PEARCE CREEK IMPLEMENTATION COMMITTEE MEETING October 21, 2016 10:00 AM 90B North Center Street Cecilton, MD 21919

Attendees:

AECOM: Chris Rogers Anchor QEA: Karin Olsen Bay View Estates (BVE) Residents: Dave Heacock, Joyce Heacock, Ken Cowley, George Hansell, Bill Haines, Norine Haines, Wilma Fitzner, William J. Fischer, Mary Ann Fischer, Sandy Stake, Stephen Zawatski, Cecil County Health Department (CCHD): Angela Scramlin Cecil Whig: Jake Owens Maryland Department of the Environment (MDE): Elder Ghigiarelli, Ginny Kearney Maryland Department of the Environment (MDE): Elder Ghigiarelli, Ginny Kearney Maryland Department of Transportation's Port Administration (MPA): Kristen Fidler Congressman Harris's Office: Mary O'Keeffe Senator Mikulski's Office: Bart Kennedy Sunset Pointe: Kathleen McDonough Town of Cecilton: Mayor Joe Zang, Mary Cooper West View Shores (WVS) Residents: Penny Sass, Diane English, Eddie Lavin, Valerie Woodruff

1.0 Welcome & Introductions

Ms. Fidler welcomed the attendees to the meeting and everyone introduced themselves.

2.0 Summary Approval

The committee members reviewed the draft August 2016 Pearce Creek Implementation Committee (PCIC) meeting summary and it was approved as written; the summary will be posted as final on the Pearce Creek outreach website (<u>www.pearcecreekoutreach.com</u>).

3.0 Philadelphia District Corps (CENAP) Update *Liner Construction Updates Kristen Keene, MES, on behalf of CENAP*

Ms. Keene stated that US Army Corps of Engineers Philadelphia District (CENAP) is continuing to cover the liner with topsoil material. CENAP is 90% complete with the installation of the liner and 80% complete with the rest of the components of the liner project. Last week, the concrete was put in place for the new sluice box and will be tested for strength, and if it passes then the sluice box will be constructed. CENAP is also working on the size and shaping of the rip-rap basin which is located at the downstream end of the sluice box. The discharge monitoring plan is still being developed.

Groundwater Monitoring Plan Update

Ms. Keene stated, regarding the groundwater monitoring plan, that CENAP is coordinating with the Maryland Department of the Environment (MDE) to finalize the document.

Mr. Cowley expressed his appreciation for MDE's attendance at the meeting and stated that residents are interested in reviewing the groundwater monitoring plan before it is finalized. Ms. Kearney stated that MDE will provide an opportunity for community review and input. MDE is open to comments and suggestions, but cannot guarantee that all comments will be included in the plan. Mr. Cowley noted that the Pearce Creek Dredged Material Containment Facility (DMCF) is not like other sites and is a unique

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situation due to the confirmed contamination. Mr. Heacock stated that the continuous stream of dump trucks and the clearing of trees have resulted in a large cloud of dust. Mr. Heacock requested that discussions be held with the contractors regarding dust control.

Ms. Woodruff stated that Reybold was contacted recently regarding truck safety and that residents have seen an improvement. Mr. Zawatski and Ms. Haines lodged truck speed complaints, and also stated that not all the trucks have been laying down their canopy. Mr. Haines stated that the main concern is from Stemmer's Run to West View Shores (WVS) due to the winding road and blind spots. Additionally, residents expressed concerns about workers parking their personal trucks on homeowner's lawns and the lack of escort vehicles present when the contractors use a front end loader to bring in pipes down the middle of the road. Mr. Haines suggested an escort truck for those situations. Mr. Lavin stated that there are many safety issues for flaggers due to the lack of visibility. Ms. Keene stated that the concerns mentioned would be relayed to CENAP and AECOM to discuss with their contractors. Mayor Zang spoke with Bill Rogers (AECOM Inspector) and they are holding discussions with contractors regarding speed and truck safety. The Cecil County Sheriff's Office will assist with enforcements well.

4.0 Drinking Water Line Planning Progress

Mayor Zang, Town of Cecilton Chris Rogers, AECOM

Water System Construction Updates

Mr. Haines asked if Reybold plans to install a better patch along Pond Neck Road and expressed a concern regarding snowplow access in areas with poor temporary patching. Mr. Rogers stated that AECOM is holding discussions with the Cecil County Roads Division regarding road repairs along Pond Neck Road; the whole lane will be repaired. Ms. Haines asked why the piping was being placed in the road when a right-of-way exists on the side of the road. Mr. Rogers replied that AECOM tried to avoid placing pipe in road in all areas possible but due to physical constraints, utilities, and/or wetlands it became necessary in some areas. Mr. Kennedy asked if there were any signs denoting the work zones. Ms. Woodruff replied yes and stated that they are all over the place. Mr. Rogers stated that the signs were installed by the contractor.

