expenses, and revenue.

**POTENTIAL STRATEGIES:** Learn about and register for the program for free on the EPA's WasteWise website. Track information as required in Zero Waste Reporting Credit 1 and 2, and update the EPA's WasteWise website during their collection window. Report out on baseline data, annual data and waste reduction goals for the project.

**SUBMITTAL DOCUMENTATION:**

- Documentation of membership in the WasteWise program, including email confirmation, official letters, or certificate of participation.

# DIVERSION

**DIVERSION CREDIT 1.1: DIVERSION IS 90.1%-94.9%**

**DIVERSION CREDIT 1.2: DIVERSION IS 95%-96.9%**

**DIVERSION CREDIT 1.3: DIVERSION IS 97%-98.9%**

**DIVERSION CREDIT 1.4: DIVERSION IS 99%-99.9%**

**DIVERSION CREDIT 1.5: DIVERSION IS 100%**

**INTENT:** To quantify the percentage by weight of waste material that is reduced, reused, recycled or composted as compared to the total volume of waste generated.

**REQUIREMENTS:** Track type and weight of all non-hazardous, solid materials by month for a minimum of 12 months. If estimates are used, provide the methodology and/or source references used to make calculations. Calculate annual average diversion by dividing the weight of materials diverted by the total weight of materials generated.

**POTENTIAL STRATEGIES:** Create a system to gather weights on all materials generated by using a scale or collecting weight tickets from the recipient of the materials. Develop a tool or template to track materials by type and weight each month. The tool should calculate total tons generated, materials sent to landfill, incineration (WTE), or the environment; materials reduced; materials reused; and materials recycled or composted. If actual weights are not available for certain material types or hauling methods, volume to weight averages can be used.

## **SUBMITTAL DOCUMENTATION:**

- 12 months of ongoing tracking data for all waste streams. Data must be displayed by commodity and waste, be broken down by month, and calculate annual average diversion rate. Diversion rate must meet the annual average thresholds described in the credit number. Applicant must identify if estimates are used and must provide the methodology and/or source references used to make calculations.
- Documentation that verifies values listed in tracking sheets for at least one month, including invoices that document weight, weight tickets, internal documentation, or any report from service provider (if available). If actual weights are not available, the documented process must quantify how full front loader bins are.



# ZERO WASTE PURCHASING

## **PURCHASING CREDIT 1: ADOPT AN ENVIRONMENTALLY PREFERRED PURCHASING (EPP) GUIDELINE OR POLICY**

**INTENT:** To reduce waste and other impacts on the environment by purchasing environmentally friendly products and materials. Commit to this action by adopting a written policy.

**REQUIREMENTS:** Write, adopt, and implement an EPP guideline or policy that reduces waste or addresses zero waste products, packaging, or services.

**POTENTIAL STRATEGIES:** Revise current purchasing policies to include an EPP policy. If no purchasing policy is in place, examine current procedures and how EPP principles can be incorporated to write a new one. A number of directives can be utilized for zero waste purchasing, including: adopt precautionary principle; purchase products and services that create no waste or minimize waste; avoid single use products and packaging; return to vendors wasteful packaging; reduce packaging and buy in larger units; use reusable shipping containers; purchase reused, recycled and compost products; buy remanufactured equipment; lease, rent and share equipment; or buy durables (using life-cycle cost analyses) ([www.ResponsiblePurchasing.org](http://www.ResponsiblePurchasing.org)). Policies may be included as part of Sustainable, Green, Corporate Responsibility, Social Responsibility, and/or Climate Change Purchasing Policies or Plans.

To achieve additional credits, include the following in the EPP policy:

- Preference for durable goods (to achieve Purchasing Credit 2)
- Preference for certified sustainably produced paper and wood products (to achieve Purchasing Credit 3)
- Preference for used, refurbished, and/or remanufactured goods over new items (to achieve Purchasing Credit 6)
- Any purchasing policy that reduces waste or addresses zero waste products, packaging or services not currently recognized in any category of the rating system. Up to three actions can be submitted. (Purchasing Credits 7.1-7.3)
- Requirement to purchase minimum of 30% post-consumer recycled content office/copy paper (Closed Loop Credit 1)
- Requirement to purchase minimum of 20% post-consumer recycled content janitorial paper products (Closed Loop Credit 2)

### **SUBMITTAL DOCUMENTATION:**

- Written copy of the EPP guideline or policy adopted that addresses zero waste issues. Receipts or purchasing reports can also be provided.
- A narrative describing the policy and how it is implemented.

## **PURCHASING CREDIT 2: INCLUDE PREFERENCE FOR DURABLE GOODS IN EPP POLICY OR GUIDELINE**

**INTENT:** To reduce waste and other impacts on the environment by directing staff to choose durable goods over disposable items.

**REQUIREMENTS:** Include a directive in the written EPP policy or guideline that durable goods are first preference for purchase over disposable items.

**POTENTIAL STRATEGIES:** Include preference for durable items upon creation of EPP policy or revise policy to include it. Policy could encourage switching to reusable shipping containers, cloth napkins or towels, reusable plates, bowls, cups, utensils, etc. Additional support could be provided by installing dishwashers or washing machines or enacting deposits for reusable dishes used at special events.

### **SUBMITTAL DOCUMENTATION:**

- EPP guideline or policy that includes written statement of preference for durable goods. Receipts or purchasing reports can also be provided (optional).
- A narrative describing the policy and its implementation.

## **PURCHASING CREDIT 3: GIVE PREFERENCE TO SUSTAINABLY PRODUCED PAPER AND WOOD PRODUCTS**

**INTENT:** To reduce waste and other impacts on the environment by directing staff to choose sustainably produced paper or wood products.

**REQUIREMENTS:** Write, adopt, and implement a guideline or policy stating that certified sustainably produced paper and wood products are first preference for purchase.

**POTENTIAL STRATEGIES:** Include preference for sustainably produced paper and wood products upon creation of EPP policy or revise policy to include it. If EPP policy is not in place, create and implement separate policy addressing paper and wood products. Various programs are available to certify the use of sustainable paper and wood products, including: Forest Stewardship Council, Sustainable Forestry Initiative (SFI), and PEFC International's global certification. The use of "organic" products raised in accordance with guidelines of the US Department of Agriculture would also be applicable.

### **SUBMITTAL DOCUMENTATION:**

- EPP guideline or policy that includes written statement of preference of sustainably produced paper and wood products. Receipts or purchasing reports can also be provided (optional).
- A narrative describing the policy and its implementation.

