

**Illicit Discharge Removal Report
Year 4 (July 1, 2021 - June 30, 2022)**

Illicit Identified in MS4 Permit Year#	Location	Discharge Description	Method of Discovery	Date Discovered/ Confirmed	Date Eliminated	Date Repair Confirmed	Mitigation	Enforcement or Corrective Measures	Schedule of Removal	Estimated volume of sewerage removed	Notes	Catchment
2	9 Gray Gardens East	SDE conducted two dye tests at 9 Gray Gardens East in Cambridge (Sparks Area). The basement toilet tested dye in both the sewer and the drain. The dye was seen in the drain 2 minutes after it was flushed and then in the sewer about 2 minutes later. The dye was significantly brighter in the drain than it was in the sewer. A 2nd floor toilet tested not legal with the dye appearing in the drain after 2 minutes. The crew mentioned that there may have been very faint traces of dye from the 2nd floor toilet in the sewer but it was not truly distinguishable. It should be noted that the drain is at a higher elevation than the sewer.	IDDE investigation	2020.02.07	2020.03.16	2021.04	Replaced sections of collapsed drain and sewer lateralst and confirm with a dye test	Not applicable	Work was done to repair the laterals and connection during Year 2. Due to COVID post correctivion check was not able to be performed. Dye testing was performed by SDE, Inc. in April 2021. and confirmed that Gray Gardens East and Raymond were clean and verified the correction .	440 gpd	Follow up CCTV confirmed collapsed sewer and drain laterals. DPW confirmed that there are cracks and breaks then eventually to a collapsed sewer lateral that starts 11 feet from sewer manhole to 16 feet to the house. The same situation exists for the drain lateral as well. Somehow the sewer and drains make their way to the system mixed. DPW authorized remedial contractor to do repairs week of 3/16/20 and will have chance to do a dye test before work is back filled.	Sparks Street D31
2	2 Hemlock St	This appears to be a direct illicit connection of the sewer lateral to the main drain in the street, and will likely require re-connecting the existing building sewer lateral to the sewer main.	IDDE investigation	2020.03.11			Due to the flow conditions observed in the sewer and drain during the dye test (drain was flowing faster than sewer), DPW will clean and CCTV the sewer between S47SMH2250 and S47SMH2510 to confirm there are no infrastructure issue first.	Not applicable	Additional investigation of lateral at 2 Hemlock during 2022/2023 is required before a final corrective plan is developed.	TBD	CCTV inspection and cleaning of the sewer did not occur during the Year 3 reporting period. CCTV of the mains was completed during Year 4 revealing major defects in the mains. CCTV of the sewer lateral at 2 Hemlock remains to be completed prior to moving forward with corrective actions.	Sparks Street D31
2 (final confirmation in Year 4)	Healy Street	SDE conducted several dye tests on Healey St. Both 18 and 20 Healey Street tested dye in both the sewer and the drain. For both tests the dye was seen in the sewer first followed by the drain and the intensity was brighter in the sewer. Based on those test results it was assumed there may be an infrastructural issue in the street as opposed to an issue with the individual building laterals. SDE added dye directly into sewer MH S47SMH3312. The dye was seen in both the downstream sewer (S47SMH3305) and the downstream drain (D31DMH3415). The dye was brighter in the downstream sewer than it was in the downstream drain. This indicates that the sewer on Healey St is leaking into the storm drain. It should be noted that it took several hours for the dye to appear in the downstream manholes.	IDDE investigation	2020.03.11			Corrective action is under review - Sewer appears to be original 10" clay pipe that has been CIPP lined. Bulges observed in video suspected to be liner installed over defects in the original clay pipe. Several joints observed in video appear separated – recommend air testing of joints. Additional investigation is required prior to making repairs	Not applicable	Additional testing of pipes 2022/2023 is recommended to confirm corrective measures to be taken	TBD	Completed pipe investigations on Healy Street in Yr 4 •SDE dye tests completed 3/10 & 3/11/2020 with two buildings having results of dye in the sewer and drain (#18, #20). SDE then dye tested the sewer at MH S47SMH3312 and observed dye in the drain MH D31DMH3415 – confirming infrastructure issues. •CCTV of sewer and drain mains started 1/19 & 1/20/2021; one section of drain incomplete •East remaining segment of drain CCTV completed 10/7/2021. CCTV reports and videos received 5/23/2022 – confirmed defects in both sewer and drain mains. •Sewer appears to be original 10" clay pipe that has been CIPP lined. Bulges observed in video suspected to be liner installed over defects in the original clay pipe. Several joints observed in video appear separated – recommend air testing of joints.	Sparks Street D31
3	1640 Cambridge Street	Sanitary lateral connected to drain	IDDE Investigation	2021.03.24	2021.04.95	2021.04.21	City disconnected lateral from storm drain and reconnected to sanitary sewer	Not applicable	Complete	1,000 gpd	Repair was confirmed with a post corrective dye test during year 3	DeWolfe Street D21
3	255 Main Street	Sanitary ejector pump tied to drain manhole	IDDE Investigation	2021.03			Property owner to disconnect ejector pump and reconnect to sewer lateral	Not applicable	2023	TBD	DPW working with property manager to redirect ejector pump.	Broad Canal D07
4	55 Broadway	sanitary lateral notched through top of 54" drain is leaking	Utility repair work	2021.08			Due to the number of utilities in Broadway, it is not possible to change the location of the sanitary service at this time. We will be making arrangements to CIPP line the sewer service to stop the leak.	Not applicable	2023	2,700 gpd (est)	to be included in CIPP lining contract estimated bid fall 2022	Broad Canal D07