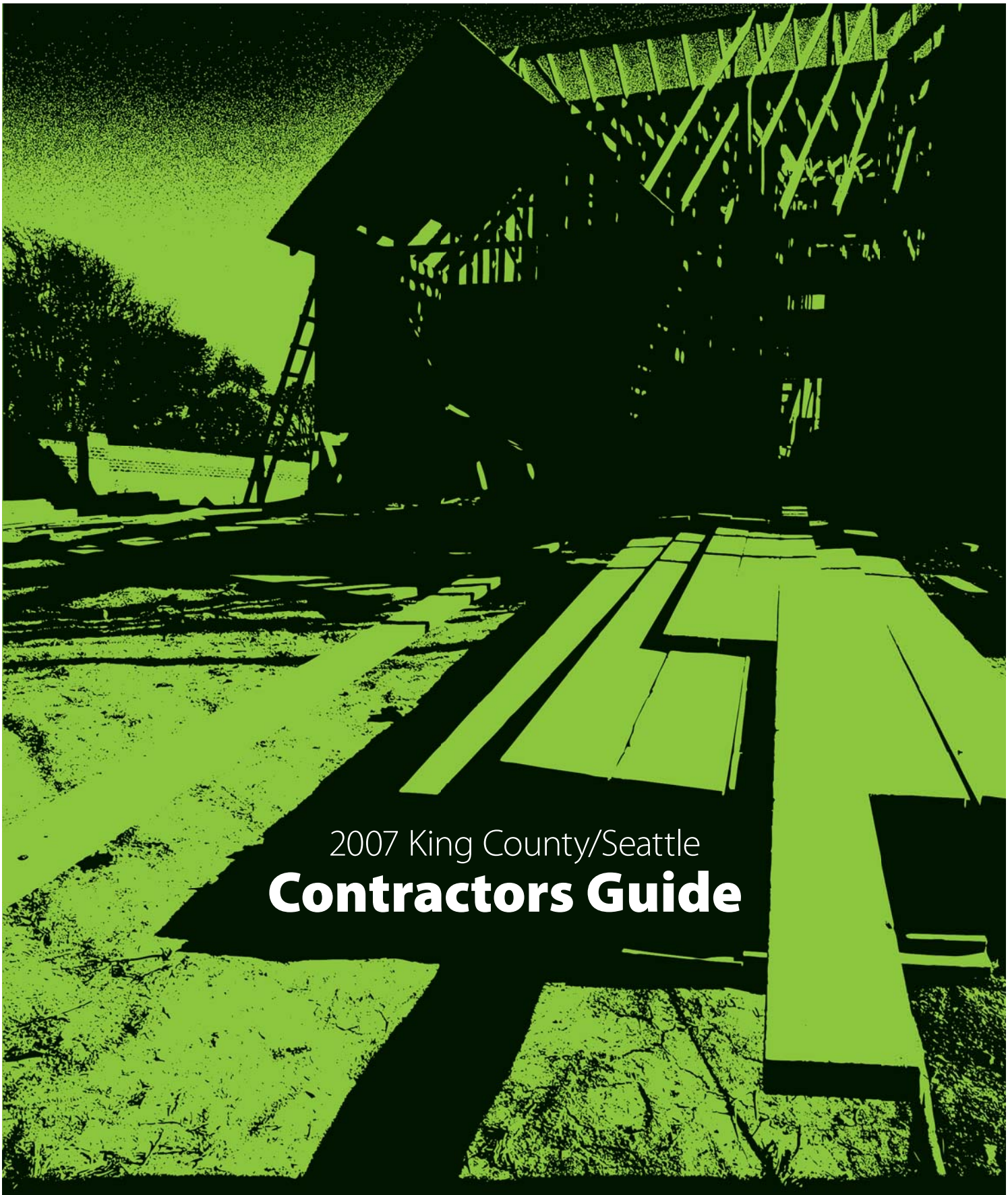

2007 King County/Seattle

Contractors Guide

Green Tools
Powered by King County

King County
Department of
Natural Resources and Parks
Solid Waste Division

Seattle Public Utilities

Green Tools

Powered by King County

King County provides a variety of tools to help residents and builders apply environmentally responsible practices to every phase of a building or remodel project.

