

EASTWICK LOWER DARBY CREEK AREA COMMUNITY ADVISORY GROUP

TECHNICAL WORKING GROUP MEETING MINUTES

July 15, 2015

MEETING SUMMARY

The EPA met with TWG to review the following items:

- One goal of the Pre-Design Investigation (PDI) is to refine the areas of soil contamination above cleanup levels in the City Park and, if necessary, the Eastwick neighborhood. As part of the planning for the upcoming PDI, a test plot in one of the identified sampling area (referred to by EPA as a sampling unit (SU)) was sampled to test whether 10 samples are sufficient to accurately determine the concentration of contaminants in that SU. The findings from the test plot in the City Park showed that, in at least that area of the Park, sampling of nearby residential properties should also be conducted as part of the PDI, and EPA will be working obtaining access to those properties.
 - a. The sample areas (SUs) that will be sampled are the size of a typical backyard in the Eastwick neighborhood (20' x 25'). Ten (10) soil borings will be collected and combined into what is called an "incremental sample" and analyzed from each sample area.
 - b. Three layers are intended to be sampled – the first 1' to address human health risk, the 1-2' zone to address human as well as ecological risks, and from 2' to the water table (generally 2-5') to address potential future uses of the deeper soils. For example, installation of new utilities, foundation footings, etc.
 - c. EPA tested their sampling method by collecting 3 sets of 10 samples and then comparing the results to one another. EPA's goal was for a less than 30% variance (referred to as Relative Standard Deviation (RSD)) between the three rounds of sampling (three sets of 10 samples). They found approximately a 10% variance in the top 1' layer. So, 10 samples is an adequate number of samples to characterize the 20' x 25' sample area. The variability was slightly above 30% for the 1'-2' layer. EPA determined that 10 samples for the 1-2' layer is still sufficient because, statistically, it is not possible to collect a feasible number of samples to reduce the variance.
 - d. Although the PDI will refine the areas of soil contamination, as part of the excavation conducted during the actual cleanup, additional samples will be collected after the excavation to confirm cleanup levels have been met.
- Discussion of revisions to Pre-Design Investigation Work Plan's Sampling and Analysis Plan.
 - a. Two minor changes have been made to the Work Plan.
 - i. The US Army Corps of Engineers Ft. Mifflin dredge disposal basin has been identified as a potential source for the approximate 200,000 to 400,000 cubic yards of soil needed for the new landfill cover (an area 3' by 3' by 3' deep = 1 cubic yard). EPA has put together a sampling plan (added to the Work Plan) for testing the dredge material that the Corps is making available for the cover material to see if it meets PA's Clean Fill Concentration Limits and the Cleanup Standards for the Clearview Landfill. If it meets PA's Clean Fill Standards and the Clearview Landfill Standards it will be suitable for use. EPA is planning on collecting and analyzing 39 samples from the Ft. Mifflin basin, well in excess of the number required by PA's Management of Fill Policy. EPA is also checking

- the grain-size of those samples (a specific range in grain size is important for evapotranspiration cap to work properly) If the dredge material is clean enough for use and it has the right grain size EPA will then begin assessing it as a suitable soil for growing the cover vegetation. If there are compounds above Clearview Cleanup Levels or PA Clean Fill Concentration Limits, the soil potentially could still be used. EPA will look into this further as part of a separate soil amendment project.
- ii. There is a separate research study that will eventually be added to the Work Plan to evaluate amending/improving the soils to make them ideal for the evapotranspiration cap and meet cleanup levels and PA Clean Fill Concentration Limits. EPA is working with its headquarters office, the EPA Office of Research and Development and University of Washington on this project. The Work Plan for this separate study will also be shared with the Technical Working Group for review.
- Update on grading plan and overall progress with conceptual design.
 - a. The EPA's contractor is working on a grading plan for the landfill. There are significant challenges associated with two areas of the landfill adjacent to Darby Creek where the slopes are very steep. When EPA's contractor has presented their ideas to EPA, EPA will share them with the TWG. Two options that are being considered are to excavate those areas to flatten the slopes or to create a wall (sheet-piles and gabion baskets are being considered) along Darby Creek.
 - b. This grading challenge goes to the overall grading of the landfill. EPA's goal for the grading is that after the cover is installed there will be no effect on flooding. This means that there will be no fill in the floodway or flood hazard area, because that would create additional flooding and it is prohibited by Federal and State regulations.

The TWG knows that the memorandum prepared by Darby Creek Valley Association's (DCVA) Technical Advisory Group's (TAG) consultant has been reviewed and will be issued in final form by the end of July. The TAG will submit the final memorandum to the ELDCACAG's Leadership Team when it is complete.

ACTION ITEMS FOR NEXT TWG MEETING: (next meeting August 17, 2015 @ Eastwick Library)

1. Updates on progress of 30% Design (Conceptual Design).
2. Updates on progress of PDI work.

Up Coming TWG Meeting Dates at 4:00 PM (locations to be determined):

August 17, 2015

September 17, 2015

October 28, 2015

November 23, 2015

December 17, 2015