MEMORANDUM

Date: March 2, 2017

To: Howard Steed

From: Monty Ledbetter

RE: MH 9588 Overflow – 111 Big Duke Trail, Hot Springs, Arkansas – 2/25/2017

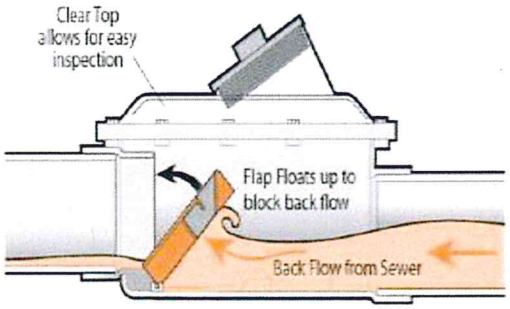
MESSAGE:

Good Morning Mr. Steed,

The information I sent Tuesday was an effort to address some of your concerns quickly, as you requested.

Anytime an overflow occurs, we respond as soon as we receive notice. Our first actions are to stop the discharge and contain the spill, followed by clean up and remediation. Hot Springs reports all municipal system overflows to the Arkansas Department of Environmental Quality as required. Our records do not indicate a pattern of overflows at Manhole 9588. As noted, the Grand B Pump Station received preventative maintenance in December of 2016. The materials that blocked the pump have accumulated recently.

The November 2015 incident occurred on private property. Cities are not responsible for reporting overflows on private property. The damage occurred because your home did not have a backwater prevention valve installed as required by the Arkansas Plumbing Code.



Backwater Prevention Valve

The pop off you installed is not a backwater prevention device. It relieves blocked sewage outside the house, preventing damage inside the structure. I strongly suggest you have a backwater prevention valve installed at the clean out next to the manhole. Such devices have a floating flap that prevents black water from backing up inside the structure.

Unfortunately, no one can guarantee that an overflow will never occur at any manhole; there are too many outside variables. The City of Hot Springs maintains 86 major pump stations, over 3500 minor pump stations and approximately 600 miles of gravity-flow sewer lines. There will be incidents where pumps malfunction, pipes clog and overflows occur. The incident on February 25 occurred specifically because of the introduction of inappropriate items into the sewer system within the collection basin where your home is located. The photo I sent displayed what our staff removed from the pump that was blocked and caused the manhole overflow.

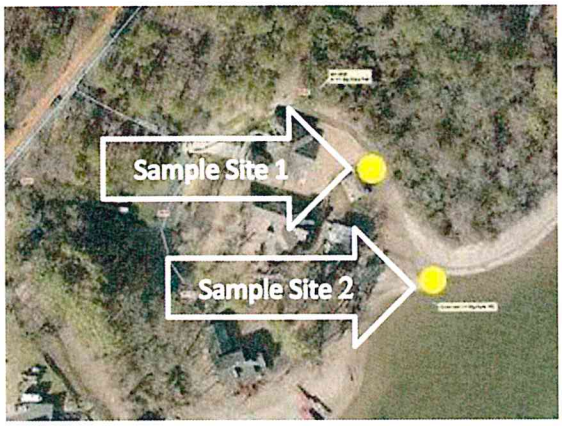
Materials such as diapers, baby wipes, feminine hygiene products, fats, oils and grease should never be flushed or washed down drains. We are preparing a campaign for the area to emphasize the importance of proper use of the wastewater system in order to be good neighbors and help prevent overflows and damage to property.

The technician who prepared the aerial photo was misinformed about which manhole overflowed, resulting in misidentification on the aerial. I apologize for not catching that before sending it out. Thank you for bringing that to our attention. I am attaching a corrected aerial map.

On February 28, samples were taken at 111 Big Duke Trail. The first sample was taken at your boat dock just below Manhole 9588; the second at the cove shoreline. The third sample was taken across the lake and downstream as a control. The lab report is attached. I received the test results from the lab yesterday.

Sample Site 1

Sample Site 2



The overflow was contained and the area treated with lime.

Site 1 tested at 13,750 colonies per 100 mls (parts per million).

Site 2 tested at 62.5 colonies per 100 mls.

Site 3 (across the lake) tested at 0 colonies per 100 mls.

The Wastewater Department will retest the same sites no later than March 10, 2017 for further comparison.

Regarding the silt in the cove, comparison of a 2006 satellite view to a 2016 satellite view shows no significant difference in the contour below the normal water level the vicinity of the boat dock at 111 Big Duke Trail or the cove just north. Both aerials were taken when the lake was drawn down. There is no indication that any overflow from Manhole 9588 contributed to the existing silt.

2006 Satellite Image

2016 Satellite Image

Monty Ledbetter, Utilities Director

ANALYSIS REPORT

SUBJECT: Fecal Coliform Results

LOCATION: 111 Big Duke Trail

SCOPE: Analyzed Sample for Potential Sewer Leak Using Fecal Coliform Method

COLLECTED DATE& TIME: 02/28/17 @ 1210

Fecal Coliform Colonies were as follows:

111 Big Duke Trail @ boat dock: 13,750 Colonies per 100mls
111 Big Duke Trail @ cove shoreline: 62.5 Colonies per 100mls
251 Emerson Point (across lake from 111 Big Duke Trail- Upstream): 0 Colonies per 100mls

Analysis Conducted By: H. Mauldin
City of Hot Springs Wastewater Treatment Plant Laboratory

Conclusion: The area in question has been detained and there are no fecal coliform colonies reaching the lake other that what is naturally occurring and the area has been cleaned.

DATE: 3/1/17

Harold Mauldin
Analyst