ANNE ARUNDEL COUNTY ILLICIT DISCHARGE DETECTION AND ELIMINATION

2016 ANNUAL REPORT

PERMIT NUMBER MD0068306

Submitted to

Anne Arundel County Department of Public Works 2662 Riva Road Annapolis, MD 21401



Submitted by

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1 INTRODUCTION

Under its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit #MD0068306, Part III.E.3., Anne Arundel County is required to implement an inspection and enforcement program to ensure that all discharges to and from the municipal separate storm sewer system that are not composed entirely of stormwater are either permitted by the Maryland Department of the Environment (MDE) or eliminated. The requirements for the permit encompass five main components: field screening of a minimum of 150 storm drain outfalls annually, conducting routine surveys of commercial and industrial drainage catchments to find and eliminate pollutant sources, maintaining a program to address illegal dumping and spills, maintaining appropriate enforcement procedures for investigating and eliminating non-permitted discharges, and reporting of all discharge detection and elimination activities.

The County's program uses outfall field screening to locate illegal storm drain connections or other non-permitted dry-weather discharges through the municipal storm sewer systems. Versar, Inc. (Versar; with LimnoTech as subcontractor) has a contract with the County to perform the field screening. Where dry-weather effluent from municipal storm sewers is found, it is tested for contaminants. If contamination is found, the program requires that it be eliminated or permitted.

Within each area where field crews conduct dry-weather screening of outfalls, Versar and LimnoTech teams also perform routine visual surveys of commercial and industrial drainage areas. Inspectors drive through each commercial and industrial area, looking for signs of pollution. If pollutant sources are present, the field team notifies the County of the possible infraction at the site; the County then reviews the conditions and considers possible enforcement actions.

The Anne Arundel County Department of Inspections and Permits (I&P) maintains an inspection and enforcement program for identifying, reporting, and eliminating non-stormwater discharges into the County storm drain system, which includes illicit dumping and spills. This program is complaint-based with complaints filed by the public, other County inspectors or departments, and the Versar/LimnoTech team. The County agencies requested one outfall inspection and two possible illicit discharge activity investigations by the field teams that had been initiated by complaints during the 2016 reporting period.

In the event of dumping, a spill, or an illegal connection, I&P corrects the situation or refers the matter to MDE for correction. If inspections identify food-waste-related concerns (e.g., overflowing or leaking dumpsters or grease collection facilities), the Anne Arundel County Department of Health corrects the situation. Both County agencies and MDE maintain appropriate enforcement procedures to ensure correction of these activities.

This report summarizes the outfall and commercial and industrial drainage catchment screening activities conducted by Versar and LimnoTech field teams during the 2016 reporting period. The 2016 reporting period extended from August 2015 through June 2016. The report also includes compliance or enforcement updates from illicit discharges, upland pollutant



sources, or structural issues reported during the 2016 reporting period. Additionally, a summary of the final resolution of complaints reported on as unresolved during the previous reporting period is presented in this year's report.



2 METHODOLOGY

2.1 FIELD INVESTIGATION – OUTFALL INSPECTIONS

Dry-weather discharges from illegal sources have a higher likelihood of originating from commercial and industrial land uses (MDE, 1997). Each year, the Anne Arundel County NPDES MS4 Permit Coordinator, or a delegated staff member, coordinates with Versar to identify priority assessment areas in the County that should be investigated for possible illicit discharges to the stormwater system. The target areas frequently encompass towns (e.g., Hanover, Odenton, Ferndale) and are bounded by major roadways or geographical features. Versar uses available digital data provided by the County and Geographic Information System (GIS) tools to examine the area of concern and identify at least 150 specific outfalls to screen in the applicable survey period. The County targets between 80% and 90% of the outfalls in commercial or industrial land use areas and the remainder in residential land use areas. Once per permit term, the County revisits outfalls that had exhibited illicit discharge during previous assessments to confirm illicit discharge elimination. By assessing a different area of the county each year, and returning to sites that exhibited possible illicit discharge conditions in previous survey periods, the County achieves an area-wide review of likely sources of dry-weather discharge throughout the permit period.

The areas targeted for the 2016 field effort included Maryland City, Odenton, Hanover, and Severn. During the 2016 screening effort, Versar staff used GIS desktop analysis to identify target outfalls draining portions of commercial and industrial land uses. During this period, the County requested that assessment teams revisit outfalls that had confirmed illicit discharges in prior years. In addition, the County requested that residential outfalls with pipe diameters of at least 36 inches be added to the criteria for selecting sites. Target outfalls for this subset were concentrated in a general corridor between Laurel and Odenton. To prepare for the field inspections, technicians used the Anne Arundel County's GIS coverage of storm drains and closed storm drain utility grids to create base maps for the target areas. Field crews used these maps in a differential Global Positioning System (GPS) unit to identify the extents of the local networks; the locations of outfalls; and the businesses, facilities, or neighborhoods within the drainage areas.

Field crews inspected 150 outfalls during the reporting period. The crews recorded water chemistry and physical condition of each outfall and its surrounding area in electronic field sheets. Crews documented additional details pertaining to each outfall in the "notes" section of the field sheets. Physical parameters recorded at each outfall included structural condition, deposits, vegetative condition, erosion, floatables, odor, color, and clarity. Crews took photographs of each outfall to document conditions. The inspection methodologies for these physical parameters are presented below. Typically, the size criteria for outfall screening requires at least an 18-inch pipe opening for systems draining commercial areas and a 36-inch opening for residential areas. During the 2016 outfall screening effort, some of the screened outfalls had smaller diameters than these standards specify; any small, but still screened, outfall is included in the tallies and tables in this report.

The field teams' assessments of the structural condition of each outfall involved inspecting the outfall pipe and outfall structure for cracking, spalling, stability, and pipe



separations. Often, outfall pipes or structures can be damaged or impaired by large scour holes at the outfall or severe downstream channel erosion that undermines the storm drain outfall. Other conditions such as excessive debris or pipe corrosion can affect the structural integrity of an outfall. When field teams identified damaged outfalls or situations that could threaten the stability of the storm drain system, they documented the significant factors at the outfall that were affecting the structural integrity of the storm drain pipe or outfall structure on the field data sheets and reported the structural issues to the Anne Arundel County Program Manager; the manager then notified the Infrastructure Management Division (IMD).

Deposits and stains present in an outfall can indicate the past discharge of a contaminant. If field crews observed significant deposits or staining at an outfall, they then investigated areas upstream in the network to determine the source.

Vegetative condition is a physical parameter that can be used to indicate the possibility of excessive nutrients, or chemicals and compounds in a discharge that harm or inhibit growth. If field crews found unusual vegetative conditions at a site, they attempted to determine the cause.

At each outfall, field crews inspected the banks of the channel leading away from the outfall for signs of erosion. Crews documented any significant erosion within 25 feet of an outfall.

If the field crews observed flowing water during a dry-weather screening, they inspected the discharge to determine the presence of floatables. The presence of floatables such as trash, sewage, or oil sheen can be evidence of an ongoing illicit connection, poor housekeeping, or a recent spill. If the crews found significant floatables in the discharge, they attempted to identify the source.

The field crews also recorded whether they detected any odor at each site where they found dry-weather flow. If the crews perceived a rancid-sour, sewage, gas, or other strong odor at a site, they recorded its qualities on the field sheets. These odors can indicate an illegal connection or spill. If the crews detected these odors, they attempted to locate the source.

Field crews documented whether algae growth was present at each outfall. The presence of algae growth may indicate nutrients or sewage contained within the discharge. If the crews found significant algae growth within the storm drain pipe or in the receiving channel, they attempted to identify the source.

Similarly, the color and clarity of the discharge can indicate contaminants in the discharge. A cloudy or opaque discharge typically means that solids are suspended in the effluent. The color of a discharge can be a clue to help assess the composition of the discharge, including chemicals or sewage contained within. If the field team found abnormal color or clarity, field teams attempted to identify the source of the potential contaminant.

In some cases, outfalls were either completely or partially submerged as a result of changing deposition patterns at the outfall or in the downstream channel, or its position in a tidal



area. In these cases, field crews attempted to collect flowing discharge samples from the upstream storm drain structures. Submerged conditions do not necessarily indicate a storm drain structural problem.

Field crews chemically tested dry-weather discharge from outfalls using Chemetrics color comparator test kits (for detergents, phenols, copper, chlorine, and ammonia), an Extech single analyte tester (for fluoride), and a YSI or *In-situ* multi-parameter sonde (for water temperature and pH). All field screening took place following a minimum of 72 hours of dry-weather (i.e., less than 0.10 inches of rainfall). Crews compared the results of the screening tests to "action" criteria, presented in Table 2-1, to determine which results should be considered abnormal and warrant further investigation (action) for possible illicit connections.

If the field teams determined that chemical conditions at an outfall resulted in any tested concentrations above the action criteria, they revisited the site within 24 hours, but at least four hours after the first test. This protocol was followed to account for any discharge anomalies, and to confirm the results of the chemical test conducted on the first visit.

Field crews indicated a possible illicit connection for any outfall with dry-weather flow that was found to have a concentration above any of the action criteria (Table 2-1) during both inspections. Possible illicit connections also included situations where an observable pollutant had been discharged through a storm drain system, but at the time of inspection the system did not exhibit flowing effluent or the discharge did not contain the pollutant. To identify the source of any illicit discharge, the field crews followed the storm drain systems upstream, testing flows through manholes and inlets as necessary and practical, until the source was identified or the discharge could not reasonably be tracked further. Field teams documented evidence of illicit discharges, including the probable cause(s), with photographs.

Table 2-1.	Analytes, testing ranges,	and action criter	ia for dry-weather	discharge screening in
	Anne Arundel County			

Analyte	Effluent Type Indicated	Action Criterion	Minimum Detection Limit	Instrument Range	Kit or Probe
Chlorine (Cl)	industrial, tap water, sewage	$\geq 0.40 \text{ mg/l}^{(a)}$	0.05 mg/l	0 to 5 mg/l	Chemetrics color comparator
Copper (Cu)	industrial	$\geq 0.21 \text{ mg/l}^{(a)}$	0.05 mg/l	0 to 10 mg/l	Chemetrics color comparator
Phenols	dry cleaning	$\geq 0.17~\text{mg/l}^{(a)}$	0.05 mg/l	0 to 12 mg/l	Chemetrics color comparator
Detergents*	sewage, washwater	$\geq 0.5 \text{ mg/l}$ (residential) ^(a)	0.15 mg/l	0.15 to 3 mg/l	Chemetrics color comparator
Ammonia	sewage	≥ 1.0 mg/l ^(b)	N/A	0 to 300 mg/l	Chemetrics color comparator
Fluoride	sewage, tap water	$\geq 0.75 \text{ mg/l}^{(c)}$	N/A	0 to 10 mg/l	Extech fluoride meter
pН	industrial washwater	\leq 6.5 or \geq 8.5	N/A	0 to 14	YSI sonde
Water Temperature	sewage	N/A	N/A	N/A	YSI sonde

- (a) MDE 1997
- (b) CWP 2004a, CWP 2004b, and Pitt 2004
- (c) Anne Arundel County (2011)
- * Field test results may fall below instrument range when using color comparators



Versar staff prepared site-specific reports for each identified major storm drain structural issue found in the field and submitted them to the Anne Arundel County MS4 Program Manager. The Program Manager typically then shared the reports with the IMD to facilitate corrections for the infractions. In some instances, the identified structural issues is associated with non-County-owned infrastructure. In these cases, the Program Manager typically sent copies of the reports to I&P for follow-up site visits, inspections, and appropriate enforcement. Appendix A includes copies of the site-specific reports detailing the major structural issues identified in the field during the 2016 reporting period.

Versar staff prepared and submitted reports of field-identified possible illicit connections to the Anne Arundel County MS4 Program Manager. The Program Manager then sent copies of the reports to I&P to initiate plans for follow-up site visits and inspections for these reported problems, and enforcement action as appropriate. Appendix B includes copies of the reports of possible illicit connections, with details of the findings by Versar and LimnoTech field teams, including any modifications made to update the information in the original reports" to the end of this sentence (moving it from the description for Appendix C to B, as requested below).

During the illicit discharge outfall investigations, some storm drain outfalls were found that were not on the County's digital version of its infrastructure network. In such cases, field teams recorded each new outfall's location with the GPS unit. Versar staff will send the locations of all previously unmapped outfalls found during the field investigations to the County to augment the County's GIS coverage.

2.2 FIELD INVESTIGATION – ROUTINE SURVEY OF COMMERCIAL AND INDUSTRIAL DRAINAGE CATCHMENTS

During the 2016 survey period, field teams conducted routine visual surveys of the drainage areas of commercial and industrial facilities in the general areas of Maryland City, Hanover, and Linthicum Heights to search for signs of polluting activities. These efforts are intended to help the County discover and eliminate any upland pollutant sources. Versar staff used GIS tools to identify areas depicting commercial and industrial land uses, as defined by the Maryland Department of Planning's 2010 land cover data set (Maryland Department of Planning 2010), to facilitate the surveys of these properties. Field crews visited each commercial or industrial property in the designated areas to confirm storm drain system components and to document upland pollutant sources if the teams found evidence of polluting activities during the surveys. Upland pollutant source identification includes evidence of spills or dumping, poor housekeeping, poor maintenance of drainage systems, or other polluting activity not approved by a valid MDE permit. If field teams identified any upland pollutant source, they recorded the evidence on electronic field data sheets and documented the conditions with photographs.

Versar and LimnoTech teams reported evidence of upland pollutant sources to the Anne Arundel County MS4 Program Manager. The Program Manager then typically sent copies of the reports to I&P or the Health Department, as appropriate, to initiate plans for correction. Versar prepared and submitted site-specific reports for any site that the field teams determined required further investigation or correction. Appendix C includes copies of these reports



As part of the County's program to address spills and illegal dumping, the County provides a means to receive complaints from residents to assist in identifying possible problems during regular field activities. The County requested two site investigations based on complaints during the 2016 reporting period.

2.3 DATA ENTRY

Versar staff performed a quality review and transferred appropriate information from the outfall inspection field sheets to an ESRI-format personal geodatabase (a proprietary GIS format that is also compatible with Microsoft Access). The geodatabase has two feature classes – one that conforms to the format required by MDE – and is included in Appendix E of this report. One feature class (for field data) contains a record for each visit to an outfall site; the other feature class (for MDE applications) contains only those field visits that involved successful outfall screening, for initial and second visits (plus two supplemental visits), as appropriate. If field inspections indicated that an outfall had dry-weather flow containing a high concentration of a contaminant, project protocol required that field crews screen the outfall again to verify the results of the initial test. The geodatabase includes the data gathered during the second (and two supplemental) visits as a separate entry from data recorded on the first site visits. geodatabase format specified by the County's permit provides several appropriate values for each of the following parameters: structural condition, deposits, vegetative condition, erosion, floatables, odor, color, and clarity. The "notes" field (in the field feature class) contains any specific details or findings from the field assessment that did not match one of these options; this information can be used as a guide for future maintenance activities.

Appendix D contains two maps that show the locations of assessed sites in the 2016 reporting period. One of the maps shows potential upland pollutant sources identified during the period. The other map shows all outfalls screened in the period, structural or erosion issues identified by field team during the period, and outfalls screened in the three previous years. In 2014, the first year of the County's current permit, the County screened outfalls in the Hanover, Linthicum Heights, and Glen Burnie areas. In 2015, screening continued in these same geographic areas. As stated previously, in 2016, the County conducted outfall screening in the Maryland City, Odenton, Hanover, and Severn areas. During 2017, the County is screening outfalls in the Parole, Glen Burnie, Pasadena, and Southgate communities. For the 2018 effort, the County will concentrate in areas south of U.S. 50. In FY 2019, the County will screen areas north and northeast of Annapolis (e.g., Severna Park, Lake Shore, and Riviera Beach), as was done for the FY 2013 effort.





3 RESULTS

3.1 PHYSICAL FINDINGS

Versar and LimnoTech field teams identified locations where physical issues significantly affected stormwater infrastructure within the targeted areas of Anne Arundel County during the 2016 reporting period; Versar reported the six most critical of these conditions to the County (Table 3-1). Appendix A contains site-specific reports on these six findings.

Table 3-1. Structural issues identified in field inspections and reported to the County during								
the 2016 reporting period								
Location	Town	Outfall ID	Inspection Date	Issue				
8554 Woodland Manor Drive	Laurel	B11F5O001	12/10/2015	collapsed infrastructure				
8201 Dorsey Run Road	Jessup	C10E4O001	01/05/2016	blocked infrastructure				
2633 Rockenbach Road	Fort Meade	N/A	01/05/2016	collapsed infrastructure				
2614 Annapolis Road	Severn	N/A	01/05/2016	collapsed infrastructure				
1275 Odenton Road	Odenton	N/A	01/07/2016	blocked infrastructure				
730 New Waugh Chapel Road	Odenton	N/A	03/09/2016	damaged infrastructure				

3.2 CHEMICAL FINDINGS

Of the 150 outfalls screened by Versar and LimnoTech, 57 had dry-weather flow during the initial site visit. Where possible at each of these outfalls, field crews collected a sample of the effluent and conducted tests on portions of the sample for phenols, chlorine, copper, detergents, ammonia, and fluoride. Field crews also documented air and water temperature and pH during the site visit. Of the screened outfalls exhibiting dry-weather flow during the initial screening, 17 yielded a result above the action criteria limit for one or more of the tested contaminants. Field crews re-screened each of these outfalls, and of those, 14 had concentrations that were above at least one action level when re-tested (Table 3-2). Appendix B contains site-specific reports for the re-tested outfalls that staff identified as potential illicit discharges, as confirmed by two successive elevated chemical test results. The appendix also contains several reports of observed or suspicious dumping and discharge activity.

Appendix E contains the ESRI geodatabase which includes a field data set with 185 field screening attempts, and an MDE-compliant data set which includes 167 records (150 initial tests and 17 re-tests) from the 2016 reporting period. The database structure includes a separate record for each visit to each outfall.



Table 3-2. Potential illicit discharges identified in field inspections during the 2016 reporting period, based on results from re-tests

Outfall	Date of Test	Test Order	Chlorine (mg/l)	Copper (mg/l)	Phenols (mg/l)	Detergents (mg/l)	Ammonia (mg/l)	Fluoride (mg/l)	pН
G13G7O006	03/09/2016	Initial	0.0	0.0	0	0.75	0	0	7.94
	03/10/2016	Re-test	0	0	0	1	2	0.1	7.24
I17C1On	03/10/2016	Initial	0	0	0.45	0.75	0	0	7.67
I17G1Onew	03/10/2016	Re-test	0.35	0	0	0.75	15	0	7.74
V10D00004	04/15/2016	Initial	0.6	0	0	0	0	0.1	7.72
K10D8O004	04/18/2016	Re-test	0.6	0	0	0	0	0.1	7.62
117D50001	04/18/2016	Initial	0	0	0.1	0.1	0	0.3	6.34
I17D5O001	04/19/2016	Re-test	0	0	0	0.2	0	0.4	5.84
117D(0007	04/18/2016	Initial	0	0	0	0.2	0	0.3	4.8
I17B6O007	04/19/2016	Re-test	0	0	0	0.2	0	0.2	4.8
110D(O====-2	04/19/2016	Initial	0	0	0	0.5	10	5	7.95
I19B6Onew2	04/20/2016	Re-test	0	0	0	1.5	0	3.1	7.47
V03D00003	04/21/2016	Initial	0	0	0	0.5	0	0.2	7.36
K02B8O002	04/22/2016	Re-test	0	0	0	0.75	0	0.3	7.65
104470026	04/26/2016	Initial	0.35	0	0	0.1	0	0.2	9.69
J04A7O026new2	04/27/2016	Re-test	0.1	0	0	0	0	0.2	10.99
O06H3Onew	04/26/2016	Initial	0	0	4	0.1	0	0.3	7.04
Quonsonew	04/27/2016	Re-test	0	0	2	0.1	0	0.1	6.88
I04F3O014	05/10/2016	Initial	0	0	0	0.75	0	0.1	8.43
104530014	05/27/2016	Re-test	0	0	0	0.6	0	0.4	8.03
J15H5Onew1	05/20/2016	Initial	0	0	0	0.1	0	0.2	6.25
JISHSOffewi	05/20/2016	Re-test	0	0	0	0	0	0.3	6.3
F09G5O001	06/08/2016	Initial	0	0	0	> 3.0	0	0.4	6.88
F09G3O001	06/09/2016	Re-test	0	0	0	> 3.0	0	0	7.09
112E10001	06/08/2016	Initial	0	0	0	0.1	0	0.2	5.45
I12E1O001	06/09/2016	Re-test	0	0	0	0	0	0.4	5.15
B12G2O001	06/09/2016	Initial	0	0	0	0.1	0	0.2	6.21
D12G2G001	06/10/2016	Re-test	0	0	0	0	0	0	6.2

3.3 UPLAND POLLUTANT SOURCE FINDINGS

Versar and LimnoTech field crews identified 21 upland pollutant sources during the routine survey of the commercial and industrial sites within the targeted areas of Anne Arundel County. Table 3-3 provides a summary of the results of the upland pollutant source investigations. Appendix C contains site-specific reports on these sites.



Table 3-3. Summary of upland pollutant source findings identified during the 2016 reporting period

reportin	ig period		_			
Address	Town	Business Name	Inspection Date	Wash- down Activity	Poor House- keeping (solid waste)	Poor House- keeping (liquid waste)
1710 Midway Road	Odenton	Unspecified	03/03/2016		X	
1044 Robert Crain Highway (MD Route 3)	Gambrills	7-11 store	03/10/2016		X	
1584 and 1586 Annapolis Road	Odenton	Unspecified	01/21/2016		X	
Adjacent to 1604 Annapolis Road	Odenton	Unspecified	01/21/2016		X	
2747 Annapolis Road	Odenton	Baltimore Washington Auto Outlet	03/02/2016	X		
2827 and 2829 Jessup Road	Jessup	Unspecified	03/02/2016		X	
3440 Laurel Fort Meade Road	Laurel	Red Crown Inn	03/02/2016		X	
3452 Andrew Court (rear of)	Maryland City	N/A (Ashley Apartments)	06/10/2016		X	
2739 Annapolis Road (rear of)	Hanover	Unspecified	03/02/2016		X	
3515 Laurel Fort Meade Road	Laurel	Unspecified	03/02/2016		X	
2421 Crofton Lane	Crofton	Clothes Call	03/09/2016		X	
1701 Crossroads Drive (east of)	Odenton	Unspecified	01/20/2016		X	
8567 Brock Bridge Road	Laurel	K1 Auto Sales	12/09/2015		X	
198 Laurel Race Track Road (south corner of)	Laurel	Laurel Race Track	06/10/2016	X		
2431 Crofton Lane (adjacent to)	Crofton	Unspecified	03/09/2016		X	
1115–1159 Annapolis Road	Odenton	Unspecified	01/20/2016		X	
3518 Fort Meade Road (rear of)	Laurel	Unspecified	12/09/2015		X	
8385 Pioneer Drive (and continuing south of)	Severn	N/A (residential)	01/14/2016		X	
1742 Disney Road	Severn	N/A (Provinces Park)	12/10/2015		X	
2294 Blue Water Blvd.	Odenton	Unspecified	03/02/2016		X	
3221 Corridor Marketplace	Laurel	Total Wine	03/02/2016		X	





4 SUMMARY AND CONCLUSIONS

In support of Anne Arundel County's NPDES permit requirements (Condition III.E.3.a, Illicit Discharge Detection and Elimination, NPDES municipal stormwater permit #MD0068306), Versar and LimnoTech field crews screened 150 outfalls for the 2016 reporting period. Appendix E contains the ESRI geodatabase of the results of these visits. Table 4-1 contains a summary of the physical and chemical parameters evaluated in the outfall screening for the period for initial screenings. Note that the table includes the presence of constituents where noted, not just those samples in which the concentrations exceeded criteria.

Table 4-1. Summary of conditions evaluated during initial outfall inspections performed during the 2016					
reporting period					
Condition	Number of Outfalls				
Observable Flow	57				
Chlorine present	13				
Detergents present	48				
Ammonia present	1				
Fluoride present	47				
Excessive vegetation	5				
Algae growth	32				
Cloudy water	5				
Opaque water	1				
Outfall damage	21				
Concrete cracking	2				
Concrete spalling	15				
Sediment deposits	29				
Submerged outfall	2				
Moderate erosion	12				
Severe erosion	4				
Oil sheen	8				
Trash present	54				
Oil/Gas/Sulfur/Sewage odor	4				
Rancid/sour odor	2				
Other than clear color	9				
Note: Some sites had multiple overall total greater than					

Versar and LimnoTech field crews reported six stormwater structures exhibiting major structural or erosion problems within the targeted areas of Anne Arundel County during the 2016 reporting period. Table 5-1 and Appendix A contain details of these findings, and the corrective actions associated with these sites.



Of the outfalls containing dry-weather flow which were screened by Versar and LimnoTech within the targeted areas of Anne Arundel County, 14 yielded results above the action criteria for tested contaminants for two successive screenings during the 2016 reporting period. Table 5-1 and Appendix B contain details of these findings, and the corrective actions associated with these sites.

As required in Condition III.E.3.b, the field program included investigations of commercial and industrial sites in the target areas to determine if any upland pollutant sources were present. Field teams identified 21 upland pollutant during these surveys for the 2016 reporting period. Table 5-1 and Appendix C contain details of these findings, and the corrective actions associated with these sites.

To comply with Condition III.E.3.c, Anne Arundel County maintained an environmental hotline to provide the residents of the County a means for reporting environmental-related complaints, including illegal dumping and spills. Environmental hotline complaints typically involve sediment control issues, illegal grading activities, or potential violations of Critical Area regulations. In the 2016 reporting period, I&P received 48 complaints that were applicable to the NPDES MS4 requirements for Illicit Discharge Detection and Elimination (IDDE); the department filed 24 complaints that were associated with outfall screening and field assessments presented elsewhere in this report and 24 complaints from other sources. Appendix F, which is a summary of the compliance cases that fall under the IDDE program, contains records of these complaints. In the event that illegal dumping or a spill is reported, County personnel immediately mobilize to correct the problem, or refer it to MDE.

As required by Conditions III.E.3.c and d, Anne Arundel County used appropriate enforcement procedures to correct any illicit discharge, upland pollutant source, spill, or illegal dumping activities identified within the County. The Corrections and Enforcement Actions section of this report below describes follow-up actions in further detail for the problems identified during the illicit discharge inspections and routine survey of commercial and industrial drainage catchments (see Table 5-1 and Appendix F).

Condition III.E.3.e of the County's NDPES municipal stormwater permit requires that all efforts to comply with the illicit discharge detection and elimination requirements are documented and submitted with the County's Annual Report. Versar staff prepared the Illicit Discharge Detection and Elimination 2016 Annual Report to comply with this permit requirement. As required, the Recommendations section included below provides documentation of the proposed changes to the program for subsequent efforts, if applicable.



5 CORRECTIONS AND ENFORCEMENT ACTIONS

As presented in Table 5-1, the Anne Arundel County Program Manager sent copies of reports for significant findings from field investigations to the responsible authorities for action. Reports of illicit connections and upland pollutant sources (e.g., leaking dumpsters) identified during the investigations for the 2016 reporting period went to either I&P or to the County Health Department. The Program Manager reported structural issues to IMD to determine ownership of the infrastructure (and whether a stormwater agreement existed with the owner); then, either IMD or I&P would respond, depending on their areas of responsibility. The IMD or I&P Departments then addressed the problems based on whether the infrastructure was publicly or privately owned, respectively. Occasionally, complex cases are not resolved in time for a particular year's report; such cases are typically reported as unresolved. Table 5-2 provides details regarding the ultimate resolution of several unresolved cases described in the previous reporting year.

The Anne Arundel County Department of Inspections and Permits applies a phased approach to eliminating and enforcing illicit storm drain discharges. Phase 1 Enforcement consists of a Violation Notice sent by first class and certified mail to the property owner. The Phase 1 Violation Notice includes an explanation of the violation and requests a written commitment to immediately cease the illicit discharge. Upon written receipt of the commitment to comply, the Department monitors the site for up to 60 days. If compliance is maintained, the violation is considered abated. Should the Department fail to receive written commitment to comply, or if further violations are observed, the Department proceeds to Phase 2 Enforcement. At the Phase 2 Enforcement level, the Department posts a Stop Work Order on the property and issues a \$1000 civil citation to the property owners. The civil citation must be paid and the violation abated or the civil citations are litigated in court. For the 2016 reporting period, the Inspection and Permits Department successfully enforced all illicit discharge complaints and referrals without the need for any referrals to MDE.

Appendix F contains inspection compliance database reports from the I&P Complaint Tracking System for each identified illicit connection, upland pollutant source, or environmental hotline complaint that is relevant to this report. These reports detail County efforts in determining if remediation is necessary and if action was taken.

Table 5-1	1. FY2016	Illicit Discharg	e Detection and Elimination Program: Investigat	ive activities and follow-up actions.	
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
December 9, 2015	NA	8567 Brock Bridge Road	The Versar field team discovered extensive debris around the vehicle storage lot at the above address. Debris evident on-site on December 9 included a collection of large pieces of furniture by the side of the road, several tires and loose debris, a car battery on the ground, and an open and overfilled trash bin. The lack of proper storage may allow trash to blow off-site, blow into the nearby storm drain system, or leach material into the storm drain system.	December 11, 2015: Sent to I&P and HD due to high levels of trash. Might be a zoning issue. December 15, 2015: I&P states this is issue for HD. December 18, 2015: Follow up to HD informing them that I&P is deferring to their enforcement authority. January 19, 2016: HD reports that all trash has been cleaned up. CASE CLOSED	RESOLVED
December 9, 2015		3518 Fort Meade Road	The Versar field team discovered extensive debris deposited near open dumpsters. Debris evident on-site on December 9 included a collection of large pieces of furniture alongside an open dumpster; the field crew noted that they believed the open barrel found between the dumpsters was empty. The field team also observed numerous wood pallets and bagged debris near a partially open dumpster. The lack of proper storage may allow trash to blow off-site or into the nearby storm drain system via the adjacent gutter pan.	December 11, 2015: Sent to I&P and HD due to high levels of trash. Might be a zoning issue. December 15, 2015: I&P states this is issue for HD. December 18, 2015: Follow up to HD informing them that I&P is deferring to their enforcement authority. January 19, 2016: HD reports that all trash has been cleaned up. CASE CLOSED	RESOLVED
December 10, 2015		8854 Woodland Manor Drive	While investigating outfall B11F5O001 for the County dry weather screening effort, a Versar field team discovered collapsed infrastructure at the outfall, located to the east of Woodland Manor Drive. Three evident sections of the large (73 by 48 inches) reinforced concrete pipe were found separated from each other; the End Section and Section 2 were completely disconnected from Section 3 which was still embedded in the ground. The wingwall-style End Section was lying in the lower receiving bed, misaligned with Section 2. The field team documented erosion around Section 3; significant erosion at the site likely created the pit that now holds the disconnected sections.	December 18, 2015: Sent to Infrastructure for their follow up. March 22, 2016: Follow up sent to IMD. May 19, 2016: Email received from IMD. Site determined to be County infrastructure. Staff instructed to develop estimate for repairs. July 13, 2016: IMD update states that they are seeking a bid to repair this problem. Repair likely to occur in winter of 2016 or spring of 2017. IMD will notify WPRP when repairs are completed. CASE OPEN	UNRESOLVED
December 10, 2015	E-2016-0396	1742 Disney Road (Provinces Park)	The Versar field team discovered an uncovered pile of sand and sediment that had been deposited on a corner of a parking lot. The field team documented that the pile of sand and sediment was located immediately adjacent to a storm drain inlet.	December 18, 2015: Sent to I&P for follow up. December 21, 2015: I&P sent complaint to North County Grading Supervisor for follow up. March 22, 2016: Follow up sent to I&P, NCGS. June 1, 2016: Follow up sent to I&P. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P requests information again. July 25, 2016: I&P sent Versar report. CASE OPEN	UNRESOLVED

Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
January 15, 2016	E-2016-33	Annapolis Harbor Center/Church Creek Monitoring Station	Consultants for the County that manage our MS4 monitoring stations discovered a low pH discharge coming from upstream of our instream station along the mainstem of Church Creek, just below MD Route 2. Follow up by I&P found evidence of soapy water discharges in the parking lot areas near the creek. I&P counseled all store managers about proper disposal of mop water.	January 15, 2016: Received from Versar January 15, 2016: Sent to I&P for follow up. Requested case number. January 15, 2016: Investigated by I&P. Found evidence of soapy water discharge in parking lot areas near creek. All relevant businesses counseled on proper disposal of mop water. February 29, 2016: During routine MS4 station maintenance, light suds again were observed on Church Creek. February 29, 2016: I&P informed about issue. March 1, 2016: During an inspection, the I&P inspector spoke with the Harbor Center property manager who admitted that vehicle washing was taking place in parking lot. Informed that such activities were illegal and counseled not to allow such activities. Re- inspection planned in 30 days. May 12, 2016: Several inspections since March 1 have resulted in continued interactions with business owners and the property manager at this location. Since March 13, there have been no additional reports or observations of suds entering the storm drain system, so I&P considers this case resolved.	RESOLVED
January 13, 2016	E-2016-32	The Village at Odenton Station	A Versar field team observed illegal dumping activity in the Odenton area. The team reported observing a janitor dumping liquid out of a bucket directly into the storm drain inlet located in the parking lot. The team reported that the janitor had walked from the building on the southeast corner of the complex to empty the bucket in the drain located directly in front of the building. The field crew did not have adequate time to obtain a photograph of the incident.	January 13, 2016: Received from Versar. January 19, 2016: Sent to I&P for follow up. January 21, 2016: Inspection performed by I&P. No dumping observed. February 11, 2016: During an unscheduled inspection of this site, a janitor was observed dumping wash water into the storm drain. The janitor was counseled about the proper disposal of mop water and was instructed to inform all employees working at this location about this issue. CASE CLOSED	RESOLVED

Table 5-1. (Continued)							
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
August 14, 2015	E-2015-517	1034 MD Route 3 North (Shoreline Seafood)	A Versar field team conducted a site visit to the outfall associated with the rear lot of shoreline seafood. At the time of the field visit, the outfall contained backed up water, but a small amount was flowing. The field team noted that the water was rancid-sour smelling, brown in color, and cloudy. The team obtained a sample of the effluent and performed chemical tests, which resulted in failure of the outfall due to unacceptable levels of detergents, ammonia, and pH. There was no obvious sign of illicit discharge input to the curb inlet, but the team noted a large quantity of gallon jugs full of waste cooking oil placed on top of the inlet slab.	August 14, 2015: Versar performs site visit. August 28, 2015: I&P inspected site. Parking lot cleaned. Inlet needed cleaning. I&P instructed property owner to clean inlet. September 8, 2015: Inlet cleaned. Parking lot and dumpster clean. CASE CLOSED	RESOLVED		
August 14, 2015	E-2015-516	2124 Priest Bridge Road (Patuxent Companies)	A Versar field team inspected the Patuxent Companies site and associated stormwater network in Crofton. Staff surveyed the property adjacent Patuxent Materials yard, and dry pond abutting Priest Bridge drive. Staff noted dry weather flow in the outfall, which was characterized as oily in odor, cloudy brown, and had an oily surface sheen. Detergents tested above the acceptable range (0.75 mg/l).	August 14, 2015: Inspection by Versar. August 17,2015: Reinspection by Versar. August 26, 2015: I&P inspection showed no issues. Site judged to be in compliance. CASE CLOSED	RESOLVED		
July 6, 2015		Hamilton Harbor Marina	A complaint received from the US EPA from their hotline. A citizen expressed a concern about sewage spills into the Magothy River from the marina. The site was inspected by the Health Department and no violation was found. The inspector reported that a backup had occurred in the restroom facilities at the marina on 7/4/15, possibly due to a blockage in the waste line or a failing grinder pump. It was noted that the marina hired a plumber who snaked the waste line on 7/4/15 and that the County replaced the grinder pump on 7/6/15. At the time of inspection, there was no reported evidence of sewage backed up underneath the docks.	July 9, 2015: Complaint received from EPA. July 9, 2015: HD informed. July 13, 2015: HD inspection found no sewage backups or other issues. The property owner informed the inspector that corrective actions had been taken and the inspector found the marina in compliance. CASE CLOSED	RESOLVED		
July 20, 2015		2664 Riva Road	Staff from WPRP discovered that a contractor working on the parking lot dumped excess tar down a storm drain inlet. Our Facilities Management Division was informed and the contractor was instructed to remove the tar.	July 20, 2015: WPRP staff discovers issue. July 20, 2015: County Facilities Management Division informed. July 21, 2015: County Facilities Management Division instructed contractor to correct issue. Re-inspection shows issue resolved. CASE CLOSED	RESOLVED		

