#### **FACT SHEET**

#### **Risk Assessment**

# Areas Offshore of the Coke Point Peninsula at Sparrows Point May 23, 2011

The risk assessment which is the subject of this fact sheet is limited in scope to the waters immediately offshore of the Coke Point area of the Sparrows Point Peninsula.

## **Background**

In 2003, a group of Port of Baltimore stakeholders (including community groups, environmental organizations, government representatives and others) known as the Harbor Team, recommended that the Maryland Port Administration (MPA) consider acquiring a portion of the southwest part of the Sparrows Point steel mill property, referred to as Coke Point Peninsula, as a possible Dredged Material Containment Facility (DMCF). Information available in 2003 showed contamination on Coke Point which indicated potential for contamination of nearby waters and

sediments (bottom mud). MPA followed the Harbor Team's recommendation to investigate and, in 2009, confirmed the presence of contaminants in these areas through offshore testing in a site conditions study.

After confirming contamination, the next questions to be answered were:

- 1. What are the risks to human health and ecological resources from the presence of contaminants in the sediment and waters immediately offshore of Coke Point?
- 2. Could a Dredged Material Containment Facility be part of a cleanup of the Coke Point area?

MPA hired technical experts who conducted studies of the offshore area adjacent to Coke Point using U.S. Environmental Protection Agency (EPA) methods and guidance from EPA and the Maryland Department of Environment (MDE) to help answer these questions.



#### **Risk Assessment Study**

The risk assessment study includes a human health risk assessment and an ecological risk assessment.

- The human health risk assessment addresses public health impacts risk over the course of a lifetime resulting from exposure to the water immediately offshore of Coke Point during activities such as fishing and swimming and eating fish and crabs caught in the immediate area.
- The ecological risk assessment examines risk to aquatic animals (such as fish, crabs, clams and worms) and wildlife (such as fish-eating birds like osprey and great blue heron and mammals like raccoon and otter).

The risk assessment has been completed and this fact sheet describes the results.

# **Results of Risk Assessment Study**

The human health risk assessment for public health impacts showed that:

- Risk from consumption of fish and crabs is comparable to the rest of the Patapsco River, for which MDE has
  established fish and crab consumption advisories. Advisories can be found at:
  (<a href="http://www.mde.state.md.us/programs/Marylander/CitizensInfoCenterHome/Pages/citizensinfocenter/fishandshellfish/index.aspx">http://www.mde.state.md.us/programs/Marylander/CitizensInfoCenterHome/Pages/citizensinfocenter/fishandshellfish/index.aspx</a>
- Potential risk from long-term contact with the surface water in the area along the shoreline of Coke Point is higher than in the background area of the Patapsco River and higher than levels typically considered acceptable.
- Potential risks from long-term contact with the sediment is elevated at levels higher than in the background areas of the Patapsco River but within levels typically considered acceptable.

Three things are important to emphasize regarding the potential human health risks – the estimates of risk are (1) subject to a high degree of uncertainty, (2) conservative (that is, tending to err on the side of protecting human health), and (3) based on a lifetime of exposure.

The ecological risk assessment showed that:

- Ecological risks are higher for Coke Point than for the background area in the Patapsco River.
- Concentrations of contaminants in the Coke Point offshore sediments exceeded levels considered to be fully protective of aquatic animals.
- Risks to aquatic animals from off shore surface water exceeded levels considered to be protective.
- For wildlife, the assessment indicated potential risks to wildlife which eat aquatic animals that are exposed to contaminants in the sediment.

### **Next Steps**

MPA intends to complete risk management and corrective measures studies for the Coke Point offshore area. Information from these studies will assist MPA, MDE and EPA in determining whether a Dredged Material Containment Facility at Coke Point could be part of a cleanup effort for the site.

# For More Information

Attend a public meeting on the risk assessment on Wednesday, June 1, 2011, from 6:30 pm to 8:30 pm at the North Point Edgemere Volunteer Fire Department, 7500 North Point Rd., Baltimore, MD 21219.

Beginning May 24, 2011, go to this internet address to view the risk assessment main report: <a href="http://www.mpa.maryland.gov/">http://www.mpa.maryland.gov/</a>. Click where it says "Coke Point Risk Assessment." You may also go to the following libraries to view a hard copy of the complete risk assessment (including appendices):

- Essex Branch, Baltimore Co. Public Library, 1110 Eastern Blvd., Baltimore, MD 21221
- North Point Branch, Baltimore Co. Public Library, 1716 Merritt Blvd., Dundalk, MD 21222

For questions or comments, contact at MPA: Steve Storms, 410-385-4426 or contact at MDE: Barbara Brown, 410-537-3212.

#### **DEFINITONS**

**Background areas** – areas close to, but not affected by contaminated areas that are being used as a comparison.

**Corrective measures –** possible methods for cleaning up contamination.

**Exposure** – contact with a substance by eating, breathing, touching skin or in the eyes; may be short-term or long-term. **Risk** – the chance of harmful effects.

**Risk assessment** – information that describes the type and degree of health risks to humans (e.g., residents, workers, recreational visitors) and ecological receptors (e.g., birds, fish, wildlife.)

Risk management - the process which evaluates what actions to take to protect public health and the environment.

Uncertainty- lack of sureness.