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About the Clark County Toolkit

The *Clark County Toolkit* offers listings to help builders, developers, architects and residents find resources to assist with commercial and residential projects. This can result in lowering project costs by saving time and money through reuse and recycling of materials that would otherwise go to the landfill.

Clark County Solid Waste and Recycling and the Green Building program gratefully acknowledge the generosity of Metro Regional Government and Bryce Jacobson, Senior Planner, for their willingness to share the format and contents of the *Metro Construction Salvage and Recycling Toolkit*. It has been edited here to help residents of Clark County find nearby resources and complete construction, deconstruction, salvage, recycling and green building projects sustainably.

To maintain our commitment to sustainability, listings in the *Clark County Toolkit* are limited to those within a ten mile distance of the Vancouver side of the Columbia River. Exceptions to this are those vendors providing the only recycling service for a particular material or an unusual service (e.g., plant salvage, building transport).

The *Clark County Toolkit* can also be found online on the Clark County Solid Waste and Recycling Web site: www.clark. wa.gov/recycle/publications/toolkit.pdf.

If you have questions regarding information in this edition of the Clark County Toolkit, please call the Solid Waste and Recycling Program at (360) 397-6118 ext. 4352.

Using the Clark County Toolkit

This guide can be used to find the material you want to recycle and choose the recycler closest to your job site. Common construction and deconstruction materials are listed in separate sections alphabetically.

If you are unable to locate a material in the *Toolkit*, it may not currently be recyclable in our area. To be recyclable, a material must have a market and those markets are constantly changing.

In addition, all recyclers, salvage and deconstruction vendors are listed in the back of the *Toolkit*, alphabetically in Appendix A. In an effort to promote sustainable practices and minimize driving for recycling purposes, those listed in the *Toolkit* are within a 10-mile distance of the I-5 or I-205 bridges.

Also included in the Toolkit are:

- Advantages of recycling building materials and how to salvage and recycle.
- Ideas for "green" building and remodeling.
- Waste regulations in the city of Vancouver and Clark County.

PLEASE REMEMBER

Because the recycling industry changes constantly, information related to businesses in this *Clark County Toolkit* may change. Fees may change based on market conditions and new firms may open for business. For the most current information, call the Clark County Solid Waste and Recycling office at (360) 397-6118 ext. 4352 or view the online toolkit at www.clark.wa.gov/recycle/publications/toolkit.pdf.

Always call ahead to confirm hours and fees before attempting to deliver a material to a recycler or to the transfer station.

Always protect your interests by checking the current status of any contractor you hire for your building or remodel project.



Guidelines for construction site waste in unincorporated Clark County

Managing waste generated on a project site can often be confusing. In the unincorporated Clark County area, solid waste collection service is regulated by the Washington State Utilities and Transportation Commission (WUTC) under WAC 480-70-041.

Recycling

Clark County encourages recycling at all construction and demolition sites. A registered recycling hauler or subcontractor other than Waste Connections, Inc. (WCI) may be hired to haul separated or mixed recyclables (containing no waste) to any permitted recycling facility. This may result in a substantial savings in your hauling expenses for separated materials such as wood, cardboard and metals. If you have questions regarding construction/demolition recycling or need help setting up a separation process on your job site, please contact WCI at (360) 892-5370 or Clark County Solid Waste at (360) 397-6118 ext. 4820.

Solid waste disposal

Under the WUTC (WAC 480-70), Waste Connections Inc (WCI) has the exclusive right to collect and haul solid waste, including construction and demolition waste, from job sites. There are allowed exceptions, including:

Self-hauling waste – A business is allowed to self-haul waste for disposal if the owner or an employee of the business hauls materials to a disposal site using a company-owned vehicle. A hauling company, other than WCI, may not be hired for this purpose.

Subcontractors – A business may hire a subcontractor to haul construction or demolition waste from the job site using a dump truck already performing other operations on the job site.