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
July 19, 2015		2015 Martins Grant Court (Serenity Acres Treatment Center)	A complaint received via the US EPA NPDES Enforcement Branch. A citizen concern was forwarded regarding septic work completed at the Treatment Center. An accusation was made that recent repairs were made to the system by unlicensed contractors without proper permits.	July 19, 2015: Complaint received by US EPA. July 24, 2015: Complaint received by County from EPA. July 24-Aug 2, 2015: Inspection by HD. No issues observed.	RESOLVED		
September 14, 2015	E-2015-0576	959 Morgan Drive	A complaint received via the US EPA NPDES Enforcement Branch. A citizen concern was forwarded regarding discharge of chlorinated swimming pool water into the storm drain. I&P inspected the property and counseled the property owner about the proper disposal of swimming pool water.	CASE CLOSED September 14, 2015: Complaint received by US EPA. September 30., 2015: Complaint received by County from EPA. September 30, 2015: Complaint sent to I&P. October 1, 2015: Inspection by I&P. Property owner counseled about proper disposal of swimming pool water. CASE CLOSED	RESOLVED		
November 4, 2015	E-2015-0622	8335 Beachwood Park Road	Citizens reported to Rec and Park staff about a grey water discharge from a property boarding Beachwood Park. The complaint was forwarded on to I&P for action. It was discovered that a laundry sink had a direct discharge to the outside via a sump pump instead of to the septic system.	November 4, 2015: Complaint received by WPRP. November 4, 2015: Complaint sent to 1&P. November 5, 2015: Inspection by I&P confirmed evidence of grey water discharge. Spoke with property owner about the plumbing arrangement within the property. Property owner was instructed to hook up the sink to the sanitary sewer line within the home and stop discharging via the sump pump. December 28, 2015: Re-inspection by I&P found issue still not corrected. No evidence of any discharge observed. I&P inspector will determine if the solution outlined during first inspection is actually necessary, given current circumstances. March 22, 2016: Follow up sent to I&P. May 19, 2016: Sink removed, so issue resolved. CASE CLOSED	RESOLVED		

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
January 21, 2016	11601520	1584 and 1586 Annapolis Road	A Versar field team found evidence of inadequate waste management in a shared parking lot in Odenton. Several businesses occupy the building at 1584, so the field team could not determine which organization(s) may have been responsible for the debris. In the northeast corner of the parking lot, generally behind the building at 1586, the field team found an open dumpster and large debris, including a mattress and box spring, a kitchen grease receptacle, and a weather-worn plastic barrel.	February 1, 2016: Received from Versar. February 9, 2016: Sent to HD. March 1, 2016: Follow up with HD on status. March 2, 2016: Reply from HD. Inspection performed on Feb 11. February 29, 2016: Property owner contacted by HD. Site visit planned soon. March 3, 2016: Inspection by HD found all large debris and most small debris has been removed. CASE CLOSED	RESOLVED		
January 21, 2016	11601510	1604 Annapolis Road	A Versar field team found evidence of inadequate waste management in an apparently vacant lot adjacent to 1604 Annapolis Road, in Odenton. In the vacant lot, the field team found an open dumpster and excessive debris, including a tire, and traffic cones.	February 1, 2016: Received from Versar. February 9, 2016: Sent to HD. March 1, 2016: Follow up with HD on status. March 2, 2016: HD inspected site on Feb 11. Site was corrected and case was closed. CASE CLOSED	RESOLVED		
March 2, 2016	1160210	3221 Corridor Marketplace (Total Wine)	A Versar field team identified several waste management issues near and associated with the business, Total Wine. In an area between the dumpster the team discovered numerous loose shopping carts overloaded with cardboard and open plastic bags of debris. In an area near the loading dock, the team found loose plastic deposited or trapped near a storage area for shopping carts and loose debris and broken glass near the same set of carts, near the dumpster. On the southeast edge of the parking lot, nearest the Total Wine store, the field crew discovered a long line of loose debris along a chain link fence. Where there was a break in the fence line, the field crew observed more loose debris further down the hill (toward Interstate 295); debris in this area included cardboard, plastic bags, food wrappers, plastic bottles, Styrofoam food containers, and an old shopping cart.	March 7, 2016: Received from Versar. March 8, 2016: Sent to HD for review. March 17, 2016: HD inspector counseled business manager to keep dumpster lids and doors closed. Instructed to address trash on property. CASE CLOSED	RESOLVED		
March 2, 2016		3440 Laurel Fort Meade Road (Red Crown Inn)	A Versar field team found an overfilled dumpster with debris scattered around it on the north side of the Red Crown Inn. Near the dumpster, the crew noted several large pieces of debris (including a mattress, a box spring, and a door) stored alongside the building.	March 7, 2016: Received from Versar. March 8, 2016: Sent to HD. March 10, 2016: HD inspector found all trash outside dumpster removed and that it was scheduled to be emptied tomorrow. CASE CLOSED	RESOLVED		

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
March 2, 2016	11602900	3515 Laurel Fort Meade Road (Brockbridge Center)	A Versar field team found several waste management issues associated with businesses in the Brockbridge Shopping Center. The team found two open dumpsters (one overfilled) with large pieces of debris placed nearby (a flat panel, a mattress, and a box spring) behind Aaron's Rentals. At the front entrance to the parking lot, the team documented a television and a cabinet that had been deposited on the grass.	March 7, 2016: Received from Versar. March 8, 2016: Sent to HD. March 17, 2016: HD inspector counseled business managers on proper housekeeping and management of dumpster areas. Trash removed.	RESOLVED		
March 2, 2016		Rear of 2739 Annapolis Road	A Versar field team noted several pieces of discarded bulk items/trash along an access road located between 2739 and 2747 Annapolis Road. At the time of the visit, the field team documented dirty conditions in the gutter pans and much staining. On a vacant lot on the east side of the road, the field team found many pieces of general trash, including large cardboard boxes. On the west side of the road, the team found and documented a discarded sofa.	March 7, 2016: Received from Versar. March 8, 2016: Sent to IMD for their review. March 9, 2016: IMD suggests Road Ops for this issue. March 22, 2016: Sent to Road Ops for their review. March 22, 2016: Road Ops says this is a private road, cleanup must be done by owner. CASE OPEN	UNRESOLVED		
March 2, 2016	E-2016-0097	2294 Blue Water Blvd	A Versar field team discovered what appeared to be a large uncovered pile of road de-icing salt in the parking lot on the west side of the rear parking lot of the Seven Oaks Shopping Center. The field crew noted that a line of residue leading from the area of the pile along the side of the parking lot to the storm drains.	March 7, 2016: Received from Versar. March 8, 2016: Sent to 1&P. March 17, 2016: Inspection finds salt pile cleaned up. CASE CLOSED	RESOLVED		
January 20, 2016	11601500	1115-1159 Annapolis Road (Odenton Shopping Center)	A Versar field team found evidence of inadequate waste management related to businesses in the rear strip of Odenton Shopping Center. The team observed several dumpsters with open lids, among the many. The team could not determine which specific establishment might be responsible for the negligence in each case. There is also a receptacle for kitchen grease with dark stains on the pavement around the rear door and the receptacle.	February 1, 2016: Received from Versar. February 9, 2016: Sent to HD. March 1, 2016: Follow up with HD on status. March 2, 2016: Site inspected on Feb 11. Issues corrected and case closed on March 1. CASE CLOSED	RESOLVED		

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
January 5, 2016	E-2016-0054	2614 Annapolis Road (Pizza Hut)	A Versar field team discovered collapsing infrastructure associated with the curb-opening inlet and the outfall pipe. At the curb behind the restaurant, field crews documented that the curb inlet and outfall pipe were subsiding, yet still connected. The topsoil behind the catch basin had eroded, exposing the fill. The team documented that the catch basin is separating from the top slab as it sinks. The field team observed that a nearby portion of the sidewalk was also resting on eroding soil.	February 1, 2016: Received from Versar. February 9, 2016: Sent to I&P. March 1, 2016: Follow up with I&P on status. March 3, 2016: I&P inspector has made contact with property owner to discuss issue. March 22, 2016: Follow up sent to I&P inspector on case. March 23, 2016: I&P inspector states that he will follow up with the property owner and their contractor the first week of April. April 6, 2016: I&P held meeting with contractor to discuss issues needing repair. Work to begin in 2 weeks. Inspection to occur after completion of work. May 4, 2016: All work completed. CASE CLOSED	RESOLVED		
January 14, 2016		Pioneer Drive Trash Incident	A Versar field team found evidence of extensive residential trash dumping. The team observed debris scattered along a long strip of woods, beyond the fence lines, on the west side of Pioneer Drive, generally between Indian Drive and Richfield Drive. When the field team found outfall H10E5O001, they also discovered two mattresses that had been dumped in the wooded area near the. As the team arrived at the section of woods at the southwestern corner of the townhouse unit group including 8385 Pioneer Drive, team members discovered a dumping area under the evergreen trees that included newer trash that had been deposited on top of the older trash that was already there; newer items included toys, a bicycle, and shoes.	February 1, 2016: Received from Versar. February 9, 2016: Sent to I&P, who forwarded them on to the Western Road Operations group in DPW. March 1, 2016: Requested Western Road Ops contact person I&P sent this case to. March 2, 2016: I&P sent contact info. March 22, 2016: Follow up sent the Western Road Ops staff. March 23, 2016: Road Ops reports that they will remove all litter and debris in the ROW. They will report back when work is completed. June 2, 2016: Follow up sent to Road Ops June 7, 2016: Road Ops reports that clean occurred on County ROW in vicinity and that townhome community has its own maintenance people cleaning up the private areas, too. CASE CLOSED	RESOLVED		

Table 5-1. (Continued)					
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
January 20, 2016		Crossroads Drive Trash Incident	A Versar field team found evidence of extensive roadside dumping along Crossroads Drive. The field team noted that the stretch of road just east of 1701 is frequently used by tractor-trailer drivers as a temporary parking area. Some of the debris found on the hillsides along the road was related to vehicles.	February 1, 2016: Received from Versar. February 9, 2016: Sent to I&P, who forwarded them on to the Western Road Operations group in DPW. March 1, 2016: Requested contact person I&P sent these to so follow can be obtained. March 2, 2016: I&P sent contact info. March 22, 2016: Follow up sent the Western Road Ops staff. March 23, 2016: Road Ops reports that they will remove all litter and debris in the ROW. They will report back when work is completed. June 2, 2016: Follow up sent to Road Ops. June 7, 2016: Road Ops reports that ROW area has been cleaned. CASE CLOSED	RESOLVED
January 5, 2016	E-2016-0133	8201 Dorsey Road	A Versar field team discovered the outfall crushed and buried in sediment. The team determined that the opening of the corrugated metal pipe had been so reduced in size that it may no longer effectively function; the outfall opening was surrounded by possible remnants of fill dirt and well-established vegetation.	February 1, 2016: Received from Versar. February 9, 2016: Sent to IMD. March 1, 2016: Follow up sent to IMD. March 21, 2016: IMD reports this is not their issue. March 22, 2016: Sent to I&P for their review. April 8, 2016: I&P inspection finds that pipe is bypassed by new construction and does not receive stormwater inputs any longer. Pipe is out of commission. CASE CLOSED	RESOLVED
January 7, 2016		1275 Odenton Road (O'Malley Senior Center)	A Versar field team found the outfall almost completely buried in mud and sediment. The field team noted that the outfall was in a small depression that contained liquid - possibly effluent - with an oily sheen.	February 1, 2016: Received from Versar. February 9, 2016: Sent to IMD. March 1, 2016: Follow up sent to IMD. March 21, 2016: IMD reports this is not their issue. March 22, 2016: Sent to I&P for their review. March 23, 2016: Inspection by I&P shows pond retrofitted. No signs of issues identified during Versar site visit. CASE CLOSED	RESOLVED

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
January 5, 2016	E-2016-0306	2633 Rockenbach Road	A Versar field team observed the southeast side of the outfall, the rocks and plastic of the rip rap, intended to stabilize the bank, had been dislodged and pushed downstream. The flared end section of the outfall on the same side showed signs of crumbling during. The erosion had started to undercut the outfall, so that the opening was found to be no longer fully supported underneath. The force of the runoff coming out of the pipe had eroded the opposite bank, exposing tree roots.	February 1, 2016: Received from Versar. February 9, 2016: Sent to IMD. March 1, 2016: Follow up sent to IMD. March 21, 2016: IMD reports this is not their issue as they think it's in an SHA ROW. March 22, 2016: Sent to SHA for their review. March 28, 2016: SHA reports that this is not in their ROW. May 31, 2016: Sent to I&P for possible follow up. June 3, 2016: I&P reports case not open yet. Research about site underway. July 18, 2016: Follow up sent to I&P. July 21, 2016: Case has been opened. Extensive erosion reported by I&P during inspection. Waiting for property owner response. CASE OPEN	UNRESOLVED		
February 9, 2016	E-2016-0053	Outing Park/Green Haven	Discharged discovered by IMD staff. Reported to I&P. Inspection revealed that it appears that someone had dumped fire pit debris in inlet.	February 9, 2016: Received from IMD field staff. February 9, 2016: Reported to I&P February 10, 2016: Inspected by I&P. Forwarded on to Road Operations to clean inlets. Case closed for I&P. March 2, 2016: Status request from Road Operations. March 22, 2016: Status request from Road Ops. April 19, 2016: Versar retest found no actionable levels of contaminants. April 25 and 27, 2016: No actionable levels found in I&P tests. No smells from inlet. Interview with nearby property owner by I&P inspector found no dumping observed by said property owner. April 27, 2016: Inspection by DPW Road Operations found no issues needing attention. May 2, 2016: I&P closed complaint due lack of evidence of an issue. Likely a one-time input into the system. CASE CLOSED	RESOLVED		

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
February 18, 2016	E-2016-0061	Furnace Branch	WPRP staff observed a turbid water discharge in Furnace Branch during monitoring work there. The outfall was identified and I&P was informed. An inspection was done by I&P and the source was traced to sewer line repairs being done in the residential area upstream. The contractor was ordered to stop work until proper S&EC work was done.	February 18, 2016: Reported issue to I&P February 18, 2016: Inspection done by I&P. Source found and corrected and the gutter and curb were cleaned. CASE CLOSED	RESOLVED		
March 3, 2016	E-2016-0093	1710 Midway Road	A Versar field team investigated the site of a paving operation along the front of the long warehouse on the side of Midway Road and found two piles of material deposited on impervious surfaces near the paving area. The team found a pile of sand in the southeast corner of the parking lot. There was evidence that vehicles had dispersed some of the sand throughout the parking lot. The team also found a pile of crushed concrete along the edge of the cul-de-sac of Midway Road.	March 7, 2016: Received from Versar. March 8, 2016: Sent to I&P. March 10, 2016: Inspection by I&P finds active work and improvements on-going. Work will be monitored until completed. June 1, 2016: Follow up sent to I&P. June 8, 2016: I&P inspector met with owner. Owner is in process of finding new contractor to complete work. I&P will continue monitoring site. June 30, 2016: Repairs underway. I&P monitoring continues. Review due on July 29. July 21, 2016: Follow up by I&P reports that repairs are under way. July 25, 2016: All asphalt repairs complete. Case Closed.	RESOLVED		
March 2, 2016	E-2016-0094	2747 Annapolis Road	A Versar field team observed possibly improper vehicle washing activity in the parking lot of the Baltimore Washington Auto Outlet business at the above address. The business activities include used car sales and auto detailing services; a sign advertises hand washing and detailing services for vehicles. When the field crew approached the lot, crew members witnessed an employee from the business power washing vehicles in the parking lot.	March 7, 2016: Received from Versar. March 8, 2016: Sent to I&P for follow up. March 22, 2016: Status request sent to I&P. March 15, 2016: Inspection finds no issues. Buckets observed on site were not leaking, so no issues with stormdrain system. No signs of power washing noted in I&P report. CASE CLOSED	RESOLVED		
March 2, 2016	E-2016-0096	2827 Jessup Road	A Versar field team investigated one or more parcels, located at 2827 and 2829 Jessup Road being utilized as storage lots for miscellaneous construction debris and discarded furniture for a possible issue with waste management. The team also found a collection of buckets stored outdoors that the team surmised contained roofing or asphalt sealing tar. The team did not investigate the buckets to determine if any of them still contained roofing materials.	March 7, 2016: Received from Versar. March 8, 2016: Sent to I&P for follow up. Not sure if this is an issue for them. Asked for a determination in transmittal. March 15, 2016: I&P inspection finds site drainage not connected to stormdrain system. No stormwater management agreement. No violations observed. CASE CLOSED	RESOLVED		

Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
March 9, 2016	E-2016-0111	730 New Waugh Chapel Road (infrastructure)	A field team consisting of Versar and LimnoTech staff discovered a damaged yard inlet associated with outfall G13G70006, behind the BGE maintenance lot. At the slab top yard drain nearest to the outfall, the field crew noted that the soil had collapsed on the side facing the wooded area. Staff also documented that the concrete lid had shifted and was loose at the time of the inspection.	March 15, 2016: Received from Versar. March 15, 2016: Sent to Road Ops for their review. March 21, 2016: Road Ops states that this is not their responsibility. March 22, 2016: Sent email to sort responsibilities between Road Ops and IMD on this matter. IMD confirmed that this is not their issue. Sent to I&P for their review and comment. March 23, 2016: IMD confirms this is not their issue. June 1, 2016: Sent to I&P for follow up. June 3, 2016: I&P assigned inspector to issue. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P reports issue resolved and case closed.	RESOLVEI
March 10, 2016	11610290	1044 Robert Crain Highway (7-11)	A Versar field team discovered a waste management issue associated with the 7-11. The team documented a litter problem on the northeast side of the parking lot, along an adjacent wooded area; this region had accumulated an excessive amount of debris.	March 15, 2016: Received from Versar. March 15, 2016: Communication from JM saying not likely any enforcement March 15, 2016: Sent to Zoning enforcement for their review. March 22, 2016: Status update requested. March 23, 2016: Zoning reports that the type of trash observed is not the kind described in code, so they have no real authority here. Sent email to HD, I&P seeking advice on how to proceed. March 23,2016: HD agreed to open case. June 1, 2016: Follow up sent to HD. June 7, 2016: Case opened and site inspection on June 6. Trash was observed; management notified that area needed to be cleaned. Re-inspection planned in seven days. Wooded area split between 7-11 at 1044 and Shoreline Seafood at 1034. June 13, 2016: Reinspection found nearly all items removed. June 15, 2016: All trash along property cleaned. Woods not owned by 7-11, so they cannot address this issue. Case considered closed. CASE CLOSED	RESOLVED

Table 5-1	Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
March 9 and 10, 2016	E-2016-0111	730 New Waugh Chapel Road (IDDE)	A field team composed of Versar and LimnoTech staff inspected the outfall, G13G70006, behind the BGE maintenance lot and its associated stormwater network. Staff found the outfall in the woods behind the lot and observed that the water in the outfall was stagnant; field team members detected the sound of flowing water in the pipe. They followed the pipe network to the next available observation point – a slab top yard inlet located in the grassy area behind the lot near the edge of the woods. Within the inlet, staff members observed clear flowing water; they obtained a water sample to test for possible illicit constituents. Detergents tested above the acceptable range (1 mg/l); ammonia was also elevated (2 mg/l).	March 15, 2016: Received from Versar. March 15, 2016: Sent to I&P for their follow up. March 22, 2016: Follow up to I&P sent. March 30, 2016: Versar and I&P conduct more testing. Site is above action level for detergents, but a natural ground water source is suspected April 1, 2016: I&P and BGE inspectors perform additional testing and find detergents above action levels. Again, a natural ground water source is suspected as the parent materials are known to be high in sulfur compounds and phosphates. Detergent test is known to be sensitive to these parameters. June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P inspector assigned to case. July 18, 2016: Follow up sent to I&P. July 21, 2016: MDE inspector performed site visit on June 28 and found no issues. MDE may require a SW permit for this location.	RESOLVED		
March 9, 2016		2421 Crofton Lane (Clothes Call)	A field team composed of Versar and LimnoTech staff found several waste management issues associated with an area of the parking lot adjacent to 2421 Crofton Lane. The team found a dumpster with an open side panel during the site visit and several bulk items deposited in the parking lot as well as various kinds of loose debris among vehicles in the parking lot. Note that staff had visited this parking lot in 2015 and reported issues with open dumpsters and scattered debris.	March 15, 2016: Received from Versar. March 15, 2016: Sent to HD for their review. March 22, 2016: Status request sent to HD. March 23, 2016: HD confirmed receipt of case. Inspection pending. March 24, 2016: HD inspection confirmed issue. Inspector spoke with property manager about trash and asked for site cleanup. April 7, 2016: HD re-inspection found site in order. Property manager counseled that a second dumpster might be best for site to ensure compliance with trash rules. CASE CLOSED	RESOLVED		

Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status	
March 10 and 11, 2016	E-2016-0131 11610290	1034 Crain Highway (Shoreline Seafood)	A Versar field team inspected the outfall behind the Shoreline Seafood lot on the southwest side of the parcel. Note that Versar field crews had documented potential illicit discharge conditions at this site on August 14, 2015. Staff found the outfall in the woods behind the lot and observed that the water in the outfall was stagnant. The team observed that the water was cloudy and greyish; the rocks and surfaces in the water had a purple-red deposition on them. In one area, the water trapped in the rip rap had an oily sheen. The team noted that the water had a faint smell of seafood by-products. The field team inspected the storm system leading to the outfall and noted that the storm drain was open with an absorbent sock across the inlet opening. Although the team members did not detect flow at the outfall, they collected and tested a water sample from the pool. Detergents and phenols concentrations were above the acceptable ranges in the sample taken. The business owner reported that business staff had washed the interior of a truck earlier in the day, to conform to Health Department regulations. He also claimed that the inlet drain has a treatment filter installed in it and that the filter is pumped out occasionally.	March 23, 2016: Report received from Versar. March 23,2016: Sent to HD, I&P for follow up. June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that case closed on April 7 following I&P inspection showing trash cleaned up, straw placed on all bare soil, and no washing observed. June 7, 2016: HD reports trash to be cleaned up near this location. CASE CLOSED	RESOLVED	
April 15, 2016	E-2016-0186	517 Wet Sand Drive	A Versar field team inspected the outfall, K10D8O001, located south of Old Oak Road, alongside the Knopps Greenhouses facility and observed that the water in the outfall was flowing. The field staff tested the discharge at the outfall; results indicated elevated chlorine concentrations (0.6 mg/l). The team followed the pipe network to an inlet near the corner of Wet Sand Drive and Grassland Road – in front of 517 Wet Sand Drive – where they observed the initiation of a pulse of water flowing from a 3-inch PVC pipe that had been connected to the inlet box. Staff noted a chlorine odor at the inlet.	April 21, 2016: Report received from Versar. April 22, 2016: Sent to I&P. June 1, 2016: Follow up sent to I&P. June 3, 2016: Report from I&P states case closed on May 4. No evidence of illicit discharge observed. Likely sump pump drainage from system installed when community built. CASE CLOSED	RESOLVED	
April 18 and 19, 2016	E-2016-0053	Escalon Avenue	A Versar field team inspected the outfall, Q09C3O001, located east of Escalon Avenue as per County request to investigate a possible illicit discharge. Staff observed that the water in the outfall was flowing; staff noted that the water was clear, and the receiving deck had an excessive amount of algae growth. The field team also detected a sour, rancid smell in the vicinity of the outfall. The field staff collected a sample of the discharge at the outfall to test for possible illicit constituents. Detergent levels tested above the acceptable range for the sample taken. Several contaminants had detectable concentration levels although none was above action levels. The team found flowing water in a manhole on the eastern side of Escalon Avenue; the flowing water originated from the pipe connected to the western side of the neighborhood. On the western side, staff observed low levels of standing water in several access points to the stormwater infrastructure.	April 21, 2016: Report received from Versar. April 22, 2016: Sent to I&P. June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that that issue was forwarded on to DPW Road Ops for their review and action. Road Ops reported back that no action was needed on their part. Low levels of detergent, below action levels, were observed. Likely an isolated event. Case closed. CASE CLOSED	RESOLVED	

	Table 5-1. (Continued)					
I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
E-2016-0197	Crofton Center	A LimnoTech field team inspected the target outfall, I17B6O007, which is located on the west side of Crain Highway, opposite the Crofton Centre shopping center in Crofton, MD. At the 72-inch outfall, the field team observed a rust-colored discharge; the team obtained a sample to test for illicit discharge indicators. The result for pH indicated a reading below the acceptable range. The crew determined that the flow was coming from the drainage line leading east under the parking lot of Crofton Centre. At the manhole in the parking lot just southeast of the Wells Fargo branch, the team observed flow; a test result indicated a pH of 5.66.	April 26, 2016: Received from Versar. April 28, 2016: Sent to I&P. June 1, 2016: Follow up sent to I&P. June 3 2016: Database entry describes delayed inspections due to extended wet weather. I&P inspection performed on May 27. Test showed pH just outside of acceptable level at 6.25. Attributed to contaminated ground water infiltration Multiple locations in this area have been tested with similar result, attributed to acidic soils known to be present in area. Case closed but will continue monitoring after extended dry period.	RESOLVED		
E-2016-0198	Martha Greenleaf Drive	A LimnoTech field team inspected target outfall I17D5O001 near Martha Greenleaf Drive in Crofton, MD. The team observed a discharge flowing from the pipe; the team obtained a sample to test for illicit discharge indicators. The result for pH indicated a reading below the acceptable range. The team tracked the flow up the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage system.	April 26, 2016: Received from Versar. April 27, 2016: Sent to I&P for follow up. June 1, 2016: Follow up sent to I&P. June 3 2016: Database entry describes delayed inspections due to extended wet weather. I&P inspection performed on May 27. Test showed pH just outside of acceptable level at 6.25. Attributed to contaminated ground water infiltration Multiple locations in this area have been tested with similar result, attributed to acidic soils known to be present in area, similar to circumstances in E-2016-0197. Case closed but will continue monitoring after extended dry period. CASE CLOSED	RESOLVED		
E-2016-0207	1300 Concourse Drive (Embassy Suites)	Versar field staff conducted a site visit to outfall I03E8O003 near the above address. Discharge from this outfall has demonstrated high concentrations of illicit discharge indicators in the past. In 2016, the field team observed flowing water at the outfall and obtained a sample of the water for testing. The results of field tests showed elevated chlorine levels that were not above the corresponding action level. The team inspected the loading dock area of the Embassy Suites hotel. As team members approached the rear of the establishment, they observed evidence of a significant amount of wash water in the parking lot, starting from a point immediately behind a loading dock, and leading across the rear parking lot.	April 27, 2016: Received from Versar April 28, 2016: Sent to I&P. June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that inspection occurred on April 29. No evidence of illicit discharge observed. Hotel maintenance chief reminded that no dumping of mop buckets or power washing with soap of the loading dock is allowed. He was told that power washing without soap is permitted.	RESOLVED		
	E-2016-0198	E-2016-0198 E-2016-0207 Crofton Center Martha Greenleaf Drive 1300 Concourse Drive (Embassy)	E-2016-0198 Martha Greenleaf Drive Martha Greenleaf Drive Martha Greenleaf Drive E-2016-0207 E-2016-0207 Martha Greenleaf Drive Martha Greenleaf Drive in Crofton, MD. The team observed a discharge flowing from the pipe; the team obtained a sample to test for illicit discharge indicators. The result for pH indicated a reading below the acceptable range. The team tracked the flow up the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage system. Versar field staff conducted a site visit to outfall I03E80003 near the above address. Discharge from this outfall has demonstrated high concentrations of illicit discharge indicators in the past. In 2016, the field team observed flowing water at the outfall and obtained a sample of the water for testing. The results of field tests showed elevated chlorine levels that were not above the corresponding action level. The team immediately behind a loading dock, and leading lot, starting from a point immediately behind a loading dock, and leading dock, and leading dock, and leading dock area of the Embassy Suites hotel. As team immediately behind a loading dock, and leading dock area of the Embass Suites hotel. As team immediately behind a loading dock, and leading dock area of the Embass Author of the adding dock, and leading dock area of the Embass Author of the adding dock area of the Embass Author of the adding dock area of the Embass Author of the adding dock area of the Embass Author of the adding dock area of the Embass Author of the adding dock area of the Embass Author of the A	A LimnoTech field team inspected the target outfall, 117B60007, which is located on the west side of Crain Highway, opposite the Crofton Centre shopping center in Crofton, Mb. At the 72-inch outfall, the field team observed a rust-colored discharge, the team obtained a sample to test for lifted idscharge indicators. The result for pH1 indicated a reading below the acceptable range. The crew determined that the flow was coming from the drainange line leading cent set under the parking lot of Crofton Centre. At the manhole in the parking lot just southeast of the Wells Frago branch, the team observed flow; a test result indicated a pH of 5.66. A LimnoTech field team inspected target outfall 117D50001 near Martha Greenleaf Drive in Crofton, MD. The team observed a discharge indicators. The result for pH1 indicated a reading below the acceptable range. The team tracked the flow up the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage line to the third catch basin in the system; this catch basin in this manufact by		

Table 5-1	1. (Continue	d)			
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
April 21-22, 2016	E-2016-0208	601 Hammonds Ferry Road	A Versar field team inspected the target outfall, K02B8O002, which is located in a stormwater retention pond east of the parking lots for 601 and 611 Hammonds Ferry Road. The flow from the outfall was slightly impeded by leaves and debris in the outfall channel. The team also noted persistent iron flocculent along the water line. The team extracted a sample of the discharge with a syringe and tested the water for contaminants. The test results showed an above-action-level concentration of detergents. The team followed the outfall's drainage line to a yard grate, in the parking lot between the buildings at 601 and 611 Hammonds Ferry Road, where two drainage lines converged; both pipes exhibited very low discharges. The discharge from the southwestern pipe opening, which is the output from the drainage line running between the buildings at 601 and 611 Hammonds Ferry Road, had a detergent concentration of 0.35 mg/L. The discharge from the northwestern pipe, which drains the north parking lot, behind the building at 611 Hammonds Ferry Road, had a layer of algae and a detergent concentration of 0.50 mg/L. An employee of Valley Lighting stated that he had given the car "a quick rinse." The team did not detect signs of soap in the residual dampness in the parking lot. From the drainage lines up to the next inlets and found both of these inlets to be dry.	April 27, 2016: Received from Versar. April 29, 2016: Sent to I&P June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that inspection performed on April 29. Flow was observed, but a source could not be determined. Each tenant in the building was briefed that vehicle washing with soap was not permitted and that a fleet washing service that collected all water before it reached the stormdrain was required. All were informed that this applied to personal vehicles, too. Follow inspection scheduled for May 11. June 7, 2016: I&P asked about status of follow up inspection. June 27, 2016: Follow up inspection found high levels of detergent, but unclear about source. Will continue to visit site to determine source. Retest scheduled for July 28. July 21, 2016: Re-inspection planned for August 18. CASE OPEN	UNRESOLVED
April 19, 2016	E-2016-0209	2421 Priest Bridge Road	A Versar field team inspected an outfall I19B6O008new001. At the 24-inch corrugated metal pipe opening of the outfall, the team observed a small amount of cloudy discharge. A manhole adjacent to the outfall revealed an intersection of two corrugated metal drainage pipes; the pipe on the east side exhibited slowly flowing water. The team collected a sample of the flowing water from the pipe to test water quality. The test results showed above action-level concentrations of ammonia, detergents, and fluoride. The team tracked the flow along the east drainage line to the fourth yard grate up the network, located adjacent to the entrance gate to a Patuxent Materials storage and maintenance lot.	April 27, 2016: Received from Versar. April 29, 2016: Sent to I&P June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that inspection was delayed due to inclement weather. Inspection performed on May 27. Trench drain not observed to drain to stormwater inlet. During inspection, adjacent property utilized by a detailing company was observed washing vehicles outside of its approved wash-down area, resulting in wash water entering the stormdrain system. Business owner consoled that all wash water must discharge into sanitary sewer system. I&P will continue monitoring this location for signs of washing outside of approved area. CASE CLOSED	RESOLVED

Table 5-1. (Continued)					
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
April 26-17, 2016	E-2016-0206	1741 West Nursery Road (Aloft BWI Hotel)	A Versar field team inspected target outfall J04A70026new2 at the Aloft BWI Baltimore Washington International Airport Hotel in Linthicum Heights, MD. The field crew observed flowing water at the outfall. The crew collected a sample of the effluent to test for illicit discharge indicators. The result for pH indicated a reading above the acceptable range. Due to the pH result out of the acceptable range, the team initiated a track down of the network to attempt to locate a possible source. At a yard grate near the northeast corner of the parking lot, the team discovered excessive seepage in the walls of the catch basin and more evidence of accumulating mineral deposits in the draining water; the crew noted that the concrete frame supporting the grate was soft and crumbling. Within the catch basin, the team observed a 4-inch black PVC pipe leading from the eastern edge of the parking lot that delivered flowing water to the network. The pH of a water sample collected at the entrance to this pipe was 11.95 in the field test. The team returned to the first manhole and proceeded to track the drainage lines around the southern boundary of the parking lot. A water sample collected from a curb inlet on the southern edge of the parking lot revealed a pH of 11.44.	May 3, 2016: Received from Versar. May 5, 2016: Sent to I&P. June 1, 2016: Follow up sent to I&P. June 3, 2016: I&P reports that inspection occurred on April 29. Property owner informed about issues. Reinspection planned for May 6 to follow up on illicit discharge. Other items to be corrected by June 1. June 7, 2016: Inquiry sent to I&P to see if follow up inspections made. June 27, 2016: I&P re-inspected site today. Evidence of sanitary sewer connection to storm drain observed. Investigation continues. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P reports that they are still working with property owner to resolve issue. CASE OPEN	UNRESOLVED
April 26 and 27, 2016	E-2016-0216	1302 Concourse Drive	A Versar field team was inspecting outfalls in the area and discovered what appeared to be evidence of a petroleum spill at outfall 103E8O003, near Concourse Drive in Linthicum Heights, MD. Team members observed several absorbent socks draped across the plunge pool; the stagnant water was dark grey and cloudy. The team noted a strong odor of oil at the site. At the nearest manhole, the team found flowing water and detected an odor of gasoline. The crew collected a sample of the effluent in the manhole to test for illicit discharge indicators. No tested parameters exceeded County action levels. Staff then followed the drainage line to a manhole behind the building at 1302; staff detected an odor of petroleum. Staff discovered a sign on the 1302 building that identified the location of 550-gallon diesel fuel storage at the site.	May 5, 2016: Received from Versar. May 5, 2016: Sent to I&P May 6, 2016: Inspector observed sheen on top of runoff coming into pipe. Observed filter socks being used to dam water from inflow pipe to keep it out of pond, but water was flanking devices and entering pond. Discussions with property maintenance personnel ensued. Fuel spill occurred two months ago and clean up was underway. MDE enforcement action in progress at this site. No current illicit discharge observed. Recommendation that case be closed as MDE is taking lead on enforcement and cleanup.	RESOLVED

Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status	
April 26-27, 2016	E-2016-0234	7621 Energy Parkway	A Versar field team inspected the outfall, Q06H3F002new2, located east of the warehouse at 7621 Energy Parkway. The team found flowing water in the outfall; the effluent showed evidence of iron flocculent, bacterial growth, and a surface sheen. The effluent also emitted a sulfur odor. Phenol levels tested above the acceptable range for the sample. Due to the presence of elevated contaminant levels combined with characteristics of concern (odor and excessive iron), the field crew initiated a track down on the site to attempt to isolate the source of the phenols. The team tested flowing water in the parking lot grate closest to the outfall, in the southeast corner of the parking lot; the test results did not detect phenols. Research conducted for this report revealed that the lot at 7621 Energy Parkway had been used as a fly ash disposal site by Baltimore Gas and Electric Company between 1982 and 1992. In 1997, property modifications added an impervious cap for the majority of the disposal area, in the form of a large warehouse and associated parking area.	May 10, 2016: Received from Versar. May 12, 2016: Sent to I&P. May 16, 2016: I&P inspector contacted MDE WMA technical staff for guidance on possible sources of phenols. MDE states that fly ash likely not source of phenols observed at site. June 1, 2016: Follow up sent to I&P. June 2, 2016: Versar plan s retest at end of June. Details about site obtained from I&P the next day. June 3, 2016: I&P reports that inspection performed on May 13. Could not discern if illicit discharge occurring due to active precipitation. Inspection evaluated stormdrain system on site. Has requested that Versar retest the area using the construction drawing provided by property owners. Will revisit site following retest. June 14, 2016: Versar retuned to retest site. Illicit discharge observed that caused an atypical reaction in the phenols test. Narrowed down possible locations for the discharge and provided that information to I&P via an email report. June 16, 2014: I&P having difficulty determining actual source of discharge. Asked if Versar has ability to do video inspection of system to find discharge. June 20, 2016: Asked Versar about their video pipeline inspection capabilities. Awaiting answer. June 22, 2016: Coordinated with I&P and IMD to use IMD's open end agreement for video inspection. July 7, 2016: Re-inspection by I&P confirmed high phenols. Video pipe inspection had not occurred as of this date. July 11, 2016: Email from MS4 Project Manager at Versar confirms that they do not have video inspection capabilities. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P reports work continues. Next inspection planned for August 8.	UNRESOLVED	

