

April 8, 2010

Bill Number 72LCB 15 — Zero Waste

Sponsored by:

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## **University of Colorado Student Government Zero-Waste and Materials Management Policy**

### **Bill History**

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As various communities around the world have become more involved in efforts to reduce their ecological and social footprints, demand for recycling services has significantly increased. In 2006, Governor Ritter signed Executive Order D0012 07 into law, establishing a series of goals to green the state government – including a twenty-percent reduction in paper use and zero-waste operations<sup>1</sup>. In conjunction with this state mandate, the City of Boulder and Boulder County respectively passed zero-waste declarations that call for an 85% diversion of materials from the landfill by 2017 and 90% by 2025<sup>2</sup>. In 2009, the University of Colorado Board of Regents passed a resolution in support of the State’s zero-waste priority and encouraged all CU campuses to achieve the waste-reduction goals established in their respective climate action plans<sup>3</sup>.

The University of Colorado Student Government (CUSG) has a well-established history of support for these zero-waste priorities. In 1976, CUSG and the Environmental Center partnered to establish the nation’s first campus recycling program with the mission to, “cost-effectively reduce and recover resources from the waste stream while promoting the environmental and social benefits of recycling and promoting opportunities for meaningful student involvement.” Since that time, the program has formed a successful partnership with Facilities Management (FM) and Housing and Dining Services (HDS) to expand services offered and increase the recovery of resources. In 1992, that partnership helped to establish the campus’ Internal Materials Processing Facility (IPF) as a means of improving resource diversion, student engagement, and cost-effectiveness. In 2003, CUSG established a take-back program with the Dell computer corporation to reduce the amount of electronics disposed of in surrounding landfills (59LCB07), and required that all paper purchases made by cost centers had to be non-bleached and contain 100% recycled-content (59LCB08). In 2004, the Legislative Council required that all large furniture purchases include materials with certain recycled-content standards and promoted the reuse of existing products as a means of reducing materials sent to the landfill (61LCB10). And in 2008, CUSG passed a bill to digitize all formal operations of the student government as a way of significantly

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<sup>1</sup> Governor’s Energy Office. (2007). Greening of State Government (Executive Order D0012 07). Denver, CO.

<sup>2</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>3</sup> University of Colorado Board of Regents. (2009). CU Sustainability and Practices.

reducing paper use (68LCB04), and implemented zero-waste standards for all student fee-funded events (68LCB12).

This bill continues this established trend by formally setting goals for zero-waste operations in all CUSG-funded cost centers by 2015 and promotes the accomplishment of these goals through commonly-used materials management programs.

## Bill Summary

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**WHEREAS**, in 2006, U.S. residents, businesses, and institutions produced more than 251 million tons of municipal solid waste, which is approximately 4.6 pounds of waste per person per day. In addition, American industrial facilities generate and dispose of approximately 7.6 billion tons of industrial solid waste each year<sup>4</sup>; and

**WHEREAS**, an estimated 300,000 tons of waste is generated in Boulder County each year by residents, businesses, and institutions, and approximately 75% of this amount is sent for landfill disposal<sup>5</sup>; and

**WHEREAS**, the University of Colorado at Boulder generated an estimated 3,100 tons of waste between 2008-2009, 800 tons of which is potentially recyclable<sup>6</sup>; and

**WHEREAS**, the University of Colorado Student Government (CUSG) accounted for roughly 260 tons of solid waste in the same 2008-2009 time period, costing students an estimated \$14,400 dollars; and

**WHEREAS**, CU Recycling effectively diverts an estimated 30-35% of materials from the landfill and generates over \$70,000 dollars annually; and

**WHEREAS**, increased recycling and composting will increase the cost-efficiency of local, publicly-supported recycling facilities and programs<sup>7</sup>; and

**WHEREAS**, a resource recovery-based economy will sustain, on a per-ton basis, up to ten times more jobs than landfilling or incineration<sup>8</sup>; and

**WHEREAS**, Landfills are a major source of greenhouse gases (particularly methane, which warms the atmosphere 23-72 times more quickly than carbon dioxide) as well as groundwater contamination<sup>9</sup>; and

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<sup>4</sup> Environmental Protection Agency. (2009). Wastes – Non-hazardous Wastes. Accessed February 27, 2010, from <http://www.epa.gov/epawaste/nonhaz/index.htm>

<sup>5</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>6</sup> CU Recycling. (2009). Available <http://recycling.colorado.edu/>

<sup>7</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>8</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>9</sup> Zero Waste International Alliance. (2009). Retrieved February 27, 2010, from <http://www.zwia.org/>

**WHEREAS**, increased recycling saves energy, water, natural resources, reduces air and water pollution, reduces the damage caused by extracting resources from the environment, and reduces the need for landfill facilities<sup>10</sup>; and