## PURCHASING CREDIT 4: IDENTIFY EPP ITEMS IN PURCHASING CATALOGS

**INTENT:** To ensure purchase of EPP items by enabling purchasing staff to easily locate them.

**REQUIREMENTS:** Ensure environmentally preferred items are identified as such in purchasing catalogs and/or websites.

**POTENTIAL STRATEGIES:** If there is a centralized purchasing system, create a guideline or policy to identify environmentally preferred products that addresses zero waste products, packaging and services and they are highlighted in purchasing catalogs used by purchasing agents. If there is a decentralized purchasing system that allows for multiple departments to purchase products, implement a system to communicate that it is the company's policy to purchase environmentally preferred products and an easy-access directory of such products is provided. Also, allow easy selection of vendors that designate EPP items in their online or paper catalogs.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the policy and its implementation.
- Guideline or policy on identification of EPP items.
- Screenshots or photographs showing the EPP items highlighted (optional)

## PURCHASING CREDIT 5: TRACK PURCHASE OF ENVIRONMENTALLY PREFERRED PRODUCTS

**INTENT:** To ensure EPP policies are being followed and collect information on EPP activities to inform goal setting and program development.

**REQUIREMENTS:** Create system to track the purchase of environmentally preferred products and materials that address zero waste.

**POTENTIAL STRATEGIES:** Examine purchasing activity and determine which vendors provide environmentally preferred products. Determine if reports are created internally on purchasing activity, or if reports can be sent from vendor. Highlight environmentally preferred items in these reports or create a separate report with just these items. Staff can also track purchase of items using a spreadsheet or word document. The tracking system should be highlighted in the purchasing guidelines used by purchasing agents and/or any departments authorized to make purchases.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the system and how it's being implemented.
- Excerpt of a tracking report.

## **PURCHASING CREDIT 6: GIVE PREFERENCE TO USED, REFURBISHED, AND/OR REMANUFACTURED GOODS**

**INTENT:** To conserve resources, reduce waste, and mitigate other impacts on the environment by purchasing used, refurbished, or remanufactured goods.

**REQUIREMENTS:** Create a written policy or enact a standard practice that used, refurbished, and/or remanufactured goods are first preference for purchase over new items. Policy or guideline can be a directive included in the EPP policy.

**POTENTIAL STRATEGIES:** Include preference for used, refurbished, or remanufactured goods upon creation of EPP policy or revise policy to include it. Alternatively, train any staff responsible for purchasing on the preference for these goods and ensure it is followed in practice. The company could set up a policy to evaluate refurbished goods before ordering something new.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the policy or standard practice and its implementation. Narrative should highlight how much used, refurbished, and/or remanufactured goods were used, and what were the costs or savings compared to what would have been bought new.
- EPP guideline or policy that includes written statement of preference of used, refurbished, or remanufactured goods.
- Receipts or purchasing reports (optional).

## **PURCHASING CREDIT 7.1: ANY ADDITIONAL EPP PRACTICES**

## **PURCHASING CREDIT 7.2: ANY ADDITIONAL EPP PRACTICES**

## **PURCHASING CREDIT 7.3: ANY ADDITIONAL EPP PRACTICES**

**INTENT:** To reduce waste and other impacts on the environment by purchasing environmentally friendly products and materials in creative and innovative ways.

**REQUIREMENTS:** Enact an environmentally preferred purchasing policy or standard practice that reduces waste or addresses zero waste products, packaging or services not currently recognized in any category of the rating system. Up to three actions can be submitted.

**POTENTIAL STRATEGIES:** Review purchasing policies, contracts, procedures, and products purchased for additional opportunities to reduce waste and its environmental impacts. Purchasing actions taken can also be oriented to driving change in the supply chain.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing additional environmentally preferred purchasing practice(s) that reduce waste and any documentation that would verify that action.

# LEADERSHIP

## LEADERSHIP CREDIT 1: ADOPT ZERO WASTE GOAL AT UPPER MANAGEMENT LEVEL

**INTENT:** To affirm commitment to zero waste and motivate action to accomplish it.

**REQUIREMENTS:** Create and adopt company and/or facility zero waste goal. Goal must be adopted by upper management. Create and implement a plan to achieve the goal.

**POTENTIAL STRATEGIES:** Upper management can adopt a company-wide or facility specific zero waste goal by setting targets for reduction, reuse, recycling, composting, and more. Develop a plan and timeline to meet targets within the zero waste goal.

### SUBMITTAL DOCUMENTATION:

- Copy of company and/or facility zero waste goal.
- Documentation of timeline and/or plan to meet zero waste goal.
- Narrative describing the timeline and/or plan to reach the goal.

## LEADERSHIP CREDIT 2: REVIEW MONTHLY DIVERSION ACTIVITIES WITH UPPER MANAGEMENT

**INTENT:** To ensure leadership is actively engaged in zero waste program.

**REQUIREMENTS:** Upper management reviews monthly diversion, prioritizing cost savings and revenue generation from zero waste activities.

**POTENTIAL STRATEGIES:** Develop a review process for upper management personnel. Dedicate specific upper management personnel(s) to the review task.

### SUBMITTAL DOCUMENTATION:

- Narrative describing upper management's review process for zero waste activities.
- Copy of any reports generated for upper management or any communications relating monthly diversion activities (emails, meeting minutes, reports, etc.).

### LEADERSHIP CREDIT 3: ENCOURAGE AND INCENTIVIZE EMPLOYEE PARTICIPATION

**INTENT:** To generate ideas to further reduce waste and incentivize zero waste behavior to ensure program participation.

**REQUIREMENTS:** Establish system to collect written or verbal suggestions from all employees on zero waste program. Establish program to identify and reward those who make outstanding contributions to reducing waste.

**POTENTIAL STRATEGIES:** Assess best methodology for gathering employee suggestions and organize a suggestion and awards program. Disseminate program throughout company. Program can be set up for employees to benefit from recommendations implemented, with recognition, prizes, or monetary bonuses. Awards and recognition program could be structured to benefit targeted charities selected by employees.

#### SUBMITTAL DOCUMENTATION:

- Narrative describing collection of zero waste recommendations. Narrative also needs to describe how and when incentives and recognition are provided for recommendations and/or zero waste activities.
- Documentation verifying program such as copies of awards, suggestion forms, promotion of programs, announcements, photographs from celebrations.