Table 5-1. (Continued)						
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status	
May 10 and 27, 2016	E-2016-0279	881 Elkridge Landing Road	A Versar field team inspected the outfall, 104F3O014, located west of the National Security Agency offices at 881 Elkridge Landing Road. Field staff observed flowing water at the outfall. Field staff collected and tested a sample of the discharge at the outfall. The results indicated above-action-level detergent concentrations. The team initiated a track down of the system to identify the source of the flow. The crew found a small PVC pipe contributing flowing effluent to this inlet from a source to the east. The crew tested this effluent results showed concentrations above action levels. Due to security constraints at the guarded National Security Agency facility, the field crew did not attempt to track the source of this small PVC pipe.	June 1, 2016: Received from Versar. June 2, 2016: Sent to I&P for follow up. June 2, 2016: Inspection by I&P found flow from parking lot drains. Inspector notes that he plans to meet with property owner to determine source of flow. July 18, 2016: Follow up sent to I&P. July 21, 2016: Work continues by I&P. CASE OPEN	UNRESOLVED	
June 8 and 9, 2016	E-2016-0311	2631 Annapolis Road (MD 175)	A Versar field team inspected outfall F09G5O001, at the corner of Annapolis Road (Maryland Route 175) and Rockenbach Road in Hanover. The crew discovered that the outfall F09G5O001 was blocked by layers of cut tree limbs that had been stacked in front of the outfall opening; this makeshift dam also accumulated forest debris (dirt, leaves, and sticks) such that the opening for the pipe appeared to be barely functioning as an outfall. The crew observed water beneath the debris partially blocking the outfall and water seeping out of the ground on the hillside above the outfall headwall. The team investigated conditions at outfall F09F5O001 and found flowing effluent from the pipe and suds in the plunge pool. A test for detergents in this discharge showed levels above 3.0 mg/l.	June 15, 2016: Received from Versar June 15, 2016: Forwarded to I&P for further investigation. July 18, 2016: Follow up sent to I&P. July 21, 2016: Meeting between property owner and I&P inspector occurred on July 19. Work is being contracted out by property owner. I&P will continue monitoring work until complete. CASE OPEN	UNRESOLVED	
June 8 and 9, 2016	E-2016-0312	1710 Crossroads Drive	A Versar field team inspected outfall I12E10001 behind the warehouses. Versar staff found the 42-inch reinforced concrete pipe outfall partially submerged. A short distance from the pipe, the field crew observed that the discharge was flowing into a downstream channel. The crew obtained a sample from the flowing water to test for illicit discharge indicators. The result for pH indicated a reading below the acceptable range. In response to the pH results out of the acceptable range, the team initiated a track down of the network to attempt to locate a possible source. The team concluded that the input to the storm water line contributing to outfall I12E10001 was likely from a natural source of low-pH ground water.	June 15, 2016: Received from Versar. June 15, 2016: Sent to I&P for follow up. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P inspector visited site on June 16 and tested pH. Concluded that pH is ground water's natural pH. CASE CLOSED	RESOLVED	

Table 5-1. (Continued)					
Survey Date	I&P or Health Dept. Compliance Database ID	Outfall/Site Address	Issue	Response	Status
May 30, 2016		7049 Arundel Mills Blvd. (Chipotle)	A citizen's complaint about trash possibly entering the storm drain system near a business at Arundel Mills Mall was reported on May 30, 2016. As it involved both an issue of dumpster maintenance and the storm drain system, the complaint was sent to both the HD and I&P.	May 30, 2016: Complaint received by County. May 31, 2016: Complaint received by WPRP. Sent to both I&P and HD for action. June 1, 2016: HD opens case June 3, 2016: HD performs first inspection. June 8, 2016: HD performs follow up inspection. June 10, 2016: HD performs final compliance inspection. June 13, 2016: HD closes its case. June 20, 2016: Follow up sent to I&P. June 21, 2016: I&P inspection found no issues involving stormdrain runoff CASE CLOSED	RESOLVED
June 9, 2016	E-2016-0354	Ashley Apartments	A Versar field team inspected outfall B12G2O001, which is located east of the apartments along Andrew Court. Versar staff found the 42-inch reinforced concrete pipe contained impeded but flowing water. The crew obtained a sample from the flowing water to test. The result for pH indicated a reading below the acceptable range. In response to the pH results out of the acceptable range, the team initiated a track down of the network to attempt to locate a possible source. A pipe entering from the south also contained flowing water. Due to its close proximity, the team considered that this pipe may have been associated with a yard grate in the grassy area adjacent to the parking lot. In the yard inlet, the team documented that a small white drain pipe had flowing effluent. A sample of the flowing water from the white pipe had a pH of 7.03.	June 17, 2016: Received from Versar. June 20, 2016: Sent to I&P for follow up. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P reports that inspection has been performed. Unclear about status. July 25, 2016: Direct follow up sent to inspector. CASE OPEN	UNRESOLVED
June 10, 2016	E-2016-0353	Laurel Race Track	A Versar field team observed a trail of pooled and flowing cloudy water originating from a source at the south corner of the Laurel Race Track property. The team noticed a pool of cloudy water on the hill adjacent to outfall A11C7O001. The team observed that the water in the outfall was stagnant and orange, with an oily sheen. To the northeast, along the fence, the team observed a larger volume of water exiting the fenced area at a gate. Alongside the opening, the team noted that a post hydrant was leaking, spraying water into the air.	June 17, 2016: Received from Versar. June 20, 2016: Sent to I&P for follow up. July 18, 2016: Follow up sent to I&P. July 21, 2016: I&P report s that case opened on July 6. CASE OPEN	UNRESOLVED

Table 5	Table 5-2. Follow-up and Resolution of Past Unresolved IDDE Cases						
Survey Date	I&P Compliance Database ID	Outfall/Site Address	Issue	Response	Status		
April 13, 2015	N/A	7304 Parkway Drive South	Versar field staff conducted site visits to two outfalls (one, a target) associated with a stormwater pond along Parkway Drive South, near the Raspberry Deli at the listed address, on April 13. On the first visit to the outfall F06H4O016, at 11:32 a.m., the field crew documented flow from the 18-inch pipe discharging to the pond. The field team tracked the pipe back to the inlet on the southwest edge of Parkway Drive South (the only source of water for the outfall) and found the inlet dry. The screening results at the outfall on the first visit were above action levels for chlorine (1.0 mg/l) and detergents (0.5 mg/l). The field crew returned to the site several hours later (3:15 p.m.) to retest the discharge from the pipe. The retest yielded the same above-action detergent levels (0.5 mg/l) and a reduced level of chlorine (0.1 mg/l) to a concentration below the action threshold. The field team did not observe any other factors of concern in the discharge water (e.g., color, odor, or floatables). Staff reported the illicit discharge to the Environmental Hotline on 4.14.15. An inspection was conducted by Inspections and Permits on May 1 and it was subsequently determined that this was an SHA stormwater facility. Contact was made with IDDE staff at SHA. A follow up was conducted by SHA's IDDE consultant where no flow was observed in any of the structures present at the facility. The source of this transitory flow remains unknown, but could be carwash runoff based upon the constituents found in the original discharge tested by Versar.	April 16, 2015: Received from Versar April 27, 2015: Sent to I&P. May 1, 2015: Inspected by I&P. As this is an SHA pond and outfall, the County has no jurisdiction regarding enforcement. August 17, 2015: SHA informed of possible IDDE issue. September 16, 2015: Follow up with SHA to determine resolution. September 24, 2016: SHA investigated the issue and did not observe any flow at any of the structures in the area. CASE CLOSED.	RESOLVED		
April 13, 2015	E-2015-182	6722 Ritchie Highway	A LimnoTech field team discovered unsafe conditions with a stormwater detention basin riser structure behind the Best Buy store at the listed address. The field crew inspected the device and photo-documented the extent of the destruction of the facility. The top of the riser was dislocated and the manhole cover was lying on the ground at the base. The embankment behind the riser shows signs of extensive erosion, which suggests that the facility may no longer be properly functioning. The eroded area has been accumulating debris, also. The device in this condition presents a significant safety hazard for the public, although the fence may deter many trespassers. After repeated site visits and meetings between the I&P inspector and the property owner, all repairs have been completed and this issue is resolved.	May 3, 2015: Received from Versar. May 4, 2015: Sent to 1&P. May 20, 2015: 1&P staff met with property owner. Necessary work discussed and discussion continues on necessary repairs. June 22, 2015: Status update request sent to 1&P. June 29, 2015: Some repairs and clean up made, but other issues remain unrepaired. August 14, 2015: Status update request sent to 1&P. August 14, 2015: I&P reports that property owner is currently developing plans to make repairs. September 8, 2015: Property owner still working on making needed repairs. November 13, 2015: Repairs are complete. CASE CLOSED	RESOLVED		

Table 5-2. (Continued)						
Survey Date	I&P Compliance Database ID	Outfall/Site Address	Issue	Response	Status	
June 25, 2015	N/A	7226 Parkway Drive	While in the area to screen an outfall, a Versar field team discovered an actively polluting condition at a roll-away dumpster found behind a Belair Produce building. The team observed the dumpster leaking a red liquid of sufficient quantity to span the rear of the parking area and enter the adjacent wooded land. In light of the nature of the business, one could surmise that the leachate may contain material from fruits and vegetables that have been discarded to the trash compactor; as such, the fluid may contain nutrients, bacteria, waxes, pesticides, and fungicides, among other constituents. In 2014, field crews documented a dumpster in the same location leaching soursmelling liquid which followed a similar path to the woods. The trail of liquids, apparently emanating from the dumpster, is evident in aerial photographs, since at least 2007. Consultations with the property owner and repeated inspections resulted in the issue being resolved.	June 30, 2015: Report received from Versar. June 30, 2015: Report sent to HD. Also sent to I&P due to likely long term nature of impact. No action requested of I&P at this time. August 14, 2015: Follow up request sent to HD. August 17, 2015: HD met with property managers. Several changes to the site were requested. A follow up inspection was scheduled for later in August. October 19, 2015: HD inspectors have met with property owner, who has repaired the dumpster. Leaking still persists and the HD continues to work to correct issue. April 27, 2016: Inspection by HD finds dumpster not leaking. CASE CLOSED	RESOLVED	



6 RECOMMENDATIONS

The County's illicit discharge detection and elimination program has been successful in the identification and removal of a wide variety of sources of pollutants, including illicit connections, upland pollutant sources, dumping and spills. At this time, no recommendations are being made for improvements to the program.





7 REFERENCES

- Anne Arundel County, Maryland Department of Public Works Bureau of Utility Operations. 2011. 2011 Drinking Water Quality Report.
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- Maryland Department of the Environment. 1997. Dry Weather Flow and Illicit Discharges in Maryland Storm Drain Systems.
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APPENDIX A EROSION AND STRUCTURAL ISSUES SITE-SPECIFIC REPORTS





Location: Behind 8854 Woodland Manor Drive, Laurel, MD

Date: December 10, 2015
Investigators: C. Tonkin and K. Dillow
Concern: Collapsed infrastructure

While investigating outfall B11F5O001 for the County dry weather screening effort, a Versar field team discovered collapsed infrastructure at the outfall, located to the east of Woodland Manor Drive behind the above address. Three evident sections of the large (73 by 48 inches) reinforced concrete pipe were found separated from each other; the End Section and Section 2 were completely disconnected from Section 3 which was still embedded in the ground (Figure 1). The wingwall-style End Section was lying in the lower receiving bed, misaligned with Section 2 (Figures 3 and 4). The field team documented erosion around Section 3 (Figures 1 and 2); significant erosion at the site likely created the pit that now holds the disconnected sections. The field crew also documented an eroded bank opposite the End Section (Figure 5). An area map is included as Figure 6.



Figure 1. Three disconnected sections of pipe infrastructure associated with outfall B11F5O001; note original height of outfall pipes and ground level at Section 3, and erosion along all sections





Figure 2. Collapsed outfall pipe showing extent of erosion along disconnected pipe sections (photograph taken facing approximately northwest)



Figure 3. Detail of collapsed outfall pipe infrastructure showing misaligned junction between the End Section (left) and Section 2 (right)





Figure 4. Photograph taken inside the End Section, showing the extent of disconnection with Section 2



erosion on the bank opposite the End Section





Figure 6. Area map



Location: 8201 Dorsey Run Road, Jessup

Date: January 5, 2016

Investigators: C. Tonkin and K. Dillow Concern: Blocked infrastructure

While investigating outfall C10E4O001, a Versar field team discovered the outfall crushed and buried in sediment (Figure 1). The team determined that the opening of the corrugated metal pipe had been so reduced in size that it may no longer effectively function; the outfall opening was surrounded by possible remnants of fill dirt (small rocks) and well-established vegetation (Figures 1 and 2). The outfall appeared to have been installed to drain an area that was very recently developed (Figure 3). The new building on the lot, which is now 8201 Dorsey Run Road, is part of the Annapolis Junction Business Park. There is evidence in Google maps (https://www.google.com/maps) that a road, Deer Creek Court, used to pass through the lot that has now been developed as 8201; it is possible that outfall C10E4O001 provided drainage for that road in previous years, and that the outfall may no longer be in service. The field team surmised that a new infrastructure network likely has been installed to control runoff from the new building and parking lot; thus, it is also possible that pipes to the outfall C10E4O001 had been connected to the revised network during construction, and that it now functions in a limited capacity for some of the runoff. An area map, indicating the location of the outfall, is provided in Figure 4.



Figure 1. Photograph showing detail of the outfall C10E4O001 and the narrowed opening of the crushed pipe; note the small rocks on the top of the pipe, possibly associated with fill dirt, and the extensive vegetation partially blocking the opening





Figure 2. Photograph showing the opening for outfall C10E4O001 (seen as a dark oval in the center right) in context with the retaining wall for the parking lot for 8201 Dorsey Run Road



Figure 3. Photograph showing the crushed outfall C10E4O001 (seen as a silver object under vegetation in the lower center right) in context with the new building at 8201 Dorsey Run Road; note the brown vegetation on the upper left of the photograph which indicates the east end of the long drainage ditch behind the three adjacent parking lots





Figure 4. Area map



Location: 2633 Rockenbach Road, Hanover

Date: January 5, 2016

Investigators: C. Tonkin and K. Dillow Concern: Collapsed infrastructure

While investigating outfall F09F5O001, on the east side of the Ridgeview Plaza Shopping Center, a Versar field team observed signs of destructive runoff forces at the outfall. On the southeast side of the outfall, the rocks and plastic of the rip rap, intended to stabilize the bank, had been dislodged and pushed downstream (Figure 1). The flared end section of the outfall on the same side showed signs of crumbling during the field visit (Figure 1). Also, the erosion had started to undercut the outfall, so that the opening was found to be no longer fully supported underneath (Figure 1). The force of the runoff coming out of the pipe had eroded the opposite bank, exposing tree roots (Figure 2). The hydrology of the outfall's flow may have been altered over time, in part by the collected rocks in the plunge pool, so that it now follows a path toward the trees on the left before returning to the intended alignment (Figure 2). An area map, indicating the location of the erosion at the outfall, is provided in Figure 3.



Figure 1. Photograph of outfall F09F5O001 showing the erosion and disturbed rip rap assembly on the southeast (right) side of the structure and the beginnings of undercutting erosion below the opening; note, also, the crumbling flared end on the right side of the outfall opening





Figure 2. View looking over the top of the outfall showing the extent of erosion on the opposite bank caused by excessive, uncontrolled flows; note the collection of rip rap rocks in the plunge pool which may be acting as a partial blockade for the water, forcing the flows to veer left after exiting the pipe





Figure 3. Area map



Location: 2614 Annapolis Road, Severn

Date: January 5, 2016

Investigators: C. Tonkin and K. Dillow Concern: Collapsed infrastructure

While investigating outfall F09H5O001, behind the Pizza Hut restaurant at the above address, a Versar field team discovered collapsing infrastructure associated with the curbopening inlet and the outfall pipe. At the curb behind the restaurant, field crews documented that the curb inlet and outfall pipe were subsiding, yet still connected (Figure 1). The topsoil behind the catch basin had eroded, exposing the fill. The team documented that the catch basin is separating from the top slab as it sinks (Figure 2). The field team observed that a nearby portion of the sidewalk was also resting on eroding soil; the vegetation downhill of this second erosion area shows a distinct growth pattern, implying that there are multiple effects of the runoff in this section (Figures 1 and 3). The depression that has developed behind and alongside the catch basin exacerbates the potential for damage from flowing runoff and trapped water (Figure 3). Although the collapsed infrastructure was the primary concern during the site visit, the photographs taken during the inspection also show stains in the parking lot leading from the corner of the Pizza Hut walkway to the curb inlet; suggesting that there may have been leakage from a container on the premises at some point. An area map, indicating the location of the curb inlet, is provided in Figure 4.



Figure 1. Photograph showing the curb-opening inlet with significant erosion behind it (center), and a nearby sidewalk area with erosion apparent underneath it and a distinct runoff pattern evident in the downslope vegetation (top right); note, also, stains in the parking lot leading from the Pizza Hut restaurant to the curb inlet (left)





Figure 2. View looking uphill from the stormwater management facility; note the separation of the catch basin from the top slab (upper center left), the sunken ground around the outfall pipe (center), and the erosion under the sidewalk (upper right)



Figure 3. View from the curb inlet toward the stormwater management facility showing the depression behind the catch basin and side structures; also note stains leading into the curb inlet



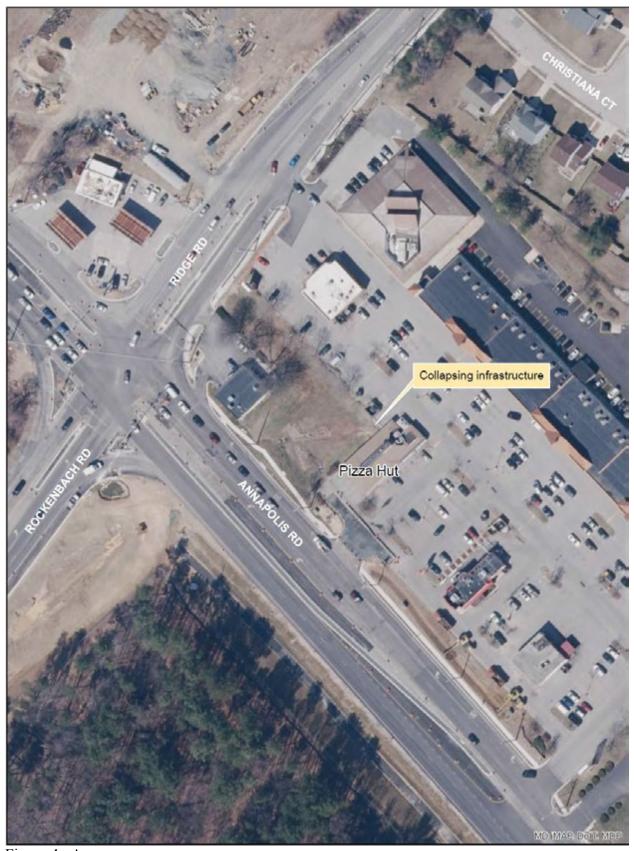


Figure 4. Area map



Location: 1275 Odenton Road, Odenton (Catherine L. O'Malley Senior Center)

Date: January 7, 2016

Investigators: C. Tonkin and K. Dillow Concern: Blocked infrastructure

While investigating outfall I13B1O009, which is located north of the parking lot for the Catherine L. O'Malley Senior Center, a Versar field team found the outfall almost completely buried in mud and sediment (Figures 1, 2, and 3, collectively). The field team noted that the outfall was in a small depression that contained liquid - possibly effluent - with an oily sheen (Figure 4). The team could not determine the effectiveness of the outfall under these conditions; hence, the team could not clarify the source of the oil sheen during the site visit. An area map, indicating the location of the buried outfall, is provided in Figure 5.



Figure 1. View from the curb inlet at the parking lot toward outfall I13B1O009; note the position of the orange cone (center) which serves as a reference in Figure 2





Figure 2. A member of the field team documenting conditions at the outfall which is located directly in front of him; the orange cone is the same marker as is seen in Figure 1



Figure 3. Photograph showing the conditions at outfall I13B1O009; the pipe was found almost completely buried in sediment at the time of the site visit





Figure 4. Detail of effluent from outfall I13B1O009 (presumed) showing oily sheen





Figure 5. Area map



Location: Behind the BGE maintenance lot, 730 New Waugh Chapel Road, Odenton

Date: March 9, 2016

Investigators: C. Tonkin and P. Potti (Versar) and B. Crary and A. Huizenga (LimnoTech)

Concern: Damaged infrastructure

While on-site to investigate a possible illicit discharge condition, a field team consisting of Versar and LimnoTech staff discovered a damaged yard inlet associated with outfall G13G7O006, behind the BGE maintenance lot located at 730 New Waugh Chapel Road in Odenton. At the slab top yard drain nearest to the outfall (Figure 1), the field crew noted that the soil had collapsed on the side facing the wooded area (Figures 2 and 3). Staff also documented that the concrete lid had shifted and was loose at the time of the inspection. These conditions pose hazards to passersby; the concrete lid should also be secured to protect the integrity of the stormwater conduit system. An area map is provided as Figure 4.



Figure 1. Slab top yard inlet found in damaged condition during the field visit





Figure 2. Evidence of collapsed soil on the northwest side of the inlet frame, seen facing southwest



Figure 3. Evidence of collapsed soil on the northwest side of the inlet frame, seen facing northeast





Figure 4. Area map





APPENDIX B ILLICIT CONNECTIONS SITE-SPECIFIC REPORTS





Anne Arundel County Illicit Discharge Site Visit Report

Outfall ID: K10D8O004

Location: 517 Wet Sand Drive, Severn, MD

Date: April 15 and 18, 2016
Investigators: C. Tonkin and P. Potti
Concern: Above-action-level chlorine

A Versar field team inspected the outfall, K10D8O004, located south of Old Oak Road, alongside the Knopps Greenhouses facility, on April 15 and 18. On both days, staff observed that the water in the outfall was flowing (Figure 1). On April 15, the field staff tested the discharge at the outfall; results indicated elevated chlorine concentrations (0.6 mg/l). Since the field team had screened the outfall previously (with indications of high indicator pollutant levels but ambiguous trackdown results), the team conducted a trackdown along the pipe network leading to the outfall. The team followed the pipe network to an inlet near the corner of Wet Sand Drive and Grassland Road – in front of 517 Wet Sand Drive – where they observed the initiation of a pulse of water flowing (after an audible click) from a 3-inch PVC pipe that had been connected to the inlet box (Figure 2). Staff noted a chlorine odor at the inlet. The field team quickly collected a sample of this flowing water before the flow stopped, to test for possible illicit constituents. The results of the tests are provided in Table 1, for Test 1. Chlorine tested above the acceptable range for the sample taken on the first site visit (0.5 mg/l).

Staff returned to the site the several days later, April 18; there had not been a rain event in the interim. They again observed flowing water at the outfall and the test results indicated elevated chlorine concentrations (0.6 mg/l). The team returned to the flowing source at the curb inlet in front of 517 Wet Sand Drive. Staff sampled the trickling effluent from the PVC pipe at the inlet (Figure 3); the results are provided in Table 1, for Test 2. Chlorine tested above the acceptable range on the second visit (0.7 mg/l). Staff surmised that the pipe may be discharging water from a water main leak, but they could not determine the reason for a PVC pipe tie-in to the system. The pulse of water suggests the possibility of a sump pump discharge, but the field crew did not find a definitive source of chorine for the ground water. There are numerous private swimming pools in the vicinity – the parcel 517 Wet Sand Drive has a pool (according to inspection of Google maps; https://www.google.com/maps); it is possible that chlorinated water from pool maintenance operations is infiltrating the ground water which is then being pumped out of the sump. An area map is provided in Figure 4.



Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken up-network of Facility K10D8O004, from a curb inlet at 517 Wet Sand Drive

samples taken up network of 1 denity K10D0000+, from a caro finet at 517 wet band Drive			
	Action Level	Test 1 Result	Test 2 Result
pН	\leq 6.5 or \geq 8.5	7.8	7.9
Temperature (°F)		59.9	59.9
Ammonia (mg/l)	≥ 1	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.5	0.7
Detergents (mg/l)	≥ 0.5	0.0	0.0
Fluoride (mg/l)	≥ 0.75	0.0	0.0
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. Outfall K10D8O004 as observed on April 15





Figure 2. Evidence of strongly flowing effluent from a PVC pipe in the curb inlet box on April 15



Figure 3. Trickling effluent from the PVC pipe observed on April 18





Figure 4. Area map



Outfall ID: K02B8O002

Location: 601 Hammonds Ferry Road, Linthicum Heights, MD

Date: April 21 and 22, 2016 Investigators: C. Tonkin and P. Potti

Concern: Above-action-level detergent concentrations

On April 21, the Versar field team inspected the target outfall, K02B8O002, which is located in a stormwater retention pond east of the parking lots for 601 and 611 Hammonds Ferry Road. At the outfall's 27-inch round concrete pipe, the team observed a small amount of shallow flowing water (Figure 1). The flow from the outfall was slightly impeded by leaves and debris in the outfall channel. The team also noted persistent iron flocculent along the water line. The team extracted a sample of the discharge with a syringe and tested the water for contaminants. Test results are presented in Table 1, as Test 1; the test results showed an above-action-level concentration of detergents (0.5 mg/L). The field crew investigated the associated parking lots for active washing or dumping activity; the team did not observe any such evidence on the day of the first visit.

On April 22, Versar staff visited the site again and found conditions at the target outfall similar to those observed during the previous visit. The team acquired a water sample of the flowing effluent and tested it for contaminants. Test results are presented in Table 1, as Test 2; the test results indicated an above-action-level concentration of detergents (0.75 mg/L). Due to the elevated results, the team initiated a trackdown to search for a source within the network. The team followed the outfall's drainage line to a yard grate, in the parking lot between the buildings at 601 and 611 Hammonds Ferry Road, where two drainage lines converged (Figure 2); both pipes exhibited very low discharges. The team collected samples from both of the pipes and tested the water specifically for concentrations of detergents. The discharge from the southwestern pipe opening, which is the output from the drainage line running between the buildings at 601 and 611 Hammonds Ferry Road, had a detergent concentration of 0.35 mg/L. The discharge from the northwestern pipe, which drains the north parking lot, behind the building at 611 Hammonds Ferry Road, had a layer of algae and a detergent concentration of 0.50 mg/L. In the parking lot near the yard grate, the team noticed a personal vehicle surrounded by damp pavement, and a visible line of water draining to the curb inlet just above the target outfall in the network (Figure 3). An employee of Valley Lighting (one of the businesses occupying the building at 601 Hammonds Ferry Road) stated that he had given the car "a quick rinse." The team did not detect signs of soap in the residual dampness in the parking lot.

From the drainage intersection, the team followed the northwest and southwest drainage lines up to the next inlets and found both of these inlets to be dry; this suggests that water may be infiltrating the drainage system underground between these inlets and the intersection where the team observed flowing water. The field team surmised that it is more likely that, due to the very small amount of discharge in the system, the observed discharge was the last remnants of past washing activity in the parking lots of 601 and 611 Hammonds Ferry Road.



Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken at outfall K02B8O002, behind 601 Hammonds Ferry Road

	Action Level	Test 1 Result	Test 2 Result
рН	\leq 6.5 or \geq 8.5		
Temperature (°F)		60.3	61.7
Ammonia (mg/l)	≥ 1	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.50	0.75
Fluoride (mg/l)	≥ 0.75	0.2	0.3
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. The target outfall, K02B8O002, located in a stormwater retention pond east of 601 and 611 Hammonds Ferry Road, as observed on April 21, 2016





Figure 2. Yard grate (left) in the parking lot between the buildings at 601 and 611 Hammonds Ferry Road where the northwest and southwest drainage lines intersect (right) before draining into the pipe leading to the target outfall



Figure 3. Damp pavement evident around a personal vehicle behind Valley Lighting (left) and evidence of runoff to the curb inlet at the east end of the parking lot (right)





Figure 4. Area map, showing detergent concentration test results obtained during the outfall discharge testing and subsequent trackdown



Outfall ID: J15H5Onew1

Location: 790 Crain Highway, Gambrills, MD (Self Storage Plus)

Date: May 20, 2016

Investigators: B. Crary and A. Huizenga

Concern: Elevated pH level

A LimnoTech field team inspected the outfall, J15H5Onew1, located behind the Self Storage Plus building, at 790 Crain Highway (Maryland Route 3), on May 20, 2016. The field crew discovered the 4-inch PVC pipe outfall at 10:00 a.m. in the wooded area to the northwest of the building (Figure 1). The crew found this small pipe immediately adjacent to an 18-inch corrugated metal pipe outfall (J15H5Onew2); neither outfall had been documented in the County's latest (2014) digital data base. The crew observed that the pipe released a trickling clear discharge; the collecting effluent in the receiving pool exhibited an oil sheen. Photographs taken during the first site visit also documented a thick orange slime in the pipe and orange staining in the pipe and on the rocks in the receiving pool (Figure 2). The field crew surmised that the accumulated orange material may have been a mat of iron-oxidizing bacteria. The field staff collected a sample of the discharge at the outfall to test for possible illicit constituents. The results of the tests are provided in Table 1, as Test 1. The results showed that the pH level was below the acceptable range for the sample taken on the first site visit (6.25).

Staff members returned to the site on the same day, at 2:20 p.m., to assess conditions at the outfall again. They again observed and tested flowing water at the outfall; the results are provided in Table 1, as Test 2. The level for pH was below the corresponding action-level in the second test (6.3). The field crew attempted to locate the source of the water in the small pipe, but did not find evidence of a network. The team surmised that the PVC pipe may collect and distribute drainage from the roof of the storage building as the adjacent metal pipe appeared to have that function. An area map is provided in Figure 3.

Table 1. Chemical test results (red values indicate concentrations exceeding action levels) of			
samples taken at Outfall J15H5Onew1			
	Action Level	Test 1 Result	Test 2 Result
рН	\leq 6.5 or \geq 8.5	6.25	6.3
Temperature (°F)		66.7	66.1
Ammonia (mg/l)	≥ 1	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.1	0.0
Fluoride (mg/l)	≥ 0.75	0.2	0.3
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0





Figure 1. The conditions of Outfall J15H5Onew1 as observed on May 20; note the orange material evident in the pipe and the orange staining on the rocks near the opening. The discharge's blue oil sheen can be seen in the lower center of the photograph. Part of the adjacent 18-inch corrugated metal pipe is shown on the left side of the photograph.





Figure 2. A close view of the opening for Outfall J15H5Onew1; note the thick orange material on the floor of the pipe and the staining on the walls of the pipe (this may be evidence of iron-oxidizing bacteria)





Figure 3. Area map



Outfall ID: I12E1O001

Location: 1710 Crossroads Drive, Odenton, MD

Date: June 8 and 9, 2016 Investigators: C. Tonkin and P. Potti

Concern: Low pH

On June 8, 2016, a Versar field team inspected outfall I12E1O001 behind the warehouses at 1710 Crossroads Drive, in Odenton, MD. On this first field visit, Versar staff found the 42-inch reinforced concrete pipe outfall partially submerged (Figure 1). The discharge in the plunge pool exhibited a thick patch of algae. A short distance from the pipe, the field crew observed that the discharge was flowing into a downstream channel. The crew obtained a sample from the flowing water to test for illicit discharge indicators. The results of the tests are provided in Table 1, as Test 1. The result for pH indicated a reading below the acceptable range (5.45).

The Versar team returned the next day and collected a sample of the flowing effluent. The results of the tests are provided in Table 1, as Test 2. The result for pH on the revisit indicated a reading below the acceptable range (5.15). In response to the pH results out of the acceptable range, the team initiated a trackdown of the network to attempt to locate a possible source. At the first manhole up-network from the outfall, the team observed pooled water at the bottom and tested the water for pH levels; the sample also had a low pH reading (5.28). Although the team did observe that there was a slight trickle of water coming into the manhole from the main line, the flow was insufficient for an adequate sample (Figure 2). At the second manhole, the team found a very small amount of water, barely flowing; there was not enough water to qualify for a valid sample. The field crew continued to track the line; the team was unable to open the third manhole due to recent paving, and did not locate the fourth manhole in the woods. The team proceeded to the beginning of the line of stormwater infrastructure which was an inlet from a dry channel alongside Maryland Route 32. As this channel was dry, the team concluded that the input to the stormwater line contributing to outfall I12E10001 was likely from a natural source of low-pH ground water. An area map is provided in Figure 3.

Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken at outfall I12E1O001				
,	Action Level Test 1 Result Test 2 Res			
рН	\leq 6.5 or \geq 8.5	5.45	5.15	
Temperature (°F)		41.6	59.2	
Ammonia (mg/l)	≥ 1	0.0	0.0	
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0	
Detergents (mg/l)	≥ 0.5	0.1	0.0	
Fluoride (mg/l) ≥ 0.75 0.2 0.4			0.4	
Phenols (mg/l)	$g/1$) ≥ 0.17 0.0 0.0			
Copper (mg/l)	≥ 0.21	0.0	0.0	





Figure 1. Outfall I12E1O001 as observed on June 8, 2016; note the extensive algae growing in the plunge pool



Figure 2. View inside the first manhole; note the slight trickle of water from the main pipe (top)





Figure 3. Area map



Outfall ID: J04A7O026new2

Location: Aloft BWI Baltimore Washington International Airport Hotel, 1741 West Nursery

Road, Linthicum Heights, MD

Date: April 26 and 27, 2016 Investigators: C. Tonkin and P. Potti

Concern: High pH

On April 26, 2016, a Versar field team inspected target outfall J04A7O026new2 at the Aloft BWI Baltimore Washington International Airport Hotel in Linthicum Heights, MD. Versar staff selected this site for a revisit in 2015; site assessments in June 2014 documented pH levels above the action-level criterion and the presence of exposed trash at the site. In 2016, the field crew observed flowing water at the outfall on the first visit (Figure 1). The crew collected a sample of the effluent to test for illicit discharge indicators. The results of the tests are provided in Table 1, as Test 1. The result for pH indicated a reading above the acceptable range (9.55).

The Versar team returned the next day and collected a sample of the flowing effluent. The results of the tests are provided in Table 1, as Test 2. The result for pH on the revisit indicated a reading above the acceptable range (10.99). Due to the pH result out of the acceptable range, the team initiated a trackdown of the network to attempt to locate a possible source. Note that the stormwater infrastructure network on this lot was not available as a digital file to guide the field team; the descriptions of the trackdown include details that informed a draft sketch of the possible network, which is included in this report. At the first manhole up-network from the outfall (MH1; the manhole provided access to a junction of three pipes), the team observed flowing water from the pipe entering from the north; the pipe exhibited a white mineral build-up (Figure 2). The team obtained a sample from the north pipe; test results indicated a pH of 11.23 (and chlorine levels unchanged from the levels at the outfall, at 0.1). The team proceeded to track the drainage line to the next probable access point – a curb inlet at the south end of the parking lot (CI1. The team extracted and tested the water from this location and found a pH level of 8.53 and a chlorine level of 0.1. From the marked difference in pH readings and flow volume, the team determined that this curb inlet was not in line with the main (north) pipeline, and likely connects to the main line north of the first manhole.

The team tracked the more likely main drainage line to a manhole in the northwest corner of the parking lot; there, the team found flowing water with a slurry of mineral deposits. The team also noted that the walls in this manhole were seeping (Figure 3). The team tested the flowing water and found a pH reading of 11.84; the similarity of this pH reading and flow condition confirmed an in-line connection with the pipe in the manhole at the south end of the parking lot, so the team continued to search this line and collect samples for pH levels. At the next upstream manhole in the system, the team observed a similar slurry of mineral deposits in the shallow water, and continued to the next access point – a yard grate near the northeast corner of the parking lot. There, the team discovered excessive seepage in the walls of the catch basin and more evidence of accumulating mineral deposits in the draining water; the crew noted that the concrete frame supporting the grate was soft and crumbling (Figure 4). Within the catch



basin, the team observed a 4-inch black PVC pipe leading from the eastern edge of the parking lot that delivered flowing water to the network (Figure 5). As team members attempted to determine the origin of the small pipe, they entered the woods and discovered a pipe end in a wet, muddy, grass area. The team surmised that this area may constitute a French drain installed to remove excess water from the ground. The pH of a water sample collected at the entrance to this pipe was 11.95 in the field test.

The team returned to the first manhole and proceeded to track the drainage lines around the southern boundary of the parking lot. The water sample taken from the manhole to the east of the first manhole had a pH reading of 10.2; a water sample collected from a curb inlet on the southern edge of the parking lot revealed a pH of 11.44. The team also documented that ground water seeps into the parking lot on the east side of the hotel; trench drains along the edge of the parking lot probably help to move this water off the lot (Figure 6).

The team found correlated evidence from several sources and four field visits that the hotel stands on a very porous, possibly high pH, soil, and that the lot receives ground water flow from a spring of very high pH water at the eastern (rear) side of the property. On both main storm drain lines, the team members traced pH values increasing as they approached the back side of the hotel property. An area map, depicting the estimated drain line infrastructure and the pH test results at various locations across the lot, is provided as Figure 7.

