

RECHARGING THE PLANET.
RECYCLING YOUR BATTERIES.™

call 2 recycle®

A Tale of Two Communities – How Recycling and EPR are Keeping Washington State “Evergreen”

November 17, 2011





King County

King County Solid Waste Division

Lisa Sepanski, Program/Project Manager



- Has been with King County, WA Solid Waste Division since 1989
- Co-chair of the Northwest Product Stewardship Council
- In 2000, started the Take it Back Network
- Involved in the development of the WA electronic product recycling legislation that passed in 2006



King County, Washington



1.9 million residents
2,134 square miles
39 Cities including Seattle

King County Solid Waste Division operates 1 landfill,
8 transfer stations and 2 drop boxes.



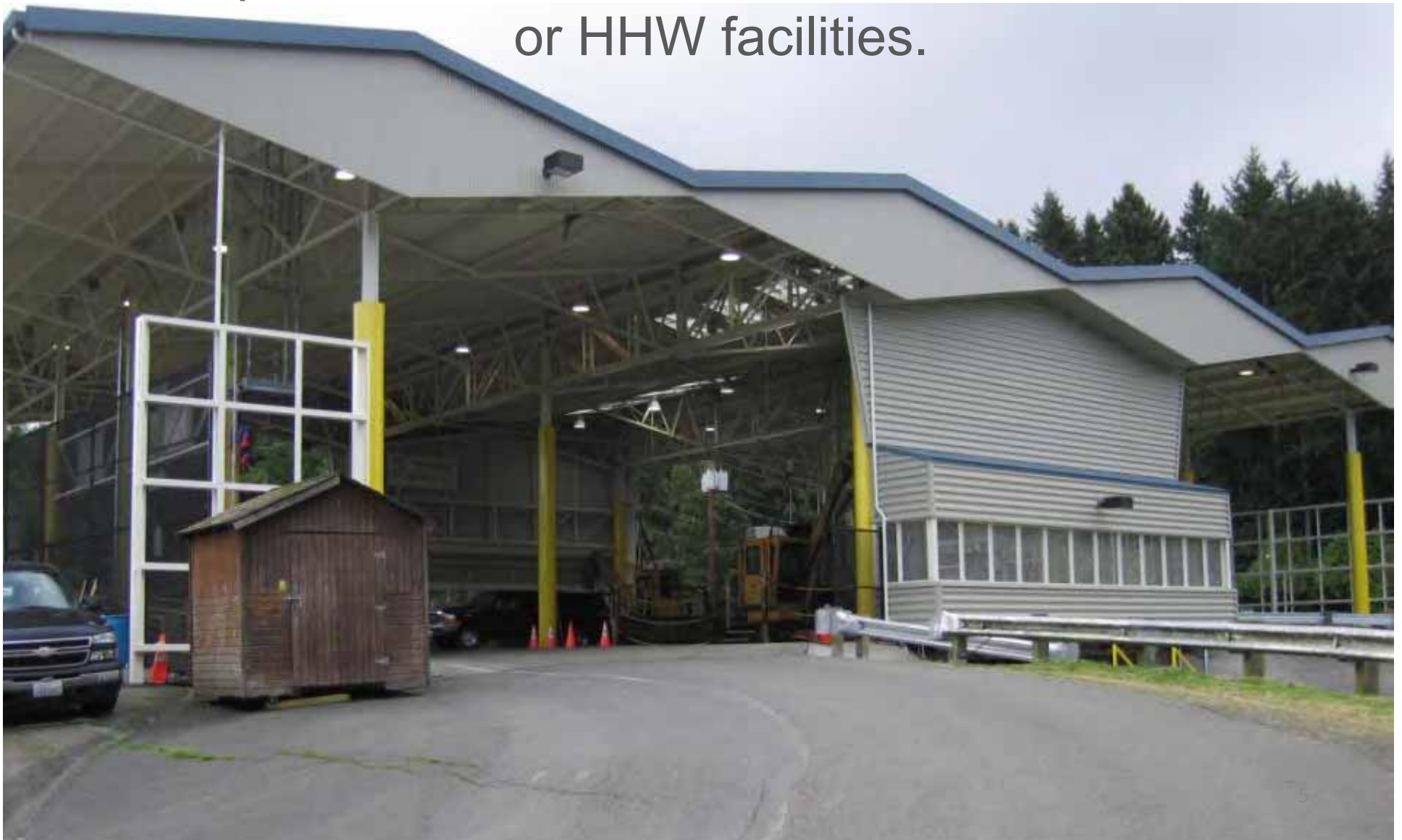
King County

It all started with electronics



King County and Product Stewardship

No space to collect electronics at transfer stations or HHW facilities.



2000 Pilot Project

Public/Private Partnerships



TOTAL RECLAIM

ENVIRONMENTAL SERVICES





Northwest Product Stewardship Council

The Northwest Product Stewardship Council (NWPSC) is a coalition of government organizations in Washington and Oregon that operates as an unincorporated association of members.

Steering Committee Agencies

Cities of Spokane, Tacoma, Seattle, WA

- Counties of King, Kitsap, Snohomish, Thurston, Yakima, WA
- Washington Department of Ecology
- Local Hazardous Waste Management Program in King County, WA
- Metro Solid Waste and Recycling Department, OR
- Oregon Department of Environmental Quality
- Environmental Protection Agency, Region 10 (non-voting member)

www.productstewardship.net



Benefits of the PS Council