### LEADERSHIP CREDIT 4: TAKE RESPONSIBILITY FOR COMPANY PRODUCTS AND PACKAGING

**INTENT:** To demonstrate leadership by taking responsibility for products and packaging produced to ensure diversion of those from landfill, incineration (WTE), and the environment; to encourage overall waste reduction and reduce use of hard to recycle materials.

**REQUIREMENTS:** Physically take back all products and packaging produced and/or marketed under all company brands.

**POTENTIAL STRATEGIES:** Implement a take back program, permitting consumers to return products and packaging, particularly those that are difficult to reuse, recycle, or compost. Alternatively, companies can participate in local or national Extended Producer Responsibility (EPR) systems.

#### SUBMITTAL DOCUMENTATION:

- Narrative describing when and how the organization takes responsibility for products and packaging.
- Documentation supporting participation in EPR systems or creation of take back programs (agreements, program materials, web links).

## LEADERSHIP CREDIT 5: REQUIRE VENDORS TO TAKE RESPONSIBILITY FOR PRODUCTS AND PACKAGING

**INTENT:** To hold contracted vendors accountable for all the products and packaging received at facility to ensure diversion of those from landfill, incineration (WTE), and the environment; to encourage overall waste reduction and reduce use of hard to recycle materials.

**REQUIREMENTS:** Set up agreements with vendors/vendors to physically take back and properly dispose of all products and packaging. Alternatively, require vendor/vendor to reimburse for the proper disposal of products and packaging or provide credits for these items.

**POTENTIAL STRATEGIES:** Include language in bid specifications or purchase orders to require vendors to take back products and packaging, particularly those that are difficult to reuse, recycle, or compost for the company. Alternatively, create agreement to receive reimbursements or credits for these items.

### SUBMITTAL DOCUMENTATION:

- Narrative describing when and how the vendors/vendors take responsibility for products and packaging, and what the products and packaging are. Narrative should include a description of how the organization holds vendors accountable.
- Documentation could include agreements, RFPs, bid specifications, purchase orders, checks or invoices showing credits, or written communications with vendors.

## LEADERSHIP CREDIT 6: PROMOTE ZERO WASTE IN THE COMMUNITY UTILIZING UPPER MANAGEMENT PERSONNEL

**INTENT:** To encourage wider adoption of zero waste practices and principles outside of the facility.

**REQUIREMENTS:** Upper management representative(s) works beyond their internal operational boundaries to encourage and promote zero waste action in the community.

**POTENTIAL STRATEGIES:** The facility can engage the community with zero waste related events such as: cleanups of beaches, parks, rivers, or streams. Leadership can speak within the community about the importance of recycling and zero waste activities. The organization or facility could also encourage the community to adopt a zero waste goal or support an educational campaign. Additionally, donations can be made to local zero waste initiatives that further promote zero waste in the community.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how and when the facility engages the community in zero waste activities.
- Documentation could include photographs of any zero waste related events in the community that the organization was involved in, flyers or promotional materials, official letters verifying participation in community programs, events, or initiatives.

# TRAINING

## TRAINING CREDIT 1: PROVIDE ZERO WASTE GOAL/POLICY TO ALL EMPLOYEES

**INTENT:** To inform all company employees of zero waste policy in order to get full engagement for program implementation.

**REQUIREMENTS:** Provide all employees with established zero waste policy and/or goal in some form, including but not limited to: employee handbook, addendum to handbook, or posted on bulletin board or website.

**POTENTIAL STRATEGIES:** Determine appropriate location/vehicle for communicating zero waste goal or policy to all employees. Revise to include this information, or create new document or posting to communicate it. Notify employees on where to find it. Provide educational opportunities for employees on zero waste policy so they can ask questions and learn how it relates to the company's mission.

### SUBMITTAL DOCUMENTATION:

- Provide narrative discussing where the zero waste policy is posted and how employees have access to policy.
- Documentation of placement of this information (employee handbook, website screenshot, photographs, etc.).

## TRAINING CREDIT 2: INCORPORATE ZERO WASTE INTO EMPLOYEE ORIENTATION

**INTENT:** To ensure total participation in zero waste.

**REQUIREMENTS:** Incorporate information on zero waste into company orientation for all employees, contractors, vendors, and consultants working in the facility. Training should include overall program information (such as zero waste goals and policies), why the program is important, how to recycle, compost and if there is a reuse program.

**POTENTIAL STRATEGIES:** Meet with office management or HR personnel to discuss opportunities to include key zero waste information in orientation presentations and materials. Decide which information is key to include to ensure successful compliance with sorting and other zero waste behaviors. Highlight zero waste goal and activity in the community to ensure new employees are aware of the overall message from the company and the importance that each person has on the overall outcome. Revise orientation materials as program changes or based on feedback gleaned from employee behaviors.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how information on zero waste has been incorporated into orientation.
- Documentation that zero waste information has been included in orientation (presentations, agendas, handouts).



### TRAINING CREDIT 3: COMMUNICATE WITH EMPLOYEES ABOUT ZERO WASTE ACTIVITIES QUARTERLY

**INTENT:** To ensure total participation in zero waste.

**REQUIREMENTS:** Communicate with employees about zero waste program updates, successes, and/or opportunities for improvement at a minimum of once a quarter.

**POTENTIAL STRATEGIES:** Strategies can range from newsletter articles, tips of the month, bulletin board postings, workshops, staff emails etc. This communication can be electronic, verbal, or visual. Take advantage of national days designated to sustainability (e.g. Earth Day, America Recycles Day, Zero Waste Week and National Reuse Day) to hold zero waste events. Results from quarterly events are effectively communicated to educate staff on zero waste successes and other areas of opportunity.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing how zero waste information is communicated to employees on a regular basis. Narrative should also outline the past 4 communications or educational activities.
- Documentation of the past 4 communications or educational activities, including photographs (if available).

### TRAINING CREDIT 4: CLEARLY LABEL ALL COLLECTION RECEPTACLES

**INTENT:** To reduce contamination and capture as much material as possible.

**REQUIREMENTS:** Clearly label and identify all receptacles for collected recyclables, compostables, landfill material, and other diversion streams as applicable. Employees, contractors, vendors, consultants, or anyone else working on-site are trained on what is acceptable in those receptacles (posters, verbal notification, training sessions, etc.). This includes desk recycling and any common area containers (e.g. break areas, conference rooms and cafe or cafeteria).