FREE Technical Assistance:

- LEED™
- Built Green™
- Deconstruction
- Grants for green projects
- Permit incentives

Publications & Online Resources:

- Construction recycling directory
- Green home remodeling guides
- Sample specifications
- Online materials exchange
- Case studies

206-296-4466 • www.greentools.us

King County

Welcome to the 2007 C&D Contractor's Guide! This guide attempts to gather in one handy location all of the essential information that a construction and demolition contractor working in greater King County will need to greatly minimize the amount of materials leaving their jobsite as waste, rather than as a resource. We hope this will give you the tools you need to get started.

Warning! "Recycling" is not what it used to be!

The term "recycling" has come to be recognized as meaning any activity which keeps something out of a landfill. You will observe as you read this guide that not all "recycling" is equal and the C&D industry has adopted several different terms to better communicate on this topic. The two big changes are:

1. The term "recycling" has become a subcategory referring only to materials used to create a new product.
2. "Diversion" has taken over as the umbrella term for activities that keep C&D from being disposed.
3. Now that so much of what leaves a jobsite has market value the term "waste" has been replaced with "material" and sometimes "debris"

Quick Guide to C&D Materials Diversion Strategies

Jobsite Waste Reduction – pg. 3

Divert for Reuse – pg. 4

Divert for Recycling – pg. 5

Table of Contents

C&D Definitions

ADC (Alternative Daily Cover):

Cover material other than earthen material which is placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging.

Appropriate for Processing:

Loads of C&D materials entering a facility of which most of the material (˜90%), as determined by the processor, can be sent on by the facility for recycling. Usually charged a lower rate.

Beneficial Use:

The use of CDL waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products in a manner that does not constitute recycling and in a manner consistent with all applicable laws. Beneficial Use includes but is not limited to use as hog fuel and alternate daily cover.

(CDL) Construction, Demolition and Landclearing Debris:

CDL debris results from construction, remodeling, repair or demolition of buildings, roads or other structures. It includes (but is not limited to) wood, concrete, drywall, masonry, roofing, siding, structural metal, wire, insulation, asphalt, packaging materials related to construction or demolition and natural vegetation resulting from clearing land for development.

Commingled C&D:

Pure loads of Recyclable C&D Waste that contain mixed types of recyclable materials stored in one on-site container, which is taken to a sorting facility where materials are separated for recycling. Non-recyclable material may not be placed in a commingled container.

Construction and Demolition (C&D) Debris:

C&D debris results from construction, remodeling, repair or demolition of buildings, roads or other structures. It includes (but is not limited to) wood, concrete, drywall, masonry, roofing, siding, structural metal, wire, insulation, asphalt, and packaging materials related to construction or demolition. It does not include natural vegetation resulting from clearing land for development.

Hog Fuel:

A specific grade of ground up wood and bark. It varies in size but is generally between ½" and 6" screen size. In the Pacific Northwest, hog fuel from CDL recycling facilities is generally used to fuel boilers for the wood and paper processing or other industries.

Inappropriate for Processing:

Loads of C&D materials entering a facility of which less than 90%, as determined by the processor, can be sent on by the facility for recycling. Usually charged a higher rate.

Mixed C&D Waste:

C&D materials containing both recyclable and non-recyclable C&D materials that have not been source separated. C&D waste is considered to be mixed C&D waste if it contains more than 10 percent but less than 90 percent recyclable C&D waste by volume.

Source-separated C&D Waste:

A single kind of recyclable C&D waste material that has been separated from other C&D waste materials at the site of remodeling, repair, construction, demolition, or land clearing before it is transported to a receiving facility.

