

BALTIMORE SUN

Port study finds health risks near Sparrows Point

Toxic chemicals in water, sediment a lifetime exposure threat

By Timothy B. Wheeler, The Baltimore Sun

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A new environmental study has found people and wildlife face higher-than-normal health risks from long-term exposure to toxic contaminants in the Patapsco River near Sparrows Point, the legacy of pollution from more than a century of steel-making on the outskirts of Baltimore's harbor.

The risk assessment commissioned by the Maryland Port Administration determined that people who swam their whole lifetime in the waters off the Coke Point area of Sparrows Point would be two to five times more likely to develop cancers or other health problems as people who did the same elsewhere in the harbor.

The study, released Monday by consultant EA Engineering, Science and Technology, found eating fish and crabs caught around Coke Point also carries health risks, but no worse than those for anywhere else in the harbor. The state already warns against eating large numbers of certain fish caught in the harbor, and against consuming the "mustard" in crabs, because of toxic contaminants in their bodies.

Wildlife such as osprey and raccoons that might feed on fish, crabs and other aquatic animals in the area also face risks from the contaminants, as do clams, worms and other bottom-dwelling organisms, the study found. Elevated levels of toxic chemicals and metals were detected in the water and sediments near shore, among them cancer-causing hydrocarbon compounds as well as polychlorinated biphenyls, or PCBs, once a widely used insulating fluid.

The port ordered the \$500,000 study around Coke Point because the state is eyeing that portion of the 2,300-acre Sparrows Point peninsula as a possible repository for muck dredged from shipping channels in the harbor. But the costs of dealing with the contaminants there have not been determined, and no decision has been made on whether to proceed, said M. Kathleen Broadwater, deputy executive director of the port administration.

State environmental officials stressed that the health risks identified by the study were long-term and mostly hypothetical, because Coke Point isn't publicly accessible from land and not a popular fishing spot.

"People who do not fish, crab, or swim regularly in the waters immediately offshore of Coke Point, the most contaminated area of the Sparrows Point steelmaking property, have no reason to be concerned for their health by the findings of this risk assessment," Jay Apperson, spokesman for the Maryland Department of the Environment, said in an email.

But Kim Coble, Maryland director of the Chesapeake Bay Foundation, called the findings "disturbing" and said they were in line with contamination found in past

sampling. She said authorities need to proceed promptly with a similar study of potential risks in the more widely used waters of Bear Creek, a Patapsco tributary in the Dundalk area that borders another portion of Sparrows Point.

"Bear Creek isn't that far away," she said. The bay foundation, the Baltimore Harbor Waterkeeper and several Dundalk area residents sued Severstal and other prior owners of Sparrows Point last year, accusing them of polluting nearby waterways and endangering the health of people living nearby.

Other government-ordered studies reported last year a vast plume of benzene and naphthalene in the ground water beneath the Coke Point area of Sparrows Point, where the steel plant's coke ovens once operated. The studies also found that the contaminants are seeping out into surrounding waters. Benzene is a carcinogenic component of petroleum, and naphthalene a byproduct of coal tar that can cause anemia and other health problems.

The steel mill recently changed hands, as Severstal North America sold it in March to RG Steel. Severstal began "interim" cleanup last year of six contaminated hot spots on the peninsula, pumping and treating the tainted ground water. A spokeswoman for RG Steel said company officials are still reviewing the risk study and have no comment. Apperson said studies of other offshore contamination have been held up by a legal dispute with the steel mill's prior owners over whether they're responsible for paying for them.

A decision on that issue is pending. But Coble said the potential risks to Bear Creek residents are such that state and federal governments should go ahead on their own now with a risk assessment and sort out later who pays for it.

Apperson said state officials will consider doing just that if they don't get a ruling soon from the U.S. District Court in Baltimore.

Del. John Olszewski Jr., who represents the area, said he was pleasantly surprised by the study's findings. "I don't think it was as bad as some people had feared," he said, "which is good. But I still think there's enough there to demand attention — and swift attention — to have it remediated as permanently and swiftly as possible."

The port administration plans a public meeting June 1 on the risk assessment, from 6:30 to 8:30 p.m. at the North Point Edgemere Volunteer Fire Department, 7500 North Point Road. A summary of the study is available at <http://www.mpa.maryland.gov>

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Health Risks In Water and Sediment at Sparrows Point

By Ron Cassie | Email the author | May 24, 2011

(Also picked up in Dredgingtoday.com)

A recent study found long-term exposure to sediments and waters adjacent to Coke Point may result in elevated health risks.