**POTENTIAL STRATEGIES:** Describing the desired contents by communicating through photographs and words boosts understanding of commodity placement. There are many vendors of containers that give many different options. Rollout procedures after purchase of carts and bins should include: presentations at regular staff meetings to describe how the program works; presentations at safety or tailgate meetings regarding proper collection procedures; and posters and signs in appropriate places in the workplace promoting the program.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative on how the different types of waste are being collected and the labeling of receptacles. Narrative should also describe training procedures.
- Photographs of the containers and their labeling for the building being certified (optional).
- Documentation of training on sorting procedures (presentations, agendas, handouts).

## TRAINING CREDIT 5: TRAIN PURCHASING AGENTS

**INTENT:** To demonstrate commitment to upstream reduction of waste as it relates to company's overall zero waste goal.

**REQUIREMENTS:** Train purchasing agents on the zero waste approach, how to identify environmentally preferred products, and to give preference to these items.

**POTENTIAL STRATEGIES:** Involve all agencies in the training on zero waste. The purchasing department needs to understand the zero waste program and have regular monitoring procedures that show what they are buying and the impacts on the facility and environment. In every instance, the organization should look to purchase environmentally preferred products. Include training on spotting environmental preferred products, including which symbols or icons to look for. All vendors (e.g., janitorial, landscape) should be required to purchase environmentally preferred product through the Scope of Work. Make available catalogues that staff purchase from with environmentally preferred products.

### SUBMITTAL DOCUMENTATION:

- Narrative describing training and how purchasing agents are able to identify environmentally preferred products. Narrative should also explain training on preference of these items.
- Documentation of training, if available (manuals, policies, presentations, agendas, handouts).

## TRAINING CREDIT 6: INCLUDE ZERO WASTE IN EVALUATION PROCESS AND/OR BONUS STRUCTURE

**INTENT:** To incentivize employee participation in the zero waste program.

**REQUIREMENTS:** Account for employee contributions to zero waste activities in employee evaluations and/or bonus structure for all job levels.

**POTENTIAL STRATEGIES:** Evaluate all employees on specific programmatic expectations such as: following sorting rules, reduce recyclables in trash/landfill stream by 5% year over year; increase diversion 5% year over year until it hits 90% and then 1% point each year thereafter; contribute to plan to reduce the total generated waste by XX% and how it will be achieved; and documenting cost savings. Company could use savings from waste reduction activities for bonuses, giveaways, or added to pension funds.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how employee contributions to zero waste activities are incorporated into evaluations and/or bonus structures.
- Documentation of employee evaluation including items or questions on zero waste program participation.

## TRAINING CREDIT 7: DEDICATE AT LEAST ONE PERSON FOR ZERO WASTE LEADERSHIP ROLE

**INTENT:** To ensure the prosperity and survival of the zero waste program.

**REQUIREMENTS:** Hire or promote someone to be a manager of the zero waste program. Alternatively, assign an employee to take on a zero waste leadership role. The job description should include zero waste training as one of this person's responsibilities.

**POTENTIAL STRATEGIES:** Create a green team leader, recycling champion, recycling manager, etc. who is accountable for zero waste leadership. Promote someone within the organization to take on leadership of the program or search for experienced professionals to take on the role.

### SUBMITTAL DOCUMENTATION:

- Narrative describing who manages the zero waste program and outlining anyone else with leadership roles. Narrative should also describe training duties of this person.
- Job description demonstrating the allocation of an employee to manage the zero waste program.

## TRAINING CREDIT 8: PROVIDE ALL EMPLOYEES ACCESS TO ZERO WASTE TRAINING

**INTENT:** To promote and make readily available zero waste training for all employees to encourage program participation.

**REQUIREMENTS:** Post general information and training on zero waste program on an internal company website or other available platform.

**POTENTIAL STRATEGIES:** Determine available zero waste training materials and documents that would be best suited for employees to access. Add this information to a manual, website, portal, web tool, etc. Information should include zero waste purpose, guidelines and contact person for any questions.

### SUBMITTAL DOCUMENTATION:

- Narrative describing where information is included.
- Link to website or screenshot of website containing zero waste training information for all company employees (optional).

# ZERO WASTE ANALYSIS

## ZERO WASTE ANALYSIS CREDIT 1: CONDUCT ANNUAL PHYSICAL WASTE AUDIT

**INTENT:** To understand what materials continue to be wasted and opportunities to reduce waste.

**REQUIREMENTS:** Complete annual waste audit by on-site personnel or third party during the reporting period. Process requires a physical separation of waste by commodity to assess the performance of the zero waste program. Identify weights and percentages of recoverable materials (i.e. recyclables and reusables) in the trash that could be removed to increase diversion.

**POTENTIAL STRATEGIES:** Request information on accepted recyclable materials from service provider(s). Keep a sample or full day's trash and label containers for the 12 market categories. Recruit volunteers to separate the waste in a public area to educate facility staff on recoverable materials that remain in the trash. Record material types and their weights.

### SUBMITTAL DOCUMENTATION:

- Narrative describing waste audit
- Documentation of the physical audit (include all reports and photographs).

## ZERO WASTE ANALYSIS CREDIT 2: ANALYZE RESULTS OF ANNUAL WASTE AUDIT AND IMPLEMENT RECOMMENDATIONS

**INTENT:** To understand and implement opportunities to improve diversion program.

**REQUIREMENTS:** Analyze information from waste audit in a report format. Report should explain the results and list recommendations. Implement its recommendations.

**POTENTIAL STRATEGIES:** Collect data during annual waste audit, including but not limited to: list of every item/material found, volume of items/materials, weights and percentages of all material types, weights and percentages of recoverable materials (i.e. recyclables and reusables) in the trash, and/or possible sources of items/materials. Look for opportunities to increase diversion, prevent waste, and reduce contamination. Address commodity streams that will save the most money or have the largest impact on diversion in recommendations.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the analysis and what has been done to implement the recommendations.
- Report explaining the results and listing recommendations.

### ZERO WASTE ANALYSIS CREDIT 3: COMPLETE ANNUAL PHYSICAL AUDIT OF RECYCLABLES

**INTENT:** To understand and ultimately reduce contamination levels in the recycling stream.

**REQUIREMENTS:** Complete annual recycling audit by on-site personnel or third party during the reporting period. Process requires physical separation of the recyclables by commodity and contaminate. Identify weights and percentages of contamination in the recyclables that should be removed for a more accurate diversion rate.

**POTENTIAL STRATEGIES:** Request information on accepted recyclable materials and contaminants from service provider(s). Keep a sample or full day's recyclables and labeling containers for the 12 Market Categories. Recruit volunteers to separate the recyclables in a public area to educate facility staff about the percentage of contamination in recycling. Record material types and their weights.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing audit of recyclables
- Documentation of the recyclable audit (include all reports and photographs).

