Questions & Answers about the November 2015 Fish Kill in Middle River Waterways

Q: A massive fish kill occurred in upper Middle River, Norman Creek, Hopkins Creek and Dark Head Cove in mid-November 2015. Is Lockheed Martin responsible?

A: No. We are aware of what happened and are concerned, as are members of the community. From the outset, we have been supporting the state and the local community in requests they have made for assistance in their investigations. The Maryland Department of the Environment (MDE) has stated, based on preliminary results of sampling conducted in the course of its investigation, that the cause of the fish kill was a toxin released by dead algae that caused the fish to suffocate. This particular algae, called *Karlodinium veneficum*, is present all the time in the upper Middle River. The MDE confirmed that its water samples from the Middle River showed that the presence of the algae was high enough to produce the toxin. The department has also stated that an average of three fish kills per year are attributed to karlotoxin or karlotoxin in combination with low dissolved oxygen. This is also commonly known as Red Tide.

Q: What causes the algae blooms?

A: According to the Maryland Department of the Environment in its Nov. 14 press release, algae blooms occur all around the bay in late spring, summer and early fall.

Q: Some people are blaming chemicals coming from Lockheed Martin property as the culprit. Is that possible?

A: on or a chemical release Middle River property that could have caused the fish kill. (This is being verified by sampling conducted by MDE.)

It takes a catastrophic, uncontrolled event for a chemical release to result in a widespread, far-reaching fish kill.

Q: What about the cleanup work Lockheed Martin is doing at the Middle River Complex and Martin State Airport?

A: All the cleanup activities at the Middle River Complex and Martin State Airport have been reviewed and approved by the Maryland Department of the Environment, and Baltimore County as well as various federal agencies where applicable. The state, the county and in certain situations the U.S. Environmental Protection Agency regularl with all health and safety and environmental regulations e

authorities in 1979. Studies have shown that fish are able to live and thrive under conditions of very high PCB concentrations. However, fish accumulate a variety of chemicals in their bodies and the chemicals can be passed to the next fish or human that consumes them. As a result, MDE has a fish advisory in place for Chesapeake Bay and its tributaries which warns people to limit their consumption of fish caught from Chesapeake Bay waters. Sediment remediation is planned for 2016 and 2017.

Maryland Department of the Environment and the U.S. Environmental Protection Agency.

Q: Where can I learn more about fish kills or about environmental cleanup activities in the Middle River area?

A: For more information from the Maryland Department of the Environment on fish kills, please see:

http://www.mde.state.md.us/programs/water/319nonpointsource/pages/mdfishkills.aspx

For more information on the current fish kill see:

http://news.maryland.gov/mde/2015/11/14/department-of-the-environment-fish-kill-investigation-continues/

ities,

please see <u>www.lockheedmartin.com/ middleriver</u> or www.lockheedmartin.com/ martinstate

Feel free to contact Gary Cambre, Senior Manager of Communications for Lockheed Martin at 800-449-4486 or by email at gary.cambre@lmco.com if you have questions or concerns.