Incidental transport – A subcontractor may be hired to haul waste in their company-owned equipment if the haul is

incidental to other services performed on the job site (e.g., a clean-up company). However this subcontractor cannot promote itself as a waste hauling company. They must also be licensed as a common carrier by the WUTC.

REMEMBER

As the generator of waste materials you are legally responsible for making sure you use a registered materials hauler, that your recyclable materials are delivered to a permitted recycling facility and not placed in a landfill, and that your recyclable material is not contaminated with garbage.

If you have any questions, please contact:

Waste Connections, Inc - (360) 892-5370

Clark County Solid Waste and Recycling

- (360) 397-6118 ext. 4352

City of Vancouver Solid Waste – (360) 619-4120

Clark County Public Health - (360) 397-8160

Washington Department of Ecology - (800) 732-9253

Washington Utilities and Transportation Commission

- (800) 562-6150

Guidelines for construction site waste in the city of Vancouver

Recycling

Demolition of a building generates a lot of wood, plaster, dry-wall, metals, masonry and other materials that can be reused or recycled rather than hauled to landfills. Through careful planning, reuse and recycling can actually be more economical than hauling and disposal.. The city of Vancouver encourages recycling at all construction and demolition sites. Here are some facts:

Hauling – Vancouver codes allow you to use a licensed recycling hauler or subcontractor, including but not limited to Waste Connections, Inc. (WCI) to haul separated or mixed recyclables – *no waste* – to any permitted recycling facility.

Material recovery – Recovery of delivered materials must be accomplished at the recycling facility. The city reserves the right to determine whether materials are being recovered as intended.

More information – For help in setting up a separation process or other questions, please call the city of Vancouver's Solid Waste Services at (360) 619-4120 or WCI at (360) 892-5370.

Solid waste disposal

Vancouver has an exclusive contract with Waste Connections, Inc. (WCI) to provide all waste collection and hauling services to businesses and residents within city limits, including construction activities and demolition waste from job sites.

Waste handling requirements in Vancouver and Clark County are not regulated the same as in the Portland area. In fact, waste haulers handling non-putrescible or dry wastes in the Portland Metro area are not authorized to conduct similar operations in Vancouver. There are exceptions, including:

Self-hauling waste – A business is allowed to self-haul waste

if the owner or employee hauls materials to an authorized disposal site using a company-owned vehicle.

Subcontractors – A business may hire a subcontractor to haul construction or demolition waste from the job site to an authorized disposal site using a dump truck already being used to perform other operations on the job site.

Incidental transport – A subcontractor may haul waste in company-owned equipment if the haul is incidental to other services performed on the job site, such as cleaning or demolition. However, this subcontractor cannot promote itself as a waste-hauling company and must also be licensed as a common carrier by the WUTC.

City of Vancouver Solid Waste Services (360) 619-4120

Waste Connections, Inc. (360) 892-5370



Save money by recycling

Recycling, salvaging and reusing construction waste can save you money by reducing disposal costs. While garbage disposal fees in Clark County are \$79.35 per ton, plus a \$10 transaction fee (as of 1/09), most construction waste can be delivered to a recycling facility for much lower fees or free of charge when separated from garbage.

When you recycle you not only save money but also conserve our natural resources.

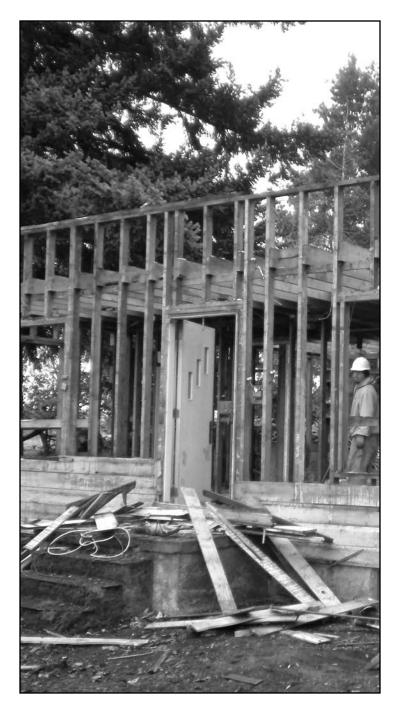
Typical waste from construction*

(Percentages based on weight)



Source: interpretation of Oregon Department of Environmental Quality 2005 Waste Composition Study.