### ZERO WASTE ANALYSIS CREDIT 4: ADD REJECTED RECYCLABLES BACK INTO WASTE STREAM DOCUMENTATION

**INTENT:** To ensure recycling weights are accurately recorded in diversion tracking reports.

**REQUIREMENTS:** Request that the hauler identify contamination percentage and/or weights in the recycling stream(s). Include weight as landfill or incineration (WTE) in the diversion calculations and reports. Make a note of the issue (e.g. if it's from a specific container, area, or building) and schedule additional outreach, education, or training in that specific location.

**POTENTIAL STRATEGIES:** Contact vendors to identify percentage of contamination received with recyclables from your facility that were pulled out and landfilled or incinerated. In addition, vendors may identify higher amounts of contamination in recyclables from a particular area/building that needs additional attention for outreach, education and training. Set up system to gather this information on a regular basis and to add contamination weights back into landfill/incineration (WTE) totals. Ensure employees understand what commodity goes in which designated container through continual education and training. For hauler commingled, single-stream, or "Dirty" material recovery facilities (MRFs) include specifications that the residue after processing your materials is less than 10%.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the methodology used to correct diversion calculations and reports.
- Diversion data/report showing contamination amounts being added to landfill or incineration (WTE) totals.
- Documentation from hauler showing contamination percentage in the recycling stream.

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## ZERO WASTE ANALYSIS CREDIT 5: ENGAGE EMPLOYEES IN WASTE AUDIT AND/OR ANALYSIS

**INTENT:** To increase awareness of and encourage involvement in zero waste amongst employees.

**REQUIREMENTS:** Ensure that employees participate in waste audits and/or the resulting analysis. If the latter, employees must be involved in action plan development to further reduce waste and remove recyclables out of the waste stream.

**POTENTIAL STRATEGIES:** Engage employees and associates in the sorting of trash (looking for recyclables), weighing material, documenting and then analyzing the data. Employees and associates can also help determine available and feasible alternatives to replace the largest percentage, most valuable, and most toxic items in the waste stream.

**SUBMITTAL DOCUMENTATION:**

- Narrative describing employee involvement and participation in the waste audit and/or analysis process. If the latter, narrative must address employee involvement in action plan development.
- Documentation of employee's engagement in the waste audit and analysis process (i.e. photographs, feedback, meeting minutes, group reports).

# UPSTREAM MANAGEMENT

## UPSTREAM CREDIT 1: WORK WITH VENDORS TO ELIMINATE NON-RECYCLABLE PACKAGING

**INTENT:** To prevent waste by phasing out non-recyclable packaging received at the facility.

**REQUIREMENTS:** Work with vendors to identify alternatives to non-recyclable packaging and establish a strategy to switch over to the alternatives.

**POTENTIAL STRATEGIES:** Review all packaging received from vendors and identify packaging that is not accepted for recycling in your program. Notify vendor of these issues and open a dialogue on solutions. Some strategies include requesting items non-individually wrapped, requiring no Styrofoam packaging, requesting that packaging be made of a sole recyclable material instead of a combination of materials, or palletizing products with the same banding to increase recovery rates.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how the facility has worked with vendors to eliminate non-recyclable packaging.
- Documentation of requests or dialogue (emails, memos, letters, etc.) and/or documentation of new alternatives (photographs).

## UPSTREAM CREDIT 2: GIVE PREFERENCE TO VENDORS WHO EMBRACE ZERO WASTE GOALS

**INTENT:** To encourage wider adoption of zero waste in the supply chain.

**REQUIREMENTS:** Ask vendors about their zero waste goals and their strategy to achieve those goals. If no goal is in place, encourage them to embrace a goal. Establish a policy or standard practice giving preference to vendors that take an active role in pursuing their zero waste goals.

**POTENTIAL STRATEGIES:** Ask if vendors have a zero waste policy, what are their zero waste goals, and how they are working to achieve their goals. Offer technical assistance and information to help vendors accomplish their goals. Encourage vendors to adopt the Zero Waste International Alliance's definition of zero waste.

### SUBMITTAL DOCUMENTATION:

- Narrative describing how facility asks vendors about zero waste policies and goals. Narrative should also describe preference for zero waste vendors during selection process. If applicable, narrative should describe how vendors are asked to embrace zero waste goal.
- Documentation of requests for information (questionnaire, forms, emails, letters) and if applicable request to establish zero waste goal.
- Documentation of preference policy.

### UPSTREAM CREDIT 3: REQUEST VENDORS USE 100% RECYCLABLE PACKAGING

**INTENT:** To prevent packaging waste and encourage vendors to embrace zero waste principles.

**REQUIREMENTS:** Identify current vendors that are not using 100% recyclable packaging and ask them to switch to 100% recyclable packaging.

**POTENTIAL STRATEGIES:** Establish a guide, policy or standard practice requiring vendors to use 100% recyclable packaging. Require that vendor use 100% recyclable packaging in contracts or agreements. If they are unable to accommodate your request, search for other vendors and vendors.

**SUBMITTAL DOCUMENTATION:**

- Narrative describing how vendors are asked to use 100% recyclable packaging.
- Copy of the packaging policy (if applicable) or agreements including the requirement.
- Documentation of request (emails, letters, memos).

### UPSTREAM CREDIT 4: REQUEST VENDORS REDESIGN PRODUCTS FOR REUSE AND RECYCLING

**INTENT:** To prevent receipt of products or materials that will be wasted at the facility. Encourage vendor to embrace zero waste principles to the benefit of all their customers.

**REQUIREMENTS:** Identify which products or materials are being wasted and would be suitable for redesign. Work with vendors to redesign these products or materials to increase their reusability or recyclability.

**POTENTIAL STRATEGIES:** Ask vendors to redesign products/materials that the organization is purchasing to increase their reusability or recyclability. Include a clause in the procurement policy emphasizing a working partnership between the organization and vendors to redesign products for increase in reusability and recyclability.

**SUBMITTAL DOCUMENTATION:**

- Narrative describing how vendors are asked to redesign products and materials the facility is purchasing to increase their reusability or recyclability.
- Documentation tracking vendor's responses and successes throughout the process.



# HAZARDOUS WASTE PREVENTION

## HAZARDOUS WASTE PREVENTION CREDIT 1: PROPERLY HANDLE HAZARDOUS MATERIALS

**INTENT:** To ensure there is proper handling, storage, and disposal of hazardous waste to prevent contamination of non-hazardous wastes and damage to the environment.