**WHEREAS**, increasingly, U.S. and international governments and organizations are adopting the policy that the financial responsibility of collecting, recycling, and disposing of materials belongs with producers<sup>11</sup>; and

**WHEREAS**, As much as possible, discard management costs for products and packaging that are difficult to reuse, recycle or compost in most local programs should be shifted from local government to the producers of the product<sup>12</sup>; and

**WHEREAS**, producers should design products to ensure that they can be safely recycled back into the marketplace or nature<sup>13</sup>; and

**WHEREAS**, avoiding the creation of waste or discards in the first place is the most economically-efficient and environmentally sustainable resource management strategy<sup>14</sup>; and

**WHEREAS**, 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<sup>15</sup>.

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THEREFORE BE IT ENACTED:

Section 1: Definitions

- A. Zero Waste: an ongoing effort to reduce materials necessary for operations and a 90% diversion of non-reusable materials from the landfill through various mechanisms (including recycling, composting, and take-back programs). This definition may be adjusted to meet the collegiate zero-waste standards administered by the International Zero Waste Alliance (ZWIA).
- B. Cost Center Operations: all programs, events, and capital projects that take place on premises supported by student fees and regulated by the University of Colorado Student Government (CUSG). This also includes programs and services funded by student fees that may not directly take place on CUSG-supported premises.

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<sup>10</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>11</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>12</sup> Zero Waste International Alliance. (2009). Retrieved February 27, 2010, from <http://www.zwia.org/>

<sup>13</sup> Boulder County Board of Commissioners. (2005). Adopting Zero Waste as a Guiding Principle and Supporting the Creation of a Zero Waste Plan (Resolution: 2005-138). Boulder, CO.

<sup>14</sup> Boulder City Council. (2006). A Resolution Declaring Boulder a Zero Waste Community. Boulder, CO.

<sup>15</sup> Zero Waste International Alliance. (2009). Retrieved February 27, 2010, from <http://www.zwia.org/>

## Section 2: CUSG Zero Waste Operations Mandate

- A. CUSG hereby commits to achieving a 75% diversion rate by 2012 and a 90% diversion rate by 2015.
- B. Zero waste operations will be applicable to all cost centers, student groups, student fee-funded events, and events that take place on properties supported with student fees.
- C. If any department or cost center within CUSG cannot meet this standard in the proposed timeline or in a specific circumstance, they must submit a formal request to the Legislative Council and CUSG Sustainability Director asking for a temporary waiver from CUSG guidelines, as well as provide a plan to achieve the zero waste standards in the future.
- D. This bill formally extends 68LCB12, also known as "A Bill to Address Waste Reduction for Student Fee Funded Events", and expands those priorities to all events taking place on student fee-supported premises.

## Section 3: Zero Waste Training and Education

- A. In order to support the efforts of cost centers to comply with CUSG zero waste standards, all student fee-funded staff and student positions shall be required to participate in a sustainability training program administered by either the CUSG Sustainability Director or an Environmental Center representative.
- B. It is recommended that student groups and individual students are offered opportunities to receive similar training based on their continual use of CUSG-supported facilities.
- C. The CUSG Sustainability Director and cost centers shall determine an appropriate training system that fits within the current allotted hours for CUSG employees in order to avoid budget increases related to the sustainability training program.

## Section 4: Contract Requirements and Procurement Guidelines

- A. In an effort to reduce the need for materials management operations in CUSG cost centers, preferential procurement and contracts shall be given to vendors who offer materials reduction programs (i.e. take-back options or reusable pallets) that enable CUSG to meet its zero waste goals. A prioritized list of guidelines is located in Appendix, attached to this bill.
- B. All private vendors and retailers operating in student fee-funded properties shall be required to comply with the zero waste standards supported by CUSG and the University of Colorado. It is mandated that these compliance standards be formally noted in all future contracts between CUSG cost centers and private vendors.
- C. In order to support the recycling market and a "closed-loop system", all CUSG cost centers and student groups shall give procurement preference to vendors and products incorporating recycled content when fiscally viable.
- D. CUSG hereby commits to achieving the post-consumer product standards generated by the U.S. Environmental Protection Agency (available in Appendix).

#### Section 5: Future Expansion of Zero Waste Services

- A. CUSG formally seeks to strengthen the partnership between Facilities Management, the CU Administration, the Boulder Campus Planning Commission (BCPC), and other related parties by supporting the expansion of the current services and infrastructure offered by the Internal Processing Facility (IPF) in an effort to achieve the zero waste goals of the entire campus.
- B. CUSG recognizes the benefits inherent in a well-supported IPF and commits to future financial and student support.

