CTDEP Solid Waste Management Advisory Committee
Subcommittee Meeting Notes of June 15, 2007

Construction and Demolition Subcommittee

CTDEP Subcommittee Lead: **Frank Gagliardo, Environmental Analyst 3**
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Stakeholders Present: Don Musial – Wheelabrator; Paul Balavender – O&G Industries; Dave Bodendorf – CRRA; John Pizzimenti – USA Hauling; Ken Ouellette – Incorporated Industries; John Powers – ReConnstruction Center; Maya Loewenberg – DECD; Ed Bona – DECD; Stan Gormley – DEP; Bill Sigmund – DEP; Carey L. Hurlburt – DEP

- John Powers hosted this subcommittee meeting at the ReConnstruction Center located at 230 South Street in New Britain.
- John Powers distributed the attached letter from Joe DeRisi (attachment) that detailed his recommendations to increase and improve the functionality of Reuse Centers in CT.
- John Powers gave us an overview, the mission and a tour of the ReConnstruction Center.
- Discussion centered on how to promote other Reuse Stores in the State, educate the community about the existence of these businesses/non-profit organizations and how to best advertise and encourage the demand for reused materials, included optimizing website design, traditional advertising and targeted promotions at swap shops, antique stores and trade shows.
- Maya Loewenburg and Ed Bona from DECD discussed how their agency might be able to assist and provide low interest loans to businesses, pilot programs, community development grants to municipalities and also suggested ConnSTEP as an additional resource for technical assistance.
- Discussion about the current limitations of DEP, CRRA and businesses because of the outdated General Statutes and Solid Waste Regulations (can not operate under Statutes and Regulations written over 30 years ago primarily for landfills and incinerators) and how our C&D subcommittee must prepare a list of necessary changes and encourage that implementation ASAP. However, the regulatory process is complex and procedures are extensive.
- CRRA will announce within the next few months their proposed Plan for operating a new landfill in the State.
- On June 26th, the C&D subcommittee will attend the Regulation Review and Reform subcommittee to discuss our concerns and to learn about their short-term goals.
- The next subcommittee meeting will be July 24th held at DEP during the breakout session of the SWAC meeting (10:30-11:30 a.m.)

Attachment:

- Joe DeRisi, Urbanminers.com, Recommendations to increase capacity and improve the functionality of Reuse Centers in Connecticut

To: "Solid Waste Advisory Committee, C & D Subcommittee."

From: Joe DeRisi,
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June 1, 2007 First Draft

Recommendations to Increase the Capacity and Improve the Functionality of Reuse Centers in Connecticut

Note that comments about reuse stores are generalizations based on observations of many reuse stores and may not apply to any particular store. Existing stores in Connecticut are effective and desirable. However they have a defined and limited role within the construction & demolition waste recovery industry. Reuse stores must be considered in conjunction with other reuse facilities in Connecticut- for profit retail and wholesale, commercial and industrial.

1) **Assessment of Reuse Centers and Supporting Organizations**.

    a) **Define restore**. There are retail, wholesale and remanufacturing businesses. There are organizations that salvage materials that do not have stores and stores that do not overtly engage in the salvage of the materials they stock. Some organizations do not sell retail or locally and may or may not obtain their salvaged materials from within the state. Some reuse organizations only serve an explicitly defined constituency (e.g. Yale reuse/recycling Center).
    b) **Supporting organizations**. What organizations should be looked at along with actual reuse operations? An obvious example is Habitat for Humanity restores –store policy is a function of the larger Habitat organization.
    c) **Detailed assessment**. What stores exist now, what are developing? What is their current capacity? Is their current capacity limited by management and or limitations such as store size, capitalization? Do stores have scales? This assessment should include, not only statistical information such as the estimated tonnage of materials handled annually, but an assessment of each stores market scope, extent of materials handled, and capacity to expand the range of materials handled. Current sources of materials should be examined and the feasibility of expanding those sources should be examined. Management and marketing structure of the stores should be reviewed and compared. It would be useful to create a thorough survey for all stores to develop an information base on their current functioning and needs for future development. Store managers as well as board members and other affiliates should participate. There should be someone working with all of the stores that can nudge them towards some kind of standardization of record keeping for waste monitoring purposes, as well as suggestions concerning materials to be targeted for salvage. This could include training store management/ directors on developing sources and marketing products. I believe research will show that there is currently , from a business point of view, inadequate marketing plans for reuse stores.

