

SOLIDS MASTER PLAN BRIEFING TO EXTERNAL STAKEHOLDER GROUP

13-Jul-16

WPCP - TRAINING ROOM; 7:00PM

ATTENDEES:

Guests:

Michael Battaglini (CCCA)

Peter Robertson, FAAC

Jesse Boeding, CivFed, Exec Comm.

Sarah McKinley, (Neighborhood Advisory Committee)

Joan McIntyre (ACE)

Sandra Borden (CCCA)

Paul Guttridge, AHCA

ATTACHMENTS:

Slide Presentation 7/13/16

NOTES:

Samantha welcomed everyone and re-introduced the team for newcomers. Samantha is the community point of contact and her email is samantha@savipr.com.

Mary began with a review of the schedule - we're midway through the Study Phase. The team is currently evaluating alternative technologies. The County is pilot testing the digestion of Arlington County solids, which will extend the study phase a little further into 2017.

Mary then reviewed a large list of technologies that were considered, then eliminated or kept, depending on the following questions: Could they be used on our scale? Will they fit on our site? How common is this technology? How many chemicals are required? Many technologies were eliminated based on the answers to these questions. The team then took a second look at the list and asked: What's a reasonable number of units? Which of these offer multiple benefits? What enables energy generation? What offers a marketable byproduct? Next, Mary described the process train (baseline) and how some of the alternatives they were considering would change the site layout. Four alternatives are under consideration: the baseline lime stabilization (produces Class B); Mesophilic Anaerobic digestion (produces a Class B); Mesophilic Anaerobic digestion preceded by Thermo Hydrolysis pretreatment (produces Class A); and Mesophilic Anaerobic Digestion followed by Thermal Drying (produces Class A).

Patti then reviewed for the group the results of the paired comparison exercise and shared the new, revised rankings of the evaluation criteria that included input from the stakeholder group. While there was a small shift down in rankings of capital cost and financial risk, the rankings for environmental and social issues increased significantly.

Mary capped the meeting with a high-level overview of the financing and budget-setting process for these improvements. She relayed that in terms of wastewater rates, we are currently average among our peers nearby, and in ten years, even with these investments, our projected rate increases appear to be lower than other jurisdictions.

The following chart captures the question and answer exchanges made during the meeting.

Question	Response	Action	Responsible Party	Follow Up
Are you currently using lime?	Yes. We are currently producing a Class B product that is land applied. Lime stabilization is inexpensive, but problematic from an operation and maintenance perspective. There are problems with equipment operations and transfer. It is also possible to produce a Class A product with the addition of even more lime to the mix, however, there are issues with that Class A product. With more lime the operations and transfer issues increase and the quality of the Class A product is not as high as other process alternatives that produce a Class A.			
Wouldn't offsite alternatives introduce other risks when transporting unstabilized solids, such as accidents and other liabilities?	Yes, and we will weigh those risks. For example, WSSC has weighed the risks of hauling unstabilized solids and still felt it was viable for them, albeit on a slightly smaller scale (less material and fewer trucks than Arlington).			
How many trucks leave the plant each day?	Approximately 30 per week. Typically 5 per day.			
Is the biogas released to the atmosphere?	Not directly. Biogas can be used as fuel for a variety of purposes at the plant. For example, it has a heat value we can use to generate heat, electricity, or both. There are no scenarios in which biogas would be released directly to the atmosphere. We will need a flare to burn unused gas. This is a safety requirement under any biogas usage scenario.			
If the site were to be flooded, is one of these alternatives better than the others?	The FEMA flood maps show that neither the 100 year nor the 500 year flood events would reach the buildings housing the solids treatment equipment.			
It seems like some of these alternatives are meant to be used together?	Yes, solids treatment is a combination of processes (or technologies). To treat the solids we need to combine a variety of technologies to address prestabilization, stabilization and post stabilization.			
If you end up with a Class A product, would you just aim to use or distribute it around Arlington?	Some of it certainly could be applied in Arlington. Part of the study includes a market analysis to look at what opportunities exist within the County for distribution of a Class A product.			

<p>If you go to Class A, would your current farmers receive this product?</p>	<p>The farmers who currently receive our Class B biosolids do so through a third party land application contractor. If we end up with a Class A biosolid, our first choice would be to sell or give the product away, rather than pay to have it applied somewhere. However, it will still be suitable for farm use, and the farmers would be happy to use it.</p>	
<p>Does the Class A biosolid have a "green value"? I mean, is it better for the environment than more traditional fertilizer products?</p>	<p>Yes, both the Class A or Class B biosolid soil amendment has advantages over commercial fertilizers that includes: slow release nitrogen, improved soil structure, improved drought resistance, increased cation exchange capacity of the soil, and enhanced soil biota.</p>	
<p>In the ranking exercise, does the reduction in relative ranking of capital costs mean that we are willing to pay more to meet other criteria that ranked higher?</p>	<p>The relative reduction in the capital costs was very minor. As this exercise weighs the relative importance of one criteria against another, it would be the overall ranking number that dictates which criteria are considered more important (or carry more weight than the other). In this case we see the resulting rankings places more importance on two of the social criteria over most of the cost criteria.</p>	
<p>Are all the options we're considering going to involve burning gas? What will be the stack height? What's in it? Where will it blow? I am concerned.</p>	<p>All uses of the biogas include burning it (either to recover the energy value or to flare it). Stack heights used in the recovery of energy will be the same as that required to burn commercial natural gas. We need to get back to you regarding potential emissions unique to biogas and flare stack heights.</p>	<p>Research the constituents of the biogas when burned, stack heights under consideration, location, etc.</p> <p>CDM</p>
<p>Are there plants using their own biogas on site?</p>	<p>Yes, most treatment plants that use anaerobic digestion reuse biogas for heating and/or energy on-site. Locally, this includes the Leesburg facility, the Loudoun facility in Ashburn, the Upper Occoquan Sewage Authority plant in Centreville, and the Blue Plains facility in DC. We are hoping to pilot anaerobic digestion with Virginia Tech to assess the projected quantity of gas that might be produced from our plant's sludge.</p>	
<p>Are there partnering opportunities for energy generation/use?</p>	<p>Possibly - DC Water has a partnership with Pepco on their energy generation.</p>	
<p>In reviewing the curve of rate increase, showing 1.5% over 10 years (included in current CIP), why not pay to do more now (taking advantage of the lower cost of today's money)?</p>	<p>Producing a solids master plan (and associated costs) that allows the rate impact to be consistent and minimal over time is an important goal of the study. Krista will talk further about how the rate is set, and which funding sources are used at the next meeting.</p>	

Do we have water treatment nutrient credits?

Yes, we participate in Virginia's nutrient trading with respect to the treatment plant effluent (on the liquids side of the plant). This includes credits for nitrogen and phosphorus removal from the plant effluent. The current dollar cost of nutrient credits is low, but staff is fully engaged in the nutrient credit exchange program.

Are you still considering a regional solution? We hope you will be flexible and open to it, where it would make long term sense.

At this point, a regional solution is not being carried forward like the other options for further analysis using the criteria scoring, however we are identifying conditions under which it would make sense to explore them. Right now we see regional solutions as only interim or short term situations, but if we find it makes sense longer term, we will consider it.

I think that kind of considering would be OK (i.e. under what changed conditions would we consider a regional solution as a long term option).

Samantha to distribute meeting summary, revise if needed and post to website.

Mary to schedule presentation at Neighborhood Coalition, and combo of Civic Associations in fall.