

Greater Houston By-Product Synergy (BPS) Second Working Meeting, Year 2, July 21, 2011

Host: Cherry Demolition: Leonard Cherry, Joe Rizzo, and Mark DeWitt

Attendees: Claude Griffin, Shell; Melanie Brooke-Lander, Baker-Hughes; Joe Rizzo and Mark DeWitt, Cherry; Jim Thompson, Goodwill Houston; Ed Zilton, Solid Waste Department, City of Houston; Matt Vicenik, Dixie Chemical; Todd Pencarinha, Dan Hickman, & Chris Pencarinha, Altiras; Paul Ducharme & Robert Gonzales, Emergent

Following a Safety Moment and summary of the Cherry Facility by Joe Rizzo, we heard brief comments from all attendees. Jim Thompson, Goodwill Houston, and Ed Zilton, who were attending for the first time, gave summaries of their operations and potential synergy interests.

Kieran Sikdar reviewed the CIRRUS™ summary that had been sent to all attendees by email. CIRRUS is growing rapidly with project information from Houston, Kansas City, Ohio, and Pacific Northwest already entered. More information from these projects and entry of information for new projects will be entered as it is received. The group agreed an email summary of the CIRRUS™ with new material and changes highlighted as well as an Excel export attachment would be helpful if sent two weeks in advance of meetings.

Everyone was asked to review their data in CIRRUS and to make updates as appropriate. Information from Altiras, Anno, Goodwill Houston, and LyondellBasell still needs to be added to CIRRUS.

Kieran reviewed the content of the example Synergy Report and asked for input. It was suggested that all environmental metrics be included and shown in list form. Financial savings and synergy partner names will not be included in individual synergy reports unless requested by the synergy participants. Financial savings should be provided to US BCSD so they can be included as an aggregate in the Houston BPS reports.

Project members are also asked to track and report jobs added because of the synergies implemented. Please mention numbers of Historically Underutilized Businesses (HUB) in your count. Jobs information supports the societal benefit of the Triple Bottom Line benefits of this project and may help us attract other participants to the project.

Working Group Report—Combustibles

Tire Synergy—Cherry is delivering two 53' trailers to CEMEX weekly with whole tires for tire-derived fuel (TDF). This includes 1200-1400 passenger vehicle tires and 400-500 truck tires. Tires that are off-spec for use at CEMEX are shredded and sent to a paper mill in

Louisiana for TDF. Metal rims from the scrap tires are sent for recycle. Large Agricultural vehicle tires are currently going to scrap, but these tires may be of interest as bumpers on marine docks. Contact Joe or Mark if you are interested in this use for these tires or if you know someone who may be interested. The goal is to send 22 loads to CEMEX monthly. Trucks return to Houston from New Braunfels empty. Let Joe or Mark know if you are interested in hauling materials back to Houston from the New Braunfels or San Antonio area.

Wooden Pallets—Goodwill can use wood pallets to transport large rolls of textiles, computer parts, and TVs that they send for recycle. If there is enough quantity, they will pick up the pallets. Cherry, Baker-Hughes, and Emergent will follow-up with Goodwill about pallets they have available.

Computers and computer components, e.g., monitors—Goodwill collects these and sends them to Dell Connect. BPS project members may have these types of materials in their facilities. Contact Jim Thompson to discuss recycling them through Goodwill's Dell Connect program. Goodwill will pick up large loads.

TVs—Goodwill recycles these through Samsung.

Electronics—Goodwill currently disposes of non-working electronics. Ed Zilton will share with Goodwill the list of end processors that the City of Houston has MOUs with.

Light bulbs—Goodwill has to pay for disposal of light bulbs. The City of Houston has applied for a grant from the Houston-Galveston Area Council (HGAC) to purchase crushing equipment for light bulbs. Ed Zilton will keep Goodwill informed of that program.

Note: please send suggestions for changing the name of this Working Group to be more reflective of the breadth of materials discussed

Chemicals Working Group Report

Solvent—Baker Hughes and Dow are in touch regarding a potential reuse opportunity.

Filter Aid Material (Diatomaceous earth sludge)—Dixie is currently landfilling material and it could be dried with agricultural wastes or used as road bed material. Baker Hughes is interested in MSDS for use as a drilling mud.

Chloroform—Emergent is looking for an outlet. Hospitals were mentioned as a potential user.

Sodium Acetate—Emergent has 200,000 gallons of darkened material for reuse

Misc Chemicals & Solvents—Shell has committed to getting additional data for these initial materials identified in advance of the next meeting.

US BCSD Updates

Susan and Kieran reviewed the US BCSD Spring Meeting held in Detroit in early June, and encouraged everyone to consider attending the Fall Meeting in Tucson on October 17-18.

US BCSD has been invited to participate in the Economics Team supporting the HGAC program to develop a Community Sustainability program for the Greater Houston Area. We will share information about US BCSD's BPS, Water Synergy Program, and PACE innovative financing programs.

EPA has announced plans to propose a modification of the Solid Waste Definition which will require non-hazardous recyclables to be managed under RCRA Subtitle C regulations. US BCSD will work with Thompson & Knight to prepare comments. Matt Vicenik reported that Dixie Chemical is also looking at the proposed regulation.

Discussion of Sharing Information between BPS Projects

The attendees expressed interest in a webinar for project participants to hear about synergies in other cities. There was also interest in a future National BPS meeting.

Van Tour of Cherry Facilities—moderated by Joe Rizzo
Meeting Adjourned at noon