On-Site/Pre-construction

- ❑ Purchase reused, recycled, or recycled content materials and equipment whenever possible.
- ❑ Reuse any and all possible construction materials on-site.
- ❑ Contract a salvage company that will come on-site to remove valuable materials.
- ❑ Take materials to one of the reuse stores in the area.
- ❑ List the items in a materials exchange such as RBME or IMEX.
- ❑ Advertise reusable materials in the newspaper.
- ❑ Conduct a 'yard sale' on the job-site to sell reusable items. For liability reasons, do not allow customers to remove materials from a building – sell items from a curb or safe area.
- ❑ Allow workers to remove wood or other salvageable items for their own use.
- ❑ Consider donating unused materials.
- ❑ Work with subcontractors to prevent waste.
  - Instruct subcontractors to take back containers and reuse pallets.
  - Have subcontractors collect own drywall debris for recycling (separate from co-mingled recycling).
  - Ask subcontractors to reuse or recycle their own materials. Consider asking for or requiring documentation to verify reuse or recycling.
- ❑ Ask suppliers to deliver supplies using sturdy, returnable pallets and containers. Have them pick up the empty containers when delivering new supplies. Also require suppliers to take back or buy-back substandard, rejected, or unused items.
- ❑ Set waste prevention goals and target specific waste producing practices. Communicate your waste prevention plan at meetings, post it on-site, and promote the results.
- ❑ Set up central cutting areas for wood and other materials. Make sure the crew uses all the reusable pieces before cutting a new piece.
- ❑ Store materials in places that prevent loss from weather and other damage.
- ❑ Clean and maintain construction equipment properly to get the full life out of it.
- ❑ Clearly mark areas key to waste prevention, such as the material storage, central cutting, and recycling stations.
- ❑ Re-evaluate estimating procedures to make sure the correct amount of each material is delivered to the site.
- ❑ Maintain an up-to-date material ordering and delivery schedule to minimize the amount of time that materials are on-site and reduce the chance of damage.

Materials

- ❑ Use products with a longer life.
- ❑ Choose products with minimal or no packaging.
- ❑ Save all 2x4s over 16" in length for use.
- ❑ Use cardboard from delivered items as floor and wall protection at the end of the project.
- ❑ Specify materials and assemblies that can be easily disassembled at the end of their useful life.
- ❑ Substitute solid sawn lumber with engineered lumber.
- ❑ For concrete construction, use precast concrete members.
- ❑ Reuse concrete forms on the job and on other job-sites.
- ❑ Reuse wood forms. Wood forms can frequently be used up to 15 times. Alternatively, use reusable metal or fiberglass forms.

Outdoor/Landscape

- ❑ Design resource-efficient landscapes and gardens.
- ❑ Reuse dirt from other projects or save dirt from one project to use for the next.
- ❑ Reuse amended topsoil for site.
- ❑ Reuse existing asphalt for road base.
- ❑ Incorporate permeable paving.
- ❑ Use recycled content rubble for backfill drainage.
- ❑ Install drip irrigation.

Foundation

- ❑ Reuse concrete formwork.
- ❑ Incorporate recycled flyash in concrete.

Structure/Framework

- ❑ Use design based on 8' module for framing and wallboard waste reduction.
- ❑ Use Forest Stewardship Council (FSC) certified wood for framing.
- ❑ Use wood I-joists for floors and ceilings.
- ❑ Use oriented strand board (OSB) for subfloor and sheathing.
- ❑ For wood construction, use advanced framing techniques (e.g. 24" on-center and insulated headers), trusses for roof or floor framing, finger-jointed studs and trim, and engineered wood products.
- ❑ Consider using wood frame wall panels prefabricated off-site.
- ❑ Design spaces to be flexible for changing uses.

Roofing/Siding

- ❑ Select safe and durable roofing materials.
- ❑ Redesign wood roof structure to allow for manufactured trusses.
- ❑ Use aluminum forms.
- ❑ Use structural insulated panels (SIPs) for walls and roofs.
- ❑ Use alternative siding materials (recycled content or fiber-cement exterior siding).

What Can I Divert for Reuse From My Deconstruction/Demolition Project?

Easy (minimal separation of materials)

- Doors, windows and their hardware
- Sinks, plumbing fixtures, toilets
- Landscaping materials
- Plants, small trees
- Trim, mouldings
- Appliances
- Cabinetry
- Shelving
- Shutters

Medium (some separation of materials)

- Bathtubs, shower stalls
- Tile
- Wood flooring

Difficult (extensive separation of materials)

- Stone
- Brick
- Lumber (beams, joists, rafters, studs)

For more detailed information on what items in a building have reuse value please visit the Northwest Building Salvage Network Website as www.nwubm.net/index.htm.