^{*}This chart represents the average composition of construction waste. Types and percentages vary from project to project.



Salvage and deconstuct ~ you have options

Salvage and deconstruct first

Salvage is the removal of reusable building materials before demolition. If you are demolishing part or all of a building, remove salvageable items as early in the project as possible. If you can't reuse them in your own project, donate them to NW Salvage and Second Hand, or receive a receipt for tax purposes when you donate to the Clark County Habitat ReStore or the Rebuilding Center in Portland. There are many choices in the Toolkit for locations accepting salvaged materials.

Deconstruction can be used for most wood frame buildings. This is the reverse of construction, dismantling a building to reuse the structural materials and components. Clark County Habitat ReStore or the Rebuilding Center can often sell salvaged hardwood floors, architectural features, cabinets, lighting and plumbing features. **Be sure to call before you deliver.**

Separate different types of demolition/ deconstruction debris

For demolition, deconstruction or construction projects, begin by identifying which materials you will have in substantial amounts and which will be the easiest to separate – wood, metal, bricks, etc. Keep these in sorted piles for recycling. For large projects you may want to contact a professional recycler to provide containers and haul the material for you.

Be sure to ask for pricing on all services.

Mixed construction or demolition debris

The last choice for dealing with scrap materials from construction or demolition projects would be using the mixed debris method. All recyclable materials are placed together in one box and hauled to a facility where they are sorted and recovered

for recycling. Usually the price is slightly less than it would be to haul waste material. **To be hauled as recyclable material there must be no contaminating materials in the load.** This is often hard to control on a job site so you would need to advise all workers to keep waste such as lunch sacks and caulking tubes out of the recyclables. For smaller jobs or sites that have space limitations this is often a good system to allow for recycling.

Reuse and recycling are always the first choices over disposal to a landfill. They greatly reduce the amount of waste to landfills, reduce your cost for waste management, and reduce the need to use additional natural resources.

PLEASE REMEMBER

Because the recycling industry changes constantly, information related to businesses in this *Clark County Toolkit* may change. Fees may change based on market conditions and new firms may open for business. For the most current information, call the Clark County Solid Waste office at (360) 397-6118 ext. 4352 or view the online toolkit at www.clark.wa.gov/recycle/publications/toolkit.pdf.

Always call ahead to confirm hours and fees before attempting to deliver a material to a recycler or to the transfer station.

Always protect your interests by checking the current status of any contractor you hire for your building or remodel project.

Clark County does not recommend, endorse, or guarantee the status of any contractor or vendor.

Please visit <u>www.lni.wa.gov/TradesLicensing/Contractors</u> to read more about how to protect yourself when hiring a contractor.

Additional resources

- **Project Green Build** Clark County non-profit aiding in the promotion and expansion of green building through educational services. Contact Brandon Tauscher at (360) 263-2719. More information at www.projectgreenbuild.org/services.html
- Managing your construction/demolition waste A local blueprint for managing the waste from your project, including "green practices" which may apply to a do-it-yourself project as well as a "green" certification project. Visit www.clark.wa.gov/recycle/
- Clark County's A to Z recycling Web site <u>www.clark.wa.gov/</u> recycle/A-Z/Materials/ConstDebris.html
- Buying and selling used commercial building materials www.BoneyardNW.com
- **Metro Toolkit** Additional recycling opportunities in the Metro region at <u>www.oregonmetro.gov/index.cfm/go/by.web/</u> id=24684
- **US Green Building Council Cascadia Regional Council** (503) 228-5533 / www.cascadiagbc.org/news
- City of Portland Green Building Program www.portlandonline.com/osd/index.cfm?c=41481
- NW Eco-building http://ecobuilding.org/
- Washington Department of Ecology www.ecy.wa.gov/programs/swfa/nav/sust.html
- Books and magazines
 - **1.** *The Northwest Green Home primer*, O'Brien and Smith, Timber Press, Portland; 2008.
 - **2.** *Green Building and Remodeling for Dummies*, Eric Freed, Wiley Publishing, Hoboken NJ, 2008.3.