- Share ideas and leverage resources around PS efforts.
- Improve efficiency and cost effectiveness of recycling programs
 - statewide vs. duplicative programs in multiple jurisdictions
- Improve the management of products to be more environmentally-sound
- Shift the financing for the management of products from governments to the manufacturers and consumers
- Internalize the costs of managing products
 - cost of recycling is included in the price of the product
- Cause manufacturers to think about the design of their products



2004-05 Pilot Project


Good Guys TV Take Back



Recycle.  

It's good for your living room. www.goodguys.com

Bring your old TV into Good Guys. The environment will thank you, and so will we.









Bring your old TV in to Good Guys.

Contribute \$10-\$25 for portable or big screen TV's through Good Guys' EPA-approved TV Recycling program.

10% OFF COUPON

As a thank you, get a coupon worth 10% off a new TV from participating brands.

THIS PROGRAM BACKED BY THE EPA AND SPONSORED BY THE FOLLOWING:

REMEMBER, RECYCLING IS EASY WHEN WE ALL SHARE THE RESPONSIBILITY.







King County

Lessons Learned from Pilots

End-of-life fees are problematic...

- Some people don't want to pay the fee
- Some people can't afford to pay the fee
- If products are donated to those with lower incomes, the burden of paying the recycling fee is placed on them

Product Stewardship...

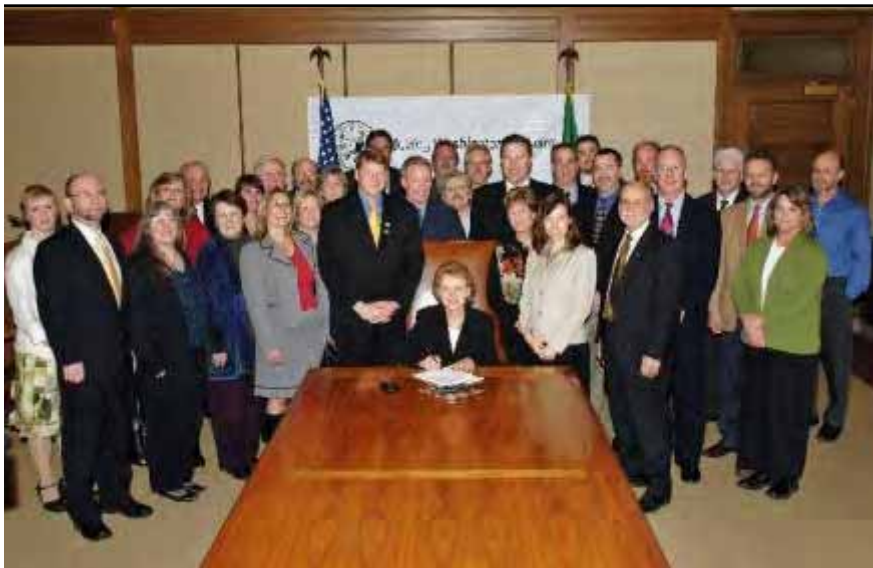
- Incorporates the recycling cost into the price of the product
- Those that purchase the product pay for the cost of recycling
- If the products are passed on to someone else to use, the recycling service is included at no cost
- Encourages reuse and recycling
- Requires legislation