Mr. Rogers reminded the PCIC that the transmission main (from the Town of Cecliton to the communities) is being installed by Eastern State Construction (ESC) and the distribution main (from the transmission main to throughout the communities) is being constructed by Reybold Construction. Both projects are proceeding appropriately and on schedule. A map was provided showing the project progress. The chlorine injection stations are in the process of being constructed. ESC has connected the transmission main to the distribution main. Roadside restoration is being provided by Moon Nurseries; the restoration efforts are on schedule and caught up to the construction. The distribution main has been completed in the Sunset Pointe community and work has begun in Bay View Estates (BVE). Completion of the work in BVE and commencement of work in WVS is expected in December.

On-lot Inspections

Mr. Rogers stated that AECOM continues to receive requests for additional inspections and/or reinspections; there are 18 residences which still need initial inspections. There are four or five residents who have explicitly refused access for on-lot inspections. Ms. Keene stated that assistance may be needed from the community leaders regarding reaching out to the residents who have not had initial onlot inspections. Mr. Haines asked if it was correct that residents will have a grace period of a year after the system is serviceable in order for the Maryland Department of Transportation's Port Administration (MPA) to pay for the hook-up, after that the residents will have to pay the connection fee, which is about \$6,000. Ms. Fidler replied yes and that it would be an MDE enforcement issue for those residents who refuse to hookup to the system. It was asked if winter would delay the waterline construction schedule. Mr. Rogers replied that weather delays are built in to the schedule.

Ms. McDonough suggested that as on-lot meetings are planned, perhaps include various enforcement/penalties for not connecting (i.e. \$6,000 hookup fee and not being able to obtain building permits). Ms. Kearney replied that residents will be subjected to the connection fee but there is no additional financial penalty. State law regarding sanitary districts allows the water service provider to ask everyone to hook-up within a reasonable period of time. Ms. McDonough asked if there were any legal or environmental consequences. Mayor Zang replied that building permits will not be granted unless the property is hooked-up to the system. Ms. Woodruff suggested a new Frequently Asked Question (FAQ) sheet regarding on-lot work and easements. Mr. Lavin asked, regarding on-lot hookups, when they are completed if water would be immediately available and potable. Mr. Rogers replied yes, as soon as hook-up occurs water will need to be available because the wells will be required to be abandoned at that time. AECOM will need access agreements from every homeowner. Residents should expect an on-lot "what to expect meeting" to occur in early spring. Ms. Woodruff requested a sample access agreement be mailed to the residents. Mr. Cowley asked where the 12 inch pipe ends and Mr. Rogers replied that he will investigate that information (Update: Mr. Cowley has been contacted and provided with this information). Mr. Haines suggested cleaning the streets twice a week instead of only once. A resident asked if they would be able to keep their well for use with a heat pump. Mayor Zang stated that it would have to be discussed with the well driller as the wells are not as deep as normal drinking wells. Ms. Scramlin stated that a geothermal well does not have casing it would not be useful to use a drinking water well (which has casing) for that purpose.

5.0 MPA Updates

MDOT CTP Meeting

On September 30th MPA held a Consolidated Transportation Program meeting with Cecil County elected officials; Pearce Creek remains a priority and has suitable funding.

Elected Official Outreach

A September 20th elected officials meeting was held at the Pearce Creek DMCF and was followed by a tour. The elected officials in attendance included County Executive Moore, Mayor Zang, Delegate Jacobs, Delegate Arentz, and Councilman McCarthy. The elected officials received a full briefing on the progress of all components of the project (i.e. liner and waterline).

Spring 2016 Exterior Monitoring Results

Ms. Olsen gave a PowerPoint presentation on the spring 2016 exterior monitoring results. Ms. Olsen stated that the objective is to collect data from exterior monitoring locations in the Pearce Creek Lake and Elk River to establish baseline conditions that will be used to monitor environmental conditions after dredged material placement begins. Testing parameters include surface water quality, sediment chemistry, sediment bioassays (to test organism survival over 10 days), and benthic community. The results presented are from the second round of baseline monitoring to represent the initial characterization of existing conditions. There are 10 sample locations, seven monitoring locations and one reference site in Pearce Creek Lake, and one monitoring location and one reference site in Elk River. The reference locations represent areas that are outside of the influence of the DMCF. There are

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two additional locations added near the Elk River beach at the request of the citizens and the results will not be compared to the other locations.