- **3.** Oregon Home Magazine's Green Living Supplement, published annually, Portland OR.
- **4.** Northwest Renovation A Home Improvement Magazine Published in Portland, Oregon FREE at numerous libraries and home improvement businesses. www.nwrenovation.com
- **5.** Designing and building a more sustainable home, City of Portland Office of Sustainable Development, Portland, Oregon, 2005.

PLEASE NOTE

Clark County does not recommend, endorse or guarantee the status of any contractor or vendor.

Please visit <u>www.lni.wa.gov/TradesLicensing/Contractors</u> to read more about how to protect yourself when hiring a contractor.

Green Building opportunities ~ certification programs

Even if you aren't planning to have your project certified, there are many good green building ideas in each of these programs.

Earth Advantage – Originally developed by Portland General Electric, it is now an independent nonprofit, offering guidelines for certification of residential structures. Find their Web site with program information at www.earthadvantage.com/.

Energy Star – This is an EPA and Department of Energy program, encouraging energy conservation through the purchase and use of appliances rated for low electrical consumption, as well as reducing greenhouse gases. Its products and recommendations are included in many certification programs. Information can be found online at www.energystar.gov/index.cfm?c=about.ab_index.

Built Green – A Seattle-based green building program providing guidelines for single family residential, condominium new construction and remodel, as well as multi-family and community projects. Information can be found online at www.builtgreen.net/checklists.html.

Evergreen – This program is used by the State of Washington CTED Program and has now been adopted by the Washington Habitat for Humanity building projects. It was adapted for their use from the SeaGreen multi-family housing program. Information can be found online at www.cted.wa.gov/site/1027/default.aspx.

LEED – The US Green Building Council's building certification program, providing stringent prerequisites and guidelines for building green structures with four different levels of certification, based upon the number of green features used.

Information for remodels can be found online at www.greenhomeguide.org/guide_for_green_renovation/green_renovation_checklist.html.

Information for new construction can be found online at www.greenhomeguide.org/green_home_programs/LEED_for_homes.html.

NAHB Green Building – The National Association of Home Builders provides guidelines for its builders to use in constructing green homes. Information can be found online at www.nahbgreen.org/About/default.aspx.



Green Building opportunities ~ commercial

The importance of contracts – In addition to the basic specifications required in construction contracts, it is very important to indicate all aspects of your project that require specific "green" actions. This includes recycling, materials content, building systems and any specific needs for documentation in a green certification program (Earth Advantage, Energy Star, Build Green, Evergreen, LEED).

Site consideration – Before plans are drawn, meet with planners, engineers, architects and landscape architects to begin a multi-disciplinary approach to green design. Review the site analysis. Is it possible to use "low impact development," working with and around the trees, native plants, streams or wetlands? Utilizing the natural features of the site and reducing movement of soils and loss of topsoil can greatly reduce the need for expensive drainage systems and replacement landscaping. Include bioswales and permeable pavement to return stormwater to the water table. Is it possible to include ecoroofs for heat island reduction, insulation and stormwater reduction? What other "green" options do members of your team propose?

Building orientation – Work with your architect to place your building on the site in a way that will capture and use as much natural light as possible. This will not only reduce the expense of large lighting systems and their maintenance by utilizing passive solar opportunities, but will provide healthier work and living spaces and views to natural surroundings.