Salvage and Deconstruction

Using salvage and deconstruction techniques on a demolition project can be an effective way to cut costs and come in with a lower bid or gain a higher profit margin. The key is knowing which techniques are most cost effective on a particular project and training your crews on the most efficient methods. An alternative to having trained crews is to subcontract or partner with a company/organization which is already well versed in salvage and/or deconstruction. They will sometimes simply provide their services in exchange for the materials they remove.

The most cost effective part of doing salvage and deconstruction is often the avoided costs of disposing of the C&D waste. And if another company removes the material from the job site you can also cut your transportation costs. Some money can be made by selling the recovered materials but it can be difficult finding customers if you do not have an established retail location or network. It may be worth it to have a more specialized company take the recovered materials off of your hands and do the selling themselves.

Using deconstruction techniques does not have to mean taking a building apart by hand one piece at a time. Knocking down the roof and the walls and disposing of them as C&D waste while salvaging the floor joists and beams is still making use of deconstruction techniques and may indeed be the most cost effective solution for even the most experienced deconstruction contractors if a building is in really bad condition. Remember, the key to cutting costs with salvage and deconstruction is knowing the techniques and knowing when to apply them.

This handout is intended to help get you get started with salvage and deconstruction and to point you in the direction of assistance to further educate yourself on how to become cost competitive in this field.

Salvage and Deconstruction

There are a number of companies which are well versed in salvage and deconstruction and which may be interested in being a subcontractor on appropriate projects. Company names and phones numbers are listed here for your convenience. For additional information on these companies please refer to pages 23 and 24 of King County's 2006 Construction Recycling Directory.

Earthwise, Inc. 206-624-4510

Olympia Salvage 360-259-8985

Resource Woodworks Inc. 253-474-3757

RW Rhine, Inc. 253-537-5852

Seattle Building Salvage ..... (Seattle) 206-381-3453

Second Use Building Materials 206-763-6929

The Reharvest Center 253-531-5845

The RE Store 206-297-9119

The ReUse People of America 206-423-9789

Salvage and Deconstruction

Plant & Tree Salvage

There are local companies which are interested in salvaging trees and plants that are slated for removal at demolition/ construction sites. Company names and phones numbers are listed here for your convenience. Additional information on these companies can be found in the Plant and Tree Salvage section (page 28) of King County's 2005 Construction Recycling Directory.

The RE Store 206-297-9119

King County Native Plant Salvage Program 206-296-1923

Urban Hardwoods..... 206-766-8199

Deconstruction Consulting Services

Private consulting services are available to work in-depth with you to provide guidance and networking support for salvage and deconstruction services.

Re-Use Consulting.....360-733-1363

Web Sites

On-line deconstruction resources at the Resource Venture www.resourceventure.org/rv/issues/building/get-started/cons-wste-mgmt/deconstruction/index.php

Presentations from the August 2004 Deconstruction Conference in California www.decon04.com/materials.htm

General Salvage/Deconstruction Assistance

For general deconstruction assistance or to learn more about deconstruction in general please contact Kinley Deller at 206-296-4434 or kinley.deller@kingcounty.gov.

What C&D Materials Can be Collected Together For Hauling to Commodity C&D Recyclers?

Asphalt Roofing

General Recyclables

- Beverage containers (glass and plastic)
- Cardboard

Plastic

- Vinyl siding
- Plastic plumbing (PVC, ABS, PE)

Window Glass

Carpet and Carpet Pad

Ceiling Panels

Drywall

Wood & Landclearing

- Yard Waste
- Pallets
- Trees

Metal Recycling

- Electrical wire (coated and non-coated),
- HVAC units,
- Steel or cast iron based bath tubs
- Metal roofing
- Metal pipe
- Nails and screws

Plastic Film

- Pallet wrap
- Plastic sheet vapor barrier

Rubble

- Asphalt Pavement
- Brick,
- Concrete
- Porcelain (sinks, toilets, etc.)

How Do I Get the Best Recycling Rate At My Jobsite?