**REQUIREMENTS:** Clearly label and safely store hazardous waste. Hazardous waste labeling, storage, and disposal must be in compliance with HAZCOM, RCRA, federal, state and local laws. Train employees to know which materials are hazardous and where to put them for proper disposal, reuse or recycling.

**POTENTIAL STRATEGIES:** Learn HAZCOM, RCRA, federal, state and local hazardous waste regulations. Find appropriate location in facility to store materials. Store and label materials according to applicable regulations. Document compliance with all training regulations dependent on waste types generated and the volumes handled at the facility.

### SUBMITTAL DOCUMENTATION:

- Narrative describing storage and labeling system of hazardous wastes. Narrative should also describe the training program for hazardous materials labeling, storage, and disposal. Storage, labeling, and training should demonstrate compliance with HAZCOM, RCRA, federal, state and local laws.
- Training materials or company hazardous waste policy (if one has been established). Photographs of storage and labeling system could also be provided (optional).

## HAZARDOUS WASTE PREVENTION CREDIT 2: SAVE RECORDS FOR AT LEAST 3 YEARS

**INTENT:** To ensure records of hazardous waste programs are properly maintained.

**REQUIREMENTS:** Save all hazardous waste manifests and records for at least 3 years per state and local regulations.

**POTENTIAL STRATEGIES:** Dedicate a staff member or utilize third-party organization to maintain records on hazardous waste manifests.

### SUBMITTAL DOCUMENTATION:

- Narrative documenting the maintenance of historical records including information of the organization responsible for record keeping (if applicable).

## HAZARDOUS WASTE PREVENTION CREDIT 3: REUSE OR RECYCLE UNIVERSAL WASTE

**INTENT:** To avoid negative environmental impacts from improper disposal of universal waste.

**REQUIREMENTS:** Collect and properly dispose of universal waste generated at the facility. All universal waste generated at the facility should be included, including but not limited to: electronic waste, fluorescent bulbs, and batteries.

**POTENTIAL STRATEGIES:** Identify universal waste streams generated in the facility operations. Develop a system to collect these materials. Ensure reuse or recycling options are identified and implemented. It is advisable to work with universal waste disposal vendor to ensure that the materials are shipped to a qualified and permitted recycling facility.

### SUBMITTAL DOCUMENTATION:

- Narrative describing the universal wastes generated at the facility, and how they are collected and disposed (including but not limited to electronic waste, fluorescent bulbs, and batteries).

## HAZARDOUS WASTE PREVENTION CREDIT 4: REDUCE THE USE OF HAZARDOUS CHEMICALS/MATERIALS

**INTENT:** To reduce or eliminate the environmental, health, and safety risks to employees and the communities in which the facility operates.

**REQUIREMENTS:** Create a written policy or enact a standard practice that reduces use of hazardous chemicals/materials in all facility operations. Replace hazardous chemicals/materials with non-toxic alternatives or eliminate the need to use hazardous materials in the first place.

**POTENTIAL STRATEGIES:** Identify all hazardous chemicals and materials that are used in the facility operation. Research and consult within the sector to determine suitable non-hazardous solutions to the organization's needs. Write a policy or enact a standard practice that demonstrates goal to reduce the use of hazardous chemicals and materials.

### **SUBMITTAL DOCUMENTATION:**

- A narrative describing the policy or standard practice and its implementation.
- Copy of the policy in place to reduce the use of hazardous chemicals and materials.

## HAZARDOUS WASTE PREVENTION CREDIT 5: COLLECT UNIVERSAL WASTES FROM EMPLOYEES AND/OR CUSTOMERS

**INTENT:** To provide opportunities for customers and employees to safely recycle universal waste.

**REQUIREMENTS:** Develop and implement a system to collect universal wastes from employees and/or customers. Ensure proper disposal of collected universal wastes.

**POTENTIAL STRATEGIES:** Provide opportunities for universal waste collection as an ongoing basis at a designated location for drop-off or offer it as a periodic event. Collection should include batteries, fluorescent lamps, and personal electronics.

### **SUBMITTAL DOCUMENTATION:**

- Narrative describing the process, parameters, and frequency of collection.

# CLOSED LOOP

## CLOSED LOOP CREDIT 1: REQUIRE A MINIMUM OF 30% POST-CONSUMER RECYCLED CONTENT FOR OFFICE PAPER

**INTENT:** To promote use of post-consumer recycled materials and reduce the use of virgin paper.

**REQUIREMENTS:** Create a written policy or enact a standard practice that requires the use of minimum 30% post-consumer recycled content for office/copy paper.

**POTENTIAL STRATEGIES:** Include requirement to purchase minimum of 30% post-consumer recycled content paper upon creation of EPP policy (Purchasing Credit 1) or revise policy to include it. If EPP policy is not in place, create and implement separate policy addressing recycled content office/copy paper. Alternatively, train any staff responsible for purchasing on the requirement and ensure it is followed in practice. If outside copy company is used, work to ensure they understand this guideline when setting up new contracts. On current programs, have a minimum of 30% post-consumer paper available for printers on site.

### SUBMITTAL DOCUMENTATION:

- Narrative documenting the effective date and specifics of the policy or standard practice.
- Copy of written policy/requirement.
- If policy is long standing, copies of invoices from procurement demonstrating its implementation.

## CLOSED LOOP CREDIT 2: REQUIRE A MINIMUM OF 20% POST-CONSUMER RECYCLED CONTENT FOR JANITORIAL PAPER PRODUCTS

**INTENT:** To promote use of post-consumer recycled materials and cut down the use of virgin paper.

**REQUIREMENTS:** Create a written policy or enact a standard practice that requires the use of minimum 20% post-consumer recycled content paper for all janitorial paper products (including but not limited to: toilet paper, paper towels and seat covers).

**POTENTIAL STRATEGIES:** Include requirement to purchase minimum of 20% post-consumer recycled content janitorial paper upon creation of EPP policy (Purchasing Credit 1) or revise policy to include it. If EPP policy is not in place, create and implement separate policy addressing recycled content janitorial paper. Alternatively, train any staff responsible for purchasing on the requirement and ensure it is followed in practice.

### SUBMITTAL DOCUMENTATION:

- Narrative documenting the effective date and specifics of the policy or standard practice.
- Copy of written policy/requirement.
- If policy is long standing, copies of invoices from procurement demonstrating its implementation.