Product Stewardship Legislation



- 2004 Washington Electronics Study Bill
- 2006 Washington Electronics Recycling Bill
- 2007 Oregon Electronics Recycling Bill
- 2009 Oregon Paint Product Stewardship Bill
- 2010 Washington Mercury Lamp Recycling Bill





Program Successes (2009-10)

- 260 collection sites – 65 in King County
- 2200 units collected/day on average
- 39,000 tons recycled
- 5.2 million lbs lead recovered
- 80 jobs created
- Manufacturers' average cost/product to recycle = \$4.00

Fact Sheet on economic benefits of E-Cycle
Washington

www.productstewardship.net



What's Next?

Pharmaceuticals?

Paint ?

Carpet ?

Batteries ?

Contact Information

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King County

King County Solid Waste Division



Jim Neely, Program Manager Supervisor

- 25 years experience in environmental management
- Oversees hazardous waste collection, contaminated sites and Green Building programs
- MS and BS in Environmental Management



King County

MODERATE RISK WASTE COLLECTION & PRODUCT STEWARDSHIP: PRESENT AND FUTURE

JIM NEELY
KING COUNTY SOLID WASTE DIVISION
LOCAL HAZARDOUS WASTE MANAGEMENT PROGRAM
OF KING COUNTY



King County

Local Hazardous Waste Management Program of King County

- Founded 20 years ago (1991)
- Partnership among solid waste, water resource, public health departments and 37 King County cities
- MRW (Moderate Risk Waste) vs. HHW (Household Hazardous Waste)
- In 2010, served 43,940 households and 487 small businesses (SQGs); costs were \$2.8 million
- Four permanent/semi-permanent facilities
- 21 'Wastemobile events in 13 cities per year
- City MRW grants- battery collection





Product Stewardship Supported MRW Materials

- Batteries*
- Electronics
- Fluorescent Lamps*
- Pharmaceuticals
- Thermostats*

* Also collected at MRW Facilities



King County

Call2 Recycle Rechargeable Battery Collection: 2010 King County Data

<u>Location</u>	<u># of Sites</u>	<u>Pounds</u>
Retail	153	27,104
MRW Facilities	17	6,432
Government Facilities	43	13,086
Businesses	45	74,893



Alkaline Battery Collection



King County



The Future 20 Year Service Planning

- Need for government facilities
- Sustainable funding model must include product stewardship
- Increased retail/manufacturer-funded facility collection of targeted materials; e.g., paint (?)
- Reduction in toxic materials (?)
- Facility planning implications





Over 25% of Materials Collected
Do not Fall Under Current EPR Focus Materials
(Source: Portland Metro)



Customers Like One Stop Disposal Option



Legacy Chemicals



Radium Paint Kit



Facility Planning

- Where feasible maintain nimble, low capital service modes such as Wastemobile and Weekly Supermall Service.
- Minimize fixed facility growth; size new/replacement facilities based on 'best case' estimates of demand:
 - expectation that role of retail and private facility collection is expected to expand.
 - expectation of reduction in the number/volumes of products that require management under MRW programs.





Factoria Transfer Station and MRW Facility Rebuild- Completion Estimated in 2014



King County



Thank you!