If you want to obtain recycling rates worthy of green building points/credits for LEED or Built Green you will have to:

- ❑ Learn the recycling rates for the different C&D processing facilities
- ❑ Specify to your hauler or drivers exactly where C&D materials from the project will be going
- ❑ Insist on receiving tip receipts (or equivalent) for anything and everything that leaves the job site
- ❑ Be aware that the most efficient balance between commingling all materials and source separating everything is a 3 container system where 1 container is for garbage, 1 container is for mixed C&D recyclables, and 1 container is for the single material (or group of materials) which are being generated during any given phase of construction and that can be taken directly to individual C&D recycling facilities.

Make a C&D materials diversion plan (Appendix A) at the beginning of the project and stick to it. This plan, and a report at the end of the project, are required increasingly more often in construction contracts.

Facility Recycling Diversion Rates

This provides a snapshot (March 2007) of the facility diversion rates at regional C&D processing facilities. Waste Management and Allied Waste are under contract to King County to report, with documentation, their diversion rate information. Recovery 1 self-reports their monthly diversion information which contains a full break-down of where all of their materials are sent for processing. Diversion rate information is provided to King County on a monthly basis and is processed and posted to the web site at http://www.metrokc.gov/dnrp/swd/construction-recycling/comingled.asp on a quarterly basis. Diversion rates for past months are available.

Regional C&D (recycling Compliant*) Facilities & their Current Diversion/Recycling Rates – as Reported to King County

Facility Name	Recycling/Diversion Rate[1]	Breakdown of Where Diverted Materials Go (Total of all Three Columns Equals ~100%)		
		Recycled into New Products	Burned for Fuel	Landfill Daily Cover or Ash Stabilization
Waste Management - Cascade Recycling Center	48.8%	32.7%	67.3%	0%
Waste Management - Eastmont Recycling Center	73.2%	90.8%	9.2%	0%
Waste Management - Recycling Northwest	67%	42.8%	57.2%	0%
Recovery 1	98.12%	29.65%	52.33%	17.93%
CDL Recycle	98.8%	52.66%	20.76%	25.38%

Regional C&D (non-recycling Compliant*) Facilities & their Current Diversion/Recycling Rates – as Reported to King County

Facility Name	Recycling/Diversion Rate[1]	Breakdown of Where Diverted Materials Go (Total of all Three Columns Equals ~100%)		
		Recycled into New Products	Burned for Fuel	Landfill Daily Cover or Ash Stabilization
Allied Waste - Black River	0%	0%	0%	0%
Allied Waste - 3rd & Lander	1.9%	100%	0%	0%

* A CDL Recycling Compliant Facility is one at which the tonnage of all CDL Waste that the facility diverts (for recycling or beneficial use) in a month is at least forty (40) percent of the Inbound Tons Appropriate for Processing.

[1] Applicable to all loads accepted for recycling/diversion. The rates provided in this column are for use by projects seeking commingled recycling rates for LEED and Built Green credits

What Other Steps Can I Take to Make Our Materials Diversion Program More Effective?

Preventing waste and diverting materials from a job-site reduces disposal and supply costs. However, even the best programs may encounter difficulties. Here are solutions to some of the challenges of developing and implementing a Materials diversion Plan. Builders have successfully used these suggestions across the country.

Managing Your Program:

What is a cost-effective way to manage a successful materials diversion program?

- ❑ Designate a person to manage the details of creating and implementing the program. On residential projects, this might be the contractor, site supervisor, or crew chief.
- ❑ For larger projects, form a materials diversion team consisting of key people such as the owner, designer, project managers, and site supervisor. This will ensure that the program is designed to provide opportunities for everyone to participate.

Involving Sub-contractors & Suppliers:

What is the best way to handle the wastes subcontractors and suppliers generate?

- ❑ Require subcontractors and suppliers to use the recycling and disposal bins on-site. This allows the most control of recycling activities. Be sure to provide recycling for the variety of wastes generated.
- ❑ Alternatively, ask the subcontractors and suppliers to take back and recycle their own waste, but require written reports. Since many subcontractor and supplier wastes are homogeneous, it is easy to separate the wastes for recycling.
- ❑ Use a combination of methods, depending on the type and quantity of wastes generated. Obtain reports from recycling haulers.
- ❑ Involve subs in choosing convenient locations for the recycling drop boxes and waste bins for the different construction phases.

