



UNIVERSITY OF FLORIDA

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March 14, 2007

To,
Alan Altman
Deputy Director Solid Waste
3545 Rosemary Hill Road
Green Cove Springs, Florida 32043
E-mail: Alan.Altman@co.clay.fl.us

Subject: Progress report on project activities as on March 14th, 2007

Hi Alan

Attached please find a brief progress report for different activities related to Innovative Recycling Grant project as on date. Let me know if you have any questions. Let us know what we need to do for the extension of the contract. Thank you for your time and I look forward to hear back from you.

Best Regards,

A handwritten signature in Hindi script, which reads "ब्रजेश" (Brajesh).

Brajesh K Dubey

Clay County Innovative Recycling Grant

An Analysis of Management Policies that Encourage C&D Debris Recycling

This document presents the project activities progress report for work period from beginning of the project until March 14th 2007. During this period, project work team was formed and project kickoff meetings were held. Background literature survey was conducted and information on construction and demolition (C&D) debris recycling policies and programs were collected from different parts of United States and from European countries. These policies were analyzed in terms of how much they have contributed to the enhancement of C&D debris recycling. A website has been setup where all the information collected as a part of this project will be presented for general public.

Project Team

University of Florida

Tim Townsend, Associate Professor
Brajesh Dubey, Post Doctoral Associate
Kim Cochran, Graduate Research Fellow
Stephanie Henry, Student Assistant

Hinkley Centre for Solid and Hazardous Waste Management

Tim Vinson, Research Coordinator
Rhonda Rogers, Sr. Information Specialist

Clay County Solid Waste Division

Alan Altman, Solid Waste Deputy Director

Brief Minutes of meetings conducted during this work period

Several meetings were conducted as part of the planning and review of the project activities during this first project period. The paragraph below presents the minutes of these meeting individually.

Meeting-1 at UF, participants included all the 4 members of UF research team. The meeting was held on 1st of August. Project proposal was reviewed and the major tasks were identified and planned. A rough outline of the final report was discussed and the progress made on collecting the policies of different US states promoting C&D debris recycling was reviewed. It was also mentioned that some similar from other parts of the world (especially European Union) should also be analyzed for comparison.

Meeting-2 at Clay County Solid Waste Division, participants included Brajesh Dubey, Stephanie Henry from UF and Alan Altman from the Clay County. During this meeting basic information related to waste management (especially C&D) quantities and management practices of Clay County was discussed.

Several other in-house meeting

Meeting-3 at Hinkley Centre for Solid and Hazrdous Waste Management, participants included Tim Vinson, Rhonda Rogers from the centre and Brajesh Dubey from UF. During this meeting logistics of website setup and upcoming workshop was planned. Several other in-house meetings were held at UF

on planning of the workshop on Oct 27th 2006. Recently, several in-house meetings were conducted in the process of finalizing the final report and the best management practice (BMP) document.

The brief details for different activity as part of this project are presented below.

Background Research

Research was performed to determine what policies have existed to encourage recycling and the types of analyses have been performed on such policies. These studies were compiled to give direction for the research performed here. A list of potential policies to encourage C&D debris recycling was created and defined.

Survey & Analysis

States where C&D debris recycling policies are thought may exist either in state or local government were contacted. A list of counties and cities where known C&D debris recycling ordinances exist was compiled. These states, cities, and counties were surveyed to determine the type of policy that they have enacted the exact language of the policy, the amount of increase in C&D debris recycling, and the costs associated with the policy. Additional information was gathered about these locations, including population growth, building permits issued locations of C&D debris disposal and recycling facilities, and average C&D debris tipping fees. All information from the survey was compiled and analyzed to determine average costs and recycling rate increases. All data was compared to ascertain typical conditions under which such a policy might become successful.

Workshop

A workshop was being held October 27, 2006 to transfer this knowledge to interested government, construction industry, and waste industry representatives. The results of the survey and analysis were presented, along with the potential applications of these policies in Florida. A draft report of the workshop is presented here.