2) **Coordination 0f Activities**. Reuse stores and other organizations that reduce solid waste should have coordinated salvage and marketing activities. Joint advertising and sharing of inventory could increase sales. This is not necessarily limited to state boundaries (e.g. The ReStore in Springfield, Ma.)

3) **Increasing Facility Capacity**. The volume of building materials recovered could be increased but reuse stores tend to be under capitalized, have limited market scope, inefficient management (including in inventory control) and inefficient and insufficient facility capacity for handling larger volumes of building materials. Also, facilities tend to be under utilized. Reuse stores should have access to capacity building capital and management expertise that can assist with increasing materials flow through their facilities.

4) **Develop Materials Recovery**. A few methods for increasing material recovery for reuse stores. a) Develop further, relationships with contractors , landlords and housing related organizations. Create regular categorical customer mailing lists (databases) for both sources of materials and buyers. b) Create salvage and deconstruction crews that directly retrieve materials. C) Have training workshops for contractors on how to remove materials for reuse and save money. D) Have training for management on expanding the range of sellable materials and how to handle these materials.(refer to the assessment section –who currently does the above to what extent?).

5) **Mission and Structure of Reuse Stores**. Mission and structure of reuse stores can limit their overall capacity. Not for profit restores tend to have limited missions (geographically localized, range of materials handled, business structure, intended market). In general not for profit restores are "good will" organizations and are not designed nor run for maximum efficiency or productivity. A "classic " limitation is the requirement that all materials are donated. Though there is a huge market of individuals and corporations that take advantage of tax breaks by donating to reuse stores, there are limitations imposed by donation only structuring. For example a renovation contractor who regularly salvages high value materials (or low value for that matter) from construction projects may be more interested in consigning the materials and receiving cash back rather than a tax break, just a consignment shop for other types of goods would do. For-profit businesses do engage in this market , but should the not for profit reuse stores necessarily exclude themselves from this large market? Perhaps the tax laws are at issue here, but this should be examined. Note that there are at least two local (within Connecticut) examples of a not for profit that obtains donated materials consigning them for sale to a for-profit, as that organization has no reuse store to sell through and there is no advantage for them in donating to an existing reuse store. See " Coordination of Activities". It may also be that the current mission of reuse stores is fine for the market that they reach and that expanding materials recovery should take place in other sectors of the reuse industry. Or as this author sees, through a coordination between these sectors and assistance to both.

6) **Legal and Technical Obstacles to Increased Materials Recovery**. There are many opportunities for salvaging larger volumes of materials from residential and commercial sources by making the jump from the current trend of "light stripping" certain materials out of buildings and moving to complete deconstruction(that is the removal of the entire structure to (and sometimes including) the foundation). In order for deconstruction to take place, handling and marketing infrastructure needs to be developed in concert. The "market" will drive this eventually, but it could be developed sooner by the funding of a pilot deconstruction project in conjunction with an existing not for profit organization ,developers and or city agencies., as this author has attempted to do a number of times (and is in the process of doing at this writing). But various technical , legal, financial and political limitations suggest the need for support at the state level:

    a) Permitting for deconstruction of buildings is an obstacle. Currently all deconstruction is considered a demolition. The exemptions for the requirement of a demolition contractor should be modified to reflect the reality that disassembling a building is not the same as demolishing it. For example demolition permitting legislation allows for an owner to

obtain a demolition permit (without a licensed demolition contractor) when the purpose of the removal of the building is " for historic purposes" . At the time the legislation was passed historic reasons were one of the few times when a building would actually be preserved, typically disassembled and reassembled elsewhere. But there was no consideration for the disassembly of a building, historic or otherwise, for the reuse of all of the materials. If a building can be deconstructed without a demolition licensed contractor for historic purposes, why not for purposes of total reuse of the materials?

