Clean Ocean Action

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Ocean Advocacy Since 1984

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February18, 2010

Oneida Cuevas, Esq.
Attention: DEP Docket Number: 20-09-11/743
Office of Legal Affairs
New Jersey Department of Environmental Protection
PO Box 402
Trenton, New Jersey 08625-0402

RE: Rule Proposal PRN 2009-377; Shellfish Growing Water Classifications; Proposed Readoption with Amendments: N.J.A.C. 7:12-1.4, 1.5, 2.1, 3.2, 4.1, 4.2 and 9.13

Dear Ms. Cuevas,

Clean Ocean Action (COA) is a broad-based coalition of 125 conservation, environmental, fishing, boating, diving, student, surfing, women's, business, service, and community groups, and also represents concerned citizens and businesses. Our goal is to improve the degraded water quality of the marine waters off the New Jersey/New York coast. COA has reviewed the proposed amendments to Shellfish Growing Water Classifications and submits the following comments.

1. Amendments 7:12-1.4 and 1.5 are important improvements. Updating the rule's reference to the Food and Drug Administration's (FDA) "Guide for the Control of Molluscan Shellfish" from 1999 to 2007 is an improvement to keep the state program in line with the latest guidance from the FDA's National Shellfish Sanitation Program. However, we recommend that "or most recent version" be added. In doing so, if the guide is again updated, its adoption by the state will not be delayed. Furthermore, the *Vibrio parahaemolyticus* Management Plan is a protective addition to the shellfish program. However, we were not able to find the plan on the state's webpage as referenced in the proposal to review it.

2. The fecal pollution causing the Navesink River Section Downgrade and the existing Prohibited Areas is unacceptable, especially given the historic efforts to clean up the river.

Back in 1979, extensive sampling of the Navesink River documented fecal pollution.[1] In response, multi-agency government efforts began in 1981 to reduce

[1] NJDEP, 1986. Navesink River Project Kicked Off *Water Resources News* Fall 1986, Vol. 2, No. 4.

non-point source pollution in the Navesink River.[2] Sampling efforts continued and a detailed storm drain study was conducted in 1985 which again indicated problems.[1] In 1986, thirteen government agencies, including the FDA, the U.S. Environmental Protection Agency (EPA), the New Jersey Department of Environmental Protection (NJDEP) and US and NJ Department of Agriculture, as well as private and public institutions agreed to a Memorandum of Understanding to

> *"formalize our commitment to the Navesink River Water Pollution Control Shellfish Protection Program and its primary goal of improving water quality in the Navesink Watershed to a point at which the river's full shellfishery and recreational potential may be attained."*[3]

And yet, an important microbial source tracking study of the upper Navesink River conducted decades later revealed both human and wildlife sources of pollution with problems noted from stormwater discharges.[4] What happened to the MOU to reduce pollution and open the entire river to shellfishing? Are these agencies still working together to deal with these problems? Were programs implemented and their effectiveness evaluated? Why has the pollution increased?

Total Maximum Daily Loads (TMDLs) for shellfishing impairments due to high total coliform levels were developed for the Navesink and Shrewsbury Rivers and the larger Watershed Management Area 12 which encompasses the rivers. These TMDLs were approved by the EPA in 2006. The TMDL for the Navesink River apparently has not been effectively implemented. Although the TMDL does state that it will be adopted after EPA approval, it is unclear whether it has even been adopted 3.5 years after approval as an adoption date was not found.[5] In addition, the TMDL suggests several management efforts and describes various government programs to reduce pollution loads, but it does not appear to mandate their implementation. The status of management actions based on the TMDL has not been made available. The source tracking study recommended in the TMDL at least was completed for part of the river.

According to the TMDL, *"The Navesink and Shrewsbury Rivers provide for almost the entire soft clam fishery in New Jersey."* The Navesink River also supports hard clams. These are critical resources that have been recognized as deserving protection. Reducing fecal pollution in the watershed and in the river was also noted in 1986 as having "multiple benefits for

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[2] Five Total Maximum Daily Loads for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 12 Atlantic Coastal Water Region Approved Sept. 27, 2006. http://www.epa.gov/waters/tmdldocs/Coastal_Pathogen_TMDLs_WMA12.pdf

[3] Memorandum of Understanding, dated August 21, 1986. Signed by R.T Dewking, Commissioner of NJDEP, C. Daggett, Regional Administrator of USEPA, A.R. Brown, Secretary of NJ Department of Agriculture, and J. Branco, State Conservationist U.S. Department of Agriculture.