Table 1. Chemical test results (red values indicate above-action-level				
concentration) of samples taken at outfall J04A7O026new2				
	Action Level Test 1 Result Test 2 1			
рН	\leq 6.5 or \geq 8.5	9.55	10.99	
Temperature (°F)		Not recorded	57.6	
Ammonia (mg/l)	≥ 1	0.0	0.0	
Total Chlorine (mg/l)	≥ 0.4	0.35	0.1	
Detergents (mg/l)	≥ 0.5 0.0 0.0			
Fluoride (mg/l) ≥ 0.75 0.0 0.2				
Phenols (mg/l) ≥ 0.17 0.0 0.0				
Copper (mg/l)	≥ 0.21	0.0	0.0	





Figure 1. Outfall J04A7O026new2 as observed on April 26, 2016





Figure 2. Three pipes connecting at the first manhole (MH1); note the thick slurry of minerals in the flowing water from the north pipe (upper left)



Figure 3. View inside third manhole (MH3) showing mineral deposits in the flowing water and signs of seepage along the walls





Figure 4. Signs of crumbling concrete at the opening for the yard grate, YG1



Figure 5. View inside the yard grate, YG1, showing the flow of water from a black PVC pipe drawing flow from the east side of the lot



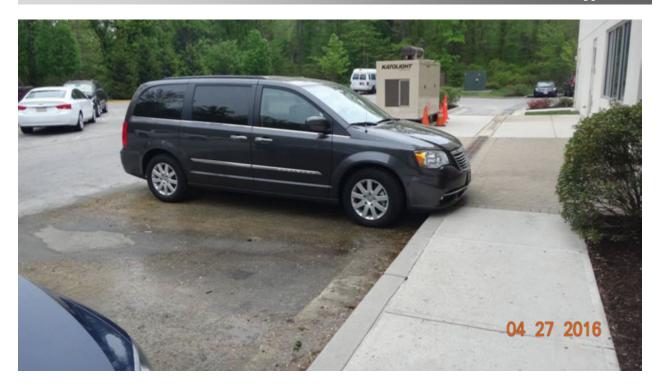


Figure 6. Signs of groundwater seeping through the parking lot on the east side of the hotel; note the trench drains in the parking lot (upper right)



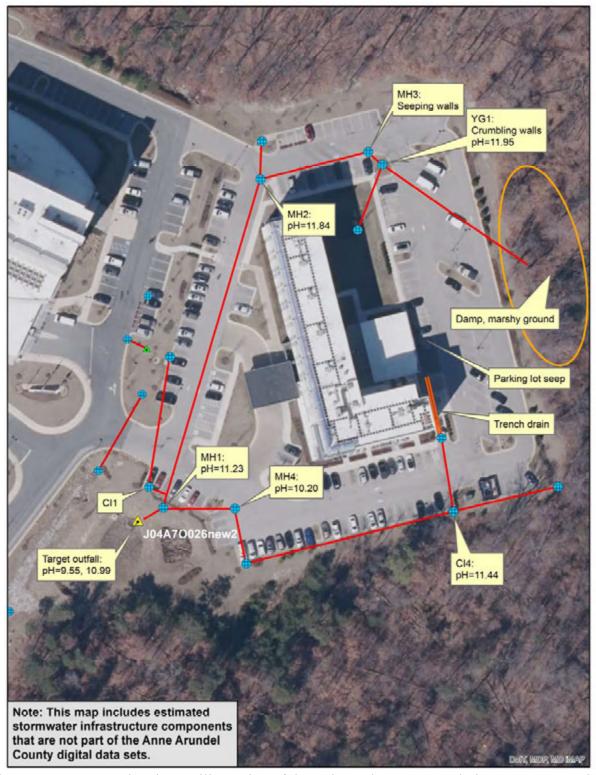


Figure 7. Area map showing an illustration of the estimated stormwater drainage system on the lot for the hotel and various locations where the field team tested pH values in effluent



Outfall ID: Q06H3Onew

Location: pond beside 7621 Energy Parkway, Curtis Bay, MD

Date: April 26 and 27, 2016
Investigators: C. Tonkin and P. Potti
Concern: High phenol levels

A Versar field team inspected the outfall, Q06H3Onew, located east of the warehouse at 7621 Energy Parkway, on April 26. A field crew had previously visited this outfall in 2013 (the site has been previously identified as Q06H3F002new2). The 33-inch, reinforced concrete pipe outfall discharged to a large wet pond. The team found flowing water in the outfall; the effluent showed evidence of iron flocculent, bacterial growth, and a surface sheen (Figures 1 and 2). The effluent also emitted a sulfur odor. The field staff carefully collected a sample of clear discharge at the outfall to test for possible illicit discharge constituents. The results of the tests are provided in Table 1, as Test 1. Phenol levels tested above the acceptable range for the sample taken on the first site visit (4 mg/l).

Staff members returned to the site the following day, April 27. They found conditions at the outfall similar to the observations made the previous day. They again observed and tested flowing water at the outfall; the results are provided in Table 1, as Test 2. Phenol levels were again above the acceptable range. Due to the presence of elevated contaminant levels combined with characteristics of concern (odor and excessive iron), the field crew initiated a trackdown on the site to attempt to isolate the source of the phenols. The team tested flowing water in the parking lot grate closest to the outfall, in the southeast corner of the parking lot; the test results did not detect phenols. The team searched the lot for evidence of additional pipes entering the system that may be contributing to the flows, but did not discover any such infrastructure. As the flow at the nearest grate was significantly lower than the flows observed at the outfall, the team considered that there may be infiltration of groundwater into the pipe as it passes under the adjacent field, before discharging to the pond. The team searched for an indication of the pipe's route between the parking lot grate and the outfall; without such evidence, the assumption is that the pipe directly connects the two access points in a straight line without a deviation in the path.

As part of the site evaluation, the team documented the presence of a sign announcing a potential future use of the property as a fuel storage site (Figure 3). The team noted that the field contained PVC pipe markers for wells (Figure 4). Research conducted for this report revealed that the lot at 7621 Energy Parkway had been used as a fly ash disposal site by Baltimore Gas and Electric Company between 1982 and 1992 (Enegry Parkway.pdf [sic] available from https://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/mapping/Documents/7621 Enegry Parkway.pdf). In 1997, property modifications added an impervious cap for the majority of the disposal area, in the form of a large warehouse and associated parking area. The extent to which the presence of a capped fly ash disposal site may influence the phenol levels recorded in the outfall screening tests is unknown. An area map is provided in Figure 5.



Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken at Facility Q06H3Onew

_	Action Level	Test 1 Result	Test 2 Result
pН	\leq 6.5 or \geq 8.5	7.04	6.88
Temperature (°F)		71.6	58.6
Ammonia (mg/l)	≥ 1	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.1	0.1
Fluoride (mg/l)	≥ 0.75	0.3	0.1
Phenols (mg/l)	≥ 0.17	4.0	2.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. Outfall Q06H3Onew as observed on April 26, 2016; note the orange iron flocculent





Figure 2. Evidence of a sheen on the effluent from outfall Q06H3Onew, as observed on April 26, 2016



Figure 3. A notice posted on the lot announcing plans to use the lot for petroleum product storage





Figure 4. A PVC pipe well marker found in the field between the paved areas and the outfall at 7621 Energy Parkway





Figure 5. Area map



Outfall ID: B12G2O001

Location: East of Andrew Court, Maryland City, MD (Ashley Apartments)

Date: June 9 and 10, 2016 Investigators: C. Tonkin and P. Potti

Concern: Low pH

On June 9, 2016, a Versar field team inspected outfall B12G2O001, which is located east of the apartments along Andrew Court (behind building 3440) at the Ashley Apartments complex. On the first field visit, Versar staff found the 42-inch reinforced concrete pipe contained impeded but flowing water (Figure 1). The crew obtained a sample from the flowing water to test for illicit discharge indicators. The results of the tests are provided in Table 1, as Test 1. The result for pH indicated a reading below the acceptable range (6.21).

The Versar team returned the next day and collected a sample of the flowing effluent. The results of the tests are provided in Table 1, as Test 2. The result for pH on the revisit indicated a reading below the acceptable range (6.2). In response to the pH results out of the acceptable range, the team initiated a trackdown of the network to attempt to locate a possible source. The team used a map of the County's GIS data sets illustrating the stormwater infrastructure in the area, but found that some of the features in the data sets did not correlate with network components and connections observed in the field. The field team sought but did not find the first three manholes up-network from the outfall, as indicated in the GIS data; the team succeeded in locating the fourth manhole in the system (note that there is also an input to this manhole from the west that is not indicated in the County's GIS-based network). This fourth manhole had standing water near the opening for the input pipe from the west (Figure 2). The team obtained a sample of this water; the pH reading was within the acceptable range (6.9). The team noted a weak flow from the main pipe coming from the south, but the water level was too low to provide an adequate sample. An inspection of the curb inlet to the south also revealed a faint flow of water but without sufficient volume to obtain a sample (Figure 3).

The team attempted to track a source of flow from a portion of the network to the west, which may have contributed to the water in the fourth manhole. The fifth manhole (to the west of the fourth), located in a parking lot between the apartment clusters for Andrew Court and Red Clay Road, displayed four tie-ins upon inspection (the County's GIS layer for stormwater pipes shows three). The team observed flowing water in the pipe entering the manhole from the west; a sample of this water had a pH of 7.6. A pipe entering from the south (the one pipe missing in the data set) also contained flowing water. Due to its close proximity, the team considered that this pipe may have been associated with a yard grate in the grassy area adjacent to the parking lot (Figure 4). In the yard inlet, the team documented that a small white drain pipe had flowing effluent (Figure 5). A sample of the flowing water from the white pipe had a pH of 7.03.

The field team evaluated the flowing water entering the system contributing to outfall B12G2O001 at several access points. All test results within the network indicated pH readings higher than those recorded at the outfall. The team surmised that groundwater near the outfall



may have low pH, and that this contribution to the flows at the outfall may be responsible for lower readings at that location. An area map is provided in Figure 6.

Table 1. Chemical test results (red values indicate above-action-level				
concentration) of samples taken at outfall B12G2O001				
	Action Level Test 1 Result Test 2 Res			
pН	\leq 6.5 or \geq 8.5	6.21	6.2	
Temperature (°F)	68.2 66.0			
Ammonia (mg/l)	≥ 1 0.0 0.0			
Total Chlorine (mg/l)	≥ 0.4 0.0 0.0			
Detergents (mg/l)	≥ 0.5 0.1 0.0			
Fluoride (mg/l)	≥ 0.75			
Phenols (mg/l)	≥ 0.17 0.0 0.0			
Copper (mg/l)	≥ 0.21	0.0	0.0	



Figure 1. Outfall B12G2O001 as observed on June 9, 2016





Figure 2. View inside the fourth manhole; note the trail of water from the west (right)



Figure 3. View inside the curb inlet south of the fourth manhole, showing a faint flow of water





Figure 4. A yard grate (foreground) that appeared to be connected to and contributing water to the manhole in the parking lot (background)



Figure 5. View inside the yard inlet showing flowing water from a small white pipe



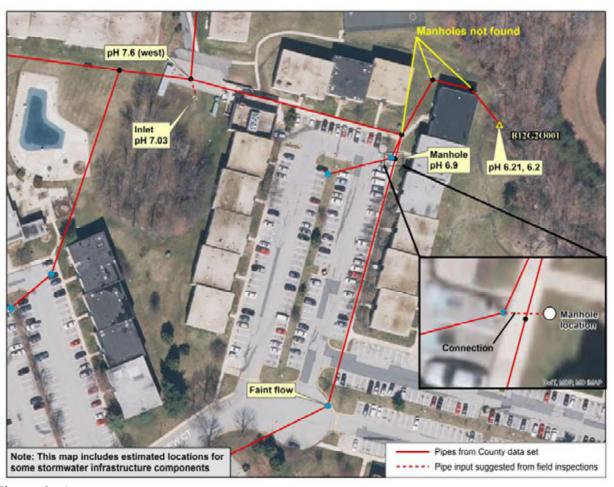


Figure 6. Area map



Outfall ID: Not applicable

Location: Near 3438 Andrew Court, Maryland City, MD (Ashley Apartments)

Date: June 10, 2016

Investigators: C. Tonkin and P. Potti

Concern: Active waste water dumping

On June 10, 2016, while conducting outfalls inspections near the Ashley Apartments complex, a Versar field team discovered soap suds at a curb inlet and along the adjacent curb along Andrew Court. The team noticed a janitor's cart, and a janitor walking with a mop bucket nearby (Figure 1). The team opened a nearby manhole to investigate conditions in the stormwater system (Figure 2). Note that the connection between the manhole, located across the sidewalk from the curb inlet, and the curb inlet is not depicted correctly in the GIS data layers provided by the County. In the manhole, the water from the input from the curb inlet was stagnant (Figure 3). The team obtained a sample of the pooled water to test for illicit discharge indicators. The results of the tests are provided in Table 1. Several indicators had results above acceptable limits. Since the investigation was initiated by a chance encounter, and not as a result of a systematic outfall screen, no second visit was made to the site of the mop dumping. An area map is provided in Figure 4; note that features have been added to the map which represent the correct manhole location and the connection between the curb inlet and the manhole.

Table 1. Chemical test results (red values indicate above- action-level concentration) of samples taken from manhole			
Action Level Test Resu			
рН	\leq 6.5 or \geq 8.5	6.9	
Temperature (°F)		Not recorded	
Ammonia (mg/l)	≥ 1	1.0	
Total Chlorine (mg/l)	≥ 0.4	1.0	
Detergents (mg/l)	≥ 0.5	3.0	
Fluoride (mg/l)	≥ 0.75	0.0	
Phenols (mg/l)	≥ 0.17	0.0	
Copper (mg/l)	≥ 0.21	0.0	





Figure 1. Soapy waste water observed at a curb inlet in the Ashley Apartments complex; note the yellow janitor's cart (left) and the janitor (top center-left) carrying a mop bucket toward the entrance to 3440 Andrew Court



Figure 2. View showing the relative location of the manhole (center-right) to the curb inlet; the team obtained a sample of water for testing from the opened manhole





Figure 3. View inside the manhole; note the soapy waste water pooled on the right





Figure 4. Area map



Outfall ID: G13G7O006

Location: Behind the BGE maintenance lot, 730 New Waugh Chapel Road, Odenton

Date: March 9 and 10, 2016

Investigators: C. Tonkin and P. Potti (Versar) and B. Crary and A. Huizenga (LimnoTech)

Concern: Above-action-level detergents and ammonia

A field team composed of Versar and LimnoTech staff inspected the outfall, G13G7O006, behind the BGE maintenance lot and its associated stormwater network located at 730 New Waugh Chapel Road in Odenton. Staff conducted the first visit on March 9. Staff found the outfall in the woods behind the lot and observed that the water in the outfall was stagnant (Figure 1); field team members detected the sound of flowing water in the pipe. They followed the pipe network to the next available observation point – a slab top yard inlet located in the grassy area behind the lot near the edge of the woods Within the inlet, staff members observed clear flowing water; they obtained a water sample to test for possible illicit constituents. The results of the tests are provided in Table 1, for Test 1. Detergents tested above the acceptable range for the sample taken on the first site visit (0.75 mg/l).

Staff returned to the site the following day, March 10. Staff observed that the stagnant water at the outfall was faintly opaque and brown, and that the water exhibited a surface film with bubbles. The team again observed that the outfall did not overtly exhibit dry weather flow, and that the network was conveying effluent between the outfall and the maintenance building. Staff sampled the effluent from the yard inlet again (Figure 2); the results are provided in Table 1, for Test 2. Detergents tested above the acceptable range (1 mg/l); ammonia was also elevated (2 mg/l). Prompted by the results from the follow-up test, staff conducted a trackdown to determine the source of the pollution from the BGE facility. The up-network extent of the stormwater network according to the GIS data layer was a yard grate located at the corner of the fueling station. When staff inspected this connection, they discovered that the network continued toward the maintenance building, and that the network of stormwater pipes followed a corresponding network of recently repaved asphalt (Figure 3). Staff tested the effluent from the yard grate at this location and found high levels of detergents (1 mg/l) and ammonia, consistent with the readings from the inlet farther away from the building. Staff documented that the line of repayed parking lot could be traced to the corner of the maintenance building. Near the corner it separated into two feeder lines: one line came from a trench inlet just outside the bay doors (Figure 4); the path for the other line continued under the building, but generally led in the direction of other trench inlets that were just on the inside edge of bay doors for the building (Figure 5). Staff confirmed that the outside grates contained water, but the field crew was not able to obtain samples for testing on the day of the second site visit. An area map is provided in Figure 6.



Table 1. Chemical test results (red values indicate above-action-level concentration) of Facility G13G7O006 at 730 New Waugh Chapel Road (sample taken from yard inlet)

	Action Level	Test 1 Result	Test 2 Result
рН	$\leq 6.5 \text{ or } \geq 8.5$	7.58	7.24
Temperature (°F)		49.5	52.0
Ammonia (mg/l)	≥ 1	0.0	2
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.75	1
Fluoride (mg/l)	≥ 0.75	0.0	0.1
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. Stagnant water found at outfall G13G7O006 on March 9





Figure 2. Evidence of flowing effluent in the yard grate, the nearest access point on the network from the outfall; note that this photograph was taken on March 10



Figure 3. Photograph showing part of the repaved portion of the parking lot that correlates with the stormwater network; note that staff did not open the curb inlet in the foreground





Figure 4. Photograph showing the end of the repaved portion of the parking lot that extends to the trench inlets by the bay doors; note that staff documented the presence of water in these inlets on March 10 but did not obtain samples for testing



Figure 5. Photograph showing trench inlets in the bays; staff presumed that these were also connected to the stormwater network via new pipes





Figure 6. Area map



Outfall ID: I03E8O003

Location: Concourse Drive, Linthicum Heights, MD

Date: April 26 and 27, 2016
Investigators: C. Tonkin and P. Potti
Concern: Remnants of petroleum spill

On April 26, 2016, a Versar field team was inspecting outfalls in the area and discovered what appeared to be evidence of a petroleum spill at outfall I03E8O003, near Concourse Drive in Linthicum Heights, MD. As team members approached the outfall, they observed several absorbent socks draped across the plunge pool; the stagnant water was dark grey and cloudy (Figure 1). The team noted a strong odor of oil at the site. The team briefly attempted to locate a viable source for the discharge, and began to search the nearby network access points for clues. At the nearest manhole, the team found flowing water and detected an odor of gasoline. Staff did not find other sources or evidence on the first visit. The crew collected a sample of the effluent in the manhole to test for illicit discharge indicators. The results of the tests are provided in Table 1; no tested parameters exceeded County action levels.

Versar staff members returned to the site the next day, April 27. They found conditions at the outfall and the nearest manhole similar in appearance and odor to those detected the previous day. Staff assessed conditions at the two adjacent manholes along Concourse Drive and determined that the odors were weaker in these locations than the level detected in the first manhole. Staff then followed the drainage line to the main line that connects the curb inlets installed behind the buildings at 1300 and 1302 Concourse Drive. At the manhole behind the building at 1302, staff detected an odor of petroleum. Upon continued investigation, staff discovered a sign on the 1302 building that identified the location of 550-gallon diesel fuel storage at the site (Figure 2). As the team surveyed the area, members noted evidence of recent disturbance: loose straw and new grass. Alongside the building, the team noted a hole in the ground, with exposed lines (Figures 3 and 4). The team detected the odor of gasoline at this location, also. The staff members surmised that this had been the site of a recent fuel spill or leak. Several clues suggested that those responsible had identified the source of the discharge and had stopped the flow near or in the building. An area map is provided as Figure 5.

Table 1. Chemical test results of the sample taken at the manhole near outfall I03E8O003				
Action Level Test Result				
рН	\leq 6.5 or \geq 8.5	8.02		
Temperature (°F) 67.6				
Ammonia (mg/l) ≥ 1 0.0				
Total Chlorine (mg/l)	≥ 0.4	0.15		
Detergents (mg/l) ≥ 0.5 0.0				
Fluoride (mg/l) ≥ 0.75 0.2				
Phenols (mg/l)	≥ 0.17	0.0		
Copper (mg/l)	≥ 0.21	0.0		





Figure 1. Outfall I03E8O003 as observed on April 26, 2016, with the absorbent socks installed to constrain the fuel in the water



Figure 2. A yellow sign (upper center-right) indicating fuel storage mounted on the building at 1302 Concourse Drive; the sign reads, "550 gallons diesel fuel." Evidence of new grass and loose straw can be seen on the right side of the photograph.





Figure 3. Signs of a hole opened alongside the building and exposed lines; note the dark stain on the sill



Figure 4. View showing the relative location of the yellow sign, on the near corner of the building, and the hole with the exposed lines (upper center, under the windows)





Figure 5. Area map
Anne Arundel County Illicit Discharge Site Visit Report



Outfall ID: I17B6O007

Location: Crofton Centre, Crofton, MD Date: April 18, 19, and 20, 2016

Investigators: C. Tonkin and P. Potti (Versar) and A. Huizenga and L. Linden (LimnoTech)

Concern: Low pH

On April 18, the LimnoTech field team inspected the target outfall, I17B6O007, which is located on the west side of Crain Highway, opposite the Crofton Centre shopping center in Crofton, MD. At the 72-inch outfall, the field team observed a rust-colored discharge (Figure 1); the team obtained a sample to test for illicit discharge indicators. The results of the tests are provided in Table 1, for Test 1. The result for pH indicated a reading below the acceptable range (4.80).

On April 19, the LimnoTech field team conducted a second site visit and collected and tested the discharge. The results of the tests are provided in Table 1, for Test 2. The result for pH indicated a reading below the acceptable range on the day of the site revisit, also 4.80.

The LimnoTech field crew conducted a partial trackdown on the second site visit. The crew determined that the flow was coming from the drainage line leading east under the parking lot of Crofton Centre. A Versar team visited the site on April 20 to continue the investigation of the source of the discharge; the team documented a low pH reading at the outfall of 5.50 on April 20. The Versar team followed the main drainage line that extends eastward under Crain Highway, in front of the Wells Fargo branch and the Osaka Grill restaurant, and toward the Sears Auto Center. At the manhole in the parking lot just southeast of the Wells Fargo branch, the team observed flow; a test result indicated a pH of 5.66 (Figure 2). There was insufficient sample volume to test other parameters. The team determined that other pipes in the vicinity (i.e., near the Checker's restaurant drive-through and in the parking lot behind the Sears Auto Center) did not contribute to the discharge. The Versar team did not find additional evidence that would further clarify the source of the illicit discharge on April 20. An area map, showing the results of the trackdown efforts, is provided as Figure 3.

Table 1. Chemical test results (red values indicate above-action-level concentration) of					
samples taken at outfall I17B6O007, west of Crofton Centre					
	Action Level Test 1 Result Test 2 Result				
pН	\leq 6.5 or \geq 8.5	4.80	4.80		
Temperature (°F)		63.1	56.8		
Ammonia (mg/l)	≥1	0.0	0.0		
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0		
Detergents (mg/l)	≥ 0.5	0.2	0.2		
Fluoride (mg/l)	≥ 0.75	0.3	0.3		
Phenols (mg/l)	≥ 0.17	0.0	0.0		
Copper (mg/l)	≥ 0.21	0.0	0.0		





Figure 1. Outfall I17B6O007 exhibiting a rust-colored discharge, as observed by the LimnoTech field crew on April 18, 2016



Figure 2. Flow observed (right photograph) from a manhole in the eastern drain line under Crofton Centre, in front of the Wells Fargo branch (left photograph) on April 20, 2016





Figure 3. Area map showing results of trackdown efforts along pipes leading to the target outfall, I17B6O007



Outfall ID: I04F3O014

Location: 881 Elkridge Landing Road, Linthicum Heights, MD

Date: May 10 and 27, 2016

Investigators: C. Tonkin, P. Potti, and D. Spradlin Concern: Above-action-level detergents

A Versar field team inspected the outfall, I04F3O014, located west of the National Security Agency offices at 881 Elkridge Landing Road, on May 10 and 27, 2016. Field crews had visited this site in May 2015; the discharge at the outfall on the previous year's visit exhibited above-action-level concentrations of detergents. On May 10, 2016, during the current year's screening, field staff observed flowing water at the outfall. Field staff collected and tested a sample of the discharge at the outfall. The results of the tests are provided in Table 1, as Test 1; results indicated above-action-level detergent concentrations (0.75 mg/l).

Staff members returned to the site at the next opportunity (that is, a sampling period with a preceding 72 hours of dry weather) – May 27, 2016. They again observed flowing water at the outfall (Figure 1). The tests on the discharge showed above-action-level concentrations of detergents (0.6 mg/l); the results are provided in Table 1, as Test 2. The team initiated a trackdown of the system to identify the source of the flow. The digital infrastructure data provided by County staff includes one manhole and two curb inlets in the stormwater conveyance system leading to the outfall. Field staff found evidence that there are more elements to the network than the digital data indicate. The field crew inspected the manhole and found two inlet pipes; one was a large concrete trunk line pipe which was dry, and one was a smaller black pipe which had flowing effluent from the direction of the first curb inlet (Figure 2). The crew proceeded to the next access point, the first curb inlet. This inlet also displayed two input pipes; one pipe leading from the second curb inlet (northeast) had flowing effluent, and one pipe conveying flow from the southeast was damp (Figure 3). The field crew inspected the second curb inlet, which is the easternmost extent of the stormwater infrastructure network according to the County's data set. The crew found a small PVC pipe contributing flowing effluent to this inlet from a source to the east (Figure 4). The crew tested this effluent for detergents; results showed concentrations above action levels (0.8 mg/l). Due to security constraints at the guarded National Security Agency facility, the field crew did not attempt to track the source of this small PVC pipe; consequently, the team did not identify the source of the flowing discharge. An area map is provided in Figure 5.



Table 1. Chemical test results (red values indicate concentrations above action levels) of samples from Facility I04F3O014

	Action Level	Test 1 Result	Test 2 Result
pН	\leq 6.5 or \geq 8.5	8.43	8.03
Temperature (°F)		58.5	58.7
Ammonia (mg/l)	≥ 1	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.75	0.6
Fluoride (mg/l)	≥ 0.75	0.1	0.4
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. Outfall I04F3O014 with flowing discharge as observed on May 27, 2016





Figure 2. Two input pipes for the manhole up-system from the outfall; the large concrete pipe (top) was dry and the black pipe (top right) had flowing effluent from a source in line with the curb inlet to the east



Figure 3. View inside the first curb inlet, showing the discharge flowing from the direction of the second curb inlet (left); note the line of moisture in the upper right which indicates a second pipe input to this inlet (from the southeast)





Figure 4. A white PVC pipe (left) contributing flow to the stormwater system from a source to the east of the second curb inlet up-network from the outfall



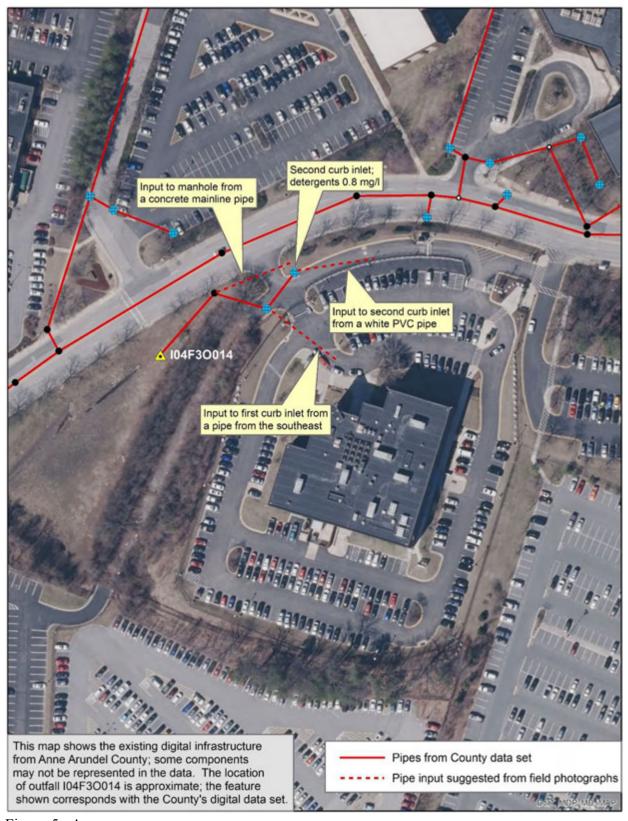


Figure 5. Area map



Location: Embassy Suites Hotel, 1300 Concourse Drive, Linthicum Heights

Date: April 26, 2016

Investigators: C. Tonkin and P. Potti

Concern: Washwater discharge to storm drain inlet

On April 26, 2016, Versar field staff conducted a site visit to outfall I03E8O003 near the above address. Discharge from this outfall has demonstrated high concentrations of illicit discharge indicators in the past. In 2014, Versar staff reported above-action-level concentrations of detergents and elevated ammonia; a trackdown showed evidence that washdown activities at the Embassy Suites Hotel, at 1300 Concourse Drive, may have contributed to the reported high levels of contaminants. In 2016, the field team observed flowing water at the outfall and obtained a sample of the water for testing. The results of field tests showed elevated chlorine levels that were not above the corresponding action level.

In lieu of a trackdown, since that was not warranted, the team inspected the loading dock area of the Embassy Suites hotel. As team members approached the rear of the establishment, they observed evidence of a significant amount of wash water in the parking lot, starting from a point immediately behind a loading dock, and leading across the rear parking lot (Figure 1). The field team documented the presence of a hose stored on a hanger on the outside wall and an uncovered bucket which appeared to contain liquid at the edge of the dock (Figure 2). The path of the water continued to the curb inlet on the opposite side of the parking lot, where it then could enter the storm sewer system (Figure 3). Although the field team did not observe washing activity, the fresh evidence of discharge suggested that hotel staff may be inappropriately releasing wash water to the stormwater system through outdoor washing activities. In 2014, field staff documented that the pavement from the loading dock toward the curb inlet in the same location showed stains from repeated flows of wash water that had left deposits on the pavement. An area map is provided in Figure 4.





Figure 1. Wash water observed in a path from the loading dock (rear center) to the curb inlet (lower left corner, out of sight) behind the Embassy Suites Hotel on April 26, 2016



Figure 2. Evidence of an outside-mounted hose and an uncovered bucket that appeared to contain liquid at the loading dock for the Embassy Suites Hotel on April 26, 2016



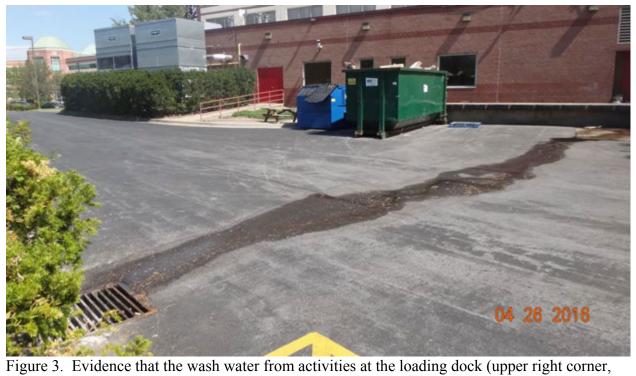


Figure 3. Evidence that the wash water from activities at the loading dock (upper right corner, off the edge of the photograph) was of significant volume to cross the parking lot and enter the curb inlet (lower left corner)





Figure 4. Area map



Outfall ID: Q09C3O001

Location: Escalon Avenue, Pasadena, MD

Date: April 18 and 19, 2016 Investigators: C. Tonkin and P. Potti

Concern: Follow-up by County request

A Versar field team inspected the outfall, Q09C3O001, located east of Escalon Avenue, on April 18, as per County request to investigate a possible illicit discharge. On the first field visit, staff observed that the water in the outfall was flowing (Figure 1); staff noted that the water was clear, and the receiving deck had an excessive amount of algae growth. The field team also detected a sour, rancid smell in the vicinity of the outfall. The field staff collected a sample of the discharge at the outfall to test for possible illicit constituents. The results of the tests are provided in Table 1, for Test 1. Detergent levels tested above the acceptable range for the sample taken on the first site visit (2 mg/l).

Staff members returned to the site the following day, April 19. They again observed and tested flowing water at the outfall; the results are provided in Table 1, for Test 2. Several contaminants had detectable concentration levels in the second test, although none was above action levels. Due to the presence of elevated contaminant levels combined with characteristics of concern (odor and excessive algae growth), the field crew determined that a trackdown would be prudent. The team found flowing water in a manhole on the eastern side of Escalon Avenue (Figure 2); the flowing water originated from the pipe connected to the western side of the neighborhood. On the western side, staff observed low levels of standing water in several access points to the stormwater infrastructure (Figure 3). The team tested a sample of the stagnant water in a manhole; results did not indicate detectable levels of contaminants and therefore the source of the high detergent level in the outfall could not be determined. The field team noted sanitary sewer and public drinking water supply lines adjacent to the manhole. Other upnetwork inlets and manholes were dry. An area map is provided in Figure 4.

Table 1. Chemical test results (red values indicate above-action-level concentration) of				
samples taken at Facility Q09C3O001				
	Action Level	Test 1 Result	Test 2 Result	
pН	\leq 6.5 or \geq 8.5	8.1	8.1	
Temperature (°F)		64.6	61.2	
Ammonia (mg/l)	≥ 1	0.0	0.0	
Total Chlorine (mg/l)	≥ 0.4	0.0	0.3	
Detergents (mg/l)	≥ 0.5	2	0.1	
Fluoride (mg/l)	≥ 0.75	0.2	0.4	
Phenols (mg/l)	≥ 0.17	0.0	0.0	
Copper (mg/l)	≥ 0.21	0.0	0.0	





Figure 1. Outfall Q09C3O001 as observed on April 18



Figure 2. Flowing water observed in a manhole on the eastern side of the Escalon Avenue neighborhood on April 19; the water flowed from the west





Figure 3. Evidence of standing water in the stormwater system on the western side of Escalon Avenue on April 19





Figure 4. Area map



Outfall ID: I17D5O001

Location: Martha Greenleaf Drive, Crofton, MD

Date: April 18 and 19, 2016 Investigators: A. Huizenga and L. Linden

Concern: Low pH

On April 18, 2016, a LimnoTech field team inspected target outfall I17D5O001 near Martha Greenleaf Drive in Crofton, MD. This outfall drains the southeast end of Crofton Station Court, and a parking lot associated with the Anne Arundel Carver Center, into a stormwater pond. The team observed a discharge flowing from the pipe (Figure 1); the team obtained a sample to test for illicit discharge indicators. The results of the tests are provided in Table 1, as Test 1. The result for pH indicated a reading below the acceptable range (6.35).

The LimnoTech team returned the next day and collected a sample of the flowing effluent. The results of the tests are provided in Table 1, as Test 2. The result for pH on the revisit indicated a reading below the acceptable range (6.35). Due to the pH result out of the acceptable range, the team initiated a trackdown of the network to attempt to locate a possible source. The team tracked the flow up the drainage line to the third catch basin in the system; this catch basin included a 4-inch pipe from which a steady trickle of discharge flowed into the drainage system (Figure 2). The team collected a sample of the flowing water; results of the tests are provided in Table 1, as Test 3. The result for pH at this piped input to the catch basin indicated a reading below the acceptable range (3.65).

The LimnoTech team did not identify any other flowing contributions to the target outfall on April 19. The team was also unable to determine the origin of the 4-inch pipe at the catch basin or to find additional evidence to identify the source of the illicit discharge. An area map is provided as Figure 3.

Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken at outfall I17D5O001, northwest of Martha Greenleaf Drive (Tests 1 and 2), and a catch basin in the upstream network (Test 3)

	Action Level	Test 1 Result	Test 2 Result	Test 3 Result
рН	\leq 6.5 or \geq 8.5	6.35	5.84	3.65
Temperature (°F)		72.0	63.5	59.4
Ammonia (mg/l)	≥ 1	0.0	0.0	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.1	0.2	0.3
Fluoride (mg/l)	≥ 0.75	0.3	0.4	0.4
Phenols (mg/l)	≥ 0.17	0.1	0.1	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0	0.0





Figure 1. Outfall I17D5O001 as observed on April 18, 2016



Figure 2. Flow observed from a 4-inch pipe entering a network curb inlet (third catch basin up the network from the outfall) on April 19





Figure 3. Area map



Outfall ID: I19B6Onew2

Location: 2124 Priest Bridge Drive, Crofton, MD

Date: April 19 and 20, 2016 Investigators: C. Tonkin and P. Potti

Concern: Above-action-level concentrations of detergents, fluoride, and ammonia

On April 19, the Versar field team inspected an outfall, I19B6Onew2, which drains the parking lot of Patuxent Materials, Inc. (Versar field crews previously visited this outfall in August 2015; this site has been previously identified as I19B6O008new1). At the 24-inch corrugated metal pipe opening of the outfall, the team observed a small amount of cloudy discharge (Figure 1). A manhole adjacent to the outfall revealed an intersection of two corrugated metal drainage pipes; the pipe on the east side exhibited slowly flowing water (Figure 2). The team collected a sample of the flowing water from the pipe to test water quality. Test results are presented in Table 1, as Test 1; the test results showed above-action-level concentrations of ammonia (10 mg/L), detergents (0.5 mg/L), and fluoride (5.0 mg/L). The team conducted a partial trackdown of a source within the drainage system on April 19. At the next access point to the east of the intersection, the team documented flowing water in the yard inlet in the parking lot, near the pass-through (Figure 3).

