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BEFORE THE SUBCOMMITTEE ON
ENVIRONMENT AND HAZARDOUS MATERIALS
UNITED STATES HOUSE OF REPRESENTATIVES

Introduction

Mr. Chairman and members of the Subcommittee, thank you for inviting me to appear today to discuss EPA' s Resource Conservation Challenge. When EPA launched the Resource Conservation Challenge in September of 2002, we set in motion a plan of action with a clear goal – to infuse new energy into one of the country's original waste management strategies. As the Agency stated nearly 2 years ago, the idea is to put the "Conservation and Recovery" back into the Resource Conservation and Recovery Act (RCRA). EPA believes this approach was clearly expected by Congress in its intent for RCRA to reverse the trend of "millions of tons of recoverable material which could be used [being] needlessly buried each year." What better way to manage wastes effectively than by eliminating them; by designing products and processes that minimize waste; by collecting waste products and reusing them; and by using all input materials more efficiently.

At its launch, the RCC pulled together many projects underway in different EPA offices, all working to conserve our natural resources. Today, almost two years later, the RCC has become a national program, challenging all of us to: prevent pollution and promote recycling and reuse of materials; reduce the use of toxic chemicals; and conserve energy and materials. In meeting these challenges, the RCC is helping us reach our human health and environmental quality goals in every Agency program and in every environmental medium. Resource conservation and its benefits can apply to every single business, every single institution, and every single family in this country.

In fiscal year 2003, the House Appropriations Committee Report accompanying EPA's appropriation, supported the RCC by saying ". . . The Committee is aware of EPA's initiative to

identify opportunities to further the goal of resource conservation and recovery while remaining true to the mission of ensuring safe and protective waste management practices. The Committee supports the initiative and encourages the use of Agency funding to implement the necessary policy changes to further this important goal."

Partnerships that Lead to Results

The RCC is composed of largely voluntary programs and projects, with a recycling and resource conservation focus, that aim toward more effective materials management. The RCC supports six program elements:

- **Product stewardship** (working with all involved in a product's life-cycle to reduce its environmental footprint);
- **Priority chemical reduction** (reducing 31 of the most persistent, bioaccumulative, and toxic chemicals released to our environment);
- **"Greening" the government (**improving the government's green procurement and waste reduction programs in line with our statutory and Executive Order commitments);
- **Beneficial use of materials (**examining and promoting safe use of valuable secondary materials and waste streams);
- **Energy conservation** (maximizing energy conservation by more effective use of materials); and
- **Environmentally friendly design** (starting at the product or process design to produce less toxic, more recyclable and reusable products).

Within each of these program elements, we are developing strategies with measurable outcomes, and we're integrating these strategies into the Agency's overall Strategic Plan. In doing so, for each RCC program element, we are:

- Analyzing materials and waste streams to identify opportunities for resource conservation, while at the same time ensure that these materials do not present a risk to human health and the environment;
- Collecting data and setting measurable targets; and
- Identifying environmental goals linked to health protection, energy savings, or job creation.

At each step in the process, we're working with partners and incorporating their expertise and knowledge to find solutions to specific problems and then implementing them.

RCC Program Elements

1. Product Stewardship

For product stewardship, we're working with manufacturers to reduce the environmental footprint of their products. This can be done by eliminating, as feasible, the toxics contained in those products and by designing products to have another useful incarnation (through reuse or recycling) after their initial life. For example, one such successful approach is being taken in partnership with the electronics industry. In electronics, our partnership is encouraging and rewarding greener design of electronic products (e.g., reduced toxic content and easier to recycle), helping to develop the infrastructure for collection and reuse/recycling of discarded electronics, and working with recyclers and others to encourage environmentally safe recycling of used electronics. In addition, we are partnering with the carpet industry, scrap tire groups, and other product sectors to similarly encourage greener design (for carpets), greater recovery and reuse and safe recycling practices (both carpets and tires).

As part of the Plug-in to eCycling program, EPA and its partners are piloting various options for safe recycling of old electronics. One such approach is to share the responsibility for collecting, transporting, and recycling old consumer electronics among manufacturers, retailers, government agencies, recyclers, and non-governmental partners. These pilots will help inform decisions and approaches to large scale electronics product stewardship programs.

With regard to one of our biggest municipal waste streams, paper, EPA has several partnerships underway that have been helping to reduce, reuse, and recycle all types of paper products. The RCC has partnered with the American Forest and Paper Association to help reach its goal of recovering 55% of the paper consumed in the U.S. by 2012. Additionally, through programs and partnerships like WasteWise, Greening the Government, and the Green Press Initiative, we're focusing on developing markets for paper products produced with post-consumer paper as well as paper recovery.

