## **Zero Waste Standards**

The Planning Group of the Zero Waste International Alliance adopted the following definition of Zero Waste on November 29, 2004. This is intended to assist businesses and communities in defining their own goals for Zero Waste.

## **Zero Waste Definition**

"Zero Waste is a goal that is both pragmatic and visionary, to guide people to emulate sustainable natural cycles, where all discarded materials are resources for others to use. Zero Waste means designing and managing products and processes to reduce 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 may be a threat to planetary, human, animal or plant health."

## **Zero Waste Business Principles**

The Planning Group of the Zero Waste International Alliance adopted the following Principles on April 5, 2005 to guide and evaluate current and future Zero Waste policies and programs established by businesses. These Zero Waste Business Principles will be the basis for evaluating the commitment of companies to achieve Zero Waste. These Principles will also enable workers, investors, customers, suppliers, policymakers and the public in general to better evaluate the resource efficiency of companies.

- Commitment to the triple bottom line We ensure that social, environmental and
  economic performance standards are met together. We maintain clear accounting and
  reporting systems and operate with the highest ethical standards for our investors
  and our customers. We produce annual environmental or sustainability reports that
  document how we implement these policies. We inform workers, customers and the
  community about Life Cycle environmental impacts of our production, products or
  services.
- 2. Use Precautionary Principle We apply the precautionary principle before introducing new products and processes, to avoid products and practices that are wasteful or toxic.
- 3. Zero Waste to landfill or incineration We divert more than 90% of the solid wastes we generate from Landfill from all of our facilities. No more than 10% of our discards are landfilled. No solid wastes are processed in facilities that operate above ambient biological temperatures (more than 200 degrees F.) to recover energy or materials.
- 4. Responsibility: Takeback products & packaging We take financial and/or physical responsibility for all the products and packaging we produce and/or market under our brand(s), and require our suppliers to do so as well. We support and work with existing reuse, recycling and composting operators to productively use our products and packaging, or arrange for new systems to bring those back to our manufacturing facilities. We include the reuse, repairability, sustainable recycling or composting of our products as a design criteria for all new products.
- 5. Buy reused, recycled & composted We use recycled content and compost products in all aspects of our operations, including production facilities, offices and in the construction of new facilities. We use LEED-certified [1] or equivalent architects to design new and remodeled facilities as Green Buildings. We buy reused products where they are available, and make our excess inventory of equipment and products available for reuse by others. We label our products and packaging with the amount of post-consumer recycled content and for papers, we label if chlorine-free and forest-friendly materials are used. Labels are printed with non-toxic inks no heavy metals are used.

- 6. Prevent pollution and reduce waste We redesign our supply, production and distribution systems to reduce the use of natural resources and eliminate waste. We prevent pollution and the waste of materials by continual assessment of our systems and revising procedures, policies and payment policies. To the extent our products contain materials with known or suspected adverse human health or negative environmental impacts, we notify consumers of their content and how to safely manage the products at the end of their useful life according to the takeback systems we have established, and shall endeavour to design them out of the process.
- 7. Highest and best use We continuously evaluate our markets and direct our discarded products and packaging to recover the highest value according to the following hierarchy: reuse of the product for its original purpose; reuse of the product for an alternate purpose; reuse of its parts; reuse of the materials; sustainable recycling of inorganic materials in closed loop systems; sustainable recycling of inorganic materials in single-use applications; composting of organic materials to sustain soils and avoid use of chemical fertilizers; and composting or mulching of organic materials to reduce erosion and litter and retain moisture.
- 8. Use economic incentives for customers, workers and suppliers We encourage our customers, workers and suppliers to eliminate waste and maximize the reuse, recycling and composting of discarded materials through economic incentives and a holistic systems analysis. We lease our products to customers and provide bonuses or other rewards to workers, suppliers and other stakeholders that eliminate waste. We use financial incentives to encourage our suppliers to adhere to Zero Waste principles. We evaluate our discards to determine how to develop other productive business opportunities from these assets, or to design them out of the process in the event they cannot be sustainably re-manufactured.
- 9. Products or services sold are not wasteful or toxic We evaluate our products and services regularly to determine if they are wasteful or toxic and develop alternatives to eliminate those products which we find are wasteful or toxic. We do not use products with persistent organic pollutants (POPs), PVC or polystyrene. We evaluate all our products and offer them as services if we can do so by our own company. We design products to be easily disassembled to encourage reuse and repair. We design our products to be durable, to last as long as the technology is in practice. We phase out the use of unsustainable materials, and develop the technology to do so. Our products can easily be re-made into the original product.
- 10. Use non-toxic production, reuse and recycling processes We eliminate the use of hazardous materials in our production, reuse and recycling processes, particularly persistent bioaccumulative toxics. We eliminate the environmental, health and safety risks to our employees and the communities in which we operate. Any materials exported to other countries with lower environmental standards are managed according to the Best International Practice as recommended by ZWIA.

These Zero Waste Business Principles are intended to be a living document. Comments and suggestions are welcome. Please email gary@garyliss.com with any comments or suggestions.

<sup>1.</sup> Leadership in Energy and Environmental Design program of the U.S. Green Building Council, www.usgbc.org