On April 20, the Versar team returned to the site and found conditions at the outfall similar to the previous day's observed characteristics; the team noted a strong sulfur smell on the revisit. The team collected a sample of water flowing from the pipe in the manhole near the outfall and tested it for contaminants. The results of the tests are provided in Table 1, as Test 2. The results for detergents (1.5 mg/l) and fluoride (3.1 mg/l) were above their respective action levels. Due to the elevated levels of constituents, the team continued to investigate conditions in the system. The team tracked the flow along the east drainage line to the fourth yard grate up the network, located adjacent to the entrance gate to a Patuxent Materials storage and maintenance lot. The lot included a washdown area (Figure 4) that appeared to be connected to the fourth yard inlet via a 6-inch PVC pipe. The team members observed that the floor of the inlet was damp, but they did not detect flowing water.

The field team did not obtain additional information which might confirm the source of the illicit discharge. The team surmised that the origin may be near the top of the drainage system leading from the area adjacent to the Patuxent Materials washdown area; the yard grates in this area were bolted or welded shut, making them difficult to sample. Evidence collected thus far suggests that the potential source may be effluent from the Patuxent Materials washdown area or associated water conveyance facilities.



Table 1. Chemical test results (red values indicate above-action-level concentration) of samples taken at outfall I19B6Onew2 at Patuxent Materials, Inc.

•	Action Level	Test 1 Result	Test 2 Result
рН	\leq 6.5 or \geq 8.5	7.88	7.47
Temperature (°F)		77	56.5
Ammonia (mg/l)	≥ 1	10	0.0
Total Chlorine (mg/l)	≥ 0.4	0.0	0.0
Detergents (mg/l)	≥ 0.5	0.5	1.50
Fluoride (mg/l)	≥ 0.75	5.0	3.1
Phenols (mg/l)	≥ 0.17	0.0	0.0
Copper (mg/l)	≥ 0.21	0.0	0.0



Figure 1. Outfall I19B6Onew2, showing cloudy discharge on April 19





Figure 2. Flowing water observed from one of the pipes (from the east) contributing to the network, as documented from within a manhole to the east of the outfall



Figure 3. Yard grate located at the north end of the parking lot at 2124 Priest Bridge Drive showing slowly flowing discharge from the east on April 19





Figure 4. Yard grate adjacent to the maintenance lot and washdown area associated with Patuxent Materials, Inc.; although there is evidence of flow into the grate, as suggested by the accumulated sediment, the field team did not find flowing discharge at this location on April 20





Figure 5. Area map, showing flow observations, and listing above-action-level readings for the water in the pipe from the east at the intersection



Outfall ID: F09G5O001

Location: 2631 Annapolis Road (MD Route 175), Hanover, MD

Date: June 8 and 9, 2016 Investigators: C. Tonkin and P. Potti

Concern: High detergents

On April 8, 2016, a Versar field team inspected outfall F09G5O001, which is south of the Shell gas station and car wash facility at the corner of Annapolis Road (Maryland Route 175) and Rockenbach Road in Hanover. Versar staff had inspected a larger, associated outfall nearby, F09F5O001, in 2015, and found high detergent levels in the system. On the first field visit during the current round of inspections, the crew discovered that the outfall F09G5O001 was blocked by layers of cut tree limbs that had been stacked in front of the outfall opening; this makeshift dam also accumulated forest debris (dirt, leaves, and sticks) such that the opening for the pipe appeared to be barely functioning as an outfall (Figure 1). The crew observed water beneath the debris partially blocking the outfall and water seeping out of the ground on the hillside above the outfall headwall. This discharge and seepage collected in a small stream that subsequently entered a stormwater inlet which was not identified in the County's GIS data sets (Figure 2); the crew also noted a white deposition on the bottom of the small stream channel. The field team collected a sample of water flowing into this stream to test for illicit discharge indicators. The results of the tests are provided in Table 1, as Test 1. The result for detergents was above 3.0 mg/l, the highest functional level that the field test is designed to detect (Figure 3).

The Versar team returned the next day and observed similar conditions at the outfall site, and noted the addition of a greyish-white residue and faint suds in the stream below the outfall (Figure 4). The crew collected a sample of the flowing water entering the stream; the results of the tests for this sample are provided in Table 1, as Test 2. The result for detergents on the revisit was above 3.0 mg/l. The excessive levels of detergents and the presence of suds prompted a thorough trackdown of the source of the effluent and an investigation of the stormwater network associated with outfalls F09G5O001 and F09F5O001.

The crew members inspected the network directly connected to outfall F09G5O001 by following the interconnected pipes and access points; they documented the locations of structures that were not included in the County's GIS (Geographic Information System) data sets, and tested water at several locations to isolate the source of the detergents. The crew inspected the first manhole in the network, just uphill from the outfall (Figure 5). The pooled water at the bottom of the manhole was greyish-purple and emitted a foul odor. The detergent test of the water in the first manhole showed a result of at least 3.0 mg/l. The County's GIS data set indicated a manhole in the network on the hillside near the entrance to the carwash, but the field crew did not find this structure on the day of the trackdown. As the crew members proceeded along the network indicated by the GIS data layer, they found and opened the next available manhole (which should be the third in the series). At this access point, which was adjacent to the exit for the car wash, the crew observed greyish-purple water and excessive suds (Figures 6 and 7). The test for detergents in a sample of the water from the third manhole showed levels above



3.0 mg/l. Although there were trench drains in place near the entrance and exit for the car wash, the field crew did not find sufficient water in either of these devices to account for the amount of flowing water observed in the stormwater network. The team, thus, surmised that the discharge from the car wash entered the stormwater system through an access route that was not readily apparent - perhaps through an illicit connection.

The field crew also extended the inspection course away from the car wash, toward the large outfall, F09F5O001, and included examinations and testing at two curb inlets downstream of the presumed source. At the first curb inlet, the crew observed flowing water and detergent levels above 3.0 mg/l. This inlet also exhibited a tie-in for a second pipe, leading to the southwest, not shown in the County's GIS coverage. At the second curb inlet, the team observed that the water appeared to be pooled and the catch basin contained some garbage and debris; the water sample from the second curb inlet also had detergent levels above 3.0 mg/l. The field team considered that the tie-in from the first curb inlet may connect to the stormwater infrastructure for outfall F09F5O001, so team members inspected two of the access points in that network, also. The curb inlet immediately west of the Car Doc facility leads directly to outfall F09F5O001, according to the GIS data. The field team inspected this inlet and found it to be dry. The team investigated conditions at outfall F09F5O001 and found flowing effluent from the pipe and suds in the plunge pool (Figure 8). A test for detergents in this discharge showed levels above 3.0 mg/l. An area map is provided in Figure 9.

Table 1. Chemical test results (red values indicate above-action-level							
concentration) of samples taken from a stream conveying discharge from							
outfall F09G5O001							
Action Level Test 1 Result Test 2 Result							
рН	\leq 6.5 or \geq 8.5	6.88	7.09				
Temperature (°F)	Temperature (°F) 74.5 69.8						
Ammonia (mg/l)	Ammonia (mg/l) ≥ 1 0.0 0.0						
Total Chlorine (mg/l) ≥ 0.4 0.0 0.0							
Detergents (mg/l) ≥ 0.5 > 3.0 >3.0							
Fluoride (mg/l) ≥ 0.75 0.4 0.0							
Phenols (mg/l) ≥ 0.17 0.0 0.0							
Copper (mg/l) ≥ 0.21 0.0 0.0							





Figure 1. Outfall F09G5O001 as observed on June 8, 2016; note that cut limbs had been placed across the opening to the extent that the outfall appeared to be almost totally blocked during the field inspection



Figure 2. View showing the small stream (center) that receives and conveys flowing water from the outfall (top center, hidden from view) and the hillside adjacent to the entrance to the car wash (top left)





Figure 3. The test result (center) showing the color far exceeding the potential of the test to determine the extent of detergents in the sample; a sample with a detergent level of 3.0 mg/l would have a blue color that matches the color of the vial at top of the outer circle (darkest blue)





Figure 4. Effluent from outfall F09G5O001 (top left), observed on June 9, 2016, showing greyish-white residue as it entered the receiving stream





Figure 5. View showing the relative location of the outfall F09G5O001 (lower left), the first manhole (center right) and the entrance to the car wash (top)



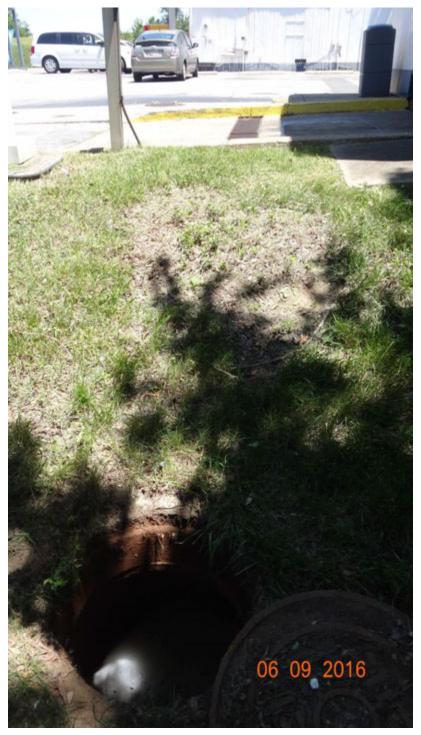


Figure 6. The relative location of the third manhole (lower left) to the exit for the car wash (top right, just outside of the view)





Figure 7. View of excessive suds inside the third manhole as observed on June 9



Figure 8. Flowing effluent from outfall F09F5O001, as observed on June 9, 2016; note white suds among the rocks in the plunge pool



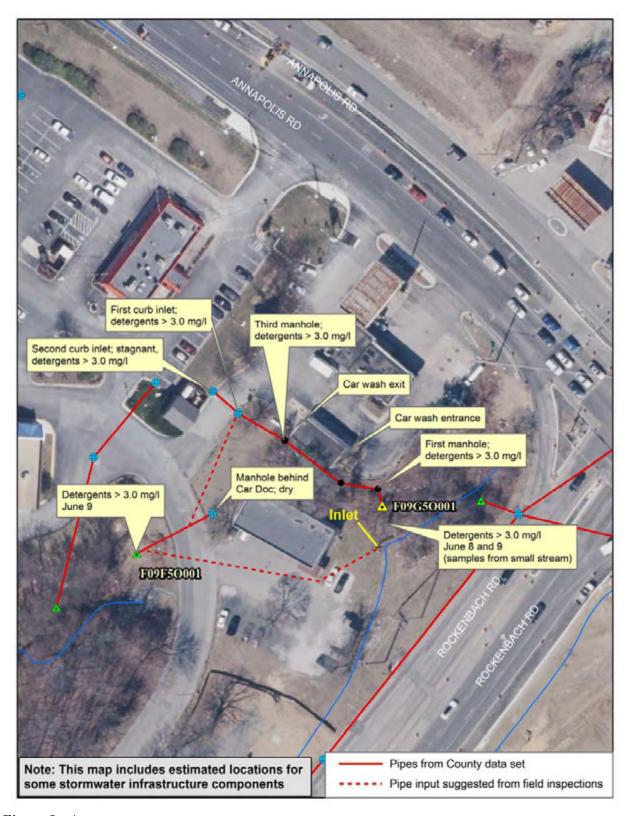


Figure 9. Area map

Anne Arundel County Illicit Discharge Site Visit Report



Anne Arundel County Illicit Discharge Site Visit Report

Outfall ID: I17G10new

Location: Shoreline Seafood, 1034 Route 3, Gambrills

Date: August 14, 2015

Investigators: M. Berlett, & I. Turcsányi

Concern: Above action level detergents and ammonia, out of acceptable range pH

A Versar field team conducted a site visit to the outfall associated with the rear lot of Shoreline Seafood, located at 1034 Maryland Route 3 in Gambrills on August 14, 2015 (the site has been assigned the ID I17G10new). At the time of the field visit, the outfall contained backed up water, but a small amount was flowing (Figure 1). The field team noted that the water was rancid-sour smelling, brown in color, and cloudy. The team obtained a sample of the effluent, but did not perform chemical tests due to color interference with the colorimetric test kit media. The team investigated the contributing drainage to the outfall which was located in the rear of Shoreline Seafood. There was no obvious sign of illicit discharge input to the curb inlet, but the team noted a large quantity of gallon jugs full of waste cooking oil placed on top of the inlet slab (Figure 2).

The team returned to the site on August 17 to reinspect the outfall because of a suspicion of illicit discharge due to the noxious nature of the effluent present in the outfall. The field team was able to obtain a clearer sample of water and performed chemical tests, which resulted in failure of the outfall due to unacceptable levels of detergents, ammonia, and pH (Table 1). The team could not perform a trackdown of the source of the flow because the material placed on top of the inlet access prevented inspection of the inlet and catch basin for straight pipe connections and tracking of the flow leading to the outfall. An area map is provided in Figure 3.

Table 1. Chemical test results (red values indicate above action level concentration) of the			
outfall near Shoreline Seafood; the site has been assigned the ID, I17G1Onew			
	Action Level	Test 1 Result	Test 2 Result
рН	\leq 6.5 or \geq 8.5	N.T.	5.86
Temperature (°F)		N.T.	71.2
Ammonia (mg/l)	≥ 1	N.T.	20
Total Chlorine (mg/l)	≥ 0.4	N.T.	0.15
Detergents (mg/l)	≥ 0.5	N.T.	>3
Fluoride (mg/l)	≥ 0.75	N.T.	0
Phenols (mg/l)	≥ 0.17	N.T.	0
Copper (mg/l)	≥ 0.21	N.T.	0
N.T. = not tested			







Figure 1. Outfall with turbid flow, August 17, 2015



Figure 2. Curb inlet (center) with containers of cooking oil placed on top, August 14, 2015



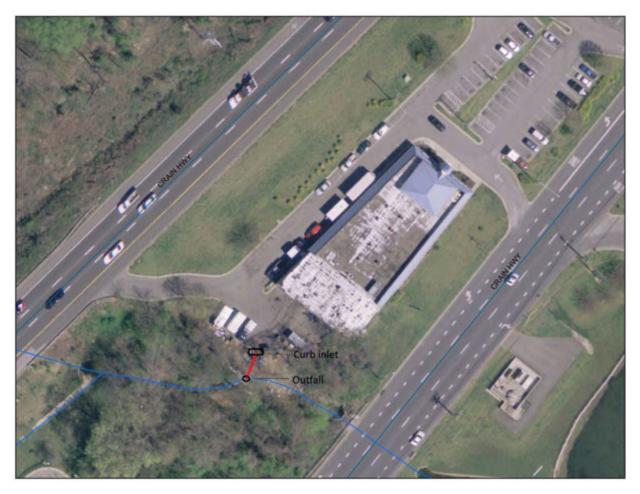


Figure 3. Area map.



Anne Arundel County Illicit Discharge Site Visit Report

Outfall ID: None

Location: The Village at Odenton Station, 1415 Duckens Street, Odenton

Date: January 6, 2016

Investigators: C. Tonkin and K. Dillow

Concern: Dumping activity

During a scheduled field day for conducting outfall screening for illicit discharge in the county, a Versar field team observed illegal dumping activity in the Odenton area. The team witnessed a janitor (dressed with a splash apron and walking with a janitor's cart) dumping liquid out of a bucket directly into the storm drain inlet located in the parking lot. The team reported that the janitor had walked from the building on the southeast corner of the complex to empty the bucket into the drain located directly in front of the building. The field crew did not have adequate time to obtain a photograph of the incident.

An investigation using Google maps (https://www.google.com/maps) reveals that the retail complex was under construction in 2008, as demonstrated by the images provided by Street View on the Web site which show only bare soil at a construction site. The field crew noted that few units in the retail portion of the buildings are occupied with businesses. An area map, indicating the location of the observed dumping activity, is provided in Figure 1.





Figure 1. Area map indicating the location of the observed dumping activity





APPENDIX C UPLAND POLLUTANT SOURCES SITE-SPECIFIC REPORTS





Location: 1710 Midway Road, Odenton

Date: March 3, 2016

Investigators: C. Tonkin and P. Potti Concern: Bulk solid storage

A Versar field team investigated the site of a paving operation along the front of the long warehouse on the right side of Midway Road (1710) and found two piles of material deposited on impervious surfaces near the paving area. The team found a pile of sand in the southeast corner of the parking lot (Figure 1). There was evidence that vehicles had dispersed some of the sand throughout the parking lot. The team also found a pile of crushed concrete along the edge of the cul-de-sac of Midway Road (Figure 2). The location of this material presents more of a concern than the sand because there is a grated storm drain inlet downgrade of the cement (Figure 3). The team noted that tire tracks on the ground above the inlet imply that trucks may be using this area for turning or backing into the warehouse docks, and thus routinely disturbing the soil immediately adjacent to the storm inlet (Figure 4). Team members photo-documented the relative location of the concrete to the inlet (Figure 5). The Versar team surmised that if paving crews were still active in the area (Figure 6), these materials may yet be removed, in due course of company business on the site; however, the proximity of the concrete to the storm inlet, and the potential of uninhibited concrete particles entering the storm drain after disturbance from routine heavy truck maneuvers at the site, denote a significant concern. Lighter particles of concrete, and the component materials (including the possibility of lead), may also enter the storm drain with rain and wind events. An area map, indicating the locations of the two piles of material and the storm drain inlet, is provided in Figure 7.





Figure 1. A pile of sand found in the warehouse parking lot on March 3 (foreground); note that the sand had also been distributed throughout the parking lot (background)



Figure 2. A pile of crushed concrete found along the cul-de-sac of Midway Road on March 3





Figure 3. A photograph of the storm inlet just west of the cul-de-sac of Midway Road (center right), as seen facing west-northwest



Figure 4. A photograph of the storm drain inlet to the west of the cul-de-sac of Midway Road, as seen facing east-southeast; note the tire tracks on the ground above the inlet and toward the cul-de-sac





Figure 5. A photograph showing the relative locations of the crushed cement (left) and the storm drain inlet (right); also refer to Figures 3 and 4 for a more detailed depiction of the inlet's location



Figure 6. A photograph showing some of the evidence that paving crews may still be active in the vicinity





Figure 7. Area map



Location: 1044 Robert Crain Highway (Maryland Route 3), Gambrills (7-11 store)

Date: March 10, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

On a day when a Versar field team was screening outfalls in the area, the team discovered a waste management issue associated with the 7-11 business at the above address. The business activities included a convenience store and a fueling station; a station for vacuuming vehicles may have been installed at one corner in the past. The team noted that on-site waste disposal and storage at the business seemed to be managed generally well; the lot was generally clean, and the dumpster was in good condition. The team documented a litter problem on the northeast side of the parking lot, along an adjacent wooded area; this region had accumulated an excessive amount of debris. The team surmised, from the types of trash found (food containers and wrappers) that the sources may have included people who were clearing their cars while preparing to use an onsite vacuum system, or patrons who disposed of containers and wrappers associated with consumables purchased at the store. The team investigated the extent of the trash distribution and found that debris was also scattered along the curbs, within the grass strip between the fuel island and the woods (Figure 1), and well into the woods (Figures 2 and 3). The team inferred from the characteristics of the debris that since customers may have been largely responsible for the inappropriate disposal over time, the business' waste management protocol should include debris removal efforts for the full lot as well as strategic placement of trash receptacles. The debris field is adjacent to a drainage ditch that may serve as a conduit for transport of trash to surface waters downstream. An area map, indicating the location of the debris, is provided in Figure 4.



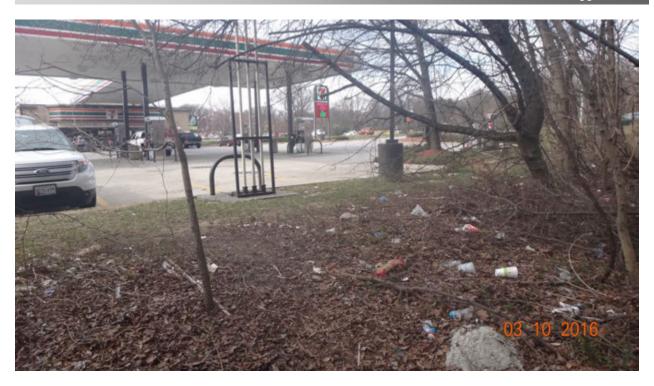


Figure 1. Debris found along the northeast side of the parking lot, near the fueling stations



Figure 2. Accumulated debris found on the grass and in the woods along the northeast edge of the parking lot, as seen looking northwest





Figure 3. Accumulated debris found on the grass and in the woods along the northeast edge of the parking lot, as seen looking southeast





Figure 4. Area map



Location: 1584 and 1586 Annapolis Road, Odenton

Date: January 21, 2016 Investigators: C. Tonkin and P. Potti Concern: Waste management

While investigating outfalls in the Odenton, MD, area, a Versar field team found evidence of inadequate waste management in a shared parking lot behind businesses at 1584 and 1586 Annapolis Road, in Odenton. Several businesses occupy the building at 1584, so the field team could not determine which organization(s) may have been responsible for the debris. In the northeast corner of the parking lot, generally behind the building at 1586, the field team found an open dumpster and large debris, including a mattress and box spring, a kitchen grease receptacle, and a weather-worn plastic barrel (Figures 1 and 2). The field team found the area around the open dumpster littered with debris (Figure 3). An area map, indicating the general location of the dumpster and debris, is provided in Figure 4.



Figure 1. Photograph of the open dumpster and large debris discarded in the northeast corner of the parking lot





Figure 2. Large debris, including a mattress set, a kitchen grease waste receptacle, and an unmarked plastic barrel, along with an excessive amount of loose debris at the edge of the woods in the corner of the parking lot



Figure 3. Detail of the littered conditions on and around the open dumpster





Figure 4. Area map



Location: 1604 Annapolis Road, Odenton

Date: January 21, 2016 Investigators: C. Tonkin and P. Potti Concern: Waste management

While investigating outfalls in the Odenton, MD, area, a Versar field team found evidence of inadequate waste management in an apparently vacant lot adjacent to 1604 Annapolis Road, in Odenton. The lot at 1604 is occupied by a BP gas station; at the time of the site visit, the field team could not determine if the activities on the vacant lot were associated with the BP station facility. The field team noted that the U-Haul truck parked on the vacant lot appeared to be for rent. In the vacant lot, the field team found an open dumpster and excessive debris (Figure 1), including a tire (Figure 2), and traffic cones (Figures 1 and 3). An area map, indicating the general location of the dumpster, is provided in Figure 4.



Figure 1. Photograph of the open dumpster and excess debris discarded along the edge of the woods; note the orange traffic cone on the right





Figure 2. Excess debris, including a tire, found scattered at the edge of the woods behind the vacant lot



Figure 3. Debris found scattered along the edge of the woods near the open dumpster; note the second orange traffic cone and the rear corner of a U-Haul truck parked on the vacant lot (right)





Figure 4. Area map



Location: 2747 Annapolis Road, Odenton (Baltimore Washington Auto Outlet)

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti

Concern: Vehicle washing

In the middle of the afternoon of Wednesday, March 2, a Versar field team observed possibly improper vehicle washing activity in the parking lot of the Baltimore Washington Auto Outlet business at the above address. The business activities include used car sales and auto detailing services; a sign advertises hand washing and detailing services for vehicles. When the field crew approached the lot, crew members witnessed an employee from the business powerwashing a white hatchback vehicle in the parking lot (Figure 1). Field team noted that there was a tarp covering an open structure on the southeast side of the building; the crew surmised that this may have been intended as a temporary cover for vehicle-washing activities, as would be appropriate. While the field crew members photo-documented the activities, the business employee proceeded to use a sponge from a bucket of liquid to scrub the vehicle (Figure 2). Later, as the first employee began to work inside the white vehicle, a second employee began to power-wash another vehicle — a beige SUV (Figure 3).

The field crew investigated the nature of flows on and from the parking lot and determined that the parking lot sloped down toward the south corner of the lot, which appears to terminate at a grassy strip along an unnamed side street. The crew did not find evidence of a storm drain in line with the presumed path of flows from the parking lot. It is possible that the business has a system in place in the parking lot to divert the waste water from vehicle washing activities to the sanitary sewer system, but the field team could not verify that such a system was being used, as team members did not enter the parking lot to investigate for such a system. The field team reported the activity, and the possible presence of an illicit discharge to the Environmental Hotline on the same day. An area map, indicating the location of the wash-down activity, is provided in Figure 4.





Figure 1. Business employee observed power-washing a vehicle (white hatchback) in the parking lot; note the tarp covering an open structure on the far left of the photograph



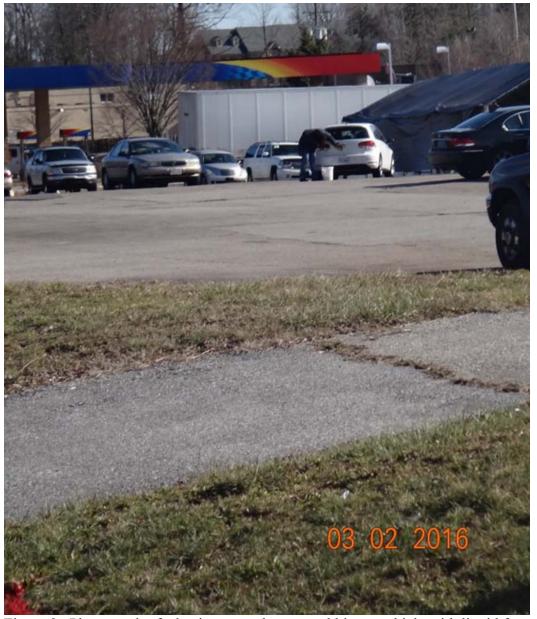


Figure 2. Photograph of a business employee scrubbing a vehicle with liquid from a bucket in the parking lot; note the downward slope of the parking lot in the background





Figure 3. Photograph showing one business employee attending to the first washed vehicle (white) while a second employee starts to power-wash another vehicle (beige) in the parking lot





Figure 4. Area map



Location: 2827 Jessup Road, Jessup

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

A Versar field team investigated one or more parcels, located at 2827 and 2829 Jessup Road, at the corner with Sellner Road, for a possible issue with waste management. The two lots appeared to function, together, as storage lots for miscellaneous construction debris and discarded furniture. A sign on one building indicated that it may have functioned as a snowball stand at one time (Figure 1). A sign on one of the lots advertised building materials for sale (Figure 2). The team also found a collection of buckets stored outdoors that the team surmised contained roofing or asphalt sealing tar (Figure 3). Only one of the labels is barely legible in the photograph; the others appear to be weather-worn beyond identification. The team did not investigate the buckets to determine if any of them still contained roofing materials that could present a pollution hazard if leaked to the environment. An area map, indicating the location of the buckets, is provided in Figure 4.



Figure 1. Photograph of some of the conditions in the lots at 2829 and 2827 Jessup Road; note the dilapidated "snowball" building and the discarded furniture





Figure 2. Signs on the lot indicating that building materials are available for sale



Figure 3. Photograph of the collection of buckets, possibly containing roofing compounds, stored on one of the lots (three tiers high, center left)





Figure 4. Area map



Location: 3440 Laurel Fort Meade Road, Laurel (Red Crown Inn)

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

A Versar field team found an open, overfilled dumpster with debris scattered around it on the north side of the Red Crown Inn at the above address (Figure 1). Near the dumpster, the crew noted several large pieces of debris (including a mattress, a box spring, and a door) stored alongside the building. These items were stored immediately adjacent to the stairwell, and thus may pose a danger to hotel guests or emergency response crews in the event of an emergency. Discarded items and surplus material of this type should be temporarily stored in secure, closed containers, preferably under shelter. Without these safeguards, some of the loose debris in the dumpster may blow off-site and into the storm drain system. Debris on the ground may be carried by wind or water to nearby storm drain inlets; it may also leak potentially contaminating contents onto surfaces that could also lead to nearby storm drain inlets or open water. Some debris may also attract pests to the site. An area map, indicating the location of the dumpster, is provided in Figure 3. The aerial photo indicates that trash may be blowing offsite to the north.



Figure 1. An open, overfilled dumpster with debris scattered around it found near the Red Crown Inn on March 2; note the large debris stored alongside the building, near the stairwell



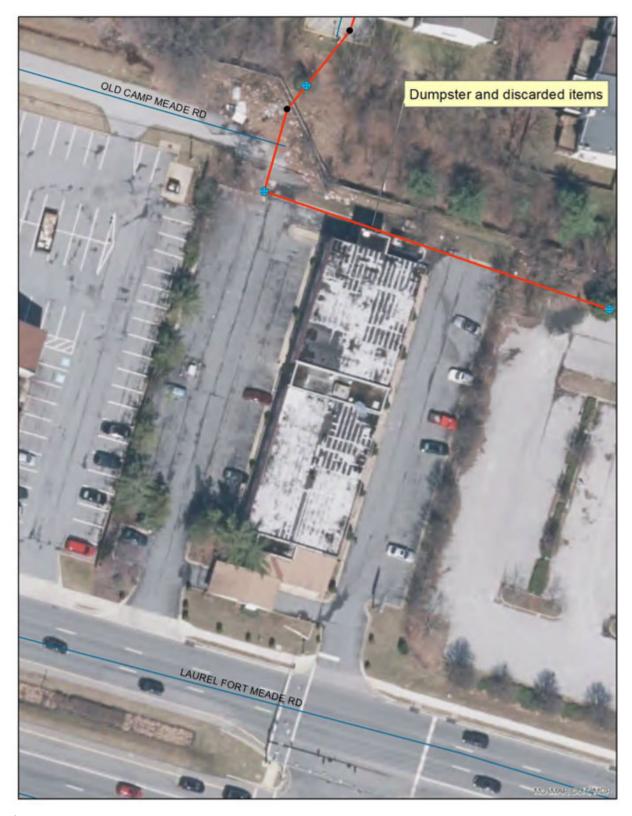


Figure 2. Area map



Anne Arundel County Hotspot Site Investigation Visit Report

Location: Behind 3452 Andrew Court, Maryland City, MD (Ashley Apartments)

Date: June 10, 2016

Investigators: C. Tonkin and P. Potti Concern: Bulk solid storage

A Versar field team discovered what appeared to be a large pile of road de-icing salt in a parking lot in the Ashley Apartments complex between Andrew Court and Red Clay Road, to the northwest of the lot at 3452 Andrew Court. At the time of the site visit, the pile was uncovered, and located immediately adjacent to a manhole (Figure 1). The field crew documented a line of residue leading from the area of the pile toward the manhole and extending to the edge of the parking lot leading to a yard drain (Figure 2). As the yard drain is not depicted in the County's GIS data sets of stormwater infrastructure, the fate of material entering this device could not be ascertained. The placement of salt on an impervious surface introduces the risk of distribution of salt particles and associated nutrients – by wind, rain, or physical disturbance – which could then be carried via stormwater runoff into adjacent storm drain inlets or open water. An area map is provided in Figure 3.



Figure 1. A large, uncovered pile of road de-icing salt found on June 10; note the line of residue leading to the manhole cover and extending to the edge of the parking lot (left)





Figure 2. A view of the relative locations of the pile of salt and the yard drain which may be receiving salt residue under certain conditions





Figure 3. Area map



Location: Rear 2739 Annapolis Road, Hanover

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

While investigating a potential hotspot at another property, a Versar field team noted several pieces of discarded bulk items/trash along an access road located between 2739 and 2747 Annapolis Road. At the time of the visit, the field team documented dirty conditions in the gutter pans and much staining, indicating that the road is frequently used for parking trucks. On a vacant lot on the east side of the road, the field team found many pieces of general trash, including large cardboard boxes (Figure 1). Note: in the background of Figure 1 is a storage area on property possibly belonging to Nationwide Tire Recyclers, which is located toward the end of the access road. On the west side of the road, the team found and documented a discarded sofa (Figure 2). Though the material is not placed on impervious surfaces, it constitutes a general pollution problem with the potential for blowing into the roadway with eventual travel to the storm drain system and surface water. The source of the material and the ownership of the vacant lot could not be determined at the time of the field visit. An area map, indicating the locations of the debris, is provided in Figure 3.



Figure 1. Dirt in gutter pan and discarded cardboard boxes on vacant lot, east side of access road





Figure 2. Discarded bulk item, and stains and material in roadway, west side of access road





Figure 3. Area map



Location: 3515 Laurel Fort Meade Road, Laurel (Brockbridge Center)

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

A Versar field team found several waste management issues associated with businesses in the Brockbridge Shopping Center on Laurel Fort Meade Road, Laurel, MD, on March 2, 2016. The team found two open dumpsters (one overfilled) with large pieces of debris placed nearby (a flat panel, a mattress, and a box spring) behind Aaron's Rentals (Figure 1). The team members found several open dumpsters in the parking lot, although they could not determine which businesses used the dumpsters. One of the open dumpsters was located immediately adjacent to a storm drain (Figure 2). The team also photo-documented a nearly full roll-off dumpster in the parking lot pictured to the right of the Aaron's Rentals store (Figure 3). Debris should be temporarily stored in secure, closed containers, preferably under shelter. Without these safeguards, some of the loose debris in a dumpster may blow off-site and into the storm drain system. Debris on the ground may be carried by wind or water to nearby storm drain inlets.

On the west side of the rear parking lot, the team discovered what may be an abandoned car with a marked rear wheel (Figure 4). At the front entrance to the parking lot, the team documented a television and a cabinet that had been deposited on the grass (Figure 5). An area map, indicating the locations of the dumpsters and debris, is provided in Figure 6.



Figure 1. Two open dumpsters with large pieces of debris near them found behind the Aaron's Rentals store





Figure 2. Open dumpster found near storm drain



Figure 3. A nearly full roll-off dumpster found behind businesses adjacent to Aaron's Rentals





Figure 4. Photograph of neglected and possibly abandoned car found in the parking lot



Figure 5. Cabinet and television found deposited near the entrance to the Brockbridge Shopping Center





Figure 6. Area map



Location: 2421 Crofton Lane, Crofton

Date: March 9, 2016

Investigators: C. Tonkin and T. Jones (Versar) and B. Crary and A. Huizenga (LimnoTech)

Concern: Waste management

A field team composed of Versar and LimnoTech staff found several waste management issues associated with an area of the parking lot adjacent to 2421 Crofton Lane (multiple businesses including Clothes Call) in Crofton on March 9, 2016. The team found a dumpster with an open side panel during the site visit (Figure 1) and several bulk items deposited in the parking lot (Figure 2). The team also photo-documented various kinds of loose debris among vehicles in the parking lot; this may have been carried by high winds from a temporary disposal area, such as a dumpster (Figures 3 and 4). Note that staff had visited this parking lot in 2015 and reported issues with open dumpsters and scattered debris. In this case, as in the previous case, the presence of loose trash and bulk items on the impervious surface constitutes an increased risk of transport of leached material and loose waste to the storm drain system and thence to local surface waters. An area map, indicating the locations of the dumpsters and debris, is provided in Figure 5.



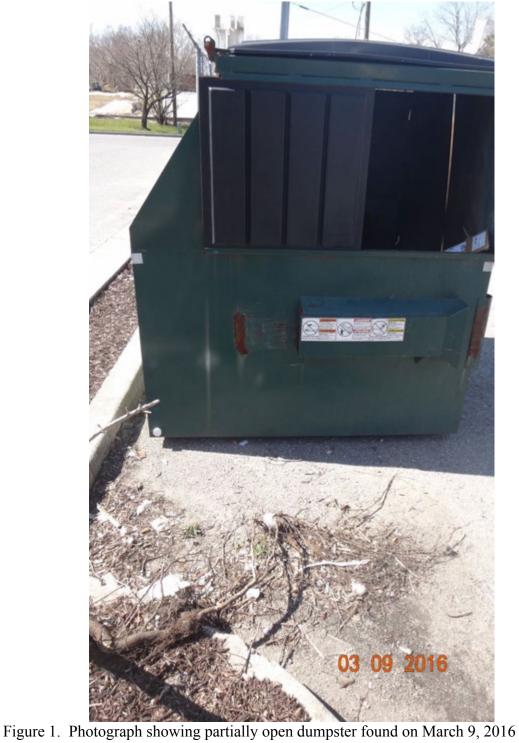






Figure 2. Bulk debris deposited in the parking lot



Figure 3. Loose debris found among vehicles in the parking lot on March 9, including paper and aluminum





Figure 4. Loose debris found among vehicles in the parking lot in March 9, including food containers, plastic, and cardboard





Figure 5. Area map



Location: East of 1701 Crossroads Drive, Odenton

Date: January 20, 2016
Investigators: C. Tonkin and P. Potti
Concern: Waste management

While investigating outfalls in the vicinity, a Versar field team found evidence of extensive roadside dumping along Crossroads Drive, just east of the building at 1701 Crossroads Drive. Crossroads Drive, east of Telegraph Road, provides access to numerous commercial businesses on the short road (e.g., movers, printers, several warehouses, and freight forwarding). The field team noted that the stretch of road just east of 1701 is frequently used by tractor-trailer drivers as a temporary parking area. This portion of the road passes over a tributary to Severn Run, and thus has a guardrail on both sides of the street and steep banks leading to the stream. Some of the debris found on the hillsides along the road was related to vehicles; for instance, the field team documented the presence of antifreeze (Figure 1), brake hoses (Figure 2), and oilsoaked rags (Figure 3). The field team also photo-documented evidence of widespread trash dumping along the roadway (Figures 4 through 8). Despite signs from Anne Arundel County and the Severn River Association (Figure 9) requesting that trash not be discarded in this area, the dumping activities persist. The sign from the Severn River Association claims that the organization has accepted responsibility for clearing this area. An area map, indicating the general location of the trash dumping, is provided in Figure 10.