b) There is no incentive for the recovery from the demolition of entire buildings because, amongst other reasons, the permitting limitations disallow competitive bidding of potential deconstruction contractors (including a crew from a reuse store) against demolition contractors
c) There is no requirement as other states have for recovery of a percentage (50% in some locations) of the C&D waste. A C&D waste recovery requirement would support recovery from all construction projects and create a market for complete deconstruction of buildings as an alternative to demolition.
d) Demolition is an efficient method from a contractors point of view and demolition contractors have a virtual monopoly on removal of structures. Reuse stores have no capacity to compete at this scale (volume of materials and efficiency of labor etc.) as they are currently structured to function on a much smaller scale. Even in the case of valuable historic buildings demolitions usually cannot be prevented.
e) There should be oversight by a multiple agency committee that reviews all demolitions or at least that towns can refer demolitions to. This committee can review the application for demolition according to the best possible use of that building or its materials: save the building as it is where it is, move the building as is, disassemble and reassemble on another site, disassemble and salvage all of the materials, salvage some defined amount of materials, etc. Of course historic buildings are a priority for preservation, but even these are demolished continually. But there is no review process that examines a building in terms of its historic significance and its inherent value as a structure and for its value as a materials resource. Given the value of building materials now and into the near future, and our limited natural resources, all building should be seen as a lumber yard in a different form, if you will. Once one gets to a certain efficiency of scale with recovery operations and combine other incentives such as public support, saving entire buildings and recovery C & D materials in all other circumstances becomes a positive in every way including economically. If a review committee caused even one "tear down" property to be deconstructed in a year, the value of the materials saved would exceed that salary of a full time review person. Just one town in Fairfield County has dozens and dozens of teardowns alone (never mind all of the other demolitions). See this link: http://www.westportnow.com/index.php?/v2/teardowns/

This same committee could be an information and support resource for reuse stores and other organizations involved in materials recovery and should be advertised and promoted.

If the committee had a paid staff person, that person could offer technical support and to restores and similar organizations, as well as process reviews and information requests from towns.

f) There should be a certification process for deconstruction managers. The deconstruction industry is in the process of developing standards for deconstruction and can be used as guidelines.
g) Reuse stores could promote expanding reuse markets. For example used structural lumber has a good potential market, but it requires educating the public to a) That this material is available and b) when and where it can and cannot be used. It is also likely true that

reuse stores themselves need to understand that there is a market for materials such as used lumber and also need to develop systems for handling and selling.

h) In order to increase overall recovery of construction and demolition waste, restores need to be examined in context with the rest of the construction and demolition recovery infrastructure as it exists now, in order to predict what their relative significance will be as the C & D materials recovery industry evolves.

7) **Summary Actions for Moving Forward**.

a) Fund a study that helps answer the questions proposed in b below in a more quantified way, and that develops a defined plan of action for addressing b – f & j below, including estimated costs of implementation where applicable. Note that g) below should run concurrently to this as a source of field tested data, and does not need to wait for the results of a study, but rather should be viewed as part of it.

b) Assess existing reuse stores. Use a survey or other means to determine the priority needs of individual reuse stores from their perspective. Also assess the relationships between reuse stores and other reuse and supporting organizations, particularly the relationships between not for profit and for profit organizations. Develop a standardized reporting system (weight?) in order to compare to other store factors –square footage, number of employees, population density etc. Make scales and software etc. available to stores.

c) Support reuse stores increasing capacity by offering/ providing assistance in marketing and management plans to individual stores.