Finding Appropriate Space

How can you find space to separate recyclables on space-constrained sites?

- ❑ Choose smaller containers and more frequent collection. There are a variety of container sizes and service options available through recycling service providers.
- ❑ Use scrap lumber to divide one container into separate compartments for storing recyclables and trash on-site instead of having multiple containers.
- ❑ Ask recycling service providers about single containers with multiple compartments.
- ❑ Rent a trailer for the major recyclable material generated in the first phase of construction. When full, haul it directly to the recycler. Bring it back to collect the next quantity of material generated.
- ❑ Use smaller containers, on wheels if possible, that are collected at the end of the day and dumped into a larger container for pick up.
- ❑ If self-hauling, build custom containers to fit the space requirements using scrap or damaged plywood, concrete forms, or barrier fencing.
- ❑ Use trash cans and other small containers to collect recyclables generated in smaller amounts.
- ❑ Consider co-mingling small quantities of wood, cardboard, and metals to make one larger load of recyclables.

Making It Convenient

- ❑ Place the recycling dumpsters as close to the work as possible.
- ❑ Always provide a container for trash with the recycling.
- ❑ Make maps of the job-site so haulers can be shown exactly where to place and pickup their dumpsters.

Promotion & Education

How do you educate your crew and subcontractors?
How do you ensure their participation?

- ❑ Treat materials diversion like a safety program. Integrate recycling training into the safety education, or design a separate recycling education program.
- ❑ Create a name or slogan for the program to be used in education and promotion. Inexpensive rewards such as hats, T-shirts, or decals can provide incentives to make the plan work.
- ❑ Share the success. Let subcontractors and crew know how effective they have been by regularly posting the volumes of materials reused or recycled.
- ❑ Use signage to communicate, remembering to use simple clear instructions and include pictures to help non-English speaking workers understand easily. See Signage Examples in Appendix B, page 19.
- ❑ Be positive! When the crew and subcontractors are motivated and understand the goals, they will figure out creative ways to overcome obstacles and work efficiently.
- ❑ Include everyone in the process. Encourage suggestions on more efficient methods, or additional materials that can be recycled.

Preventing Contamination

How can you prevent contamination of recyclables?

- ❑ Laminate a poster with pictures describing the recycling program and post it in visible locations.
- ❑ Clearly label the recycling bins. Post lists of what is and is not recyclable.
- ❑ Provide enough trash bins to collect unrecyclable items. Have them emptied regularly so the overflow does not end up in the recycling bin.
- ❑ Consider locating bins in a locked or supervised area, or having bins with lids to discourage contamination by the public.
- ❑ Conduct regular site visits to verify that bins are not contaminated. Provide reports and educate subcontractors and crew on the results.
- ❑ Dump out contaminated loads and have the subcontractors and/or crew pull out the contaminants themselves. It may take some time the first time, but there won't likely be a second time.

Hot Issues Q&A

Q: Can it be cost effective and in compliance with state and local regulations to recycle asphalt and/or concrete on-site?

A: Yes, asphalt and concrete can be used in both structural and non-structural applications as long as it is processed (usually crushed) to meet the required specifications for the application. Certain additional requirements do apply to the use of the material (e.g. must be above placed above the level of the water table) but the practice of processing and using these materials on-site is often more cost effective than having the "waste" material hauled off and having new material brought onto the site. More information is available at www.greentools.us.

Q: Can painted, pressure treated and creosoted wood be recycled?

A: No, though some commercial boilers may be permitted by Ecology to incinerate some of these contaminated wood materials as boiler fuel. Care should be taken to insure the incinerator the incinerated material will be going to is permited to incinerate the exact materials that will be going there. If someone accepts this material from you for recycling you may wish to request a paper trail to verify that the material is processed in accordance with state regulation.

Links to additional information and guidance documents can be found on-line at www.greentools.us.

Q: Can cedar shakes be recycled?