[4] NJDEP 2008. Coastal Nonpoint Source Pollution Monitoring Program Upper Navesink River Stormwater Study: Microbial Source Tracking. February 2008 (revised) http://www.state.nj.us/dep/bmw/Reports/RevisedNavesinkStormFeb.pdf

[5] NJDEP and TetraTech 2006. Five Total Maximum Daily Loads for Total Coliform to Address Shellfish-Impaired Waters in Watershed Management Area 12 Atlantic Coastal Water Region Approved Sept. 27, 2006 No adoption date provided. http://www.epa.gov/waters/tmdldocs/Coastal_Pathogen_TMDLs_WMA12.pdf

agriculture, fish and shellfish, and any of us who use the watershed for water supply or recreation."[6]

NJDEP must require that at the very least the recommendations of the Upper Navesink River Stormwater Study are implemented in a timely manner.[7] The key recommendations include 1) improve stormwater infrastructure, 2) maintain dumpsters, or refuse containers, properly to prevent leakage, and 3) identify and remediate problems in wastewater systems, such as leakages or illegal connections. Although some local efforts have been made, clearly more needs to be done. NJDEP must ensure that all of these recommendations, the actions identified in the TMDL, and other potentially relevant efforts are taken now.

3. The Branchport Creek Downgrade from Special Restricted to Prohibited seems overdue given the known, long-term problems from NJSEA's Monmouth Park Racetrack that must be reduced. The NJDEP must ensure that the New Jersey Sports and Exposition Authority (NJSEA) is indeed enforcing Best Management Practices (BMPs) and moving forward with construction activities to reduce stormwater pollution from the Monmouth Park Racetrack to Branchport Creek according to schedule. Last spring, the NJSEA stated that BMPs would be implemented at a public hearing. But once again, the NJSEA failed to adequately do so. Monmouth County Department of Health has continued to document high fecal pollution levels from the racetrack. There is a long history of the NJSEA saying they will fix the problems and then not following through with action. NJDEP must also insist that the NJSEA pay for its environmental violations and pay for water quality monitoring in the racetrack's vicinity for fecal contamination, total suspended solids, total nitrogen, and any other relevant water quality parameters.

4. **While it is important that Keyport Harbor has been proposed to be upgraded from Prohibited to Special Restricted based on decreased coliform levels, COA is concerned about contaminant accumulation in shellfish and the current lack of contaminant advisories for shellfish other than lobster and crabs.** The EPA last year designated an area in Lawrence Harbor, which is close to Keyport Harbor, to be a Superfund Site and public health hazard due to lead slag deposited in the area.[8] Very high levels of lead were found as well as elevated levels of antimony, arsenic and copper. Initial sampling confirmed the presence of lead in mussels and clams.[9] The extent of contamination resulting from contaminant transport by currents from the lead slag sites still remains to be determined. In mussel samples from Raritan Bay and off Sandy Hook, NOAA has identified medium to high levels of contaminants, including mercury, lead, tin, butylins, and polychlorinated biphenyls (PCBs) and others in its Mussel Watch Program.[10] In addition, samples from the Hudson River and Raritan Bay had the

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[6] NJ Department of Agriculture Secretary Brown as quoted in NJDEP, 1986. Navesink River Project Kicked Off *Water Resources News* Fall 1986, Vol. 2, No. 4.

[7] NJDEP 2008. Coastal Nonpoint Source Pollution Monitoring Program Upper Navesink River Stormwater Study: Microbial Source Tracking. February 2008 (revised)
http://www.state.nj.us/dep/bmw/Reports/RevisedNavesinkStormFeb.pdf

[8] http://www.epa.gov/region02/superfund/npl/raritanbayslag/

[9] http://www.epa.gov/region02/superfund/npl/raritanbayslag/RBS_juneupdate.pdf

[10] Kimbrough, K. L., W. E. Johnson, G. G. Lauenstein, J. D. Christensen and D. A. Apeti. 2008. An Assessment of Two Decades of Contaminant Monitoring in the Nation's Coastal Zone. Silver Spring, MD. NOAA Technical Memorandum NOS NCCOS 74. 105 pp.

most samples in the nation identified as "high" for flame retardant chemicals, polybrominated diphenyl ethers (PBDEs).[11]

5. **The Shellfish Growing Water Classifications Rule must expand testing of shellfish to include chemical assessments and standards.** At this time, there are no current monitoring programs administered by NJDEP to survey levels of chemical contaminants in shellfish meat (other than bluecrab and lobsters) in New Jersey's waters, even though there is reason to believe that chemical contamination of shellfish poses a risk to human health. This is particularly crucial since consumers typically eat the whole animal. For example, there are elevated levels of chemical contamination in sediments throughout the state's coastal waters, which are often reflected in elevated levels of contamination in benthic organisms such as shellfish. In fact, the Mussel Watch program, managed by National Oceanic Atmospheric Administration, found that mussels at all sampling sites in New Jersey had elevated concentrations of metal or organic contaminants and categorized the sites as having medium to high levels of for several contaminants tested in shellfish tissue at each site. NOAA's additional study of PBDEs indicated high levels at all sites tested along the New Jersey coast (Sandy Hook, Long Branch and Shark River).

