

Office of the Health Officer

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<u>Report of Wastewater Release</u> 183 Whittier Highway, Center Harbor, NH 03226 Date of Release: January 16, 2024

Situation and Background

Around 8:43 am on January 16, 2024, Center Harbor Fire was requested to 183 Whittier Highway in Center Harbor for reports of a sewer line rupture. Upon arrival, it was found that a 10 inch force main had ruptured. This line carries partially treated wastewater from the Center Harbor sewage lagoons southward down NH Route 25 (Whittier Highway) to Meredith and on to Franklin where it undergoes additional treatment. At the Center Harbor lagoons, treatment is limited to sun exposure. The large line is used intermittently when the lagoons require drainage, or when an adequate amount of wastewater has been collected. The line is owned and operated by Bay District Sewer Commission. There was a rupture of this line approximately 50' south of this release on November 10, 2023.

Initial Response and Investigation

Center Harbor Fire Captain Chris Conway, Chauffeur Leon Manville, and EMT Mark Stearns responded to this incident. Upon arrival, they report noting a translucent, yellow-green fluid flowing from an approximately 6" diameter hole which expanded to an approximately 3' flow just off the shoulder of NH Route 25 (Whittier Highway). There was a strong odor of sewage around the area. The fluid was noted to be traveling down the roadside to a small brook located in front of 183 Whittier Highway, passing through a small culvert under the driveway of that address, and continuing through a second culvert under Whittier Highway. The brook continued approximately 1000 feet to Lake Winnipesaukee with an outlet due west of Half Mile Island located adjacent to the property at 196 Whittier Highway.

Health Officer Tyler Driscoll spoke with one of the operators of the sewer line, Don Muscavitz, who advised that the line had been activated on January 15, 2024 at approximately 11am and was shut down on January 16, 2024 at 10am, approximately 90 minutes after the leak was reported to Center Harbor Fire. Mr. Muscavitz reports that approximately 347,000 gallons of wastewater was pumped during that time with rates of 290-300 gpm. It is unclear when the leak may have occurred as there were no pressure or flow anomalies noted unlike the prior release. The amount of wastewater released is unknown.

Evaluation of the water of Lake Winnipesaukee was attempted, but ice and snow cover on the lake limited visualization of any contamination or detection of any sewage odor.

Actions Taken

Actions were taken to mitigate further release. A dike was placed in front of the culvert leading under the driveway at 183 with moderate decrease of wastewater leaving this culvert. Bay District Sewer officials were on site and had requested a vacuum truck to the scene to remove residual wastewater from the diked area as well as the original hole. Once this was completed, all municipal services had left the scene. NHDES had been notified by Bay District Sewer and municipal authorities on scene.

Additional Information

As a result of the prior wastewater release, additional information had already been obtained. Briefly, review of the wells in the area and the flow of the release indicate very low level of concern for drinking water contamination. Individual residents can obtain testing of their wells if so desired at their own expense. This testing should include total coliform and E. coli levels. Testing of the water of Lake Winnipesaukee in the area of outflow was performed as noted below for the prior release. Acceptable levels of E. coli for freshwater beaches are less than 158 MPN/100 mL for a single sample or two samples of less than 88 MPN/100 mL per the New Hampshire Beach Inspection Program. In general, remediation of the stream bed for a one-time sewage release would not be required. The likelihood of future bacterial/viral contamination from residual sediment is very low. Please see prior report for wastewater release of November 10, 2024 for additional information and discussion.

As of January 19, 2024, repair efforts were ongoing. These efforts were completed by February 2024.

Conclusion and Follow Up Plans

As with the prior release, there appears to be extremely low risk of significant bacterial/ viral contamination of local residential water wells, lake water, or public beaches. Despite the uncertainty of the total amount of wastewater released, the massive volume of distribution in Lake Winnipesaukee as well as the paucity of swimming and other water activities at the time of the release poses extremely low risk to the public. No remediation will be required of Bay District Sewer by the NHDES, and no additional testing will be performed by the State.

As a precaution, the Center Harbor Health Officer will perform additional E. coli testing in the vicinity of the release site and at the public beach on Lake Winnipesaukee. This will be completed after ice-out (estimated April 2024) and prior to the Summer swimming season (May 2024).

Follow Up Testing

Testing for E. coli in the area of the Center Harbor Town Beach and south of Hog Island was performed on the dates noted in the table below. As previously stated, acceptable levels of E. coli are less than 158 MPN/100 ml for a single sample or less than 88 MPN/ 100 ml for two samples.

Date	Center Harbor Town Beach (MPN/100 ml)	Hog Island (MPN/100 ml)
11/28/2023	1.0	160.7
4/15/2024	1.0	3.1

Any questions can be directed Deputy Health Officer Cartier at the contact information noted.

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Tyler Driscoll Health Officer Town of Center Harbor firechief@centerharbornh.gov Fig. 1 - Green, cloudy fluid flowing from approximately 6" diameter hole in front of 183 Whittier Hwy - 01/16/2024



Fig. 2 - Green, cloudy fluid flowing from approximately 6" diameter hole in front of 183 Whittier Hwy spreading to an approximately 3' wide flow entering a brook just downhill - 01/16/2024



Fig. 3 - Green, cloudy fluid flowing from approximately 6" diameter hole in front of 183 Whittier Hwy - 01/16/2024



Fig. 4 - Green, cloudy fluid moving toward culvert under the driveway of 183 Whittier Highway. Culvert has been diked with red salvage cover - 01/16/2024



Fig. 5 - Green, cloudy fluid moving toward culvert under the driveway of 183 Whittier Highway. Culvert has been diked with red salvage cover - 01/16/2024



Fig. 6 - Overhead view of release site into Lake Winnipesaukee located at 43°42'06.2"N 71°27'29.8"W. Center Harbor Town Beach is 2,300 feet north-northwest of the indicated location.