Figure 1. Photograph of an antifreeze container (and a beer can) found along the south side of Crossroads Drive during the site visit





Figure 2. Photograph of discarded green tractor-trailer brake hoses and loose debris found along the south side of Crossroads Drive during the site visit



Figure 3. Photograph of a bag of oil-soaked rags discarded onto the guardrail and extensive debris in the wooded area beyond the guardrail found along the south side of Crossroads Drive





Figure 4. Photograph of a section of the Crossroads Drive (south side) where trucks are commonly parked and discarded debris accumulates on the roadside (seen to the right of the guardrail)



Figure 5. Photograph documenting a section of the roadside (south side) littered with debris; note the stream in the ravine in the background





Figure 6. Photograph of some of the extensive debris deposited on the hillsides along the north side of Crossroads Drive; the stream is in the ravine to the right of the view



Figure 7. Photograph of discarded filled trash bags and a pizza box found on the north side of Crossroads Drive





Figure 8. Discarded furniture found along the north side of Crossroads Drive; the sign on the left claims that this area is cleaned by the Severn River Association



Figure 9. Signs posted on the north side of the roadway prohibiting dumping; signs were posted by Anne Arundel County and the Severn River Association





Figure 10. Area map



Location: K1 Auto Sales, 8567 Brock Bridge Road, Laurel

Date: December 9, 2015
Investigators: C. Tonkin and K. Dillow
Concern: Waste management

While investigating outfalls in the area, a Versar field team discovered extensive debris around the vehicle storage lot at the above address. Debris evident on-site on December 9 included a collection of large pieces of furniture by the side of the road (Figures 1 and 2), several tires and loose debris (Figure 3), a car battery on the ground (Figure 4), and an open and overfilled trash bin (Figure 5). The lack of proper storage (preferably in closed containers under shelter) may allow trash to blow off-site, blow into the nearby storm drain system, or leach material into the storm drain system. Large pieces of debris, already on the ground or blown to the ground with a strong wind, may create hazards for drivers in the parking lot or in the street. The exposed car battery may also leak potentially contaminating contents that could enter the storm drain system or soil. Some debris may also attract pests to the site. An area map, indicating the location of the debris, is provided in Figure 6. Please note that the time stamp on the camera was incorrect when these photographs were taken; the correct date is December 9, 2015.



Figure 1. A collection of large pieces of furniture deposited near the roadway, facing north on Brock Bridge Road (photography date: December 9, 2015)





Figure 2. A collection of large pieces of furniture deposited near the roadway, facing south on Brock Bridge Road (photography date: December 9, 2015)



Figure 3. Several tires and loose debris observed along a fence line (photography date: December 9, 2015)





Figure 4. A car battery observed on the ground (photography date: December 9, 2015)



Figure 5. An overfilled open bin and loose debris observed on-site (photography date: December 9, 2015)





Figure 6. Area map



Location: South corner of Laurel Race Track property

Date: June 10, 2016

Investigators: C. Tonkin and P. Potti Concern: Excessive wash water

While investigating outfalls in the area on June 10, 2016, a Versar field team observed a trail of pooled and flowing cloudy water originating from a source at the south corner of the Laurel Race Track property. The team noticed a pool of cloudy water on the hill adjacent to outfall A11C7O001 (Figure 1). The team observed that the water in the outfall was stagnant and orange, with an oily sheen (Figure 2). The team members headed northeast to investigate the trail of water leading to the outfall. They found an area along the fence line where water coursed through some rocks and pooled along a footpath behind a maintenance area for the race track (Figure 3). Further to the northeast, along the fence, the team observed a larger volume of water exiting the fenced area at a gate (Figure 4). Alongside the opening, the team noted that a post hydrant was leaking, spraying water into the air (Figure 5). The team surmised that this and related pumps are available and used to fill water tanker trucks employed to wet down the race track as part of routine maintenance (Figure 6); wash down activities may also be routine in the maintenance area. An area map is provided in Figure 7.



Figure 1. A pool of water (foreground) observed adjacent to outfall A11C7O001 on June 10





Figure 2. Observed conditions in the pooled water at outfall A11C7O001; note the orange color and the oil sheen



Figure 3. A view of a discharge path for excess wash water from the race track maintenance area; note the bed of rocks along the embankment leading from the fence line (center-left) and the pool of water alongside the footpath





Figure 4. Excess wash water flowing out of a small gate in the fence bordering the race track maintenance area; note the red post hydrant to the right just inside the entrance





Figure 5. A red post hydrant with a valve inside the fenced maintenance area; at the time of the field visit in June 10, this hydrant was leaking water (spraying it into the air)



Figure 6. View inside the fenced maintenance area showing pooled and flowing water, numerous hoses, and a tanker truck on-site at the race track





Figure 7. Area map



Location: 2431 Crofton Lane, Crofton

Date: March 9, 2016

Investigators: C. Tonkin and T. Jones Concern: Waste management

A field team composed of Versar and LimnoTech personnel found several waste management issues associated with an area of the parking lot adjacent to 2431 Crofton Lane (multiple businesses including National Carpet and Showman Furniture) in Crofton on March 9, 2016. Behind the National Carpet business, the team found a dumpster with an open side panel and loose debris scattered around it, including carpet fragments, plastic sheeting, long rolls of cardboard, and plywood (Figure 1); the team also discovered a small storm drain inlet just downhill of the dumpster (Figure 2). In the alcove near the National Carpet business, the field team found a box of plastic hangers and loose plastic among the bushes (Figure 3). In the same alcove, alongside a rusting storage trailer, the team found bulk loose debris, including wood, cardboard, metal, and plastic (Figure 4). Behind the building section on the north side of the group, the field team found another collection of bulk debris scattered around a pair of dumpsters (Figure 5); this debris included bulk pieces of wood, a damaged bookcase, pressboard, and cardboard. The field crew photo-documented the relative location of the nearby storm drain inlet to the debris (Figure 6). An area map, indicating the locations of the dumpsters and debris, is provided in Figure 7.



Figure 1. Photograph showing partially open dumpster and loose debris related to the carpeting business scattered around it on March 9





Figure 2. Photograph showing the relative location of the dumpster seen in Figure 1 to the nearby storm drain





Figure 3. A box of plastic clothes hangers and loose plastic sheeting trapped in the bushes found by the field crew on March 9



Figure 4. Loose debris found in the alcove behind National Carpet, including wood pallets, cardboard, metal framing, and two reused plastic buckets found on March 9





Figure 5. Loose debris found surrounding the dumpster to the north



Figure 6. Relative location of the nearby storm drain inlet to the loose debris seen in Figure 5



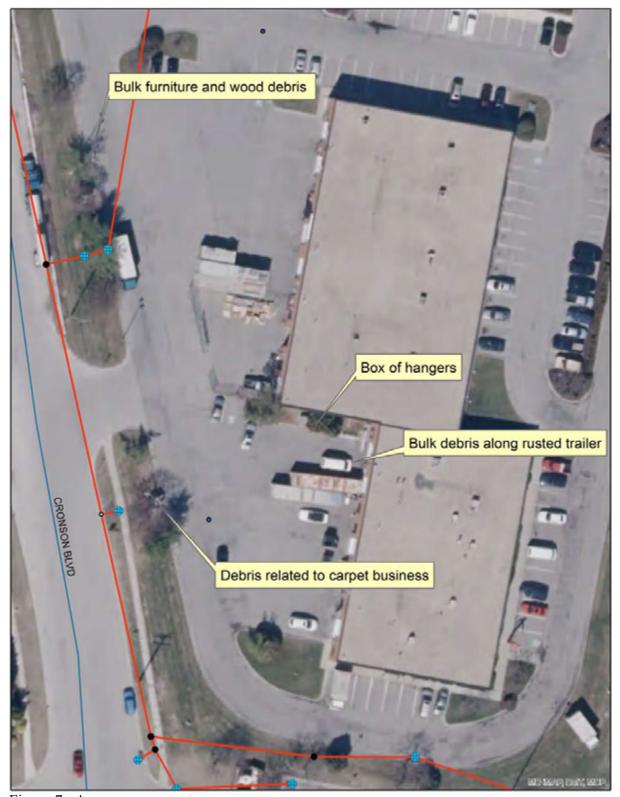


Figure 7. Area map



Location: 1115 through 1159 Annapolis Road, Odenton (Odenton Shopping Center)

Date: January 20, 2016
Investigators: C. Tonkin and P. Potti
Concern: Waste management

While investigating outfalls in the Odenton, MD, area, a Versar field team found evidence of inadequate waste management related to businesses in the rear strip of Odenton Shopping Center; the strip includes the addresses stated above. On Wednesday, January 20, the team observed several dumpsters with open lids, among the many dumpsters sited behind the strip of businesses. Since there were so many dumpsters serving the businesses, the team could not determine which specific establishment might be responsible for the negligence in each case. For the purposes of this report, business names derive from information available on Google maps (https://www.google.com/maps). The team found one open dumpster near the west corner of the parking lot, generally behind the Five Guys Burgers and Fries business at 1157 Annapolis Road (Figure 1). Another open dumpster was located near a side entrance of the same business (Figure 2). This area also had a receptacle for kitchen grease; the photograph taken on-site during the inspection shows dark stains on the pavement around the rear door and the receptacle (Figure 3; the extent of the staining suggests that grease may have been spilled or accumulated while transferring materials to the receptacle or to the dumpster). The team found a third open dumpster generally behind the Three Brothers Italian Restaurant at 1139 Annapolis Road (Figure 4). A fourth open dumpster discovered during the site visit was found overfilled (Figure 5); this dumpster was located generally behind the Advance Auto Parts store (1143 Annapolis Road); there were numerous dumpsters for the businesses in this section of the strip, and employees at Advance Auto Parts (or Three Brothers Italian Restaurant) are not necessarily responsible for the state of the dumpster or the debris scattered in the area. An area map, indicating the general location of the dumpsters, is provided in Figure 6.





Figure 1. Photograph of one open dumpster found near the west corner of the parking lot, generally behind the Five Guys Burgers and Fries restaurant



Figure 2. Photograph of a second open dumpster (the one in the background) found near a side door of the Five Guys Burgers and Fries restaurant





Figure 3. Photograph of the second open dumpster (the rightmost dumpster) and a kitchen grease waste receptacle (rear center) by a side door of the Five Guys Burgers and Fries restaurant; note the dark stains on the pavement around the side door and the grease container



Figure 4. Photograph of a third open dumpster (on the left) found generally behind the Three Brothers Pizza restaurant





Figure 5. Photograph of a fourth open, and overfilled, dumpster found generally behind the Advance Auto Parts store; note the debris scattered on the pavement near the dumpster and debris on the hill behind the parking lot





Figure 6. Area map (business names derived from https://www.google.com/maps)



Location: Behind Ourisman Mazda Parts, 3518 Fort Meade Road, Laurel

Date: December 9, 2015
Investigators: C. Tonkin and K. Dillow
Concern: Waste management

While investigating outfalls in the area, a Versar field team discovered extensive debris deposited near open dumpsters at the above address. Debris evident on-site on December 9 included a collection of large pieces of furniture alongside an open dumpster (Figure 1); the field crew noted that they believed the open barrel found between the dumpsters was empty. The field team also observed numerous wood pallets and bagged debris near a partially open dumpster (Figure 2). The lack of proper storage (preferably in closed containers under shelter) may allow trash to blow off-site or into the nearby storm drain system via the adjacent gutter pan. Large pieces of debris, already on the ground or blown to the ground with a strong wind, may create hazards for drivers in the parking lot. Some debris may also attract pests to the site. An area map, indicating the location of the debris, is provided in Figure 3. Please note that the time stamp on the camera was incorrect when these photographs were taken; the correct date is December 9, 2015.



Figure 1. A collection of large pieces of debris deposited alongside two open dumpsters (photography date: December 9, 2015)





Figure 2. A collection of wooden pallets and bagged debris deposited near a partially open dumpster (photography date: December 9, 2015)





Figure 3. Area map



Location: Pioneer Drive, Severn
Date: January 14, 2016
Investigators: C. Tonkin and P. Potti
Concern: Waste management

While investigating outfalls in the area behind the townhouses along Pioneer Drive in Severn, a Versar field team found evidence of extensive residential trash dumping. The team observed debris scattered along a long strip of woods, beyond the fence lines, on the west side of Pioneer Drive, generally between Indian Drive and Richfield Drive. The wooded area provides riparian buffer protection for the stream, Severn Run. The field team assessed that most of the debris seemed to have been deposited over a period of years; most of the trash appeared to be old and weather-worn household items (Figure 1). The team discovered a posted sign stating "No Loitering, Dumping or Trespassing," and claiming that the area was under video surveillance; this suggests that the local authorities are aware of the potential for illegal activities in this vicinity, but have not enforced the stated regulations. When the field team found outfall H10E5O001, they also discovered two mattresses that had been dumped in the wooded area near the outfall (Figure 2). As the team arrived at the section of woods at the southwestern corner of the townhouse unit group including 8385 Pioneer Drive, team members discovered a dumping area under the evergreen trees that included newer trash that had been deposited on top of the older trash that was already there; newer items included toys, a bicycle, and shoes (Figure 3). An area map, indicating the locations of the observed trash dumping areas, is provided in Figure 4.





Figure 1. Photograph of general types of household items found deposited as trash in the wooded area behind the townhouse lots along Pioneer Drive





Figure 2. Photograph of outfall H10E5O001 with debris scattered around it; note the mattress on the right side of the photograph



Figure 3. A large area of scattered debris, including newer items, found near 8385 Pioneer Drive on the bank leading to Severn Run



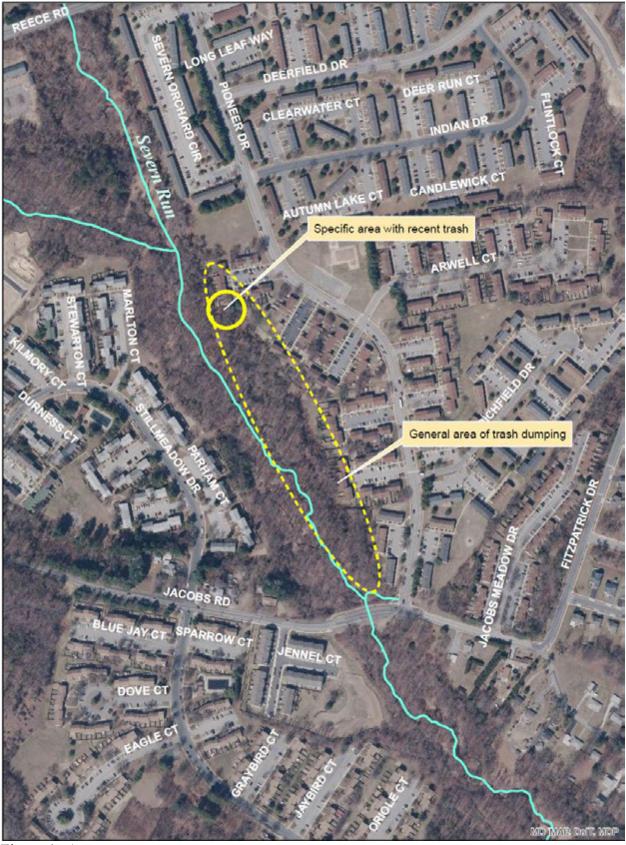


Figure 4. Area map



Location: Provinces Park, 1742 Disney Road, Severn, MD

Date: December 10, 2015
Investigators: C. Tonkin and K. Dillow
Concern: Improper bulk solid storage

While investigating outfalls in the area, a Versar field team discovered an uncovered pile of sand and sediment that had been deposited on a corner of a parking lot in Provinces Park (also known as Jessup-Provinces Park), which is an Anne Arundel County Parks and Recreation facility, located at the above address (Figure 1). The field team documented that the pile of sand and sediment was located immediately adjacent to a storm drain inlet (Figure 2). The figures illustrate that the location of the pile partially blocks intended flows to the inlet; flows are also partially blocked by storage trailers in the same section of the parking area. Material from the pile may be dislodged by disturbances from humans, animals, or rain; this material may then enter the storm drain system and transport associated metals and nutrients to the system and contribute occluding bulk material to the pipes and downstream areas (Figure 3). An area map is provided as Figure 4.



Figure 1. An uncovered pile of sand and sediment found on the parking lot adjacent to a storage trailer; note the curb inlet which can be seen between the two





Figure 2. A view of the impervious surface leading to the storm drain inlet; the flows to the inlet are almost completely blocked by the storage trailer and the large pile of sand and sediment



Figure 3. Sand deposit on outfall apron (left side when facing outfall)





Figure 4. Area map



Anne Arundel County Hotspot Site Investigation Visit Report

Location: 2294 Blue Water Blvd, Odenton (Seven Oaks Shopping Center)

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Bulk solid storage

A Versar field team discovered what appeared to be a large pile of road de-icing salt in the parking lot on the west side of the rear parking lot of the Seven Oaks Shopping Center on Blue Water Blvd. At the time of the site visit, the pile was uncovered, two tarps with weight stones were placed on the pavement immediately adjacent to the pile (Figure 1). The field crew noted that a line of residue leading from the area of the pile along the side of the parking lot to the storm drain (Figure 2). The placement of salt on an impervious surface introduces the risk of distribution of salt particles and associated nutrients – by wind, rain, or physical disturbance – which could then be carried via stormwater runoff into adjacent storm drain inlets or open water. An area map, indicating the location of the large salt pile, is provided in Figure 3.



Figure 1. A large, uncovered pile of road de-icing salt found on March 2; the tarps did have weigh stones available at the time of the site visit





Figure 2. Evidence of the distribution of salt residue from the exposed pile of road salt along the edge of the parking lot toward the storm drain



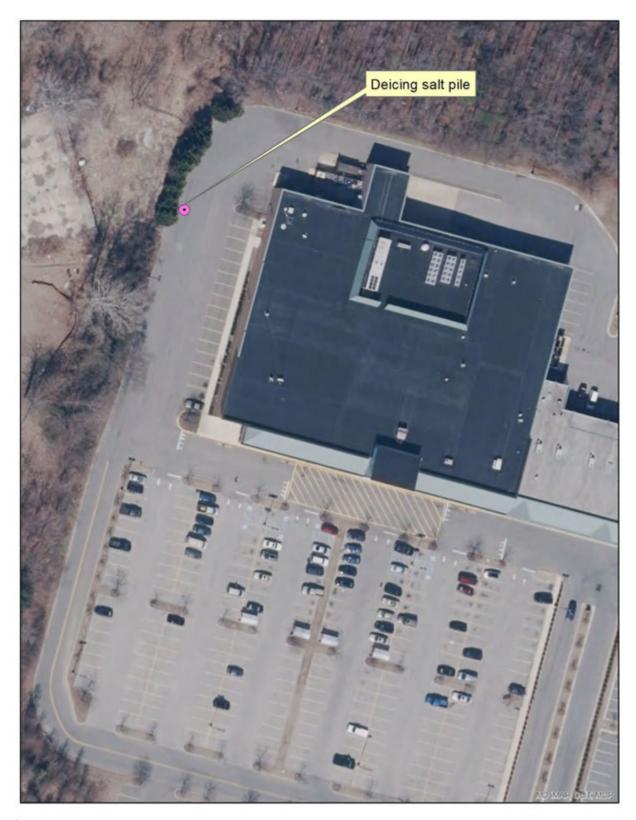


Figure 3. Area map



Location: 3221 Corridor Marketplace, Laurel (Total Wine)

Date: March 2, 2016

Investigators: C. Tonkin and P. Potti Concern: Waste management

A Versar field team identified several waste management issues near and associated with the business, Total Wine, in the Corridor Marketplace at the above address. The team noted that some waste disposal and storage from the business seemed to be managed well: the on-side dumpster was closed, and cardboard boxes had been compressed, tied, and stored neatly between pallets for recycling, although material stored for recycling was accumulating (Figure 1). In an area between the dumpster and the cardboard bundles, however, the team discovered numerous loose shopping carts overloaded with cardboard boxes (from the liquor store) and open plastic bags of debris (Figure 2). In an area near the loading dock, the team found loose plastic deposited or trapped near a storage area for shopping carts (Figure 3) and loose debris and broken glass near the same set of carts, near the dumpster (Figure 4). Debris should be temporarily stored in secure, closed containers, preferably under shelter. Without these safeguards, some of the loose debris in the dumpster may blow off-site and into the storm drain system. Debris on the ground may be carried by wind or water to nearby storm drain inlets; it may also leak potentially contaminating contents onto surfaces that could also lead to nearby storm drain inlets or open water. Some debris may also attract pests to the site.

On the southeast edge of the parking lot, nearest the Total Wine store, the field crew discovered a long line of loose debris along a chain link fence (Figure 5). Where there was a break in the fence line, the field crew observed more loose debris further down the hill (toward Interstate 295); debris in this area included cardboard (with labels for alcoholic beverages), plastic bags (including those with labels advertising the Total Wine business), food wrappers, plastic bottles, Styrofoam food containers, and an old shopping cart (Figures 6 and 7). An area map, indicating the locations of the debris, is provided in Figure 8.





Figure 1. Accumulating cardboard material, intended for recycling



Figure 2. Shopping carts found overloaded with cardboard boxes and loose debris alongside the Total Wine store





Figure 3. Loose plastic found deposited near or trapped by a storage area for shopping carts from the Total Wine store



Figure 4. Loose debris found trapped under shopping carts stored alongside the Total Wine store; note the broken glass on the ground near the curb (right foreground)





Figure 5. A long line of loose debris found trapped against a chain link fence to the southeast of the Total Wine store



Figure 6. Loose debris found accumulating along the woods, downhill of the parking lot for the Total Wine store and other businesses at the Corridor Marketplace (facing south)





Figure 7. Loose debris found accumulating along the woods, downhill of the parking lot for the Total Wine store and other businesses at the Corridor Marketplace (facing north)





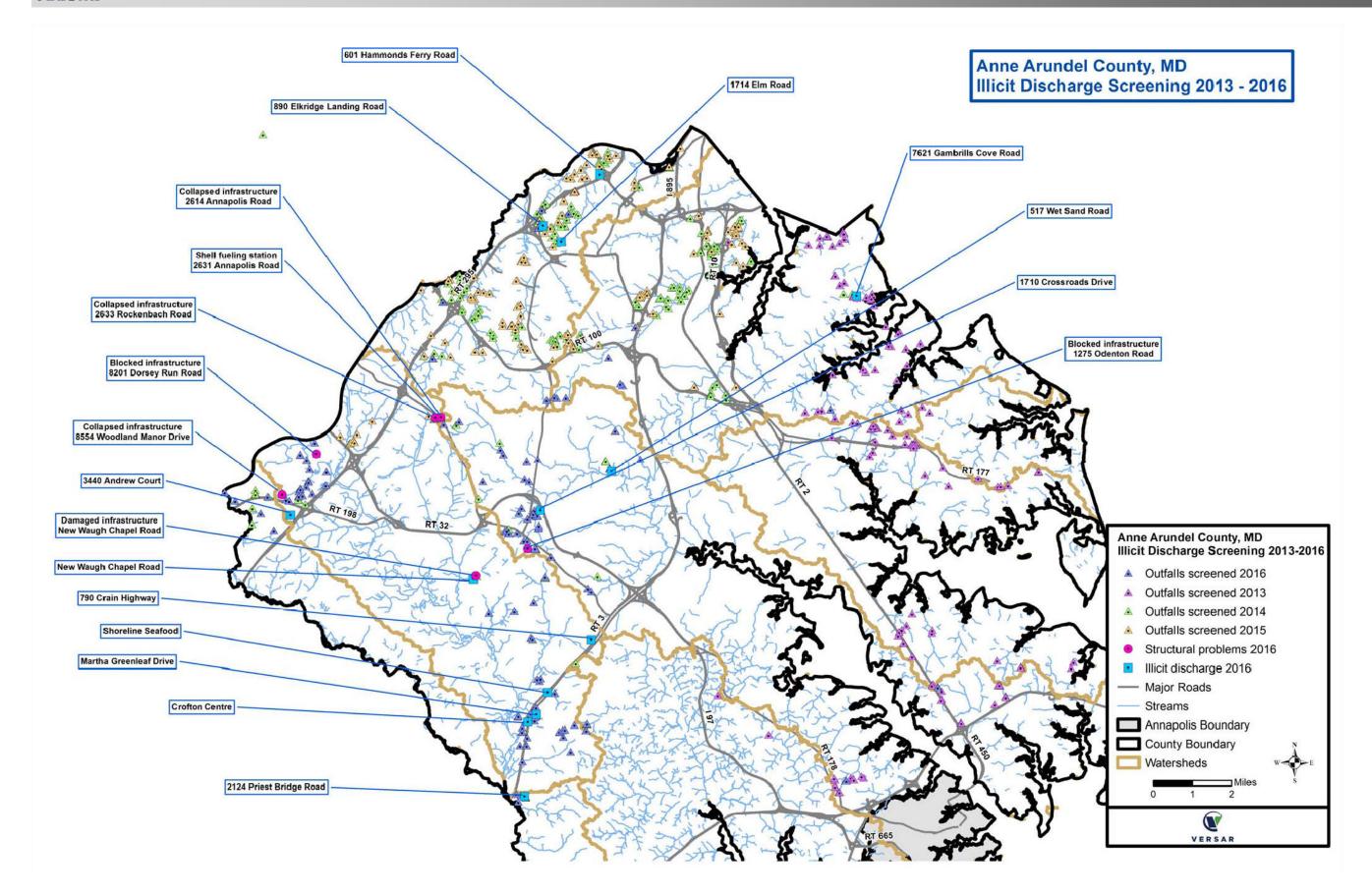
Figure 8. Area map



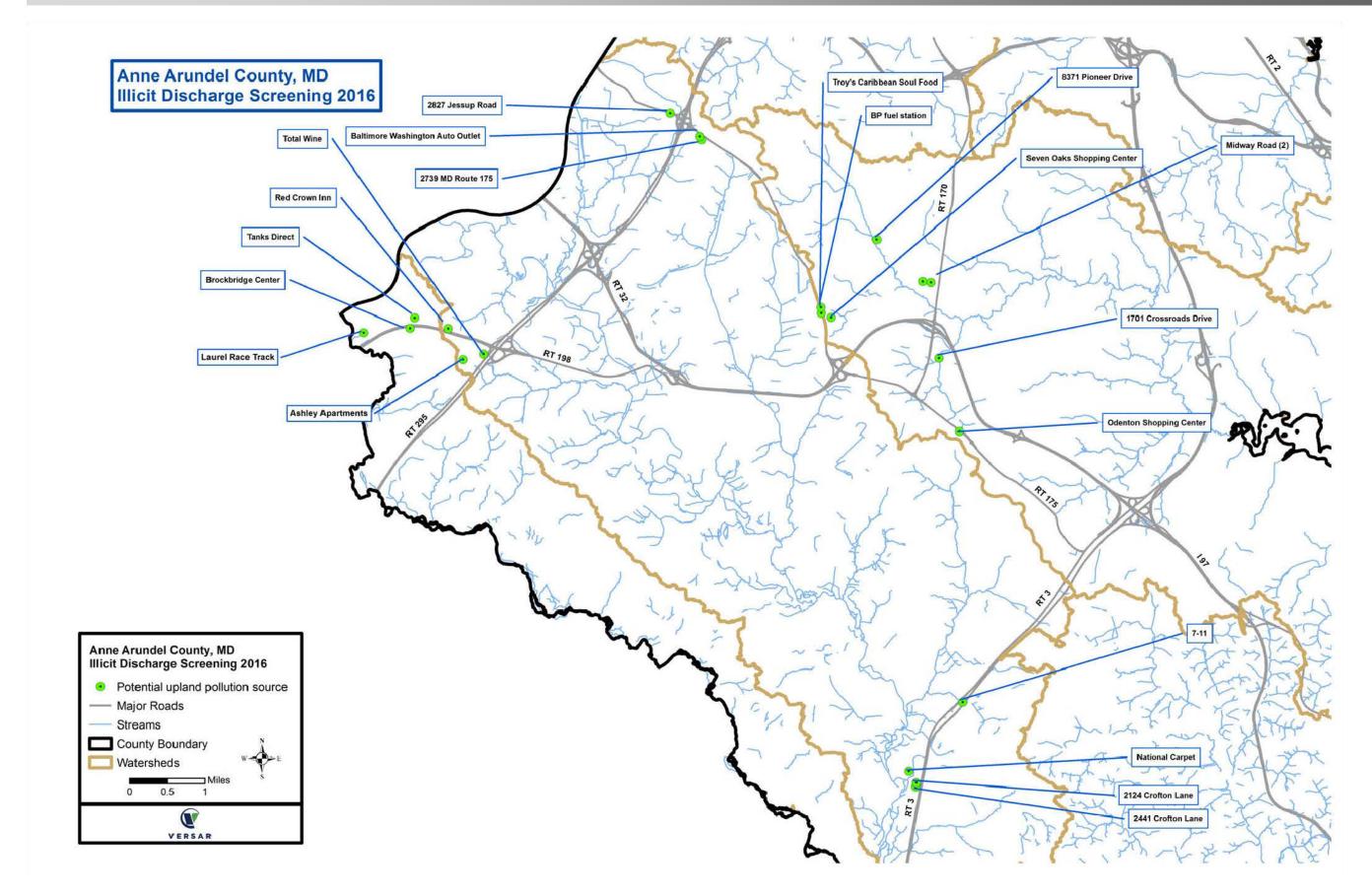
APPENDIX D MAPS













APPENDIX E

ESRI GEODATABASE FOR ILLICIT DISCHARGE DETECTION PROGRAM INSPECTIONS





APPENDIX F COUNTY INSPECTION COMPLIANCE DATABASE REPORTS





Outfall Site ID changes relevant to Appendix F	
Previous ID	New ID
Unnamed (Shoreline Seafood)	I17G1Onew
I19B6O008new1	I19B6Onew2
Q06H3F002new2	Q06H3Onew
K10D80001	K10D80004



Case ID: E - 2015 - 425 Tax ID: 336208332025

Received: 7/20/2015 Details:

Tickler: Completed: 7/20/2015

ILLEGAL DISCHARGES COMPLAINT

Phone:

State Map: 09 23 0146 County Map: E 1

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

7/20/2015 OPENED COMPLAINT CASE 7/25/2015

MDE WAS FORWARDED THE FOLLOWING COMPLAINT FROM EPA REGION III. RECEIVED A CALL FROM A CONCERNED CITIZEN DESCRIBING SOME POTENTIAL STORM WATER VIOLATIONS OCCURRING IN GLEN BURNIE, MD. THE CONCERNED CITIZEN DESCRIBED A CAR WASH THAT MAY HAVE AN ILLICIT DISCHARGE TO MUNICIPAL STORM SEWER. THE FACILITY IS THE *** AT *** CRAIN HIGHWAY (AT THE CORNER OF MAIN AVENUE) IN GLEN BURNIE, MD. THE PERSON WHO I SPOKE TO (WHO WISHES TO REMAIN ANONYMOUS) SAID THAT THEY COMMONLY DEGREASING CAR ENGINES OUTSIDE AND THEN WASHING THE CONTAMINANTS DOWN A DRIVEWAY, ACROSS A SIDEWALK AND TO A STORM DRAIN. IT ALSO MAKES FOR A VERY SLIPPERY SIDEWALK. HE SAID THAT THIS IS A COMMON OCCURRENCE DURING MONDAY THROUGH FRIDAY, AT LEAST.

7/20/2015 CLOSE COMPLAINT

PART 2.INSPECTOR INFORMED THE MANAGER THAT HE MUST AT ALL TIMES PREVENT ANY CAR/VEHICLE WASH RUNOFF FROM REACHING THE STORM DRAINS. MANAGER INFORMED INSPECTOR THAT ON OCCASION, DURING RAIN EVENTS, THAT PUDDLES OF WATER DEVELOP WHERE HIS PARKING LOT AND MAIN AVENUE MEET. WHEN THIS HAPPENS, THE MANAGER HAS BEEN "SQUEEGEEING" THE WATER INTO THE STORM DRAIN TO MITIGATE THE PUDDLES. INSPECTOR TOLD THE MANAGER THIS IS FINE, UNLESS ANY OF WATER IN THE PUDDLES IS DUE TO RUNOFF FROM HIS BUSINESS, IN WHICH CASE IT'S NOT. MANAGER INFORMED INSPECTOR OF PLANS TO GET THE PARKING LOT REPAVED. INSPECTOR STRONGLY RECOMMENDED TO THE MANAGER THAT WHEN REPAVING TAKES PLACE, THAT A CONTAINMENT AND/OR TREATMENT/RECYLCING SYSTEM BE PUT IN PLACE AT THE WASHPAD. THIS WOULD PREVENT THE RUNOFF FROM REACHING THE STORM DRAINS. IN FURTHER RESEARCH, IT HAS BECOME APPARENT THAT THE BUSINESS IN QUESTION DOES NOT HAVE A CERTIFICATE OF USE, WHICH IS REQUIRED TO OPERATE THE BUSINESS AT THIS LOCATION. INSPECTOR HAS BEEN ADVISED BY THEIR SUPERVISOR TO CLOSE THE COMPLAINT AND TRANSFER THE CASE OVER TO ZONING ENFORCEMENT. AS SUCH, INSPECTOR RECOMMENDS THAT THIS ILLICIT DISCHARGE

COMPLAINT CASE BE CLOSED AT THIS TIME AS ZONING ENFORCEMENT WILL BEGIN THEIR OWN INVESTIGATION.

7/20/2015 CLOSE COMPLAINT

PART 1. INSPECTOR ARRIVED ON-SITE TO PERFORM INSPECTIONS ON BOTH THURSDAY, 7/16/2015 AT APPROXIMATELY 2:45 PM, AND FRIDAY, 7/17/2015 AT APPROXIMATELY 1:15 PM. DURING BOTH VISITS, INSPECTOR NEVER WITNESSED ANY VEHICLE WASH RUNOFF REACH THE STORM DRAINS ADJACENT TO THE CORRESPONDING PROPERTY. IN ADDITION, INSPECTOR DID NOT OBSERVE ANY RUNOFF COMING FROM EITHER OF THE 2 NEIGHBORING AUTOMOBILE SERVICE GARAGES. THERE WAS NO EVIDENCE OF "SLIPPERY" OR "SLICK" SIDEWALKS. INSPECTOR SPOKE WITH THE MANAGERS OF ALL 3 BUSINESSES TO DISCUSS THE CONCERN OF RUNOFF/ILLICIT DISCHARGE INTO THE STORM DRAINS, AND INFORMED THEM THAT IF THEY EVER ARE PRODUCING RUNOFF, THEY MUST PREVENT IT FROM REACHING THE STORM DRAINS. THIS IS BECAUSE VEHICLE WASH RUNOFF ON/FROM COMMERCIAL PROPERTIES IS NOT ALLOWED TO DISCHARGE INTO THE STORM DRAINS, AS PER THE COUNTY'S NPDES DISCHARGE PERMIT. IN PARTICULAR, INSPECTOR MET WITH ***, THE MANAGER OF THE BUSINESS THAT WAS REFERENCED IN THE COMPLAINT, ***. INSPECTOR'S ORIGINAL MEETING WITH THE MANAGER RESULTED IN THERE BEING NO EVIDENCE OF "ENGINE DEGREASING" TAKING PLACE AT THE FACILITY. HOWEVER, AFTER DOING MORE RESEARCH, INSPECTOR DISCOVERED THAT DIAMOND AUTO SHINE DOES PROVIDE ENGINE CLEANING AS PART OF THEIR DETAILING SERVICES. IN DISCUSSIONS WITH THE MANAGER, IT BECAME APPARENT THAT THE BUSINESS DOES CLEAN ENGINES, BUT ONLY WITH WATER AND NO USE OF HEAVY DEGREASING AGENTS. AS STATED PREVIOUSLY, INSPECTOR DID NOT WITNESS ANY RUNOFF FROM VEHICLE WASHING REACH THE STORM DRAINS. THIS IS IN SPITE OF VEHICLE WASHING TAKING PLACE WHILE INSPECTOR WAS STILL ON-SITE DURING BOTH VISITS. THE BUSINESS IN QUESTION USES A PRESSURE WASHER TO APPLY THE WATER, WHICH DOES NOT APPEAR TO PRODUCE AS MUCH RUNOFF AS IF USING A HOSELINE. IN ADDITION, DUE TO THE SLOPE OF THE PARKING LOT/ CONCRETE WASHPAD, THE SMALL AMOUNT OF RUNOFF THAT IS PRODUCED DOES NOT APPEAR TO EASILY/OFTEN REACH THE ROAD/CURBLINE. ALSO, THE DETERIORATING CONDITION OF THE PARKING LOT IS PREVENTING ANY RUNOFF FROM EASILY MAKING IT TO THE ROAD/CURBLINE. THE WATER APPEARS TO MOSTLY EVAPORATE ON THE WASHPAD. OR, IF IT MAKES IT TO THE PARKING LOT, IT EITHER SOMEWHAT INFILTRATES INTO THE GROUND (DUE TO THE BROKEN UP ASPHALT), OR IT EVAPORATES THERE.