Contact Information

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King County

City of Spokane

Geoff Glenn, Disposal Superintendent



- Has been with the City of Spokane, Solid Waste Management since 1992
- Disposal Superintendent
- Serves on many committees focusing on environmental and social justice, recycling, sustainability and product stewardship

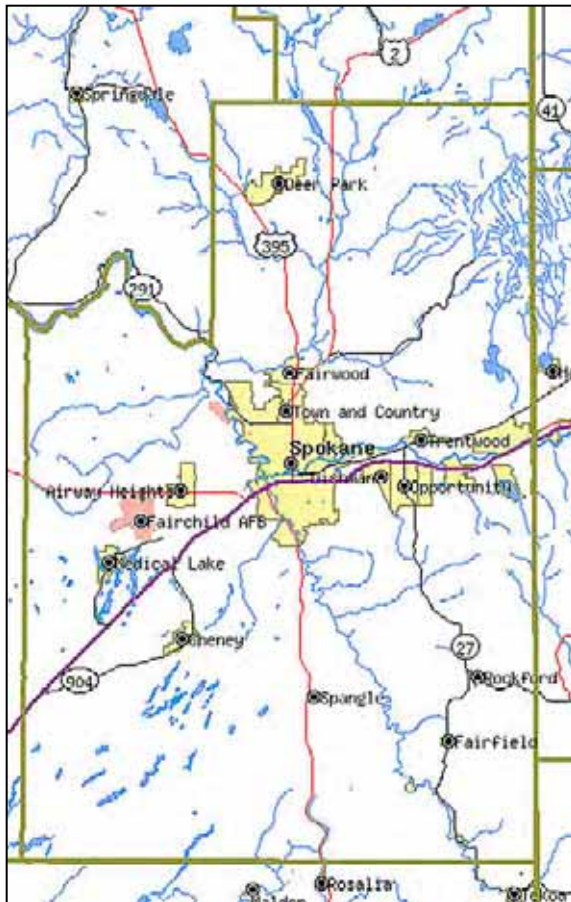


City of Spokane Recycling and Household Hazardous Waste Program

Geoffrey D. Glenn, CHMM
Operations Superintendent



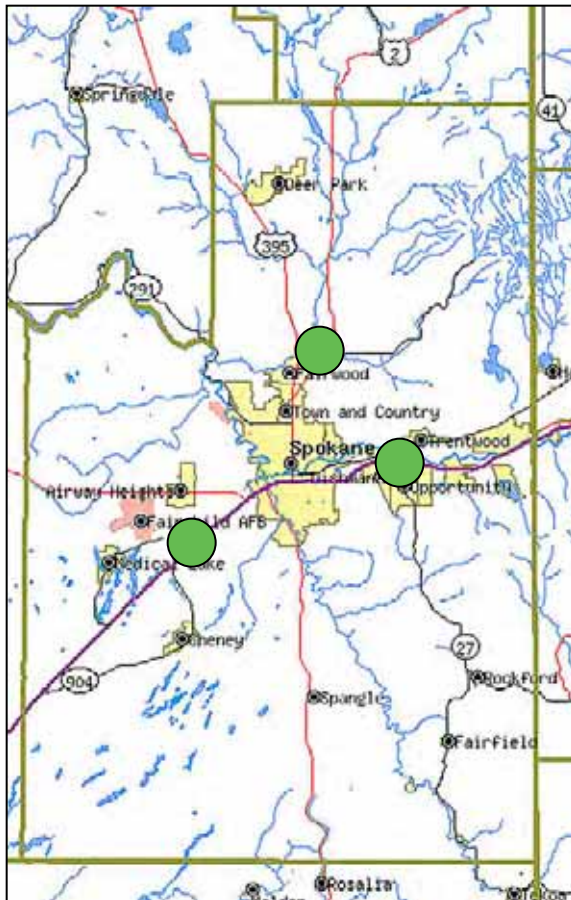
Introduction



- Spokane
 - Eastern Washington
 - Fourth Largest County
 - 471,200 (2010 census)**
 - Second Largest City
 - 209,900 (2010 census)**
 - Agriculture, Timber, Mining



Introduction



- North County Transfer Station
- Waste to Energy
- Valley Transfer Station



Introduction

- Fixed Recycling and HHW Facilities
 - North County Transfer Station
 - Valley Transfer Station
 - Waste to Energy
- Staff
 - MRW Coordinator
 - 2 Technicians
 - 7.5 Laborers (HHW)
 - 3 Seasonal Employees