#### Section 6: Financing and Incentivizing Zero Waste Operations

- A. In order to provide long-term fiscal sustainability to cost center zero waste operations, the CUSG Sustainability Director will hereby work with Facilities Management and all related parties create an effective variable rate structure to incentivize waste-reduction efforts.
- B. This bill officially requests a one-time \$15,000 dollar earmark from the Student Operations Reserve (SOR) to accommodate one-time expenses required for zero waste conversion.
  - a. Potential expenditures include:
    - i. Signs
    - ii. Collection receptacles
    - iii. Loading dock and space expansion
    - iv. Staff training programs and related materials
- C. All zero waste operations related to student group and cost center events shall be financed through an account managed by the Student Organizations Finance Office (SOFO) and the Student Group Funding Board (SGFB).

#### Section 7: Partnerships

- A. CUSG recognizes the efforts of the CU campus, the City of Boulder, and Boulder County to achieve zero waste and encourages continued partnership to support these goals.
- B. CUSG realizes the opportunity to demand extended producer responsibility from affiliated campus vendors and formally establishes a zero waste partnership with the student government entities on the campuses throughout the CU System (CU-Denver, CU-Colorado Springs, Anschutz Medical Campus). This agreement will be supported by a memorandum of understanding (to be attached) and offers opportunities to share important resources that further the zero waste goals of all parties.

#### Section 8: Data Collection and Accountability

- A. CUSG cost centers and CU recycling shall create an efficient and transparent data-gathering system that will provide statistics related to trash, recycling, compositing, diversion services, cost savings.
- B. This data, including climate effects related to the successful diversion of materials along with other related information, shall be presented to the Legislative Council on a bi-annual basis by the CUSG Sustainability Director in order to account for continual

progress made towards achieving the zero waste goals and operations standards established in this bill.

- C. The Program Director of CU Recycling shall have the power to halt all cost center collections or facilitate additional zero waste trainings if necessary. This includes instances of contamination in diverted materials or other related concerns.

**Section 9: Implementation**

- A. The CUSG Sustainability Director, CU Recycling, the Environmental Center, cost centers, and student groups will continue to work together on an ongoing basis to implement the zero waste guidelines and programs necessary to achieve at least a 90% diversion rate by 2015.

Section 10: This bill shall become effective upon final passage of by the Legislative Council and either obtaining the signatures of the two Tri-Executives or the elapse of six days without action by the Tri-Executives.

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<b>Vote Count</b>		
<b>4/8/2010</b>	<b>Amended and passed on 1<sup>st</sup> reading</b>	<b>Acclamation</b>
<b>4/15/2010</b>	<b>Amended and passed on 2<sup>nd</sup> reading</b>	<b>Acclamation</b>

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Daniel Ramos  
Tri-Executive

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Thomas Higginbotham  
Tri-Executive

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Christine Thai  
Tri-Executive

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- IV. Executive Order D0012 07 “Greening State Government”
- V. Materials Management Plan for University of Colorado Master Plan, Sustainability Task Force
- VI. CUSG Vendor Request for Information Form
- VII. CUSG Vendor Request for Information Letter
- VIII. CUSG Cost Center Diversion and Cost Spreadsheet
- IX. History of Recycling at University of Colorado to 2001
- X. Bottled Water Report, University of Washington

### ADDITIONAL RESOURCES AND SUPPORTING DATA

- I. Green Products Guide  
Available: <http://ecenter.colorado.edu/publications/index.html#gpg>
- II. Business Plan Report of CU Recycling, University of Colorado  
Available: <http://www.colorado.edu/reports/recycling/>
- III. Vendor Contracts: Options to Address Environmental Concerns in Bid Responses  
Available: [http://recycling.colorado.edu/reduce\\_and\\_reuse/procurement\\_contracts.html](http://recycling.colorado.edu/reduce_and_reuse/procurement_contracts.html)
- IV. Paper Steps on Campus Guide – Principles of “Highest and Best Use”  
Available:
- V. Zero Waste Principles, Zero Waste International Alliance  
Available:  
[http://www.zwia.org/main/index.php?option=com\\_content&view=article&id=49&Itemid=37](http://www.zwia.org/main/index.php?option=com_content&view=article&id=49&Itemid=37)
- VI. Environmental Protection Agency’s College Sector Waste Information  
Available: <http://www.epa.gov/ispd/pdf/2006/colleges.pdf>
- VII. A-Z Materials Guide  
Available:
- VIII. Expanded Dual Stream Guide  
Available: [http://recycling.colorado.edu/cu\\_recycling](http://recycling.colorado.edu/cu_recycling)
- IX. University of Colorado Procurement Green Purchasing Guidelines  
Available: <https://www.cu.edu/psc/purchasing/GreenPurchasingGuidelines.pdf>

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*Jessica Bradley, Supervisor, Internal Processing Facility (IPF)*

*Andreino Cardoso, UMC Food Service Director*

*Jack DeBell, Director of CU Recycling*

*Herb Kienle, Recreation Center Building Manager*

*Robin Margolin, UMC Food Services*

*Dave Newport, Director of CU Environmental Center*

*Javier Portillo, Wardenburg Building Manager*

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