d) Develop mechanisms for increased cooperation between reuse stores, perhaps a regional workshop for managers and or staff and board members.

e) Analyze the potential between not for profit and for profit reuse organization cooperation.

f) Reassess legislation that Demolition permitting is based on and regulations concerning C&D waste, including mandating waste reuse and recycling.

g) Fund a pilot program for a deconstruction operation for residential scale projects that includes participation by one or more reuse stores in cooperation with the business sector(including developers/ owners of the property, and organizations other than the reuse store that may be involved wholesale purchase of materials etc.), municipality or other appropriate organizations (see example below). Not only can this pilot program be cost estimated but. depending on the building(s) used for the pilot, there may very well be a break even or better return on investment moneywise, not including the social and long term economic advantages. (in other words there is no reason at all NOT to develop this).

h) Create a statewide mechanism (or model ordinance for towns) that monitors and requires teardowns and other residential demolition to be reviewed. Consider requiring subdivision plans and or any demolition permit application to be reviewed outside the local commission by a regional agency such as Conservation Districts. Require demolition applications to include competitive bids for deconstruction options.

i) Provide funding and materials and perhaps trained personnel to assist restores with developing relationships with contractors, developers, industry and corporate material sources. Perhaps some kind of “coordinator” position, one whom works with existing reuse stores and other existing recovery businesses and assists the entire process.

j) Closely examine the training and employment opportunities restores offer and determine urban areas that will benefit, and provide the local support needed to municipalities and or private organizations for starting new reuse stores.

Websites of reuse operations that may have some different concepts applicable to Connecticut stores:

http://www.recyclenorth.org/

http://urbanore.citysearch.com/

http://www.rebuildingcenter.org/

http://www.bignyc.org/

Summary of ongoing project demonstrating some current pitfalls of building materials reuse

At this writing this author is attempting to retrieve and keep from the waste stream 4 small structures that require demolition (due to approved new develop). The developer/owner has demolition approvals as part of the development proposal and is under no requirement to reuse or recycle any other the building material. In this case the developer desires to keep the material out of the waste stream and has sought a deconstruction alternative. The estimated cost to deconstruct the four units, factoring in the return on the sales of the materials and all costs is about $ 24,000. The developer's stated budget for the demolition is $ 10,000. The alternatives are 1) Remove only materials that are lucrative which in this case would be a very small percentage of the volume of materials or reduce labor costs to work within the budget. The proposal is to utilize volunteer labor from not for profit reuse organizations to remove materials and have the restores profit from the sales. Some of the more valuable and or higher volume materials (e.g. random width oak plank flooring) will be wholesaled directly to a remanufacturer (local !) and the rest will be sold retail directly of site or be trucked to the restore for resale. The owner is also willing to contribute cash based on the extent of removal, to the not for profit organization(s).
Note that the building structures in question have limited value materials compared to some buildings candidate for deconstruction. Note also that there was only one deconstruction bid received.

This proposal has generated interest with reuse store organizations, but at the current time there are no Connecticut reuse stores with crews practiced at removal, transportation, stocking or selling of materials that involves structural materials. The stores are not practiced at receiving cash compensation for removal of materials. More than one store combining volunteers for materials removal is unprecedented as far as is known to this author. The developer in this case has not previously worked with reuse stores or volunteers for removing buildings or parts of buildings. There are very few individuals trained to manager a deconstruction site with volunteers. This author is developing this project on his own time. The time within which the removal must take place is limited and requires a fast and efficient removal process. These factors are all impediments to keeping many tons of building materials out of the waste stream. It is certainly possible to make this happen, not only in this particular circumstance but in many others. This author does not understand why one apparently needs to look at this one person struggled effort or to look outside of Connecticut in order to see this kind of material retrieval. It seems to me that resources in terns of expertise, organization and funding could immediately increase the amount of building materials salvaged by many hundreds of tons even within the existing framework of reuse stores and for profit reuse entities and remanufactures.