The growth of e-commerce has brought about waste paper reduction benefits, however it has helped generate an increase in paper and plastic packaging materials in municipal solid waste systems each year. To address this issue, EPA launched the Cradle- to- Cradle Design

Challenge. In 2003, EPA presented the Cradle-to-Cradle Design Award for e-commerce packaging and logistics to student and professional winners. As a result of the Design Challenge, a group of packaging industry professionals have formed a Sustainable Packaging Coalition to design resource conserving packaging and systems.

2. Reduction of Priority Chemicals

To reduce the release of the 31 priority chemicals we're taking a three tiered approach, closely aligned to our approach for product stewardship. First – eliminate, where practical, the chemical from the product or process; second – substitute, as available, a less hazardous chemical; third – minimize the amount of chemical disposed of and maximize recycling. EPA's premier partnership with industry and other stakeholders, the National Partnership for Environmental Priorities (NPEP), is leading the way and has already received commitments from 29 facilities members to prevent 684,000 pounds of priority chemical releases. This program is key to reaching our GPRA goal of preventing an additional 10 percent of priority chemical releases by 2008. In 2003, (2 years early) we met the goal established in 1996 of achieving a 50 percent reduction by 2005. For other priority chemicals, EPA is tailoring partnerships to reduce the releases of mercury from automobile switches, mercury from dental offices, and early retirement of equipment containing PCBs. In response to the continuing health risks from chemical spills in schools, EPA is partnering with schools, school associations, and states to launch a "Chemical Cleanout Week" to safely remove and dispose of excess laboratory chemicals.

3. "Greening" the Government

By "greening" the government, we're harnessing the tremendous buying power of the United States Government to influence what products and services are produced. It is our goal that the U.S. Government serve as a model of stewardship to the public and private industry by incorporating recycling and waste prevention practices in federal agencies' daily operations. The "greening" application is very broad, from purchasing products and services that minimize environmental burdens to promoting safe, cost effective, energy efficient and environmentally-sound products.

RCRA, the Pollution Prevention Act, and several Executive Orders, guide us in enhancing recycling activities and give preference in purchasing products with recycled content,

environmentally preferable products, and biobased content products. The Executive Orders also mandate the evaluation of compliance by the federal facilities to Section 6002 of RCRA. EPA has built several key programs to "green" the government (i.e., Environmentally Preferable Purchasing (EPP), Comprehensive Procurement Guidelines (CPG), Green Buildings Partnerships, GreenScapes, and WasteWise) and established partnerships, provided outreach, training and technical assistance, and developed tools for EPA and others to use or to build on.

The future of greening will be in our ability to make sure federal funds spent through contracts, grants, leases, corporative agreements, and inter-agency agreements are clear with respect to green purchasing expectations. As part of the RCC we will be working with our federal partners in identifying aggressive federal recycling and waste diversion goals to complement accomplishments already made (e.g., in 2001, 90 percent of the offices in the six largest procuring agencies had recycling programs in place.) Additionally, EPA is working with other federal agencies, under E.O. 12148, to eliminate priority chemicals where possible and reduce toxic chemical releases by 40 percent by December 2006.

4. Beneficial Use of Materials

The beneficial use of wastes or reuse of secondary materials promotes efficient materials management. Instead of wastes being disposed of, they are fed back into different production or other processes, thus contributing value and acting as a substitute for primary raw materials. Waste recovery is undertaken to avoid waste disposal, to save virgin resources, and to extract value from otherwise discarded materials.

Under the RCC, we are building partnerships that identify goals and measures to spur safe and beneficial use of secondary materials. The Coal Combustion Partnership Program (C2P2), for example, is an industry/government partnership to increase the beneficial use of coal ash and other coal combustion products and to reduce the amount of these materials that are land disposed. EPA estimates that coal-fired power plants generate approximately 135 million tons of coal combustion products each year. The C2P2 encourages generators and users of coal combustion products to increase the use of coal ash in cement and other construction products. A significant benefit from this program is that every ton of coal ash used in concrete to replace Portland cement reduces 0.89 tons of global green house gas emissions. Under the RCC, C2P2 partners have committed:

- To increase the environmentally safe use of coal combustion products in concrete from 14 million metric tons in 2001 to 20 million metric tons by 2010, a 43 percent increase; and
- To increase the environmentally safe beneficial use of coal combustion products from 30 percent to 45 percent by 2008, by volume about a 30 percent increase.