Introduction

- A total of 619.92 tons of Household Hazardous Waste was collected at the three System facilities in 2010, compared to 540.38 tons in 2009. Of that 619.92 tons, 582.83 tons, 92%, were recycled, reused or went to energy recovery, with only 37.09 tons being disposed in a solid waste or hazardous waste landfill.
- Collections
 - Refrigerant
 - Batteries
 - Oil
 - Antifreeze



Refrigerant (1994 – Present)

– **1994 – 1997**

+400 lbs. CFC Fleet Services

Processed using reclaimed equipment

– **1996 – 1997**

+200 lbs. HCFC Building Maintenance

– **1999 – Present**

+200 lbs. 134a – Fleet Services

– **2008 - 2010**

7000+/8000 units - 577 lbs. refrigerant

0 Disposal Costs



Batteries

- Collected (2010)*:
 - 157.5 tons total batteries
 - 41 tons household alkaline/other
 - 9 tons NiCad/Rechargeable
 - 107.5 tons Lead Acid (Sealed/Auto)
- Disposition
 - Household alkaline/other – landfill/other options
 - NiCad/Rechargeable – RBRC (2003)
 - Lead Acid (Sealed/Auto) – local vendor – lead recovery



* Not all batteries ship within calendar year



Oil

- Facts:
 - 84 gallons of crude oil to yield 1 gallon of new motor oil
 - 571,200 gallons of crude to yield 6,800 gallons of new motor oil.
 - 1.41 gallons of used motor oil will yield 1 gallon of re-refined motor oil.
- City of Spokane Fleet Services consumed approximately 6,800 gallons of virgin 15w/40 motor oil (2008)
- 74,000 gallons/273 tons (2010)
- Costs:
 - Re-refined - Firebird 15-40 CJ4 = \$6.65 gal
 - New (Virgin) - 15-40 CJ4 = \$6.40 gal



Antifreeze

- City of Spokane Fleet Services consumed 1,113 gallons of new antifreeze (2008).
 - Fleet pays \$11.65 per gallon for new antifreeze.
 - Fleet Services currently pays \$1.00 per gallon for the disposal of its used antifreeze.
 - The jugs are not recyclable due to antifreeze contamination.
- 6000 gallons/25 tons (2010)
- Antifreeze:
 - Remanufactured - Extended Life 50/50 = \$3.95 gal
 - #2 HDPE jug - Reusable = \$1.97 each
 - New (virgin) - Fleet Guard 50/50 = \$11.65 gal + disposal



Culture

- Resistance to emerging ideologies regarding recycling, sustainability, product stewardship and producer responsibility – seen as regulatory vs. better business practices.
- Barriers/resistance based on operational procedures and guidelines – e.g. containers vs. material type
- Models part of overarching commitment to triple bottom line – resistance institutional vs. personal/department – e.g. lowest bidder, legalese, purchasing practices



Thank you!

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Call2Recycle

Sean Burchill, Regional Account Manager



- Regional Account Manager for West Coast
- Been with Call2Recycle for almost 12 years
- Extensive background in environmental policy and waste management



Call2Recycle®

FREE . . . Industry funded product stewardship initiative – no out of pocket costs to participate.

SIMPLE . . . Easily integrated into current collection efforts; multiple shipping options; Boxes Automatically Replenished; Customer Service Department.

TRANSPARENT . . . qualified “e-Stewards”; Data reports & Certificates of Recycling provided.



We want to maximize battery collection and recovery from municipalities in the most efficient, compliant and cost-effective manner possible.



How Does It Work



Battery Disposal



Battery disposal for municipalities can be . . .

- . . . Expensive
- . . . Complicated
- . . . Unclear – Final Disposition



GreenVantage

Municipal battery collection programs have been impacted by USDOT regulations

Specific for municipal governments (recycling authorities, hazmat, etc.)

Offsets municipalities costs in preparing batteries (USDOT)



Questions?

Please type your questions
into the Q&A section.

Thank you for your participation!

Join us for our next webinar Dec. 15, 2011.