A meeting to discuss the report will be held June 1 at the North Point-Edgemere Volunteer Fire Company.

An environmental study authorized by the state of Maryland and released Monday found higher than acceptable levels of risk for human beings and ecological resources with long-term exposure to sediment and surface water along the Coke Point shoreline at Sparrows Point.

The Maryland Port Administration is interested in acquiring the Coke Point peninsula on Sparrows Point as a potential site for a dredged material containment facility for the placement of sediment dredged from the channels in Baltimore Harbor. The MPA commissioned the risk assessment as part of evaluating the Coke Point for a dredging facility.

The Coke Point site is presently owned by RG Steel, the new owners of the steel mill at Sparrows Point. Long-term exposure, according to the study guidelines, is defined as 30 years over a lifespan of 70.

Maryland director of the Chesapeake Bay Foundation, Kim Coble, called the findings "disturbing" in a Baltimore Sun story, adding they were in line with contamination found in past sampling. Coble, the Sun reported, said authorities should proceed with a study of Bear Creek, a more widely-used Patapsco tributary in the Dundalk area near Sparrows Point.

"Bear Creek isn't that far away," Coble told the Sun. Last July, The Chesapeake Bay Foundation, Baltimore Harbor Waterkeeper and a handful of local residents filed suit against Severstal and ArcelorMittal USA, the previous owners of the Sparrows Point mill, accusing them of polluting nearby water and endangering the health of citizens.

"The location of a containment facility at Coke Point is one option under consideration as the Port of Baltimore seeks future dredged material placement sites," said Maryland Transportation secretary Beverley K. Swaim-Staley in a press statement. "However, the benefit of examining the Coke Point location is that data has now been produced that can help guide private and public sector environmental clean-up efforts at the site."

"While we have been hard at work ensuring that the onshore contamination is being addressed, the completion of this study gives us a much better understanding of the scope and nature of the offshore contamination associated with Coke Point," Maryland Department of the Environment secretary Robert M. Summers said in a press statement accompanying the release of the report. "People who crab or fish in these areas should refer to the existing consumption advisories.

"For nearly a decade, there have been fish consumption advisories in effect for these waters; this study reaffirms that guidance. We understand the communities' concern and agree that this contamination is not acceptable. Additional action by the owners of the property must be taken as soon as possible to address the contamination."

The 2,300-acre Sparrows Point property is subject to a 1997 Judicial Consent Decree, following a suit brought by the Environmental Protection Agency against former mill owners Bethlehem Steel. The decree, still in place with subsequent mill owners, requires a comprehensive site investigation and cleanup to address contamination and is overseen by the Maryland Department of the Environment and the EPA..

The new study also assessed ecological risks for aquatic and benthic organisms such as fish, crabs, worms and clams, and for other wildlife living on and around the Coke Point shoreline. The study found that the potential risk from contamination in offshore sediments and surface water to aquatic, benthic (bottom dwelling) organisms and wildlife is at a level that warrants remedial measures.

"The Sparrows Point property, with its history of more than a century of industrial pollution, is perhaps the most complex cleanup site in the Chesapeake Bay watershed. In recent years, however, significant progress has been made in this difficult endeavor," Summers said in the press release. "Since 2007, MDE and EPA have significantly increased the pressure on the owners of the Sparrows Point property to move from assessing contamination at the site to taking more aggressive cleanup actions and are litigating in court to compel the companies to conduct an assessment of offshore contamination."

Del. John Olszewski, Jr., said that he was at least pleased that "worst-case scenarios" feared by some about water and sediment near Coke Point were not reflected in the study.

"Still, it's a call to action to seek appropriate remediation as fast as possible," Olszewski said.

Olszewski added that he would like to see the Port Administration ultimately decide to use the Coke Point peninsula as a dredging facility - partly to ensure that proper investigation and clean-up of the area.

According to the Port Administration, two of the six proposed treatment cells to recover and treat benzene contamination of groundwater in the Coke Point area are operational with two additional cells on schedule to be operational by July 2011.

From the report:

“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:

<http://www.mde.state.md.us/programs/Marylander/CitizensInfoCenterHome/Pages/citizensinfocenter/fishandshellfish/index.aspx>

- 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.

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.”