Middle River Complex Project Bulletin

Outfall 005 Sediment Removal Work Has Begun

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Fall-Winter 2014-2015

Lockheed Martin Middle River Complex
2323 Eastern Boulevard
Middle River, Maryland

Federal, state and local approvals are in place and work has begun to remove contaminated sediments from Dark Head Cove. The contaminants are located in submerged sediments eight-to-ten feet beneath the water's surface immediately adjacent to Outfall 005, which is located in the bulkhead just south of the foundation of former Building D at Lockheed Martin's Middle River Complex.

The contaminated sediments being removed were identified in the fall of 2013, when Lockheed Martin was taking samples in preparation for the full cleanup of sediments in Cow Pen Creek and Dark Head Cove. These sampling activities revealed higher concentrations of polychlorinated biphenyls (PCBs) near Outfall 005 than had previously been detected elsewhere in Dark Head Cove.

Lockheed Martin and the Maryland Department of the Environment decided to begin cleaning up this location as soon as possible because of the high concentration of contaminants. The work is proceeding during the 2014-15 winter work window, from mid-October until mid-February. This will keep to a minimum any harmful effects on fish spawning and the growth of underwater aquatic vegetation.

Location of sediment removal near Outfall 005

Sediments are being removed using a clamshell bucket operating from a crane on a barge located within the area marked off by the floating boom. Lockheed Martin placed the boom around the area of contamination this past Spring (2014). The clamshell bucket is the best technology for this kind of operation. It makes a clean, level cut in the cove bottom, then closes up and seals before it is raised so that the sediment doesn't drip out.

When the barge is full, it will dock at the bulkhead and the clamshell bucket will be used to move the dredged sediments to dump trucks that will carry the sediments to a bermed and lined dewatering pad to drain. A thick plastic liner prevents water from leaking from the dewatering pad. The area between where the barge docks and trucks park also will be lined to contain any spillage. Workers will continuously monitor for any problems that may develop, and a spill response plan is in place on how to manage any issues that may arise.

The dewatering pad is located atop the concrete of the former seaplane launch area in Block F. Once it is dry enough so it won't drip, the sediment will be loaded onto lined and covered dump trucks for transport to an approved and licensed offsite disposal facility. Truck wheels will be checked for sediment spill and, if necessary, washed to make certain no sediments fall on roadways. The truck wheel wash-water and the water that drains from the dewatering pad will be collected in a lined and bermed sump pit and treated on site. Cleaned water will be sampled to confirm water quality standards are met, then the cleaned water will be released into the Baltimore County sanitary sewage system.

Tom Blackman, project manager for the Middle River remediation project, noted that this project is the first of the three steps necessary to clean up contamination in Cow Pen Creek, Dark Head Creek and Dark

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Head Cove. "Securing the remaining approvals and the subsequent cleanup will proceed at a normal pace," Blackman said. "When we're done, we will have made a major improvement to the environment of Middle River. Doing so has been the result of an extraordinary collaborative process among Lockheed Martin and its contractors, the community and environmental agencies."

What will the work hours be for the cleanup operation?

Dredging and sediment removal, including trucks moving in and out of the area, are scheduled for daylight hours. Depending on work progress and weather conditions, work may need to take place six days a week or even for extended hours, because the in-water part of the sediment removal operation must be concluded by mid-February, which marks the end of the winter environmental work-window established for fish spawning and habitat protection.

Barge with crane and clamshell bucket will be towed from Baltimore and will be located inside the boom line and silt curtains at the dredge site.

How will you control the silt that is stirred up during the dredging operation?

The dredging is being contained by the underwater silt curtain that was put in place this past spring, plus a second curtain that will be installed during dredging to further contain silt. Movement of the clamshell bucket is being guided by a satellite-based global positioning system to reduce unnecessary reworking of the sediment bed. Lockheed Martin will monitor the turbidity that occurs naturally in the Cove and compare it to any that might be produced by the dredging operation. (Turbidity is the cloudiness in water caused by floating particles, similar to smoke in the air.) If necessary, dredging activities will be adjusted to reduce turbidity. Turbidity quality compliance standards have been established with the regulatory authorities, the U.S. Environmental Protection Agency (EPA) and the Maryland Department of the Environment (MDE).

This truck, here mounted on a flatbed, is the type that will be used to move sediments. Sediments will be moved from the barge into dump trucks using the crane-mounted clamshell bucket; then sediments will be placed on the upland dewatering pad to drain water from sediments.

Who do I call with questions or if I see anything that needs to be reported?

We are interested in all community questions or concerns. Gary Cambre, Senior Manager of Communications for Lockheed Martin, can be reached anytime toll-free at (800) 449-4486 or by email at gary.cambre@lmco.com. If you wish to contact the Maryland Department of the Environment about this project, their toll-free number is (800) 633-6101.

For more information on this or other projects, go to www.lockheedmartin.com/middleriver