At each location water samples are collected using a peristaltic pump. Surface sediment and benthic organism samples are collected using a grab sampler. For the benthic sampling the sediment is sieved and the organisms are separated and sent to the lab. Laboratory and field data were collected to evaluate water quality. Field data included temperature, dissolved oxygen, salinity, turbidity, and pH. Laboratory analyses included nutrients, metals, and suspended solids. The chemical testing was compared to water quality criteria which is set by the Environmental Protection Agency (EPA) and the State of Maryland to be protective of aquatic life. Each chemical has two criteria, one that evaluates short term (acute) exposure and one that evaluates long term (chronic) exposure.

Regarding results, Pearce Creek Lake and the Elk River were shown to be freshwater. Ms. Olsen reminded the PCIC that the previous salinity results had shown the Elk River to be oligohaline (very low salinity). The turbidity is highly variable at Pearce Creek Lake, but is a result of natural occurrences (i.e. algae, bank erosion). The turbidity was elevated at the Elk River reference location due to increased runoff. There were no water quality criteria exceedances for Pearce Creek Lake or the Elk River, and results were generally consistent with the fall 2015 data. The PCIC was reminded that in the fall there had been a zinc exceedance at one location, but that was not the case for the spring sampling.

Sediment testing includes physical characterization (i.e. sand, silt, and clay), chemical testing (i.e. nutrients and metals) and benthic bioassays. The results are compared to freshwater sediment guidelines which have a Threshold Effect Concentration (TEC) and a Probable Effect Concentration (PEC). An "effect" means that an organism's behavior is impacted, such as a reduction in an organism's growth rate, and it does not indicate mortality. The Pearce Creek Lake sediments were mostly silts and clays. The Elk River monitoring location was silts and clays, and the Elk River reference location was silty with a lot of shell material. Nutrient concentrations are naturally variable at all of the locations and are within the normal concentrations for the ecosystem type. Overall, concentrations of nutrients and metals were low but they were even lower in the Elk River reference sediments due to a higher percentage of sand and shell material. For the Pearce Creek Lake monitoring locations, five metals were between the TEC and PEC, and nickel exceeded the PEC. For the Pearce Creek Lake reference location, four metals were between the TEC and the PEC, and nickel exceeded the PEC. Nickel concentrations are generally consistent with sediment in the upper reaches of the Chesapeake Bay. For the Elk River monitoring location, one metal was between the TEC and PEC, none of the metals exceeded the PEC. For the Elk River reference location, two metals were between the TEC and PEC, none of the metals exceeded the PEC. The lower metal concentrations in the Elk River are due to tidal flushing. The list with which metals were detected can be distributed upon request.

The benthic bioassay testing involves a 10-day whole sediment toxicity testing using *Hyallela azteca* which is a freshwater amphipod. It is a standard testing procedure commonly used to evaluate sediment conditions. The amphipods are added to the sediment collected from each sampling location. There are eight replicates tested for each location and ten organisms per replicate. The tests measure survival and organism growth. Results from the monitoring locations were compared to the results of the reference locations. There was high survival for the Pearce Creek Lake and Elk River sediments which show the sediments to be non-toxic and supportive of benthic organisms. Ms. Olsen will provide a response to

Mr. Cowley at a later date regarding *Hyallela azteca* lifespan; it is estimated around a few months (*Update: a response has been provided to Mr. Cowley*).

Biological characterization of sediments included benthic community sampling. Benthics are bottomdwelling organisms, such as worms, insects, amphipods, and clams; they are an important part of the diet for fish and birds. The benthic community is commonly used as indicators of environmental stressors because they live in the sediment and cannot move away. The Chesapeake Bay Program has developed a standard set of measurements, or metrics, used to determine if the benthic community is healthy; 12 different metrics are calculated for each location. These metrics are used extensively throughout the Chesapeake Bay. Several of the metrics are combined into a value called the Chesapeake Bay Benthic Index of Biotic Integrity (B-IBI) which takes into account salinity and sand or silt and allows for direct comparison between sites throughout the Bay. The benthic community can be influenced by natural conditions (e.g. low dissolved oxygen, low total organic carbon) or a response to poor sediment quality. The B-IBI only applies to samples collected between July and September; these numbers are not calculated for spring samples. The organisms were collected using a grab sampler; three replicates were collected for each location and sieved on the boat. The organisms are preserved and transferred to the laboratory where microscope analysis is used to identify all of the species for each replicate. Abundance was lower compared to the fall 2015 sampling event at each Pearce Creek Lake location except for PCL-07, which increased. The Elk River results were similar with the abundance being lower compared to the fall 2015 sampling event at each location. Abundance is the total number of organisms present. Currently there is no data to determine if the lowering of abundance is normal for this time of year. At all of the locations in Pearce Creek Lake and the Elk River an expected seasonal shift in species present was observed and consistent diversity was detected.