Another example is our RCC tire partnership. There are at least 300 million scrap tires in stockpiles in the U.S. today, with 281 new million scrap tires generated in 2001 alone. We also estimate that markets now exist for approximately 78 percent of scrap tires. A partnership between EPA and scrap tire stakeholders is working to meet two 2008 goals for the safe beneficial use of scrap tires:

- To divert 85 percent of newly generated scrap tires to reuse, recycling, and energy recovery; and
- To reduce the number of existing tire stockpiles by 55 percent.

As the RCC unfolds, EPA will put in place additional goals and measures.

Each of these programs will help solidify a critical component in promoting beneficial use, reuse, and recycling of wastes – market development. Our approach involves working with consumers to generate demand for recycled products, working with industry to adjust its perspective so wastes are viewed as products.

5. Energy Conservation

The RCC is focusing its energy conservation efforts on identifying opportunities to increase the amount of energy conserved or recovered from activities associated with the production and management of waste materials. This includes working with industrial sectors to identify practices that will conserve energy through the reduction or elimination of waste byproducts, the identification of secondary markets for waste byproducts, and the expansion of energy recovery processes to extract the energy value of waste byproducts.

Our near term focus is to enhance energy conservation associated with waste materials involves the measurement and expansion of current activities. For example, we're investigating additional hazardous wastes that are comparable to commercially available fuels. Congress also supported this approach in Committee report language on EPA's fiscal year 2004 appropriations bill: "The Committee also supports EPA's work to examine the effectiveness of the current

comparable fuel program to supplement domestic energy sources with industrial materials, and encourages EPA to promulgate a rule in fiscal year 2004 allowing additional industrial materials to be safely used as fuels." This is consistent with Congress' intent under RCRA that solid waste represents a potential source of fuel that can be converted into energy as a means of reducing our dependence on other energy sources, including petroleum products, natural gas, nuclear and hydroelectric generation.

We are also looking at further expanding our WasteWise program, through which partners conserve energy by using fewer raw materials and by recycling materials in manufacturing processes. In 2002, WasteWise partners identified 3.5 million tons of their waste reduction efforts as directly attributable to their WasteWise membership. This level of waste reduction translates into a reduction of greenhouse gas emissions by 2.4 million tons of carbon equivalent. Finally, we are looking at how to further encourage the use of landfill gas for energy. We want to expand on efforts like the one at Rutgers University's Eco-complex, which proves that energy can be produced from landfill gases and put to beneficial use (in this case, by using the fuel in closed loop aquaponic fish and plant production). By focusing on energy as a strategic element, we are providing a new forum to highlight the environmental and energy savings associated with waste avoidance, recycling or reuse, and recovery.

6. Environmentally Friendly Design

In the RCC's final program element, our goal is to promote the design and/or redesign of products and processes to minimize their environmental impact. Through tools development, outreach, and incentives, stakeholders are transforming the design of their products.

One partnership working toward this goal is the Formulator Initiative, which gives companies the opportunity to partner with EPA's Design for the Environment (DfE) program to design or reformulate products to have a more positive environmental and human health profile. We have developed a prototype for the cleaning product industry. To enhance outreach, we've brought together leaders in the commercial product supply chain, product designers, and EPA's DfE and Green Chemistry experts to steer commercial products toward use of greener materials and easy disassembly. Also, through a partnership with the Industrial Designers Society of America (IDSA), we have printed and distributed the *Okala Ecological Design* course guide. In partnership with various companies and industrial design and green chemistry trade groups, EPA

is planning to educate and train product designers to use environmental information in design decisions, and to bridge risk information gaps between chemicals and materials for commercial product designers.

Conclusion

The RCC is unique in its ability to bring together resource conservation projects and stakeholders, set a focus and goals for key products, commodities, or wastes, and recognize achievements that benefit our environment. In the fall of this year, we expect to release strategic plans for each of the six program elements. These strategies will identify a direction for the next five years in resource conservation: what we need to focus on (e.g., paper, tires, mercury in products); what partnerships we need to build; what measures we will use to track success (e.g., percent recovery, pounds recycled); and what goals will produce environmental benefits.

The Resource Conservation Challenge isn't mandatory, it's not required by rule or regulation; it is a largely voluntary effort driven by the benefits derived by the participants. In some cases, participation is driven because resource conservation will pay for itself, as with many kinds of energy efficiency. In some cases, participants are involved because they've discovered an innovative way to reuse a waste stream or perhaps because a particular waste stream poses unique and difficult problems for traditional waste management. But in all cases, partners join because resource conservation is critically important to our environmental and our economic future.