### CLOSED LOOP CREDIT 3: PURCHASE COMPOST FROM A LOCAL SOURCE

**INTENT:** To encourage a closed loop system of using food waste to create compost for internal use.

**REQUIREMENTS:** If purchasing compost, purchase from the facility that composts your material. If no materials generated at your facility are being composted, purchase compost from a local source.

**POTENTIAL STRATEGIES:** Evaluate process of the composter, landscaping company, or facility manager who receives facility food and/or green waste. Review cost, quantity, timelines and the quality of the compost produced compared to what had been used on site. Implement a policy of using compost from the company that receives your food waste or another local vendor.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative documenting which company your waste goes to and how it is closing the loop and coming back to the site (if applicable). If facility does not send materials for composting, narrative should describe where they purchase compost.
- Receipts or invoices showing purchase of compost.

### CLOSED LOOP CREDIT 4: ENSURE MATERIAL REMAINS IN LOCAL MARKETS AND COMES BACK ON SITE

**INTENT:** To close the loop on as many commodities as possible and support a local zero waste economy.

**REQUIREMENTS:** Implement a process where as much material as possible from the facility is taking advantage of local reuse, recycling, or upcycling options. Buy back or use products or materials made from your materials.

**POTENTIAL STRATEGIES:** Assess opportunities in local markets for reuse, recycling or upcycling of materials generated on site. Your operation may generate different waste that can be turned around easily into a new product locally. Set up agreements with the local companies or organizations that provide these services. Develop a policy or standard practice to ensure the new products or materials they produce come back on site.

#### **SUBMITTAL DOCUMENTATION:**

- Narrative of which company(s) waste goes to and how it is closing the loop and coming back on site.
- Documentation verifying agreements with local companies or organizations such as contracts, agreements, invoices, or official letter outlining the relationship. Documentation will also need to be provided showing acquirement of products or materials (receipts, invoices).

# INNOVATION

## INNOVATION CREDIT 1: PARTICIPATE IN UPCYCLING PROGRAMS

**INTENT:** To utilize alternative solution(s) that divert the hard to recycle material in an innovative way.

**REQUIREMENTS:** Identify and upcycle at least one material or waste stream.

**POTENTIAL STRATEGIES:** Identify and pursue alternative outlets for difficult to recycle commodities. These could include upcycling programs such as ReCork and Terracycle or vendor-to-vendor reuse/refurbishing of products.

### SUBMITTAL DOCUMENTATION:

- Narrative describing what the material is, how the process works, where the material is sent for upcycling, how long that company has been in operation, why this is considered upcycling, and the benefits of the program.
- Documents verifying participation in upcycling programs, including agreements, receipts, letters (if applicable).

## INNOVATION CREDIT 2: COMMIT TO REDUCE TOTAL DISCARDS ANNUALLY

**INTENT:** To ensure that continuous improvements are made to reduce the remaining excess that goes to landfills, incinerators, and the environment.

**REQUIREMENTS:** Develop and adopt written statement of commitment to continuous improvement which includes reducing the remaining residue that goes to landfills or incinerators by at least 1% of baseline disposal each year and/or to address other zero waste business principles over time.

**POTENTIAL STRATEGIES:** Evaluate zero waste program and potential for improvement. Continue research into different markets to identify outlets for difficult to recycle commodities. Set a goal and establish in writing or revise current zero waste or sustainability policies to include it.

### SUBMITTAL DOCUMENTATION:

- Narrative detailing the plan to implement the yearly commitment to reduce waste by at least 1% of baseline disposal.
- Copy of written statement which must include reducing the remaining residue that goes to landfills or incinerators by at least 1% of baseline disposal each year and/or to address other zero waste business principles over time.

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### **INNOVATION CREDIT 3: IMPLEMENT INNOVATIVE WASTE REDUCTION ACTIVITY**

**INTENT:** To identify other creative and innovative zero waste approaches.

**REQUIREMENTS:** Address additional waste reduction measures that are not covered in the existing TRUE Rating System. Develop and implement strategy to increase waste reduction activities.

**POTENTIAL STRATEGIES:** Encourage all employees to submit innovative ideas that would help bring your zero waste program to the next level. Also, look for alternative systems that take specific products or materials and handle them in an alternative manner that is not given credit in the scorecard previously.

**SUBMITTAL DOCUMENTATION:**

- Narrative summarizing how the program operates and how it reduces waste.
- Documentation verifying activity (policies, agreements, written communications, photographs).
- An excel table that explains the weights and costs if applicable (optional).

# GLOSSARY

**ANAEROBIC DIGESTION (AD):** A series of processes in which microorganisms break down biodegradable material in the absence of oxygen, used for industrial or domestic purposes to manage waste and/or to generate energy. Anaerobic digestion typically captures methane created from the microorganisms and uses it to generate heat or energy.

**BASELINE:** A basic standard or level; guideline or specific value or values that can serve as a comparison or control.

**BASE YEAR:** Year tracking began of diversion and/or financial data; year of first available diversion and/or financial data. This could be the reporting year immediately preceding the most recent reporting year at a minimum (calendar or otherwise).

**COMMERCIAL WASTE:** Waste generated by businesses.

**COMMODITIES:** Materials that have value and can be reused or sold.

**COMPOSTING:** The controlled aerobic decomposition of organic matter by micro-organisms.

**CONTAMINATION:** Materials or substances that are mixed with recyclables or compostables that diminish or destroy the utility or value of the recyclables or compostables.

**COST:** The dollar value of resources used for an operation during a given period.

- **AVOIDED COST (COST AVOIDANCE):** The reduction in costs of one activity made possible by the operation of a different activity. In solid waste management, avoided costs often means savings realized in the cost of collecting, transferring, transporting, and disposing garbage that is made possible by waste reduction, recycling and composting.
- **NET COST:** Full cost of a solid waste management activity, minus its byproduct or value-added revenues.

**DISPOSAL:** 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 waters, including groundwater.

**DOWNCYCLING:** Recycling practice that involves breaking an item down into its component elements or materials. Once the constituent elements or materials are recovered, they are reused if possible but usually as a lower-value product.

**DOWNSTREAM:** Materials generated after the point of consumption.

**END-MARKET:** Any person or place receiving processed or unprocessed source-separated recyclable material and utilizing the material as a finished product or as feedstock material for a manufacturing process.

**ENVIRONMENTALLY PREFERRED PURCHASING (EPP):** A concept that melds procurement and environmental sustainability into an environmentally conscious purchasing strategy, utilizing multifaceted environmental purchasing factors.