The fall 2015 and spring 2016 sampling events complete the initial year of baseline exterior monitoring in Pearce Creek Lake and the Elk River. Baseline monitoring will continue in fall 2016 and spring 2017. The goal is to establish the "existing" condition for water, sediment, and benthic community. Once dredged material placement starts, monitoring will continue and the results will be compared to the baseline data. Overall, there are positive results and consistencies between the fall 2015 and spring 2016 exterior monitoring sampling results, which indicate no major environmental changes.

Regarding the Elk River Beach samples, they were collected in nearshore areas and added at the request of the citizens. The river beach samples will be evaluated independently from the baseline exterior monitoring data, but they will include the same testing program (i.e. sediment, water quality, benthic community, and toxicity). The locations were freshwater and turbidity was low at both locations. For the chemical testing the concentrations were generally low and there were no water quality criteria exceedances. The sediment type was mostly silts and clays with shell fragments at Location 1 while Location 2 was primarily sand. The nutrient concentrations are naturally variable and the metal concentrations were generally low. Overall, concentrations of nutrients and metals were lower in Location 2 sediments which had a much higher percent of sand. The benthic community had lower diversity and lower abundance, which was impacted by the grain size (shell hash and sand). Additionally, many clams were observed at Location 1. For benthic toxicity, Location 2 was 91% sand and therefore no toxicity sample was collected since there were such low contaminant concentrations. The sample from Location 1 had high survival indicating that the sediment is non-toxic. This was the initial round of sampling, and sampling will continue in fall 2016 and spring 2017 to establish the

existing conditions for water, sediment, and benthic community in the Elk River Beach locations. These results will evaluate if there are any changes to the environmental conditions over time.

Mr. Cowley asked if the area is restricted for shellfish consumption and also asked if that was part of the testing. Ms. Olsen replied that clam shell tissue is not tested but Anchor does collect visual health observations. Mr. Hansell stated that he had asked a similar question at a Maryland Waterman's meeting and it was replied that the types of clams that are present are usually not eaten and therefore not tested.

6.0 Cecil County Health Department (CCHD)

Ms. Scramlin stated that once the first house is connected to the waterline, the CCHD can issue building permits on new construction on vacant lots. Building permits of any kind will not be issued if a home refuses to connect. Homes must be in compliance with the Cecil County Master Water and Sewer Plan. Ms. Kearney stated that the Best Available Technology must be installed in new homes. Ms. Scramlin stated that a stub will be available at each vacant lot. Ms. Fidler reminded the PCIC that MPA will not be paying the connection fee for any new homes, only the existing residents.

7.0 Citizen Comments

Feedback from the Community Members

Ms. Woodruff stated that AECOM visited the WVS community meeting, which was helpful and appreciated. She also noted that the PCIC meetings have helped other aspects within the communities (e.g. community drainage issues). The bottled water delivery issues have been worked out and have become much more manageable. Ms. McDonough stated that there are water pressure concerns being expressed by Sunset Pointe residents. Mr. Rogers replied that the water pressure will be appropriate for domestic use. Mayor Zang stated that water pressure is a priority and that residents will be billed quarterly. Ms. Fidler stated that AECOM is working to prioritize hook-ups for full-time residents. The first residents will have water in May 2017 and the last residents will be hooked-up in spring 2018. Mr. Cowley asked if a decision was made whether or not AECOM will place stubs along property lines. Mr. Rogers stated that AECOM is tending to indicate stubs on the middle of lots; no changes were made to the existing plans. Ms. Fidler stated that based on the schedule about 20 homes will be hooked-up each month and by the end of October 2017, a majority of the full time residents will occur in conjunction with water bills.

Mr. Heacock expressed a concern regarding flagging signs which have not been taken down when the flaggers are not present. Mr. Heacock also asked, in instances where the meter will be placed in a ditch, if it would be impacted by flooding. Mr. Rogers replied that AECOM would not want the meters to be inundated with water and will have to investigate those specific addresses (*Update: AECOM revisited those instances and there are no problems anticipated with inundation of meters*).

8.0 Future Meeting Discussions

Ms. Fidler will work with community leaders regarding potential snow dates for the upcoming meetings.

Adjourn - Noon

Kristen Fidler, Chair

Community Representatives

Angela Scramlin, CCHD

Kristen Fidler, MPA