7/20/2015 CLOSE COMPLAINT

PART 2.INSPECTOR INFORMED THE MANAGER THAT HE MUST AT ALL TIMES PREVENT ANY CAR/VEHICLE WASH RUNOFF FROM REACHING THE STORM DRAINS. MANAGER INFORMED INSPECTOR THAT ON OCCASION, DURING RAIN EVENTS, THAT PUDDLES OF WATER DEVELOP WHERE HIS PARKING LOT AND MAIN AVENUE MEET. WHEN THIS HAPPENS, THE MANAGER HAS BEEN "SQUEEGEEING" THE WATER INTO THE STORM DRAIN TO MITIGATE THE PUDDLES. INSPECTOR TOLD THE MANAGER THIS IS FINE, UNLESS ANY OF WATER IN THE PUDDLES IS DUE TO RUNOFF FROM HIS BUSINESS, IN WHICH CASE IT'S NOT. MANAGER INFORMED INSPECTOR OF PLANS TO GET THE PARKING LOT REPAVED. INSPECTOR STRONGLY RECOMMENDED TO THE MANAGER THAT WHEN REPAVING TAKES PLACE, THAT A CONTAINMENT AND/OR TREATMENT/RECYLCING SYSTEM BE PUT IN PLACE AT THE WASHPAD. THIS WOULD PREVENT THE RUNOFF FROM REACHING THE STORM DRAINS. IN FURTHER RESEARCH, IT HAS BECOME APPARENT THAT THE BUSINESS IN QUESTION DOES NOT HAVE A CERTIFICATE OF USE, WHICH IS REQUIRED TO OPERATE THE BUSINESS AT THIS LOCATION. INSPECTOR HAS BEEN ADVISED BY THEIR SUPERVISOR TO CLOSE THE COMPLAINT AND TRANSFER THE CASE OVER TO ZONING ENFORCEMENT. AS SUCH, INSPECTOR RECOMMENDS THAT THIS ILLICIT DISCHARGE COMPLAINT CASE BE CLOSED AT THIS TIME AS ZONING ENFORCEMENT WILL BEGIN THEIR OWN INVESTIGATION.

7/20/2015 CLOSE COMPLAINT

PART 1. INSPECTOR ARRIVED ON-SITE TO PERFORM INSPECTIONS ON BOTH THURSDAY, 7/16/2015 AT APPROXIMATELY 2:45 PM, AND FRIDAY, 7/17/2015 AT APPROXIMATELY 1:15 PM. DURING BOTH VISITS, INSPECTOR NEVER WITNESSED ANY VEHICLE WASH RUNOFF REACH THE STORM DRAINS ADJACENT TO THE CORRESPONDING PROPERTY. IN ADDITION, INSPECTOR DID NOT OBSERVE ANY RUNOFF COMING FROM EITHER OF THE 2 NEIGHBORING AUTOMOBILE SERVICE GARAGES. THERE WAS NO EVIDENCE OF "SLIPPERY" OR "SLICK" SIDEWALKS. INSPECTOR SPOKE WITH THE MANAGERS OF ALL 3 BUSINESSES TO DISCUSS THE CONCERN OF RUNOFF/ILLICIT DISCHARGE INTO THE STORM DRAINS, AND INFORMED THEM THAT IF THEY EVER ARE PRODUCING RUNOFF, THEY MUST PREVENT IT FROM REACHING THE STORM DRAINS. THIS IS BECAUSE VEHICLE WASH RUNOFF ON/FROM COMMERCIAL PROPERTIES IS NOT

ALLOWED TO DISCHARGE INTO THE STORM DRAINS, AS PER THE COUNTY'S NPDES DISCHARGE PERMIT. IN PARTICULAR, INSPECTOR MET WITH ***, THE MANAGER OF THE BUSINESS THAT WAS REFERENCED IN THE COMPLAINT, DIAMOND AUTO SHINE INC. INSPECTOR'S ORIGINAL MEETING WITH THE MANAGER RESULTED IN THERE BEING NO EVIDENCE OF "ENGINE DEGREASING" TAKING PLACE AT THE FACILITY. HOWEVER, AFTER DOING MORE RESEARCH, INSPECTOR DISCOVERED THAT *** DOES PROVIDE ENGINE CLEANING AS PART OF THEIR DETAILING SERVICES. IN DISCUSSIONS WITH THE MANAGER, IT BECAME APPARENT THAT THE BUSINESS DOES CLEAN ENGINES, BUT ONLY WITH WATER AND NO USE OF HEAVY DEGREASING AGENTS. AS STATED PREVIOUSLY, INSPECTOR DID NOT WITNESS ANY RUNOFF FROM VEHICLE WASHING REACH THE STORM DRAINS. THIS IS IN SPITE OF VEHICLE WASHING TAKING PLACE WHILE INSPECTOR WAS STILL ON-SITE DURING BOTH VISITS. THE BUSINESS IN QUESTION USES A PRESSURE WASHER TO APPLY THE WATER, WHICH DOES NOT APPEAR TO PRODUCE AS MUCH RUNOFF AS IF USING A HOSELINE. IN ADDITION, DUE TO THE SLOPE OF THE PARKING LOT/CONCRETE WASHPAD, THE SMALL AMOUNT OF RUNOFF THAT IS PRODUCED DOES NOT APPEAR TO EASILY/OFTEN REACH THE ROAD/CURBLINE. ALSO, THE DETERIORATING CONDITION OF THE PARKING LOT IS PREVENTING ANY RUNOFF FROM EASILY MAKING IT TO THE ROAD/CURBLINE. THE WATER APPEARS TO MOSTLY EVAPORATE ON THE WASHPAD. OR, IF IT MAKES IT TO THE PARKING LOT, IT EITHER SOMEWHAT INFILTRATES INTO THE GROUND (DUE TO THE BROKEN UP ASPHALT), OR IT EVAPORATES THERE.

Case ID: E - 2015 - 429 Tax ID: 321190025724

Received: 7/21/2015 Details:

Tickler: Completed: 9/3/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 31 06 0487 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

7/21/2015 OPENED COMPLAINT CASE 7/26/2015

9/3/2015 NO VIOLATION FOUND 9/8/2015 9/3/2015

THE ILLEGAL DISCHARGE COMPLAINT WAS INSPECTION FROM AN ISSUE ORIGINATING FROM THE *** CONSTRUCTION. THE VIOLATION HAS SINCE BEEN ABATED AND IMPROVEMENTS TO

THE SITE OUTFALL HAVE BEEN COMPLETED. NO FURTHER ISSUES OBSERVED.

9/3/2015 CLOSE COMPLAINT

Case ID: E - 2015 - 441 Tax ID: 247005246980

Received: 7/23/2015 Details:

Tickler: Completed: 10/5/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 36 24 0162 County Map: 2

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

7/23/2015 OPENED COMPLAINT CASE 7/31/2015

REFERRED FROM DPW - UTILITIES - POSSIBLE TRANSMISSION FLUID RUNNING INTO

STORMDRAIN.

7/27/2015 CASE NOTE 7/27/2015 7/27/2015 7/27/2015

UPON FURTHER EXAMINATION IT HAS BEEN DETERMINED BY MYSELF AND MY SUPERVISOR *** THAT THE PINK COLORED LIQUID IS IN FACT CAR WASH CONDITIONER. I WAS ABLE TO SPEAK WITH THE OWNER OF THE CAR WASH AND HE CONFIRMED THAT THE CAR WASH CONDITIONER IS PINK IN COLOR AND THE DRIPS OF THE CARS COMING OUT OF THE WASH BAY ARE THE REASON FOR THE ACCUMULATION OF THE PINK LIQUID. THE CAR WASH HAS BEEN INSTRUCTED TO FIX THE ISSUE BY PLACING SAND BAGS ALONG WITH FILTER CLOTH FOR THE TEMPORARY TIME BEING. IN DUE TIME (A WEEK OR 2) THE CAR WASH OWNERS WILL MAKE A PERMANENT FIX SO THE WATER WILL DRAIN BACK INTO THE WASH BAY. I WILL CONTINUE TO FOLLOW UP, MAKE DOCUMENTATION AND TAKE PICTURES.

10/5/2015 CLOSE COMPLAINT

UPON FURTHER INSPECTION THE CLASSIC CAR WASH OWNER HAS SATISFIED THE COMPLAINT BY INSTALLING A ASPHALT BERM TO REDIRECT THE WATER/CONDITIONER THAT WAS DRIPPING OFF OF THE CARS WHICH IN TURN WAS MAKING IT'S WAY TO THE COUNTY STORM DRAIN SYSTEM. THE CARS STILL DRIP AFTER EXITING THE CAR WASH ALTHOUGH THE CAR WASH IMMEDIATELY HAS MULTIPLE EMPLOYEES HAND DRY EACH VEHICLE AS THEY EXIT THE WASH BAY.

Case ID: E - 2015 - 522 Tax ID: 200090042470

Received: 8/25/2015 Details:

Tickler: Completed: 8/25/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 45 20 0240 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

8/25/2015 CLOSE COMPLAINT

CONT.DPW-IMD EXPRESSED CONCERNS DUE TO PREVIOUSLY FOUND ILLICIT CROSS-CONNECTIONS (BETWEEN SANITARY AND STORM SEWER) AND ILLICIT DISCHARGE/DUMPING ACTIVITIES. HOWEVER, NEITHER INSPECTOR EVER WITNESSED SUCH ACTIVITIES AT THE MALL OR IN THE STORM DRAIN SYSTEM. IT IS BELIEVED THAT PERHAPS THE DISCOLORATION OF THE WATER AT THE OUTFALL IN QUESTION IS A COINCIDENCE. THE SAME MAY BE TRUE FOR THE UNUSUAL SMELL. IN ADDITION, THE DRY WEATHER FLOW MAY BE THE RESULT OF GROUNDWATER INFILTRATION AND/OR WATER THAT IS BACKED UP/TAKING A LONG TIME TO REACH THE OUTFALL (THE STORM DRAIN SYSTEM FOR THE MALL IS QUITE EXTENSIVE). AS A PRECAUTION, INSPECTOR *** HAS CONTACTED MALL MANAGEMENT AND ASKED THEY REMIND THEIR TENANTS THAT THERE IS TO BE NO DUMPING DOWN INTO THE STORM DRAINS. IN ADDITION, INSPECTOR *** ASKED MALL MANAGEMENT TO INFORM THE CAR WASH SERVICE THAT IF THEY EVER DO PRODUCE RUNOFF, THEY MUST CONTAIN IT/PREVENT IT FROM REACHING THE STORM DRAINS. BECAUSE NO ILLICIT CROSS CONNECTIONS/ILLICIT DISCHARGE ACTIVITIES HAVE BEEN WITNESSED AT THIS SITE, AND TEST RESULTS SHOW NO EVIDENCE OF HIGH LEVELS OF POLLUTANTS, INSPECTORS RECOMMEND THAT THIS COMPLAINT BE CLOSED AT THIS TIME. PLEASE BE INFORMED THAT THIS CASE MAY BE REOPENED, OR A NEW CASE FILED/OPENED. SHOULD ANY FURTHER PROBLEMS/CONCERNS OF POTENTIAL ILLICIT DISCHARGE ARISE.

8/25/2015 OPENED COMPLAINT CASE 9/30/2015

TODAY DURING OUR VISIT TO THE SUBJECT FACILITY, WE NOTICED AN ILLICIT DISCHARGE ENTERING THE COUNTY'S POND. THIS HAS HAPPENED IN THE PAST AND *** WAS ABLE TO TO RESOLVE THE MATTER. I'M FORWARDING THIS TO YOU FOR FOLLOWUP. PLEASE LET ME KNOW IF IT NEEDS TO GO TO SOMEONE ELSE. THE LAST TIME THIS HAPPENED, *** CONTACTED THE MALL (OR NORDSTROMS - SEE BELOW) AND WAS SUCCESSFUL IN ELIMINATING A PREVIOUS ILLICIT DISCHARGE. I HAVE ATTACHED AN EMAIL FROM DAVE THAT PROVIDES A CONTACT FOR THE ***. PLEASE HAVE THE MATTER

INVESTIGATED AND LET ME KNOW THE RESULTS. I HAVE ATTACHED PICTURES THAT SHOW THE DISCHARGE. NOTE THAT THERE ARE PRINCIPAL INFLOW 2 PIPES THAT DRAIN INTO THE POND. THESE PIPES ARE ADJACENT TO EACH OTHER. THE ONE IN QUESTION HAS DRY WEATHER FLOW AND IS THE ONE ON THE RIGHT WHEN LOOKING OUT INTO THE POND.

8/25/2015 CLOSE COMPLAINT

INSPECTOR *** ARRIVED ON-SITE AT APPROXIMATELY 1:00 PM ON MONDAY, 8/24/2015 IN RESPONSE TO A POTENTIAL ILLICIT DISCHARGE COMPLAINT SUBMITTED BY DPW-IMD. INSPECTOR COLLECTED A WATER SAMPLE FROM EACH OF THE 2 OUTFALLS THAT FLOW INTO THE COUNTY (DPW-IMD) MAINTAINED POND AND TESTED THEM FOR PH AND DETERGENTS. AT THE TIME OF ARRIVAL, THE OUTFALL OF CONCERN HAD A VERY SMALL AMOUNT OF FLOW, WHILE THE ADJACENT OUTFALL, WHICH HAS HAD FLOW BEFORE, WAS COMPLETELY DRY AT THE SPLASH PAN. IT HAD BEEN OVER 72 HOURS (THE RECOMMENDED ANTECEDENT DRY PERIOD) SINCE THE LAST SIGNIFICANT AMOUNT OF PRECIPITATION. TEST RESULTS SHOWED A RELATIVELY NEUTRAL PH, AND DETERGENTS WERE BELOW THE 0.5 MG/L THRESHOLD (FOR BOTH OUTFALLS). THESE TESTS SUGGEST THAT THERE MAY NOT BE AN ILLICIT DISCHARGE. HOWEVER, A STRANGE SMELL DOES PERSIST FROM THE OUTFALL THAT DPW-IMD EXPRESSED CONCERN ABOUT. INSPECTOR *** AND INSPECTOR *** EACH VISITED THE SITE THE PREVIOUS THURSDAY AND NEVER WITNESSED ANY ILLICIT DISCHARGE ACTIVITY. A FEW MONTHS AGO, BOTH INSPECTORS HAD WORKED ON PREVIOUS CONCERNS WITH THIS SITE, AND PERFORMED A TRACKDOWN TO FIND ANY POTENTIAL SOURCE OF ILLICIT DISCHARGE. THEY DID SO BY OPENING STORM DRAIN STRUCTURES WHILE TRAVELING THE STORM DRAIN SYSTEM UPSTREAM. INSPECTORS WERE NEVER ABLE TO PINPOINT A POTENTIAL SOURCE OF ILLICIT DISCHARGE. THE ONLY ACTIVITY EVER WITNESSED BY THE INSPECTORS WAS A CAR WASH SERVICE OPERATING IN THE MALL PARKING GARAGE. HOWEVER, THE CAR WASH SERVICE NEVER PRODUCED ANY NOTICEABLE RUNOFF AS THEY USE A HIGH PRESSURE WATER VAPOR SYSTEM INSTEAD OF A CONVENTIONAL HOSE. IN ADDITION. INSPECTOR *** FOLLOWED UP AND OBSERVED THIS OPERATION. INSPECTOR *** REPORTED BACK THAT HE WAS NEVER ABLE TO WITNESS THE SERVICE USING SOAP/ DETERGENT LADEN CLEANING AGENTS. THERE IS ALSO A LACK OF EVIDENCE OF ILLICIT CONNECTION (UNEXPLAINED PIPES TYING IN WITH THE STORM DRAIN SYSTEM, HUMAN FECAL MATTER, TOILET PAPER, SOAPY LOOKING WATER, ETC.).

8/25/2015 CLOSE COMPLAINT

DPW-IMD EXPRESSED CONCERNS DUE TO PREVIOUSLY FOUND ILLICIT CROSS-CONNECTIONS (BETWEEN SANITARY AND STORM SEWER) AND ILLICIT DISCHARGE/DUMPING ACTIVITIES. HOWEVER. NEITHER INSPECTOR EVER WITNESSED SUCH ACTIVITIES AT THE MALL OR IN THE STORM DRAIN SYSTEM. IT IS BELIEVED THAT PERHAPS THE DISCOLORATION OF THE WATER AT THE OUTFALL IN QUESTION IS A COINCIDENCE. THE SAME MAY BE TRUE FOR THE UNUSUAL SMELL. IN ADDITION, THE DRY WEATHER FLOW MAY BE THE RESULT OF GROUNDWATER INFILTRATION AND/OR WATER THAT IS BACKED UP/TAKING A LONG TIME TO REACH THE OUTFALL (THE STORM DRAIN SYSTEM FOR THE MALL IS QUITE EXTENSIVE). AS A PRECAUTION, INSPECTOR *** HAS CONTACTED MALL MANAGEMENT AND ASKED THEY REMIND THEIR TENANTS THAT THERE IS TO BE NO DUMPING DOWN INTO THE STORM DRAINS. IN ADDITION, INSPECTOR *** ASKED MALL MANAGEMENT TO INFORM THE CAR WASH SERVICE THAT IF THEY EVER DO PRODUCE RUNOFF, THEY MUST CONTAIN IT/PREVENT IT FROM REACHING THE STORM DRAINS. BECAUSE NO ILLICIT CROSS CONNECTIONS/ILLICIT DISCHARGE ACTIVITIES HAVE BEEN WITNESSED AT THIS SITE. AND TEST RESULTS SHOW NO EVIDENCE OF HIGH LEVELS OF POLLUTANTS, INSPECTORS RECOMMEND THAT THIS COMPLAINT BE CLOSED AT THIS TIME. PLEASE BE INFORMED THAT THIS CASE MAY BE REOPENED, OR A NEW CASE FILED/OPENED, SHOULD ANY FURTHER PROBLEMS/CONCERNS OF POTENTIAL ILLICIT DISCHARGE ARISE.

Case ID: E - 2015 - 576 Tax ID: 388929227528

Received: 10/1/2015 Details:

Tickler: Completed: 10/7/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 33 22 0060 County Map: 28

> Map No: Suffix Block Parcel Plat Sect **Block** Lot No

Date Due Date Event Request for Trial Date

10/1/2015 OPENED COMPLAINT CASE 10/6/2015

> CHLORINATED RESIDENTIAL POOL WATER BEING DRAINED FROM A HOSE DIRECTLY INTO GROUND, APPROXIMATELY 15 FEET FROM POND THAT FEEDS INTO DEEP CREEK WHICH RUNS

INTO THE MAGOTHY RIVER (CHESAPEAKE BAY).

10/7/2015 CLOSE COMPLAINT

NO EVIDENCE OF DISCHARGE STILL OCCURRING. VISITED HOUSE ON 10/1/2015 AND 10/6/2015

TO EDUCATE OWNER ON PROPER DISCHARGE PROCEDURE. COMPLAINT CLOSED.

Case ID: E - 2015 - 586 Tax ID: 300090218001

Received: 10/8/2015 Details:

Tickler: Completed: 10/14/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 24 06 0069 County Map: 3

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

10/8/2015 OPENED COMPLAINT CASE 10/13/2015

CLEARED ENTIRE PROPERTY OVER THE YEARS. DRAIN DRAINING HORSE WASTE TO THE THE CREEK. THEY ARE IN THE BODKIN CREEK WATERSHED. NO GRADING, NO BUILDING, NO VMP

PERMITS.

10/14/2015 NO VIOLATION FOUND 10/19/2015 10/14/2015

10-13-2015 INSPECTION BY ***. SITE IS A HORSE FARM AND PASTURE WITH NO CONSTRUCTION ACTIVITY OR EARTH DISTURBANCE OBSERVED. NO VIOLATIONS OF ARTICLE 16 OBSERVED. THERE IS AN PIPE IN THE GROUND DRAINING A BOWL SHAPED PORTION OF THE PROPERTY. BUT IT WAS NOT RECENTLY INSTALLED AND BY IT'S CONDITION APPEARS

TO HAVE BEEN IN PLACE FOR MANY YEARS.

10/14/2015 CLOSE COMPLAINT

NO VIOLATIONS OF ARTICLE 16

Case ID: E - 2015 - 621 Tax ID: 200090046594

Received: 11/4/2015 Details:

Tickler: Completed: 12/2/2015

ILLEGAL DISCHARGES COMPLAINT

State Map: 51 A 16 0210 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

11/4/2015 OPENED COMPLAINT CASE 12/4/2015

*** IS WASHING THE NEW STOREFRONT WITH CHLORIC ACID AND IT'S WASHING INTO THE

STORMDRAIN WITH NO PROTECTION.

11/5/2015 CASE NOTE 12/4/2015 11/5/2015

NO POWERWASHING WAS OBSERVED AT FIRST SITE INVESTIGATION ON 11-3-15 AT 2:30PM. UPON FOLLOW UP INVESTIGATION ON 11-4-15 POWERWASHING WAS TAKING PLACE WITH WATER ONLY. CONTRACTOR DID ADMIT THEY HAD USED A CLEANING SOULTION CALLED SURE-KLEAN 600, WHICH IS A DILURED HODROGEN CHLORIDE SOLUTION. THE MSDS FOR THIS PRODUCE INDICATES SPENT WASNWATER MUST BE NEUTRILIZED TO PH 6-10 BEFORE DISCHARGE TO A SEWER SYSTEM. THE CONTRACTOR WAS DIRECTED TO CEASE THE USE OF THE PRODUCT WITHOUT AN APPROVED PLAN TO NEUTRIALIZE THE SPENT WASHWATER PRIOR TO DISCHARGE. THE SITE WILL BE MONITORED FOR 30 DAYS TO ENSURE COMPLIANCE.

12/2/2015 CLOSE COMPLAINT

UPON INVESTIGATION ON 11/4/2015, NO PRESSURE WASHING WAS OBSERVED. EDUCATED FOREMAN REGARDING USE OF CHLORINE-BASED CLEANERS AND PROHIBITED DISCHARGE INTO STORM DRAINS. WATCHED SITE FOR 30 DAYS; NO FURTHER USE OF PRESSURE WASHING SYSTEM WAS OBSERVED. COMPLAINT CLOSED.

Case ID: E - 2015 - 622 Tax ID: 309521457378

Received: 11/4/2015 Details:

Tickler: Completed: 5/19/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 24 09 0100 County Map: 75

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

11/4/2015 OPENED COMPLAINT CASE 11/30/2015

THIS IS THE ADDRESS OF THE ALLEGED RELEASE OF GRAY WATER FROM A NEIGHBOR ACROSS THE STREET FROM BEACHWOOD PARK. NO STAFF AT *** WITNESSED THE DISCHARGE. IT WAS REPORTED BY A CITIZEN WALKING IN THE PARK. IT HAS ALSO BEEN MENTIONED "IN PASSING" BY OTHER NEIGHBORS THAT THIS PRACTICE HAS BEEN GOING ON FOR YEARS. THE SCENARIO HEARD IS THE OWNER PUTS A HOSE OUT TO DISCHARGE WHEN WASHING CLOTHES, RECOILS THE HOSE WHEN DONE. GENERAL DESCRIPTION FROM THE CITIZEN WHO WITNESSED OF WHERE THE DISCHARGE IS OCCURRING. "THE HOUSE IS DIRECTLY EAST ACROSS FROM THE NEW PATH AND DISCHARGE THE PIPE IS HIDDEN JUST BELOW THE SURFACE ABOUT A 2 FEET FROM THE SOUTH CORNER OF HIS DRIVE WAY ON BEACHWOOD PARK RD."

11/19/2015 CASE NOTE 12/31/2015 11/19/2015

INSPECTOR *** ARRRIVED ON-SITE ON THURSDAY, 11/5/2015, AT APPROXIMATELY 11:00 AM. UPON ARRIVAL, INSPECTOR WAS ABLE TO LOCATED THE END OF A WHITE PVC PIPE NEAR THE SOUTHEASTERN CORNER OF THE DRIVEWAY. AT THE END OF THE PIPE THERE WAS EVIDENCE OF A GRAY WATER DISCHARGE. MORE SPECIFICALLY, THERE WAS THE PRESENCE OF WHAT LOOKED LIKE WET LAUNDRY LINT THAT WOULD'VE BEEN DRAINED OUT OF A WASHING MACHINE. SHORTLY AFTER DISCOVERING PIPE, INSPECTOR MET ***. *** INFORMED INSPECTOR THAT THEY DON'T HAVE A WASHING MACHINE TIED TO THIS PIPE. IN ADDITION, THE ONLY TIME THEY HAVE A "HOSE" OUT FRONT IS WHEN THEY WASH THEIR VEHICLES IN THEIR DRIVEWAY, WHICH THE INSPECTOR DID CONFIRM TO HER WAS LEGAL. HOWEVER, *** INFORMED INSPECTOR THAT THE WHITE PVC PIPE IS THEIR SUMP PUMP DRAIN. IN ADDITION, THERE IS A UTILITY SINK/TUB THAT SHE USES TO DUMP BUCKETS OF MOP WATER, AND OCCASSIONALLY SCRUBS TOWELS AND OTHER SUCH FABRICS IN OCCASSIONALLY. THIS UTILITY SINK/TUB DRAINS INTO THE SUMP PUMP WELL. INSPECTOR INFERS FROM THIS INFORMATION THAT THIS IS THE SOURCE OF THE GRAY WATER DISCHARGE AT THE END OF THE PVC PIPE. INSPECTOR INFORMED *** THAT

HE WOULD BE BACK IN TOUCH WITH WHETHER OR NOT THIS UTILITY SINK/TUB NEEDS TO HAVE ITS DRAIN REDIRECTED TO THEIR SEPTIC TANK, AND IF SO, IF A PERMIT WAS NEEDED. INSPECTOR WAS ADVISED BY PLUMBING INSPECTIONS SUPERVISOR THAT A PERMIT WOULD BE NEEDED SO THAT A PLUMBING INSPECTOR MAY CONFIRM THAT THE WORK IS COMPLETED PROPERLY. INSPECTOR HAS SINCE LEARNED AS OF 11/18/2015 THAT AN INSPECTOR FROM THE BUREAU OF ENVIRONMENTAL HEALTH ALSO VISITED THE HOME IN RELATION TO THE SAME COMPLAINT. THE *** INSPECTOR WAS INVITED DOWN TO THE BASEMENT. THE BEH INSPECTOR CONFIRMED TO THE INSPECTOR THAT THERE WAS A UTILITY SINK/TUB IN THE BASEMENT THAT DRAINS TO THE SUMP PUMP WELL. ADDITIONALLY, THERE IS A WASHING MACHINE IN THE BASEMENT, BUT IT DOESN'T LOOK LIKE IT HAS BEEN USED IN QUITE SOME TIME, AND THERE IS NO DRAIN HOSE CONNECTED TO IT. MR. AND MRS. DEMBY HAD INFORMED *** INSPECTOR THAT THEY USE A LOCAL LAUNDROMAT TO DO THEIR LAUNDRY. AT THIS TIME, AFTER SPEAKING WITH *** SUPERVISOR, IT HAS BEEN DETERMINED THAT THE UTILITY SINK/TUB IS CONSTITUTING A SOURCE OF GRAY WATER DISCHARGE, AND THUS NEEDS TO HAVE ITS DRAIN REDIRECTED TO THE HOME'S SEPTIC SYSTEM. PLEASE COMPLETE THE FOLLOWING CORRECTION ITEMS BY 12/20/2015:1. OBTAIN A PLUMBING PERMIT FROM ANNE ARUNDEL COUNTY AND REDIRECT THE UTILITY SINK/TUB'S DRAIN LINE TO THE SEPTIC SYSTEM. THE FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 12/21/2015.

1/4/2016 CASE NOTE

3/31/2016

1/4/2016

INSPECTOR *** ARRRIVED ON-SITE ON MONDAY, 12/28/2015, AT APPROXIMATELY 12:00 PM. UPON ARRIVAL, INSPECTOR DIDN'T OBSERVE ANY ACTIVE ILLICIT DISCHARGE. IN ADDITION, THE LOCATION OF PREVIOUS ILLICIT DISCHARGE APPEARED TO HAVE BEEN INACTIVE FOR SOME TIME. WHILE THE ILLICIT DISCHARGE ACTIVITIES SEEM TO HAVE BEEN DISCONTINUED AT THIS TIME, THE SOURCE ITSELF HAS NOT BEEN RESOLVED AS THE PROPERTY OWNER(S) STILL HAVEN'T SOUGHT A PLUMBING PERMIT TO REDIRECT THE SOURCE INTO THEIR SEPTIC TANK, OWNER(S) PREVIOUSLY STATED TO INSPECTOR THAT THEY WOULD NO LONGER BE UTILIZING THE TUB/SINK THAT WAS THE SOURCE OF THE DISCHARGE. INSPECTOR WILL DISCUSS WITH SUPERVISOR UPON THEIR RETURN WHETHER OR NOT THIS IS GROUNDS FOR CLOSING THE COMPLAINT OR IF THE OWNER(S) STILL MUST OBTAIN A PLUMBING PERMIT AND REDIRECT THE TUB/SINK'S DISCHARGE INTO THEIR SEPTIC TANK. AS STATED PREVIOUSLY, THE OWNER(S) HAVE STATED THEY WILL NO LONGER BE UTILIZING THE SOURCE OF THE DISCHARGE, AND NO EVIDENCE OF FURTHER DISCHARGE WAS PRESENT UPON ARRIVAL AT THE PROPERTY. PLEASE COMPLETE THE FOLLOWING CORRECTION ITEMS BY 12/20/2015: *1. OBTAIN A PLUMBING PERMIT FROM ANNE ARUNDEL COUNTY AND REDIRECT THE UTILITY SINK/TUB'S DRAIN LINE TO THE SEPTIC SYSTEM. THE FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 1/28/2016.

5/19/2016 CLOSE COMPLAINT

VIOLATION HAS BEEN RESOLVED. UTILITY SINK/TUB HAS BEEN REMOVED. CASE MAY BE CLOSED AT THIS TIME.

Case ID: E - 2015 - 666 Tax ID: 172505393355

Received: 12/22/2015 Details:

Tickler: Completed: 12/29/2015

ILLEGAL DISCHARGES COMPLAINT

Phone:

State Map: 60 24 0102 County Map: F 1

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

12/22/2015 OPENED COMPLAINT CASE 1/27/2016

12/29/2015 CLOSE COMPLAINT

PER LETTER DATED 12/18 REGARDING A COMPLAINT FOR WATER DISCHARGE, THIS PROBLEM

WAS RESOLVED ON 12/21 BY *** THE PLUMMER. \$3,714.00 INVOICE #425937.

Case ID: E - 2016 - 3 Tax ID: 500006519800

Received: 1/5/2016 Details:

Tickler: Completed: 2/29/2016

ILLEGAL DISCHARGES COMPLAINT

Phone:

State Map: 08 02 0077 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

1/5/2016 OPENED COMPLAINT CASE 1/29/2016

SOAP/DETERGENT GOING INTO STORM SWALE.

2/29/2016 CLOSE COMPLAINT

THE HOME OWNER HAS BEEN NOTIFIED OF THE ILLICIT DISCHARGE COMING FROM HIS HOUSE INTO THE STORMWATER SWALE AND HAS REPAIRED THE ISSUE. NO LONGER AN ILLICIT DISCHARGE ISSUE FOR THIS PROPERTY. COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 4 Tax ID: 200002469800

Received: 1/5/2016 Details:

Tickler: Completed: 1/5/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 44 04 0045 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

1/5/2016 CLOSE COMPLAINT

INSPECTOR *** SPOKE WITH *** FROM AACO DPW REGARDING COMPLAINANT: ***. INSPECTOR SPOKE WITH ***. *** DENIED MAKING COMPLAINT. PERFORMED INVESTIGATION 12/16/2015. UPON INVESTIGATION, LITTLE TO NO EVIDENCE COULD BE FOUND REGARDING A MILKY DISCHARGE ON THE GOLF COURSE OR THE SURROUNDING AREA. CHEMICAL TESTS PERFORMED ONSITE (PHOSPHATE, PH LEVELS, DETERGENT) REVEALED NO ABNORMALITIES.

CLOSE COMPLAINT.

1/5/2016 OPENED COMPLAINT CASE 1/10/2016

MILKY DISCHARGE RUNNING THROUGH GOLF COURSE.

Case ID: E - 2016 - 45 Tax ID: 300033365000

Received: 2/4/2016 Details:

Tickler: Completed: 5/4/2016

DRAINAGE COMPLAINT NPDES TRIGGERING EVENT FOR SEDIMENT LADEN

State Map: 23 17 0213 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

2/4/2016 OPENED COMPLAINT CASE 2/9/2016

2/11/2016 NOT IN COMPLIANCE 2/16/2016 2/11/2016

SITE INSPECTION REVEALED THAT LADEN WATER HAD LEFT SITE AND EFFECTED DOWN SITE CONDITIONS. MEETING WAS HELD WITH ENGINEERS TO REVISE PLANS TO PREVENT FURTHER LADEN WATER FROM LEAVING SITE. PIPE LEADING TO CHESTNUT HILL AVE HAS BEEN BLOCKED BY CONTRACTORS TO ELIMINATE ANY FLOW FROM SITE. ENGINEERS IN PROCESS OF SUBMITTING RED LINE PLANS TO SHOW CHANGES IN PLANS TO REFLECT THIS. AN INSPECTION WILL BE PERFORMED DURING NEXT RAINFALL EVENT TO ENSURE DOWNSTREAM CONDITIONS

ARE NOT AFFECTED BY GRADING ON SITE.

2/11/2016 CORRECTION NOTICE ISSUED 3/16/2016 2/11/2016

5/4/2016 CLOSE COMPLAINT

ALL PIPES AFFECTING CHESTNUT HILL HAVE BEEN BLOCKED AND REDIRECTED TO DISCHARGE TO OTHER DEVICES ON SITE. PER INSPECTIONS, NO VISUAL SEDIMENT LADEN WATER HAS

BEEN FOUND LEAVING SITE. OK TO CLOSE

Case ID: E - 2016 - 61 Tax ID: 500000273313

Received: 2/19/2016 Details:

Tickler: Completed: 2/22/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 10 07 0602 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

2/19/2016 OPENED COMPLAINT CASE 2/24/2016

FIELD STAFF IDENTIFIED AN OUTFALL THAT IS PRODUCING SOME PRETTY TURBID WATER DISCHARGING TO A FURNACE BRANCH TRIBUTARY IN GLEN BURNIE. THE TURBID WATER WAS NOT PRESENT EARLIER IN THE MORNING AND WAS OBSERVED FLOWING DOWNSTREAM WITHIN FURNACE BRANCH AT ABOUT 11:15 AM. FIELD STAFF WALKED UPSTREAM AND IDENTIFIED AN OUTFALL AS THE SOURCE OF THE TURBID WATER. THE OUTFALL SHOULD BE DRAINING LANDS ON AND ADJACENT TO NEW JERSEY AVENUE IN GLEN BURNIE.

2/19/2016 CASE NOTE 2/29/2016 2/19/2016

*** VISITED THE SITE ON 2/18/16. *** WAS PUMPING DIRTY WATER FROM THEIR EXCAVATED SEWER CONNECTION PIT. DISCHARGING DIRTY WATER IS A VIOLATION OF ARTICLE 16 OF THE COUNTY CODE. *** WAS INSTRUCTED BY *** TO STOP PUMPING UNTIL THEY HAD INSTALLED THE PROPER FILTRATION DEVICES.

2/22/2016 CLOSE COMPLAINT

REPAIRS HAVE BEEN COMPLETED. SILT AND SAND IN GUTTER PAN HAVE BEEN REMOVED. *** IS NOT PUMPING DIRTY WATER.