A: Yes and No. If they have been treated they should be handled like any other treated wood (see treated wood Q&A). If they have not been treated then they can be reused or recycled through composting. Though technically not recycling they can also be incinerated as boiler fuel.

Q: Can new gypsum drywall scraps be used as a soil amendment?

A: Maybe, though the practice is not currently recommended in our region. Adding drywall definitely changes the mineral content of the soil it is applied to and this can be a bad thing or a good thing depending on the condition of the pre-existing soil. Wet gypsum drywall is known to release hydrogen sulfide which smells like rotten eggs and there are also concerns that hazardous heavy metals may be present in some drywall products currently on the market which could accumulate and potentially become a problem in soils amended with gypsum drywall material.

Where Can I Get More Information and Assistance?

Visit the King County GreenTools website at www.greentools.us

Jobsites outside of Seattle should call the King County GreenTools C&D Hotline at 206-296-4434

Jobsites in Seattle should call the Resource Venture hotline at 206-389-7304 (www.resourceventure.org)

What C&D Related Assistance Is Available Through King County GreenTools?

Site Specific Assistance

- Evaluate job site reuse/waste reduction opportunities
- Assist in preparing spec documents relating to materials diversion
- Assist in locating alternative building materials
- Assist in navigating the construction waste materials diversion
- Provide LEED compatible forms for tracking materials diversion
- Provide suggestions on size and placement of job site recycling bins
- Assist in training and motivating job site workers to handle materials to increase diversion
- Assessment of buildings slated for demolition to determine their salvage/deconstruction value
- Review building plans and suggest alterations to facilitate on-going recycling by tenants

Program Specific Assistance

- Presentations on construction waste management and material diversion issues
- Assist in establishing communication between agencies, organizations and site/project managers on materials diversion issues
- Assist in developing effective employee education on construction materials diversion
- Assist in designing and developing photographic (non-lingual) recycling signs for job site recycling containers

Available Tools

- Sample construction materials diversion plans, vendor letters and materials diversion economics worksheet
- Construction Recycling Directory

Appendix A: C&D Materials Diversion Plan Checklist and Templates

Recycling construction materials saves money by cutting disposal costs. It reduces waste going to the landfill and attracts clients who value environmental responsibility. Other benefits include a cleaner, safer site and improved community relations. Follow these steps to set up a successful, cost-effective job-site recycling program.

Analyze materials to be generated by project

- ❏ Estimate types and quantities of C&D materials the project will generate at different stages

❏ Check to see what can be recycled/reused onsite (wood, soil, rock, concrete, etc.)

Decide how you will recycle

- ❏ Can you arrange the job site to accommodate three containers (garbage, commingled recyclables and single commodity rotated with job phase)?
- ❏ Do you have the equipment to self haul?
- ❏ How often might you need your containers picked- up?

Research recycling options

- ❏ Check out the Construction Recycling Directory or King County's on-line "What Do I Do With…? Database (www.metrokc.gov/dnrp/swd/wdidw)
- ❏ Call recyclers and ask them:
  - ❏ What materials do you accept?
  - ❏ Is co-mingled recycling available?
  - ❏ What are my collection options & costs?
  - ❏ If I self-haul, can I drop off, and if so, what are your tipping fees?
  - ❏ Do you provide receipts to track recyclables?
  - ❏ Do you set up and provide job site training?

Decide what you will recycle at the jobsite

❏ Determine your costs

- ❏ Compare the cost of disposing waste with the cost of recycling

Write out the materials diversion plan

- ❏ Which materials will be salvaged or reused on site
- ❏ Which materials will be recycled
- ❏ How will materials get to the recycler
- ❏ Who are the responsible crew members/teams
- ❏ Your projected savings

Set up and monitor

- ❏ Clearly designate recycling bins
- ❏ Post list of what is recyclable and what is not
- ❏ Keep bins close to where waste is generated but not in traffic pattern
- ❏ Provide hauler and crew with site plan
- ❏ Check recycling bins daily for contamination
- ❏ Check garbage dumpsters daily for misplaced recyclables
- ❏ Call for pick-up before boxes are full
- ❏ Require quantity and cost tickets to track results and savings