Waste and recycling plan – Before your first project meeting, contact the recycling and waste service provider in your project jurisdiction. Explain your project, obtain pricing and request that a representative attend project meetings. Determine which materials can be recycled and establish a layout for access by the service provider, as well as types of containers and their



placement for easy access by the workers. Make certain all project workers are briefed on the plan and the importance of sorting materials properly.

Team meetings – Before breaking ground, hold a meeting with all parties involved, including the architect, contractors, subs, workers, recycling and waste service provider, project manager and owner. Present your goals for the building and concerns for the site and its surroundings. Entertain questions from all meeting attendees and be specific about your goals. Continue to hold regular update meetings to answer additional questions and look for opportunities to add more green features to your project.

Healthy interior materials – Green building projects offer many opportunities to create healthy indoor spaces for their future occupants. Use of non-toxic glues, low VOC paints, natural fibers, recycled content carpet squares, Energy Star appliances, Green Seal certified cleaners and FSC certified wood are only a few of the material options. Your architect and/or project advisor should be able to recommend many materials to choose from.

Before occupancy – Be certain your building is "commissioned" before occupants begin to move in. Commissioning is a systematic process of testing to assure that a building's systems perform the way they were designed and intended to perform. This normally includes the HVAC, electrical, plumbing, emergency and lighting systems. If done in a timely manner, corrections and adjustments can be made under warranty, saving great expense later.

Acknowledge your team – When your building is complete, commissioned and ready for occupation, provide an occasion to honor and acknowledge everyone who participated in the project, from conception to completion. Emphasize their success in the creation of a "green" structure, it's importance to you as well as to future occupants and the sustainability movement.

If your project was completed under a certification program, let everyone know the success and the benefits to them as they participate in future construction projects.

If you have questions regarding "building green," please contact Leslie Johnson, Certified Sustainable Building Advisor, in Clark County Solid Waste and Recycling at (360) 397-6118 ext. 4820.



Green Building opportunities ~ residential

Do your homework and know your budget – Spend time researching "green" options on the internet and in books and magazines. The field is growing and changing daily which can make it difficult to pinpoint exactly what is feasible for your particular project. It's often helpful to look at the guidelines for green certification programs (Earth Advantage, Build Green, Energy Star, LEED) to see what "green" features are most important for energy savings and increased resale value.

If you are building a new home you have more options for "greening" the project than you would have with a remodel. Starting with the orientation of your structure on the site, green options are available during every phase of construction. Investing in many of those features during new construction will more than pay for additional expense through energy savings and material durability in the years to come. It's important to have your budget firmly in mind as you begin making these choices.

Select an architect, consultant and contractor – If you are going to work with a professional on your project, make certain you select one whose credentials in green building are established. There are many talented professionals who can make your project go smoothly and keep your green goals in mind, as well as offering additional choices for sustainable features you may not have been aware of and may want to include. Make sure the professional you select knows your goals and your budget and keeps them in mind. Including green specs in your contract will help ensure a positive outcome.

Energy and appliances – Working toward energy conservation is one of the easiest "green" goals to include in your project. Purchasing appliances rated by Energy Star, using high R value insulation and including triple-pane windows will all have high payback values for your investment. Orienting your home to

utilize maximum available natural light and the benefit of passive solar heat will also provide a great return on investment. Even in the Northwest we can use the sun to our advantage. Solar water heating systems are more and more a part of green remodels and are worth investigating as part of your plan. LED lights are now available for residential application, requiring much lower electricity usage than even CFLs.

Documentation – Compile a notebook of information about the project as it progresses. If and when you decide to do additional work, or if your home is sold, this provides information to you or your buyer on exactly what the green features are. It's also helpful to have this information handy for future changes in electrical features, paint colors, or operation of special heating and cooling systems. This will also give you back-up for advertising your "green" features.

If you have questions regarding "building green," please contact Leslie Johnson, Certified Sustainable Building Advisor, in Clark County Solid Waste and Recycling at (360) 397-6118 ext. 4820.