



MEMO

To: Mark Davis and Magda Usarek-Witek

Fr: Fred Stine, Citizen Action Coordinator

Date: April 17, 2018

Re: Newton Creek Dredging and Reclamation Project

Good afternoon Magda and Mark,

We continue to review the permits submitted by Camden County for dredging Newton Creek. I am respectfully, submitting these supplemental comments to you for your consideration.

1) **Why has the County chosen not to use flocculants as part of the dewatering process?**

**GP 13, Introduction: Methods (PDF page #75)**

Excess sediment was discarded once all analysis jars were filled with the requisite volume. No testing was performed, or was specified in the SSAP for dewatering using polymer or flocculants.”

This statement from the permit indicates to us that the county is considering not using polymers and flocculants. The value of polymers or flocculants cause the binding of very small particles (which the toxins tend to 'adsorb' (stick) to) together to make larger, filterable particles. Therein absorbing the toxins into the sediment so they do not drain back into the creek in return water. Two of the County’s proposed 3 options for managing the return water allow for that return water to wash right back into the lake – either directly or after dilution. Neither option is meeting their goal of improving the ecological health of the creek. The 3<sup>rd</sup> option was to pump the return water to the CCMUA. However, they state that that option is not possible due to limited capacity. Because of these circumstances, locking the maximum amount of contaminants into the sediments that will ultimately be trucked-away must be the highest priority. It seems to us that that would mean using a flocculant.

2) **What is real reason for not using geotextile bags for dewatering?** We are very interested in DEP’s assessment and analysis on the most efficient method (in terms of contaminant removal) of dewatering. We thought it was important to point out the County’s rational for not being able to use geotextile bags varied:

**GP 13 (PDF page 73)**

“As work on the project progressed the feasibility of dewatering using geotextile bags decreased, **due to the high population density and time constraints**; at this point it was decided that....”

**GP 13, Subsequent Testing (with Elutriate) (PDF Page 77)**

“After the first round of sediment and water testing, further investigation and conceptual design work was performed on the project. This design work determined that it is not feasible to dewater the anticipated dredge spoils in geotextile tubes, as **it is a slow process that requires more acreage than is available to the project**, and that mechanical dewatering must be used.” (our highlighting)

Again, we urge DEP to require the dewatering methodology that is in the best interest for the ecological health of the creek – both short and long-term. Because the County’s varied rationale, we are concerned that they might be “fishing” for reasons to use one method over another and that it may be more about cost savings than ecological health. As we stated in our original comment, the county has not provided sufficient details on their dewatering process and so we urge DEP to require the county to utilize the most effective method and provide substantial details so the public may fully understand what they proposed to do.

3) **More contaminants, based on both volume and concentration, will be dewatered at the Oaklyn site vs the White Horse Pike site.** If the County is permitted to utilize a dewatering system that results in significant amounts of contaminants to flow back into the creek with the return water, the greatest volume of contaminants will end up in back Peter’s Creek, the receiving waters from the Oaklyn dewatering site.

In other words, Audubon Park and Peter’s Creek could receive contaminants flowing back into their lake not only from their own lake, but also Section #5, the two most contaminated sections in this entire dredging project.

Section #5 constitutes 78,000 CY while Peters Creek is 80,000 CY. That totals 158,000 CY of the projected 260,000 CY or 61% of the total volume of sediment to be removed. Further, the highest levels of contamination (by far) are in Section #5 and Peters Creek – 65% of all the sediment testing samples that exceeded Non-residential standards were found in Section #5 and Peter’s Creek.

Ideally, the dewatering method that most effectively removes contaminants and prevents same from returning into the waterways is used at both sites. However, based on the distribution of sheer volume and levels of contamination, it is even more important that the most effective dewatering method, at the very least, be utilized at the Oaklyn site.

4) **Does dredging actually increase flood storage capacity?**

**IFHA Permit, Engineering Report, Calculation Narrative (PDF page #82)**

“A cut-fill analysis was essential to determine the amount of sediment to be removed. The flood storage calculations are minimal because the proposed activities will not add any impervious surface; following the completion of the dredging work a significant increase in stormwater volume storage within the lake will be realized.”

Is this an accurate statement? If the lake levels will return to the current levels and the lake surface area will remain the same, then how will there be additional storage capacity after dredging? The lakes will refill to the original levels and then during a new stormwater runoff from a storm event will overflow the lake as it does now. We point this out just so we can fully understand what the County’s engineer is trying to establish and whether this statement, if not accurate, requires additional information for these permits.

5) **What consideration and preventative measures will be given to eliminate/control air-borne contaminants during the dewatering process?** Our understanding is that through mechanical dewatering, more of the sediments are exposed to the air resulting in dispersal, including volatiles. We urge DEP to require Applicant to fully discuss how they plan to manage this portion of the process.

Thank you again for considering these four additional comments. Please confirm your receipt of these comments and do not hesitate to contact me should you have any questions.

A handwritten signature in blue ink that reads "Fred Stine". The signature is fluid and cursive, with the first name "Fred" and last name "Stine" clearly legible.

**Fred Stine**, Citizen Action Coordinator

CC: Lorrain Prince, Newton Creek Watershed Association