Overview of the workshop

A workshop was conducted to present the research and its findings of this project to stakeholders from both public and private sectors. The prime focus of the workshop was to exchange information on C&D debris policies and to stimulate a discussion with the audience in an effort to solicit comments on the problems that might arise with the proposed C&D debris recycling policies.

The workshop was held on October 27, 2006 at the Clay County Administrative Building in Green Cove Springs, Florida. Fifteen people attended the workshop, including county officials, state officials, waste haulers and waste management personnel. The workshop's agenda included lectures covering the current C&D debris management practices in the US and abroad, an overview of the policies to encourage C&D debris recycling, and the applicability of C&D debris recycling policies to Florida; in particular Clay County. A discussion section was held to conclude the workshop.

Feedback from Participants

Markets

The C&D haulers who attended the workshop expressed that the markets for C&D debris recyclables in Florida were few and far between. The census was that there were not enough places to bring the recyclable material for processing and the cost of recycling was not feasible. They went on to say that it was more cost effective and profitable to landfill the materials than to process the materials with their own equipment. The haulers agreed that equipment needed to be purchased in order to maximize the load of a given material. With the equipment being expensive and the maintenance costly, these

expenditures were not feasible for small companies. Haulers are not willing to buy expensive processing equipment and then pay the cost of trucking the recyclable material to the buyer, if the payment for the materials is not enough to balance the costs of the equipment and transporting.

Policy

Florida state officials acknowledged that the legislative sector would begin working toward the introduction of C&D debris recycling policies for the whole of the state in the next couple of years. However, the issue hindering the introduction of this policy is that it is difficult to promote C&D debris recycling when tipping fees are low. With low tipping fees, there is no driver for initiating a change in the current C&D debris management practices.

California has tipping fees comparable to the State of Florida; however California has issued a percent recycling mandate. The Florida Department of Environmental Protection does not have the authority to mandate a percent recycling requirement. Therefore, the Legislature must recognize the need for C&D debris recycling. It was recommended that a collective voice from the community raise the issue to the Legislature. This is a cyclical process: the government must declare the forthcoming policy, and then individuals/companies that seek financial gain will begin to develop the markets for the recycled material. After markets are established the success of the policy resides in its' enforcement.

Hauler Concerns

The smaller C&D debris haulers stated that source separating is an obstacle in their business. They claimed that it is not cost effective to pay for the labor of source separating unless the load contains a large quantity of the recyclable material. These smaller haulers do not have the proper permits to allow transfer of the waste load from the job site back to their yard. They said that source separating at the work site is not feasible unless they benefit. For example, separating materials that lessen the tipping fee of a load, i.e. concrete because of its voluminous and heavy mass, would prove beneficial to the hauler. Further, in bringing the waste loads back to their yard for source separation a supervisor can assess what is being done by the paid workers, thereby creating a governed job site. Paying for source separation at the job site causes some skepticism by the owner of the hauling business, for he is not at the job site to ensure that the labor is being fulfilled. Therefore, it is believed to be easier to source separate in the yard than at the job site.

Large companies that own haulers and landfills were believed to hold an advantage over the smaller haulers that don't own their own landfill. Big companies have the ability to transfer waste to their landfill for source separation because they have a permit that allows them to store waste. However, big company representatives claimed that in order to be competitive in the C&D waste management market, they often resort to hiring third party haulers and transporting the material to a landfill other than their own. This strategy was employed to enable the bigger company, which owns a landfill and hauling trucks, to bid out bigger contracts.

Summary/Conclusion

The workshop attendees provided comments that have been deemed very useful. They seemed open to the idea of implementing a C&D debris recycling policy in Florida. However, they are all very aware of the problems associated with enforcing the recycling of C&D debris materials. They are looking to the state to provide assistance before requiring that the management of C&D debris is changed. The main focus of the attendees was on the availability of markets. They are in a business and are only interested in making a profit. Therefore, the markets must be available and accessible.

Website (www.constructiondebris.org)

ConstructionDebris.org has been activated and updated with information about the project and other related information on construction and demolition waste in general. The site is being updated regularly. The final report and the BMP document will also be made available on web after the project completion and with DEP approval.