Make your program work

- ❏ Start early: Incorporate a recycling program from the start to guarantee success
- ❏ Communicate your materials diversion plans to crews, subs and suppliers as they come on-site
- ❏ Include recycling requirements in all subcontracts and purchase orders
- ❏ Post quantities of materials reused and recycled
- ❏ Track your savings
- ❏ Encourage suggestions from supervisors and crew
- ❏ Reward employees
- ❏ Make use of available resources and directories

Track your success

- ❏ Keep the receipts from recycling and garbage disposal
- ❏ Furnish receipts to your company's estimating department for planning future materials diversion budgets.
- ❏ Supply receipts to the projects BuiltGreen or LEED documentation coordinator

Avoid Penalties for Illegal Dumping and Unsecured Loads

Contractors and property owners can be fined up to $5,000 for illegal disposal of construction materials or other debris.

To ensure that your construction materials are managed properly:

- Always know where materials go when they are removed from the jobsite.
- Require disposal, salvage and recycling receipts for all materials removed from the jobsite.
- Before the project begins, inform your contractors and subcontractors that you require these receipts.
- Keep these receipts and provide copies to your project manager or the property owner.

For more information about illegal dumping, visit: www.kingcounty.gov/dumping.

The fine is $194 for transporting an unsecured load. If an item falls off of your vehicle and causes bodily injury, you will be charged with a gross misdemean or, which carries a penalty of up to $5,000 and may include jail time.

For tips on how to secure your load, visit: www.metrokc.gov/dnrp/swd/facilities/secure-load.asp.

- Separate materials for salvage and recycling.
- For information about reuse and recycling of construction-related materials:
  1. Use the Construction Recycling Directory and the Contractor's Guide as your trusted resources.
  2. Call the King County Solid Waste Division at 206-296-4466. Toll free: 1-800-325-6165, ext. 6-4466. TTY Relay: 711. Mon. – Fri. 8:30 a.m. – 4:30 p.m.
  3. Consult these web sites: www.metrokc.gov/dnrp/swd/wdidw and www.metrokc.gov/dnrp/swd/construction-recycling/index.asp.

To report an illegal dumpsite:

- Call 206-296-SITE (7483)
- Report on-line: www.kingcounty.gov/dumping

King County
Department of
Natural Resources and Parks
Solid Waste Division

Company: _____

Project: _____

_____

Designated Materials Diversion Coordinator: _____

Contact info: _____

Materials Diversion Goals:

❑ This project will divert from landfills ___% [e.g. 75%] by weight of the materials generated on-site.

Steps to inform contractors/sub-contractors of materials diversion policies:

❑ _____

❑ _____

❑ _____

❑ _____

❑ _____

C&D Materials Expected to be Generated and Proposed Diversion Method:

The following charts identify materials expected to be generated by this project and the planned method for diverting these materials from disposal as a waste.

Deconstruction/Demolition Phase

Material	Quantity	Diversion Method	Handling Procedure

C&D Materials Diversion Plan (continued)

Construction Phase

Material	Quantity	Diversion Method	Handling Procedure

MATERIAL CATEGORY	DISPOSED IN C&D LANDFILL	DIVERTED FROM LANDFILL BY RECYCLING OR SALVAGE FOR REUSE	
		Recycled	Salvaged for Reuse
1. Asphalt (cu yds)			
2. Concrete (cu yds)			
3. Porcelain Plumbing Fixtures (lbs)			
4. Ferrous Metals (lbs)			
5. Non-Ferrous Metals (lbs)			
6. Wood (lbs)			
7. Glass (lbs)			
8. Brick (lbs)			
9. Paper (lbs)			
10. Newsprint (lbs)			
11. Cardboard (lbs)			
12. Plastic (lbs)			
13. Gypsum board(lbs)			
14. Paint (gal)			
16. Other -			
17. Other -			
Total (Weight)			
		Percentage of Materials Diverted (Total disposed divided by total diverted)	

King County
Department of Natural Resources and Parks
Solid Waste Division
King Street Center, Suite 701
201 S. Jackson St.
Seattle, WA 98104-3855

PRSRT STD
U.S. POSTAGE
PAID
SEATTLE, WA
PERMIT #14146