

**Illicit Discharge Removal Report
Year 5 (July 1, 2022 - June 30, 2023)**

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	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			City to rehab sewer main and determine condition of #2 Hemlock sewer lateral to repair/line as needed.	Not applicable	City added to remedial contract during Year 6	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 was attempted during year 5 but unable to complete due to a concrete blockage in the mainline.	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			Additional investigation is required prior to making repairs - City Contractor will perform test pits.	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 re-laid with PVC under FY15 remedial contract. Bulges observed in video could be due to compaction issues or bricks observed in photos taken during installation causing joints not to seal properly - recommend test pits. Consider lining of drain.	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. 2023 update: Lateral may not be re-used and instead abandoned/plugged.	Not applicable	2023	2,700 gpd (est)	to be included in CIPP lining contract estimated bid fall 2022	Broad Canal D07
5	6 Marie Ave	partial direct illicit connection (1st floor sink in half bath)	IDDE investigation	2022.07			Corrective action requires work by Owner (internal re-plumbing or remove and cap illicit fixture). City will coordinate with owner and pursue enforcement if needed during Year 6.	Potential	2023/2024	TBD	•SDE dye tests completed 8/11/2021. Four tests; 3 were Legal and 1 was Not Legal (1st floor sink in half bath) •CCTV of main drain line completed 2/16/22 by NWMCC •CCTV report and video for Marie Ave received 7/13/22- confirmed at least one (possibly 2) active drain laterals for #6 Marie Ave •CCTV results and next steps reviewed with City 7/27/22	DeWolfe St D21
5	64 Highland Ave	partial direct illicit connection (basement sink-right side of building)	IDDE investigation	2022.07			Corrective action requires work by Owner (internal re-plumbing or remove and cap illicit fixture). City will coordinate with owner and pursue enforcement if needed during Year 6.	Potential	2023/2024	TBD	•SDE dye tests completed 8/3/2021. 2nd Floor sink Legal; Basement sink (right side of building) Not Legal •CCTV of main drain line completed 2/16/22 by NWMCC •CCTV report and video for Highland Ave drain received 7/13/22 - confirmed an active drain service for #64 with evidence of illicit	DeWolfe St D21

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5	36 Dana St	partial direct illicit connection (basement sink and washing machine #36) and leaking sanitary lateral for #36	IDDE investigation	2023.03			Corrective action requires work by Owner (internal re-plumbing or remove and cap illicit fixtures). City will coordinate with owner and pursue enforcement if needed during Year 6. City will also line both building sewer laterals.	Potential	2023/2024	TBD	<ul style="list-style-type: none"> July 2021: SDE dye test of the basement sink on #36 side showed dye in the drain first (but faint), and then in the sewer more brightly 1 minute later. The basement fixtures are believed to connect to a separate lateral for the downspouts (there are DS into foundation). The first floor fixtures tested legal. At this point we know the lateral that the basement fixtures are tied to is leaking, but it is unconfirmed if the lateral is connected to the drain leaking to the sewer or the other way around. CCTV is requested. Oct 2021: CCTV of main drains on Chatham and Dana complete and they were found to be in poor to fair condition. There were two lateral connections to the drain in front of #36 on the Chatham St side of the bldg. Both appear to be active. Debris of some kind is seen below the drain later further east. Suspect this debris is from the basement sink that SDE tested and now believe this to be an internal plumbing issue that requires the Owner to re-plumb the basement fixtures to the buildings sanitary lateral. March 2023: CCTV of sewer mains and one sewer and one drain lateral were completed. Fine roots observed within sewer lateral. 	DeWolfe St D21
5	3 Gray Gardens West	leaking sewer lateral	IDDE investigation	2023.03			City to line the sewer lateral.	Not applicable	2023/2024	TBD	<ul style="list-style-type: none"> SDE dye tests completed 8/31/2021; all fixtures tested had dye observed in the sewer and drain CCTV of sewer and drain mains completed 2/17/2022. Reports and videos received 7/13/2022 – confirmed one active sewer lateral for #3 Gray Gardens West and no active drain laterals. CCTV of sewer lateral for 3 Gray Garden West incomplete. CCTV/Dye Testing completed March 2023 by Rapid Flow and SDE. Confirmed #3 Gray Gardens West is a leaking lateral. 	Sparks Street D31