The FDA recognizes that shellfish can accumulate "*poisonous or deleterious substances*" due to their filter-feeding behavior.

> *"The FDA has established action levels, tolerances and guidance levels for poisonous or deleterious substances to control the levels of contaminants in human food including seafood (FDA Federal Register, 1977; FDA, 1985)."*[12]

The levels are designed to be used to assess public health impacts and are revised as needed. The 2007 Guide Section 4 Chapter 2 Table1 provides action levels, tolerances and/or guidance levels for many contaminants including heavy metals, pesticides, and PCBs.

Additionally, EPA has recommended that bivalves be target species for evaluating contaminants:

> "Bivalve molluscs (e.g., oysters, mussels, and clams) are filter feeders that accumulate contaminants directly from the water column or via ingestion of contaminants adsorbed to phytoplankton, detritus, and sediment particles. Bivalves are good bioaccumulators of heavy metals (Cunningham, 1979) and polycyclic aromatic hydrocarbons (PAHs) and other organic compounds (Philips, 1980; NOAA, 1987)…."[13]

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[11] Kimbrough, K. L., W. E. Johnson, G. G. Lauenstein, J. D. Christensen and D. A. Apeti. 2009. An Assessment of Polybrominated Diphenyl Ethers (PBDEs) in Sediments and Bivalves of the U.S. Coastal Zone. Silver Spring, MD. NOAA Technical Memorandum NOS NCCOS 94. 87 pp.

[12] FDA 2007. Guide for the Control of Molluscan Shellfish http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/NationalShellfishSanitationProgram/ucm053987.htm

[13] USEPA, 2000. Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories, Volumes 1 to 3. http://www.epa.gov/fishadvisories/advice/es.html

In 2005, EPA and FDA agreed to a Memorandum of Understanding on Environmental Contamination in Fish and Shellfish to work together to improve assessments and notification.[14] This MOU encouraged environmental monitoring efforts and communication to the public of health risks for both fish and shellfish.

New Jersey can lead this effort to protect public health.

We urge the state to consider assessing shellfish, such as bivalves, for levels of contaminants of concern including metals, pesticides, PCBs, PBDEs, dioxins and furans, and polycyclic aromatic hydrocarbons. Existing and new advisory levels (of contaminant levels in edible tissue) based on the latest federal guidance by EPA and FDA should be used to assess whether or not shellfish is safe for human consumption. Surveys and screening should be used to identify areas of concern, establish shellfish consumption advisories, modify classifications of shellfish growing waters, and reduce pollution. Efforts could be coordinated with existing programs such as Mussel Watch by NOAA and National Coastal Condition Assessments by EPA.

6. Finally, twelve years is unacceptably long. The Rule must adopt more frequent sanitary survey requirements, notably in areas that are not "Approved Areas". The current rule requires NJDEP to prohibit shellfish harvest in water not subject to a sanitary survey by the Department every 12 years. The proposed readoption of this existing rule is not protective, and COA urges NJDEP to require more frequent sanitary surveys every three years for areas that do not meet requirements of "Approved Areas". Section 7:12-1.4(a)(5) should be amended to state,

> *"All growing areas classified as "Approved Areas" which are not subject to a sanitary survey every 12 years shall be classified as prohibited. All growing areas not classified as "Approved Areas" which are not subject to a sanitary survey every 3 years shall be classified as prohibited."*

In conclusion, COA supports proposed amendments to the Shellfish Growing Water Classification Rules. However, substantial changes are still need before readopting the existing rules to ensure the program is protective of public health and to reduce pollution.

We look forward to your written response and request a meeting to discuss our concerns.

Sincerely,

Cindy Zipf
Executive Director

Heather Saffert, Ph.D.
Staff Scientist

[14] USEPA and USFDA 2005. Memorandum of Understanding on Environmental Contamination in Fish and Shellfish http://www.epa.gov/fishadvisories/files/moufdaepa.pdf