

Commission on the Seacoast Cancer Cluster Investigation RSA 126-A:74
(HB 484, Chapter 197:2, Laws of 2017)

Update to the Rye Board of Selectmen
May 29, 2018

Commission Website:

<http://www.gencourt.state.nh.us/statstudcomm/committees/1349/default.html>

Overview:

The commission was charged with (but not limited to):

1. Develop a common understanding of the key definitions and concepts of cancer clusters and environmental investigation.
2. Review the progress made by state and federal agencies and their partners.
3. Delineate the potential roles and responsibilities for municipalities, state agencies, and their partners.
4. Provide informed communication about the cancer cluster investigation to their constituencies.
5. Calibrate and utilize the Seacoast New Hampshire Groundwater Availability Study developed by the United States Geological Survey in 2003 to assess localized groundwater flow and contaminant migration from sites selected by the commission.

Commission Membership:

Representative Charles McMahon, Chair
Representative Philip Bean
Representative Martin Bove
Representative Mindi Messmer
Representative Pamela Gordon
Senator Martha Fuller Clark
Senator Daniel Innis
Benjamin Chan, NH DHHS
Kim McNamara, City of Portsmouth
Martha Wassel, Town of Greenland
Thomas Sherman, Town of Rye
Janet Stevens, Seacoast Resident
Julie Tucker, Seacoast Resident
Wendy Stanley Jones, Seacoast Resident
Thomas Mack, NH Chapter of the US Geological Survey
Rosemary Caron, UNH Toxicologist

Work of the Commission:

- The Commission has met seven times.
- Heard testimony from parents of affected children, Seacoast residents, the NH Department of Health and Human Service, NH Department of Environmental Services, NH Division of Fish & Game, US Environmental Protection Agency and the Coakley Landfill Group.
- NH DHHS verified the existence of a Cancer Cluster as defined by the US Centers for Disease Control
- Reviewed the findings and recommendations of the Governor's Task Force on the Seacoast Cancer Cluster.
- Focusing currently on the issues presented by the Coakley Landfill:
 - Nature of the contamination
 - VOCs
 - 1,4-dioxane
 - PFAS – PFOA, PFOS, PFNA, etc
 - Public drinking water (Aquarion and Rye District)
 - Sources of contamination
 - Remediation of contaminated water
 - Municipal water to Breakfast Hill Road
 - Assurance of clean drinking water
 - Decrease draw of plume of contamination away from landfill
 - Continued monitoring of test and private wells
 - Berry's Brook
 - Catch and release only
 - Fish sampling and timing
 - Final plan for addressing concerns at the landfill
 - Pump and treat versus natural attenuation
 - Bedrock Study (2 years)

Next meeting:

Thursday, June 14 from 10-12 noon
Legislative Office Building 205

Submitted by:

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Background history of the Coakley Landfill:

Based on historical information, the Coakley Landfill property was mined for sand and gravel and was a rock quarry as early as 1969. Up to 20 feet of material had been excavated from the site by 1971. In March 1971, the town of North Hampton requested approval to use the Coakley property as a landfill. In April 1971, a permit was granted to the town of North Hampton to operate a landfill. The Coakley Landfill was permitted for operation beginning in 1971 through 1987. In the early 1970s, the state did not employ much technical review staff for review of licensing of landfills such as Coakley Landfill and did not have any regulations for citing of landfills. The City of Portsmouth, the towns of Newington, New Castle, North Hampton and Pease Air Force Base entered into an agreement to use the Coakley land for landfill operations. According to historical records, the landfill application was reviewed by state and federal agencies. Given the time period that the landfill was operational industrial and commercial waste and the fact that hazardous waste separation was not practiced during that time, it is likely that the waste disposed had significant quantities of hazardous waste (Good Faith Offer, 1991). Landfill operations began in 1972, with the southern portion of the Site used for refuse from the municipalities of Portsmouth, North Hampton, Newington, and New Castle, along with Pease Air Force Base. In January 1972, an agreement was made between North Hampton, Portsmouth and Coakley Landfill outlining responsibilities for operation of the landfill. Other users included the towns of New Castle, Newington and Pease Air Force Base (Pease). The agreement with Pease prohibited the dumping of shop and ordnance waste from Pease Air Force Base, located in Newington, NH, as well as demolished buildings, junk autos, machinery, and large tree stumps or butts. Coincident with landfill operations, rock quarrying was conducted at the Site from approximately 1973 through 1977. Much of the refuse disposed of at Coakley Landfill was placed in open (some liquid-filled) trenches created by rock quarrying sand and gravel mining. State inspections were conducted during the operation of the landfill. According to reports from residents who lived in Lafayette Terrace, prior to 1975 barrels and tanker trucks dumping liquid wastes were observed at Coakley Landfill. In 1978 and 1979 oil-soaked debris from accidents in Portsmouth and Newington, was placed in what is known as the Oily Debris Area in the northern section of the Coakley Site. The precise volume of this material is unknown. In 1981, the State of New Hampshire granted the Town of North Hampton permission to dispose of pesticide waste containers at the Coakley Landfill Site. The City of Portsmouth began operating a refuse-to-energy plant on leased property at Pease Air Force Base in 1982. From July 1982 through July 1985, Pease Air Force Base and the municipalities of Rye, North Hampton, Portsmouth, New Castle, and Derry began transporting their refuse to this plant for incineration. After that time, the Coakley Landfill generally accepted only incinerator residue from the new plant. The NHDES approved the disposal of ash from the Waste to Energy Program in Coakley Landfill. In March 1983, the Bureau of Solid Waste Management ordered an end to the disposal of unburned residue at the Coakley Landfill. The Coakley dump was closed in July 1985 due to volatile organic compound (VOC) contamination of residential drinking water wells in Lafayette Terrace area. In 1986, municipal water lines were installed to provide water to Lafayette Terrace. In August 1982, correspondence indicates that ash from the Waste to Energy Program at Pease was approved for disposal at the Breakfast Hill Landfill operated by the town of Rye at the corner of Breakfast Hill Road and Lafayette Road. It is possible that ash was disposed at the Breakfast Hill Landfill for several years although the exact length of time of disposal was not noted. Governor's Task Force on the Seacoast Cancer Cluster Final Report and Recommendations Page 40 of 62 Prior to incineration, the New Hampshire Waste Management Division estimated that approximately 120 tons per day were disposed of at the landfill. The daily weight of incinerator residue was estimated to be approximately 90 tons. In the end, it is estimated that an approximate 50-foot-thick layer of ash was accumulated in the landfill.