**FOOD SCRAPS:** Uneaten food and food preparation wastes.

**GRASSCYCLING:** A source reduction activity whereby grass clippings are left on the lawn after mowing to help hold moisture and naturally add nutrients back to the soil.

**GREEN TEAMS:** A group of individuals with the common goal of increasing the sustainable or environmentally responsible operations/programs of a particular organization, business or community. Green teams are often made up of people from all levels of the organization/community in order to gain wide input and perspective. Green teams are usually charged with analyzing an organization's current performance from a sustainability focus, and making recommendations to improve this performance, including reducing waste, increasing recycling, energy efficiency measures, eco-friendly purchasing/procurement, water conserving measures and employee/resident education.

**HAULER:** A waste collection company that provides refuse and other material removal services. Includes both private and public entities. Synonymous with: service provider, collector, vendor.

**HAZARDOUS WASTE:** Waste that poses substantial or potential threats to public health or the environment. There are four factors that determine whether or not a substance is hazardous: ignitability (i.e., flammable), reactivity, corrosivity, toxicity.

**HIGHEST AND BEST USE:** Creating and keeping materials and products for a use as high on the zero waste hierarchy as possible and in the useful loop as long as possible. Keeping materials from being downcycled where the number of future uses or options are limited.

**INCINERATION:** Reducing the volume of solid waste by use of an enclosed device and controlled flame combustion.

**LANDFILL:** A pollution control facility for safe/sanitary final disposal of solid waste on land. The refuse is spread and compacted and a cover of soil applied in order to minimize environmental impacts (including public health and safety). Under current regulations, landfills are required to have liners and leachate treatment systems to prevent contamination of ground water and surface waters.

**MATERIAL RECOVERY FACILITY (MRF):** An intermediate processing facility designed to remove recyclables and other valuable materials from the waste stream utilizing manual or mechanical methods.

**MULCHING:** The process by which the volume of organic waste is reduced through shredding or grinding.

**POST-CONSUMER MATERIALS:** Recovered materials that have been used as a consumer item and are diverted from municipal solid waste for the purpose of collection, recycling, and disposition. Excludes materials from industrial processes that have not reached the consumer, such as glass broken in the manufacturing process or over-issues of newspapers and magazines.

**RECYCLING:** The series of activities by which discarded materials are collected, sorted, processed, converted into manufacturing feedstock material and used in creation of new products. Excludes use of these materials as fuel substitute or for energy production.

**REPAIR (A.K.A. REFURBISHING, REMANUFACTURING):** When an item is reconditioned and used for the same function.

**REUSABLE:** When an item is manufactured to be used over and over again, and to replace disposable (single-use) items.

**RESIDUES:** Materials remaining after processing, incineration (WTE), composting, or recycling have been completed; usually disposed of in landfills.

**REUSE:** Use of a product or item in its original form more than one time.

**SINGLE STREAM:** Method of collecting all recyclable materials in one "stream" in a non-compartmentalized vehicle to be separated at a facility later. A single-stream program integrates the separation and collection components of recycling.



**SOURCE REDUCTION:** Any action which causes a net reduction in the generation of solid waste. Source reduction includes, but is not limited to: reducing the use of non-recyclable materials, replacing disposable materials and products with reusable materials and products, reducing packaging, reducing the amount of yard wastes generated, establishing garbage rate structures with incentives to reduce waste tonnage generated, and increasing the efficiency of the use of paper, cardboard, glass, metal, plastic, and other materials. Synonymous with waste prevention.

**SOURCE SEPARATION:** The act of separating recyclable or reusable materials/items from other materials intended for disposal.

**TRIPLE BOTTOM LINE:** An addition of social and environmental values to the traditional economic measures of a corporation or organization's success. Triple Bottom Line accounting attempts to describe the social and environmental impact of an organization's activities, in a measurable way, to its economic performance in order to show improvement or to make evaluation more in-depth.

**TWELVE MASTER CATEGORIES OF COMMODITIES/DISCARDS:** The overall commodity breakdown of resources generated, developed by Dr. Dan Knapp:

- |                     |                   |                           |                            |
|---------------------|-------------------|---------------------------|----------------------------|
| <b>1. Reusables</b> | <b>2. Paper</b>   | <b>3. Plant trimmings</b> | <b>4. Putrescible/food</b> |
| <b>5. Polymers</b>  | <b>6. Wood</b>    | <b>7. Ceramics</b>        | <b>8. Textiles</b>         |
| <b>9. Soils</b>     | <b>10. Metals</b> | <b>11. Glass</b>          | <b>12. Chemicals</b>       |

**UNIVERSAL WASTE:** A category of waste materials not designated as "hazardous waste", but containing materials that need to be prevented from free release into the environment.

**UPCYCLING:** Recycling of materials that retains the majority of the materials' integrity and energy value, while creating a new item or material that will be employed in a long, useful life or purpose.

**UPSTREAM:** Materials generated before the point of consumption.

**VENDOR:** Third party organizations that supply goods, services or materials.

**WASTE AUDIT:** Analysis of a facility's processes, waste stream, recycling activities and disposal costs. The waste audit is used to process detailed information on a solid waste management system and recommend beneficial changes.

**WASTE CHARACTERIZATION/ WASTE ANALYSIS:** Sorting, identification and measurement (by weight and/ or volume) of solid waste materials into categories for the purpose of determining best management practices and developing cost-effective recycling and composting programs.

**WASTE GENERATION:** The amount (weight or volume) of materials and products that enter the waste stream before recycling, composting, landfilling, or combustion takes place.

**WASTE REDUCTION:** The combined efforts of waste prevention, reuse, composting, and recycling practices.

**WASTE STREAM:** Waste material output of a facility.

**WASTE-TO-ENERGY (WTE):** The conversion of recovered solid waste into a usable form of energy, usually through combustion at extremely high temperatures.

**XERISCAPING:** Landscaping in a style which requires little or no irrigation and produces less waste.

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**ZERO WASTE:** The only peer-reviewed, internationally accepted definition of zero waste is that of the Zero Waste International Alliance (zwia.org): Zero waste is a goal that is ethical, economical, efficient and visionary, to guide people in changing their lifestyles and practices to emulate sustainable natural cycles, where all discarded materials are designed to become resources for others to use. Zero waste means designing and managing products and processes to systematically avoid and eliminate the volume and toxicity of waste and materials, conserve and recover all resources, and not burn or bury them. Implementing zero waste will eliminate all discharges to land, water or air that are a threat to planetary, human, animal or plant health.