Case ID: E - 2016 - 74 Tax ID: 500090095012

Received: 2/26/2016 Details:

Tickler: Completed: 2/29/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 01 20 0119 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

2/26/2016 OPENED COMPLAINT CASE 3/2/2016

2/29/2016 CLOSE COMPLAINT

INSPECTORS *** AND *** ARRIVED ON-SITE ON TUESDAY, 2/23/2016, AT APPROXIMATELY 1:45 PM. INSPECTOR *** MADE CONTACT WITH SUPERVISOR FROM *** AND EXPLAINED THE COUNTY HAS RECEIVED COMPLAINTS FROM NEIGHBORING BUSINESSES ABOUT ILLEGAL VEHICLE WASHING. SUPERVISOR LED INSPECTORS BACK TO THEIR WAREHOUSE AREA WHERE THEY KEEP THEIR TRUCKS PARKED. SUPERVISOR SHOWED THE INSPECTORS THE BUCKET AND MOP/BRUSH THEY USED TO WASH DOWN THEIR TRUCKS, AND EXPLAINED THAT THEY USED NO DETERGENTS/SOAPS/AGENTS, ONLY WATER. INSPECTORS DID NOT SEE ANY EVIDENCE IN THE BUCKET THAT ANY CLEANING AGENTS WERE USED. INSPECTOR *** AND HIS SUPERVISOR, ***, ARE CURRENTLY RESEARCHING WHETHER OR NOT THERE ARE ANY BIODEGRADABLE AND/OR WATER-SAFE CLEANING AGENTS ALLOWED TO BE USED WHEN WASHING VEHICLE FLEETS ON COMMERCIAL PROPERTIES. UNTIL SUCH TIME THAT A CONCLUSION IS REACHED, AND/OR ***, THE OWNER/MANAGER OF THE BUSINESS PARK, ARE ABLE TO OBTAIN AN NPDES DISCHARGE PERMIT, NO CLEANING AGENTS MAY BE USED WHEN WASHING VEHICLES. FOR THE PRESENT TIME BEING, COMPANIES WITH VEHICLE FLEETS MAY WASH THEIR VEHICLES WITH WATER ONLY. IF IN THE FUTURE THE VEHICLE WASHING WITH ONLY WATER IS FOUND TO STILL BE A SOURCE OF POLLUTION, THEN ALL VEHICLE WASHING MUST CEASE IMMEDIATELY. IT IS POSSIBLE THAT EVEN WHEN USING ONLY WATER, RESIDUAL COMPOUNDS MAY STILL BE WASHED OFF OF THE VEHICLES. BUT AS STATED EARLIER, VEHICLE FLEET WASHING MAY TAKE PLACE AS LONG AS ONLY WATER IS BEING USED. AS THERE IS NO VIOLATION AT THIS TIME, THIS COMPLAINT CASE MAY BE CLOSED FOR THE TIME BEING.

Case ID: E - 2016 - 129 Tax ID: 138002474100

Received: 3/24/2016 Details:

Tickler: Completed: 4/4/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 55 13 0341 County Map: 3 40

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/24/2016 CASE NOTE 4/29/2016 3/24/2016

ILLICIT DISCHARGE OF LAUNDRY AND OR WATER SOFTENER. ILLICIT DISCHARGE WAS DISCOVERED WHILE INVESTIGATING COMPLAINT E-2016-122 AT NEIGHBORING PROPERTY 706 PETERSBURG RD. CONTACTED HOMEOWNER AT *** APPOMATTOX. HE CONFIRMED THAT HIS LAUNDRY IS DISCHARGING INTO THE SUMP PIT IN BASEMENT. SUMP PIT THEN ULTIMATELY DISCHARGES INTO A STORMWATER INLET LOCATED IN THE REAR PROPERTY CORNER. HOMEOWNER HAS PURCHASED AN EJECTOR PUMP FOR LAUNDRY TO BE DISCHARGED INTO SANITARY LINE. SPOKE TO *** AND INSTRUCTED HIM THAT HE COULD NOT USE HIS WASHING MACHINE UNTIL HE DISCONNECTS LAUNDRY DRAIN FROM DRAIN TILE AND INSTALL THE DRAIN INTO A SANITARY DRAIN LINE.

3/24/2016 OPENED COMPLAINT CASE 4/29/2016

THE LAUNDRY AND WATER SOFTENER IS HOOKED UP TO SUMP PUMP WHICH DISCHARGES INTO STORMWATER INLET IN PROPERTY CORNER.

3/30/2016 CASE NOTE 4/4/2016 3/30/2016

INSPECTION ON 3/30/2016 AT 705 APPOMATTOX RD. REVEALED THE FOLLOWING. HOMEOWNER *** IS DISCHARGING LAUNDRY WATER INTO HIS DRAIN TILE WHICH ENTERS HIS SUMP PIT AND ULTIMATELY DISCHARGES INTO A STORMWATER INLET LOCATED AT *** PETERSBURG RD. NOTIFIED *** THAT HE HAS TO DISCONNECT LAUNDRY DRAIN FROM DRAIN TILE AND INSTALL THE DRAIN INTO A SANITARY DRAIN LINE. ALSO INFORMED *** THAT THERE IS TO BE NO LAUNDRY WASHED UNTIL ALL REMEDIES HAVE BEEN MADE. ALL DEFICIENCIES SHOULD BE FIXED NO LATER THAN 4/2/2016.

4/4/2016 CLOSE COMPLAINT

RE-INSPECTION ON 4/4/2016 REVEALED THE FOLLOWING: *** DISCONNECTED HIS LAUNDRY FROM THE DRAIN TILE AND CONNECTED TO A SANITARY LINE TO DISCHARGE INTO SEPTIC SYSTEM. THERE IS NO LONGER ANY VIOLATION ASSOCIATED WITH THIS ILLICIT DISCHARGE. COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 186 Tax ID: 406290215872

Received: 4/25/2016 Details:

Tickler: Completed: 5/4/2016

ILLEGAL DISCHARGES COMPLAINT

Phone:

State Map: 22 03 0032 County Map: 9

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

4/25/2016 OPENED COMPLAINT CASE 5/31/2016

ELEVATED CHLORINE CONCENTRATIONS IN OUTFALL

5/4/2016 CLOSE COMPLAINT

THE PVC PIPE THAT TESTED HIGH FOR CHLORINE IS CONNECTED TO A SERIES OF SUMP PUMPS THAT ARE PUMPING GROUND WATER AWAY FROM THE FOUNDATIONS OF SOME NEIGHBORS. THIS WAS PUT INTO PLACE DURING THE ORIGINAL CONSTRUCTION OF THE COMMUNITY. THE HIGH CHLORINE LEVEL MUST BE COMING FROM THE GROUND WATER. NO

EVIDENCE OF AN ILLICIT DISCHARGE. THIS COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 206 Tax ID: 541290224734

Received: 5/2/2016 Details: Tickler: 9/1/2016 Completed:

STORMWATER MANAGEMENT ISSUES

State Map: 04 13 0111 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/2/2016 OPENED COMPLAINT CASE 6/6/2016

INSPECTOR ARRIVED ON-SITE AT APPROXIMATELY 12:40 PM ON FRIDAY, 4/29/2016. UPON ARRIVAL, INSPECTOR MADE THE FOLLOWING OBSERVATIONS: 1. THERE IS FLOW COMING FROM UNIDENTIFIED SOURCES AT 2 DIFFERENT LOCATIONS BEHIND THE HOTEL. 2. THERE IS A SINKHOLE BY 1 OF THE YARD DRAINS BEHIND THE HOTEL. 3. THERE IS A CAP MISSING FROM THE OBSERVATION WELL OF THE PRETREATMENT CHAMBER. IN REFERENCE TO THE 3 ITEMS BELOW: 1. INSPECTOR PLANS TO REVISIT SITE ON 5/6/2016 TO BETTER ASSESS THE SOURCES OF ILLICIT DISCHARGE AND POTENTIALLY TEST WATER SAMPLES. 2. PLEASE REPAIR SINKHOLE BY 6/1/2016. 3. PLEASE ADD CAP TO OBSERVATION WELL BY 6/1/2016.

6/28/2016 CASE NOTE 7/29/2016 6/28/2016

INSPECTOR ARRIVED ON-SITE AT APPROXIMATELY 11:00 PM ON MONDAY, 6/27/2016. UPON ARRIVAL, INSPECTOR MADE THE FOLLOWING OBSERVATIONS: 1. THERE IS ACTIVE FLOW IN THE 2 BRANCHES OF THE STORM DRAIN SYSTEM. 2. PH READINGS WERE CLOSE TO NEUTRAL. 3. THERE IS A FILM ON THE TOP OF THE WATER, ALONG WITH WHAT LOOKS LIKE POTENTIALLY TOILET PAPER DEBRIS. 4. THERE IS AN ODOR OF SEWAGE AT THE INFLOW TO THE FILTRATION DEVICE. INSPECTOR WILL CONTINUE TO FOLLOW-UP TO TRACK DOWN AND CONFIRM A SOURCE OF ILLICIT DISCHARGE.

7/26/2016 CASE NOTE 8/31/2016 7/26/2016

INSPECTORS ARRIVED ON-SITE AT APPROXIMATELY 1:00 PM ON THURSDAY, 7/21/2016. UPON ARRIVAL, INSPECTOR MADE THE FOLLOWING OBSERVATIONS: 1. THERE IS ACTIVE FLOW IN 1 BRANCH OF THE STORM DRAIN SYSTEM. 2. THE SOURCE OF THIS FLOW WAS A SMALL 4-INCH BLACK HDPE PIPE COMING INTO A YARD/PARKING LOT INLET NEAR THE UPSTREAM END OF THE SYSTEM. 3. SAMPLE TAKEN FROM THIS PIPE SHOWED VERY HIGH PH LEVELS. 4. AFTER FURTHER RESEARCH, IT WAS DETERMINED THAT: THIS PIPE IS THE UNDERDRAIN TO A LARGE FRENCH DRAIN BUILT IN THE HILLSIDE ABOVE THE BACK PARKING LOT TO HELP CONTROL GROUNDWATER SATURATION AND FLOODING; AND THAT THE GROUNDWATER IS NATURALLY

HIGH IN PH. 5. UNABLE TO FIND ANY EVIDENCE AT THIS TIME OF AN ILLICIT CONNECTION INTO THE STORM DRAIN SYSTEM. THERE ARE, HOWEVER, 2 CORRECTION ITEMS THAT NEED TO BE COMPLETED IN REFERENCE TO THE SWM PLAN OF THE PROPERTY: 1. REPAIR SINKHOLE BY YARD INLET BEHIND BUILDING. BACKFILL, COMPACT AND STABILIZE. 2. ADD A REMOVABLE CAP TO THE VERTICAL PIPE IN THE FOREBAY CHAMBER OF THE BIORETENTION DEVICE. A FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 8/24/2016.

8/17/2016 CASE NOTE

9/1/2016

8/17/2016

INSPECTORS ARRIVED ON-SITE AT APPROXIMATELY 10:00 AM ON WEDNESDAY, 8/17/2016 FOR AN ON-SITE MEETING WITH THE HOTEL'S LANDSCAPE CONTRACTOR. THERE ARE 2 CORRECTION ITEMS THAT NEED TO BE COMPLETED IN REFERENCE TO THE SWM PLAN OF THE PROPERTY: 1. REPAIR SINKHOLE BY YARD INLET BEHIND BUILDING. BACKFILL, COMPACT AND STABILIZE. 2. ADD A REMOVABLE CAP TO THE VERTICAL PIPE IN THE FOREBAY CHAMBER OF THE BIORETENTION DEVICE. A FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 8/31/2016.

Case ID: E - 2016 - 207 Tax ID: 500090038211

Received: 5/2/2016 Details:

Tickler: Completed: 5/2/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 03 12 0255 County Map: 1R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/2/2016 OPENED COMPLAINT CASE 5/7/2016

5/2/2016 CLOSE COMPLAINT

INSPECTOR ARRIVED ON-SITE ON FRIDAY, 4/29/2016, AT APPROXIMATELY 1:45 PM. UPON ARRIVAL, INSPECTOR COULD FIND NO EVIDENCE OF ILLICIT DISCHARGE. IN ADDITION, THE ORIGINALLY FORWARD REPORT INDICATED THAT THE ELEVATED RESULTS FOR CHLORIDE WERE BELOW ACTION LEVEL TO BEGIN WITH. INSPECTOR MET WITH HOTEL MAINTENANCE CHIEF, AND REMINDED THEM THAT NO DUMPING OF MOP BUCKETS OR POWER WASHING OF THE LOADING DOCK IS ALLOWED (POWER WASHING WITHOUT SOAP MAY BE ALLOWED). THIS COMPLAINT MAY BE CLOSED AT THIS TIME.

Case ID: E - 2016 - 208 Tax ID: 500002500550

Received: 5/2/2016 Details: Tickler: 8/22/2016 Completed:

ILLEGAL DISCHARGES COMPLAINT

State Map: 01 20 0339 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/2/2016 OPENED COMPLAINT CASE 5/7/2016

5/4/2016 CASE NOTE 5/13/2016 5/4/2016

INSPECTOR ARRIVED ON-SITE ON FRIDAY 4/29/2016 AT APPROXIMATELY 2:00 PM, AND THEN AGAIN ON TUESDAY 5/3/2016 AT APPROXIMATELY 2:20 PM. DURING VISIT ON 4/29/2016, INSPECTOR OBSERVED FLOW AT THE OUTFALL/POND INFLOW IN QUESTION. INSPECTOR FOLLOWED THE FLOW UP THE 2 BRANCHES OF STORM DRAINS LEADING TO THIS OUTFALL. INSPECTOR WAS UNABLE TO LOCATE A SOURCE OF FLOW. INSPECTOR THEN PROCEEDED TO GO DOOR-TO-DOOR ALONG THE 611 BUILDING, SPEAKING WITH EACH TENANT AND INFORMING THEM THAT IF THEY UTILIZE VEHICLE FLEETS, THEY'RE NOT ALLOWED TO WASH THEIR VEHICLES UNLESS IT'S WITH ONLY WATER (I.E. NO SOAPS). THEY MAY, HOWEVER, HIRE A VEHICLE WASH SERVICE THAT'S ABLE TO COLLECT THE RUNOFF BEFORE IT REACHES THE STORM DRAINS. THESE SAME RULES APPLY FOR PERSONAL VEHICLES. INSPECTOR REPEATED THESE LATTER VISITS WITH ALL THE TENANTS OF THE 601 BUILDING ON 5/3/2016. THESE TENANTS WERE GIVEN THE SAME WARNING/INFORMATION AS THOSE IN THE 611 BUILDING. IN ADDITION, INSPECTOR WOULD LIKE TO INFORM ALL TENANTS, AND MERRITT PROPERTIES, THAT RUNOFF FROM ANY WASHING ACTIVITY ISN'T ALLOWED TO BE DIRECTED INTO STORM DRAINS IF IT CONTAINS SOAPS/DETERGENTS. SUCH WASHING ACTIVITY NOT ONLY INCLUDES WASHING VEHICLES, BUT ALSO INCLUDES POWERWASHING RAMPS/LOADING DOCKS. CLEANING/WIPING DOWN EQUIPMENT, ETC. IN SUMMARY, THERE ARE 4 OPTIONS FOR THOSE WHO WISH TO HAVE VEHICLES WASHED ON-SITE, OR ARE PERFORMING ANY WASHING ACTIVITY WITHOUT KEEPING THE RUNOFF FROM THE STORM DRAINS: 1. HIRE A VEHICLE WASH SERVICE THAT CAN CONTAIN THE RUNOFF. 2. IMPLEMENT THEIR OWN CONTAINMENT SYSTEM/SET-UP. INSPECTOR WOULD NEED TO MONITOR/TEST THIS OPTION VERY CLOSELY BEFORE DECIDING IF SOAPS WOULD IN FACT BE ALLOWED AGAIN. 3. WASH WITH ONLY WATER. 4. THEMSELVES OR *** (OR COMBINATION) CAN APPLY FOR AN NPDES DISCHARGE PERMIT.THE FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 5/11/2016.

6/28/2016 CASE NOTE

7/29/2016

6/28/2016

INSPECTOR ARRIVED ON-SITE ON MONDAY 6/27/2016 AT APPROXIMATELY 10:15 AM. DURING VISIT INSPECTOR OBSERVED FLOW AT THE OUTFALL/POND INFLOW IN QUESTION. INSPECTOR TOOK A SAMPLE AT THE OUTFALL AND TESTED FOR DETERGENTS. TEST SHOWED RESULTS GREATER THAN 3 MG/L, BUT MAY BE CONSIDERED INCONCLUSIVE DUE TO CLOUDINESS OF SAMPLE TAKEN. IT IS STILL UNCLEAR WHERE DETERGENTS ARE INFILTRATING INTO THE STORM DRAIN SYSTEM. IN ADDITION, INSPECTOR HAS RECEIVED PHOTOS SHOWING PEOPLE WASHING VEHICLES, BUT IT IS UNCLEAR WHICH INDIVIDUALS AND/OR COMPANIES ARE RESPONSIBLE. INSPECTOR WILL CONTINUE TO FOLLOW-UP UNTIL A SOURCE IS CONFIRMED OR RULED OUT. THE FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 7/28/2016.

7/19/2016 CASE NOTE

8/22/2016

7/19/2016

INSPECTOR ARRIVED ON-SITE ON FRIDAY 7/15/2016 AT APPROXIMATELY 1:00 PM. DURING VISIT INSPECTOR OBSERVED FLOW AT THE OUTFALL/POND INFLOW IN QUESTION. IT IS STILL UNCLEAR WHERE DETERGENTS ARE INFILTRATING INTO THE STORM DRAIN SYSTEM. IN ADDITION, INSPECTOR RECEIVED PHOTOS PRE-6/27/2016 VISIT, SHOWING PEOPLE WASHING VEHICLES, BUT IT IS UNCLEAR WHICH INDIVIDUALS AND/OR COMPANIES ARE RESPONSIBLE. INSPECTOR WILL CONTINUE TO FOLLOW-UP UNTIL A SOURCE IS CONFIRMED OR RULED OUT. THE FOLLOW-UP INSPECTION IS CURRENTLY SCHEDULED FOR 8/18/2016.

Case ID: E - 2016 - 245 Tax ID: 200011306117

Received: 5/17/2016 Details: Tickler: 7/29/2016 Completed:

ILLEGAL DISCHARGES COMPLAINT

State Map: 42 05 0084 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/17/2016 OPENED COMPLAINT CASE 6/22/2016

*** IS PUTTING A BLUE PLASTIC 50 GALLON GREASE BOX IN THE GROUND TO CATCH GREASE AND SEPTIC RUNOFF FROM ITS GREASE TRUCK SPILLS: THEY ARE DIRECTING THE WATER RUN OFF TOWARD STORM WATER POND NEAR BY INSTALLED AT THE FENCE BEHIND LARGE TANKS BETWEEN FENCE AND POND.

5/27/2016 CASE NOTE 7/29/2016 5/27/2016

COMPLAINT RECEIVED 5/17/2016 WAS INVESTIGATED ON 5/18/2016 AT 11:30 AM ORIGINALLY AND THEN A FOLLOW-UP WITH SUPERVISOR ON 5/26/2016 AT 12:20 PM. BASIS OF COMPLAINT WAS DESCRIBED AS: *** IS PUTTING A BLUE PLASTIC 50 GALLON GREASE BOX IN THE GROUND TO CATCH GREASE AND SEPTIC RUNOFF FROM ITS GREASE TRUCK SPILLS: THEY ARE DIRECTING THE WATER RUN OFF TOWARD STORM WATER POND NEAR BY INSTALLED AT THE FENCE BEHIND LARGE TANKS BETWEEN FENCE AND POND. UPON INVESTIGATION IT WAS DETERMINED THAT THERE ARE MULTIPLE VIOLATIONS AT *** CRONSON BLVD. THERE IS NO CERTIFICATE OF USE FOR THE BUSINESS ***. THERE IS NO NPDES INDUSTRIAL DISCHARGE PERMIT FOR ***. THE OVERALL CLEANLINESS OF THE PROPERTY HAS IMPROVED, BUT THERE IS STILL A SUBSTANTIAL AMOUNT OIL SPILLAGE FROM OIL TRANSFERS FROM TRUCK TO STORAGE TANKS. THE PROPERTY ALSO SEEMS TO BE OPERATING AS A SALVAGE YARD/DUMP FOR VEHICLES AND OLD MOBILE HOME TRAILERS. FORWARDING ADDITIONAL VIOLATIONS TOO ZONING DEPARTMENT. MDE HAS BEEN CONTACTED TO INVESTIGATE AND INFORM PROPERTY OWNER OF CORRECT PERMITS NEEDED TO OPERATE B&P ENVIRONMENTAL AND ADDITIONAL BUSINESSES ON PROPERTY.

Case ID: E - 2016 - 270 Tax ID: 220390034910

Received: 5/31/2016 Details:

Tickler: Completed: 6/22/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 36 24 0376 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/31/2016 OPENED COMPLAINT CASE 6/5/2016

LEAKY DUMPSTER

5/31/2016 CASE NOTE 5/31/2016 5/31/2016

SPOKE WITH STORE MANAGER FOR ***. INFORMED HER OF THE LEAKING DUMPSTER/ TRASH COMPACTOR LOCATED AT REAR OF BUILDING. THERE WAS A WORK ORDER ISSUED BY MANAGEMENT COMPANY TO HAVE REPAIRS MADE. WILL CONTINUE TO MONITOR UNTIL

REPAIRS ARE MADE.

6/22/2016 CLOSE COMPLAINT

DUMPSTER HAS BEEN REPAIRED AND IS NO LONGER LEAKING FLUIDS. THIS COMPLAINT CAN BE

CLOSED.

Case ID: E - 2016 - 275 Tax ID: 400590213546

Received: 5/31/2016 Details:

Tickler: Completed: 7/6/2016

ILLEGAL DISCHARGES COMPLAINT

State Map: 08 20 0293 County Map: D 4RR

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/31/2016 OPENED COMPLAINT CASE 6/6/2016

STORMWATER ILLICIT DISCHARGE AT *** AT THE ***. DUMPSTER AREA LITTERED WITH

FOOD AND GARBAGE ENTERING CATCHBASIN IMMEDIATELY NEXT TO DUMPSTER.

7/6/2016 CLOSE COMPLAINT

THE DUMPSTER AREA HAS BEEN CLEANED OUT AND THERE IS NO LONGER A THREAT OF AN ILLICT DISCHARGE INTO THE NEARBY STORM DRAINS. PLEASE CLOSE THIS COMPLAINT.

Case ID: E - 2016 - 279 Tax ID: 500090050677

Received: Details: 6/2/2016 Tickler: 8/31/2016 Completed:

STORMWATER MANAGEMENT ISSUES

State Map: 0.3 12 0177 County Map: 10

> Map No: Suffix Block Parcel **Block** Lot No Sect

Date Event Due Date Request for Trial Date

6/2/2016 7/29/2016 **OPENED COMPLAINT CASE**

> INSPECTOR ARRIVED ON-SITE ON WEDNESDAY, 6/1/2016, AT APPROXIMATELY 1:00 PM. UPON ARRIVAL, INSPECTOR OPENED MANHOLE BETWEEN PARKING LOT AND POND AND OBSERVED ACTIVE FLOW COMING FROM PARKING LOT DRAINS. UPON FURTHER INSPECTION OF THE 2 NEAREST UPSTREAM INLETS, INSPECTOR OBSERVED ACTIVE FLOW COMING INTO THE FURTHEST UPSTREAM INLET BY WAY OF A NEW LOOKING WHITE PVC PIPE. AT THIS TIME, INSPECTOR WOULD LIKE TO MEET WITH OWNERSHIP/PROPERTY MANAGEMENT TO FURTHER

INSPECT THE PARKING LOT DRAINS AS THIS IS AN NSA OFFICE BUILDING.

7/26/2016 CASE NOTE 8/31/2016 7/26/2016

> INSPECTORS AND *** STAFF ARRIVED ON-SITE ON THURSDAY, 7/21/2016, AT APPROXIMATELY 10:30 AM. UPON ARRIVAL, INSPECTORS OBSERVED MINIMAL FLOW COMING FROM THE WHITE PVC PIPE FOUND CONNECTED INTO THE INLET NEAR THE GUARD STATION. INSPECTORS WERE LATER ABLE TO LOCATE A CLEANOUT/TEE NEAR THE PARKING LOT ENTRANCE, AND AGAIN ANOTHER NEAR A SIDE ENTRANCE TO THE BUILDING. IT IS BELIEVED THAT THESE CLEANOUTS/ TEE-OFFS, AND THE WHITE PVC PIPE, ARE PART OF THE ROOF LEADER DRAIN SYSTEM SO THAT THEY MAY BE TIED INTO THE LARGER STORM DRAIN SYSTEM. THE MEETING WAS INCONCLUSIVE AS TO WHETHER OR NOT THERE IS AN ILLICIT CONNECTION COMING INTO THE ROOF LEADER SYSTEM. INSPECTOR WOULD LIKE TO SCHEDULE ANOTHER VISIT/MEETING. AT THIS MEETING, INSPECTOR WOULD LIKE TO HAVE ALL RUNNING FAUCETS (SINKS, UTILITY TUBS, ETC.) IN THE BUILDING TO BE TURNED ON. SHOULD INCREASED FLOW BE OBSERVED AT THE INLET IN QUESTION, THEN MOST LIKELY THERE IS AN ILLICIT CONNECTION. IT SHOULD BE NOTED THAT *** EMPLOYEEDS INFORMED THE INSPECTORS THAT MECHANICAL EQUIPMENT ON THE ROOF WAS WASHED DOWN AROUND THE TIME OF THE ORIGINAL SAMPLING. THEY BELIEVE THIS MAY HAVE RESULTED IN THE ELEVATED DETERGENT LEVELS.

Case ID: E - 2016 - 342 Tax ID: 283590244963

Received: 6/30/2016 Details: Tickler: 7/10/2016 Completed:

ILLEGAL DISCHARGES COMPLAINT

State Map: 50 12 0217 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

6/30/2016 OPENED COMPLAINT CASE 7/5/2016

Case ID: E - 2015 - 516 Location:

Tax ID: 200090052789

Received: 8/24/2015 Details:

Tickler: Completed: 9/1/2015

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 8/24/2015 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 42 23 0167 County Map: 4R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

8/24/2015 OPENED COMPLAINT CASE 9/24/2015

SITE AND ASSOCIATED STORMWATER NETWORK A VERSAR FIELD TEAM INSPECTED THE PRIEST BRIDGE DRIVE IN CROFTON. THE FIRST VISIT WAS CONDUCTED ON LOCATED AT AUGUST 14. STAFF SURVEYED THE PROPERTY, ESPECIALLY THE REAR INVENTORY AREA, ADJACENT MATERIALS YARD, AND DRY POND ABUTTING DRIVE. STAFF NOTED DRY WEATHER FLOW IN THE OUTFALL, WHICH WAS CHARACTERIZED AS OILY IN ODOR, CLOUDY BROWN, AND HAD AN OILY SURFACE SHEEN. BECAUSE OF THE OPACITY OF THE WATER, ONLY THE DETERGENTS TEST AND PH COULD BE ACCURATELY PERFORMED ON THE EFFLUENT. DETERGENTS TESTED ABOVE THE ACCEPTABLE RANGE (0.75 MG/L). DURING THE RETURN VISIT ON AUGUST 17, DETERGENTS TESTED AT 0.5 MG/L. STAFF ALSO PERFORMED A HOTSPOT INVESTIGATION IN CONJUNCTION WITH THE OUTFALL SCREEN. IN THE REAR LOT (FENCED), STAFF NOTED SEDIMENT DEPOSITS AND RESIDUAL WATER AROUND THE TRENCH DRAIN INLET LOCATED AT THE NORTHWEST PORTION OF THE FENCED-IN INVENTORY AREA. THIS TRENCH DRAIN IS THE PROBABLE LOCATION OF THE MCHENRY EQUIPMENT WATER PURIFICATION SYSTEM. A FUELING STATION IS PRESENT, BUT DOES NOT HAVE CANOPY COVER THAT WOULD REDUCE THE EXPOSURE OF THE STORM SEWER SYSTEM TO WASHOFF OF FUEL SPILLS DURING STORMS. STAFF ALSO NOTED WATER HEATERS AND OTHER MATERIAL PLACED ON THE IMPERVIOUS SURFACE OF THE REAR LOT. WITHIN THE PATUXENT MATERIALS LOT, STAFF DOCUMENTED POWER WASHING ACTIVITY. THE EFFLUENT FROM THE OPERATION LIKELY ENTERED A PORTION OF THE STORM SEWER SYSTEM SEPARATE FROM THE DRY POND AT THE NORTHWEST PORTION OF THE PROPERTY.

9/1/2015 CLOSE COMPLAINT

INSPECTED SITE ON 8/26/2015 ABOUT 11:30 AND CONDUCTED A WATER TEST. WALKING SITE AND INSPECTING INLETS AND MANHOLES SHOWED NO DIRTY WATER. IN FACT MOST OF THE STORM DRAIN WAS FREE OF WATER. A SMALL AMOUNT OF WATER, A SLOW TRICKLE COMING FROM THE OUTFALL INTO THE STORM WATER MANAGEMENT POND WAS COLLECTED AND TESTED. WATER TESTED AT LOW ACCEPTABLE LEVELS FOR PH AND DETERGENTS. WE WALKED

THE SITE AND FOUND IT TO BE CLEAN. PAVED AREAS WERE FREE OF SOIL AND DEBRIS. THE POWER WASHING AREA WAS CLEAN SO WERE THE INLETS IN THIS AREA. NOTHING OUT OF THE ORDINARY WAS NOTED IN THE WORKING AREA FACILITY, NO FUEL ON PAVING, NO OIL SPILL STAINS, FOR AN AREA WHERE HEAVY COMMERCIAL VEHICLES ARE SERVICED AND WORKED ON, THIS FACILITY IS RELATIVELY CLEAN. THIS FACILITY IS IN COMPLIANCE AND THIS COMPLAINT IS CLOSED FOR I&P.

Case ID: E - 2015 - 517 Location:

Tax ID: 400002382015

Received: 8/24/2015 Details:

Tickler: Completed: 9/8/2015

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 8/24/2015 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1:Violator 1:Owner 2:Violator 2:Address:Address:

Phone:

State Map: 36 18 0065 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

8/24/2015 OPENED COMPLAINT CASE 9/24/2015

A VERSAR FIELD TEAM CONDUCTED A SITE VISIT TO THE OUTFALL ASSOCIATED WITH THE MARYLAND ROUTE 3 IN GAMBRILLS ON **REAR LOT OF** , LOCATED AT AUGUST 14, 2015. AT THE TIME OF THE FIELD VISIT, THE OUTFALL CONTAINED BACKED UP WATER, BUT A SMALL AMOUNT WAS FLOWING. THE FIELD TEAM NOTED THAT THE WATER WAS RANCID-SOUR SMELLING, BROWN IN COLOR, AND CLOUDY. THE TEAM OBTAINED A SAMPLE OF THE EFFLUENT, BUT DID NOT PERFORM CHEMICAL TESTS DUE TO COLOR INTERFERENCE WITH THE COLORIMETRIC TEST KIT MEDIA. THE TEAM INVESTIGATED THE CONTRIBUTING DRAINAGE TO THE OUTFALL WHICH WAS LOCATED IN THE REAR OF THERE WAS NO OBVIOUS SIGN OF ILLICIT DISCHARGE INPUT TO THE CURB INLET. BUT THE TEAM NOTED A LARGE QUANTITY OF GALLON JUGS FULL OF WASTE COOKING OIL PLACED ON TOP OF THE INLET SLAB . THE TEAM RETURNED TO THE SITE ON AUGUST 17 TO REINSPECT THE OUTFALL BECAUSE OF A SUSPICION OF ILLICIT DISCHARGE DUE TO THE NOXIOUS NATURE OF THE EFFLUENT PRESENT IN THE OUTFALL. THE FIELD TEAM WAS ABLE TO OBTAIN A CLEARER SAMPLE OF WATER AND PERFORMED CHEMICAL TESTS, WHICH RESULTED IN FAILURE OF THE OUTFALL DUE TO UNACCEPTABLE LEVELS OF DETERGENTS, AMMONIA, AND PH (TABLE 1). THE TEAM COULD NOT PERFORM A TRACKDOWN OF THE SOURCE OF THE FLOW BECAUSE THE MATERIAL PLACED ON TOP OF THE INLET ACCESS PREVENTED INSPECTION OF THE INLET AND CATCH BASIN FOR STRAIGHT PIPE CONNECTIONS AND TRACKING OF THE FLOW LEADING TO THE OUTFALL.

9/1/2015 CASE NOTE 9/25/2015 9/1/2015

THE LOWER PARKING LOT AT THE REAR OF _____ WAS RELATIVELY CLEAN. THE LARGE QUANTITY OF GALLON JUGS, COOKING OIL, WERE REMOVED AND THE INLET WAS VISIBLE. AN INSPECTION OF THE INLET SHOWS THAT IT NEEDS TO BE CLEANED OUT. COMPLETE THE FOLLOWING:1.CLEAN OUT THE I-2 INLET. HAVE INLET FREE OF ANY MATERIAL. CLEAN THE INFILTRATION TRENCH BAFFLING DEVICE INSIDE OF THE INLET. BE SURE INLET IS FREE AND CLEAR OF ANY MATERIAL WHICH WOULD INHIBIT WATER FLOW TO THE INFILTRATION

TRENCH AND OUT FLOW FROM THIS INLET. I RECOMMEND A VACTOR TRUCK TO DO THE WORK REQUIRED TO THIS INLET. WILL RE-INSPECT ON OR BEFORE 9/14/2015.

9/8/2015 CLOSE COMPLAINT

AS DIRECTED THE INLET HAS BEEN CLEANED OUT BY A VACTOR TRUCK. INLET BOX IS FREE AND CLEAR OF ANY DEBRIS AND THE BAFFEL PROTECTING THE 15" RCP PIPE IS CLEAN AND FREE OF DEBRIS. THIS COMPLAINT IS NOW CLOSED FOR I&P.

Case ID: E - 2016 - 32 Location:

Tax ID: 400090040991

Received: 1/20/2016 Details:

Tickler: Completed: 2/11/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 1/20/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 21 22 0187 County Map: 1

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

1/20/2016 OPENED COMPLAINT CASE 2/1/2016

POSSIBLE ILLEGAL DUMPING. OBSERVATION OF A JANITOR DUMPING LIQUID FROM A BUCKET

INTO STORM DRAIN INLET LOCATED IN PARKING LOT.

1/21/2016 CLOSE COMPLAINT

COMPLAINT RECEIVED ON 1/20/2016 STATED A JANITOR WAS DUMPING A BUCKET OF WATER INTO A STORMWATER INLET. I ARRIVED ON SITE TO FIND NO ILLEGAL DUMPING. WALKED THE PROPERTY TO FIND POSSIBLE SOURCES OF DUMPING AND COULD NOT LOCATE ANY. MOST BUILDINGS IN COMPLEX ARE STILL VACANT. COULD NOT LOCATE ANY JANITOR ON SITE. I WILL CONTINUE TO STOP BY WEEKLY TO KEEP AN EYE OUT FOR MORE ILLEGAL DUMPING.

COMPLAINT CAN BE CLOSED AT THIS TIME.

OOMI LAINT OAN BE GLOOLD AT THIS TIN

2/11/2016 CLOSE COMPLAINT

ON JANUARY 6, 2016 DURING A SCHEDULED FIELD DAY FOR CONDUCTING OUTFALL SCREENING FOR ILLICIT DISCHARGE IN THE COUNTY, A VERSAR FIELD TEAM OBSERVED ILLEGAL DUMPING ACTIVITY IN THE ODENTON AREA. THE TEAM REPORTED OBSERVING A JANITOR (DRESSED WITH A SPLASH APRON AND WALKING WITH A JANITOR'S CART) DUMPING LIQUID OUT OF A BUCKET DIRECTLY INTO THE STORM DRAIN INLET LOCATED IN THE PARKING LOT. THE TEAM REPORTED THAT THE JANITOR HAD WALKED FROM THE BUILDING ON THE SOUTHEAST CORNER OF THE COMPLEX TO EMPTY THE BUCKET IN THE DRAIN LOCATED DIRECTLY IN FRONT OF THE BUILDING. THE COMPLAINT WAS FORWARDED TO INSPECTIONS AND PERMITS STORM WATER MANAGEMENT INSPECTOR . I INSPECTED ON JANUARY 20, 2016 TO FIND NO VIOLATIONS. I CONTINUED TO STOP BY TO SEE IF ANY VIOLATIONS EXISTED. ON FEBRUARY 10, 2016 I OBSERVED A JANITOR DUMPING DIRTY MOP BUCKET WATER INTO THE STORM WATER INLET LOCATED IN PARKING LOT. I APPROACHED THE JANITOR AND INFORMED HER THAT ALL MOP BUCKET WATER MUST BE DISPOSED OF INTO A SANITARY DRAIN AND NOT A STORM DRAIN INLET. PLEASE INFORM ALL EMPLOYEES THAT THEY MUST DISCHARGE MOP WATER INTO SANITARY DRAIN AND NOT STORM DRAIN.

Case ID: E - 2016 - 312 Location:

Tax ID: 405690079587

Received: 6/15/2016 Details:

Tickler: Completed: 6/17/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 6/15/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation: Y

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 21 24 0619 County Map: 17

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

6/15/2016 OPENED COMPLAINT CASE 6/20/2016

ON APRIL 8, 2016, A VERSAR FIELD TEAM INSPECTED OUTFALL I12E10001 BEHIND THE , IN ODENTON, MD. ON THIS FIRST FIELD VISIT, VERSAR WAREHOUSES AT STAFF FOUND THE 42-INCH REINFORCED CONCRETE PIPE OUTFALL PARTIALLY SUBMERGED. THE DISCHARGE IN THE PLUNGE POOL EXHIBITED A THICK PATCH OF ALGAE. A SHORT DISTANCE FROM THE PIPE, THE FIELD CREW OBSERVED THAT THE DISCHARGE WAS FLOWING INTO A DOWNSTREAM CHANNEL. THE CREW OBTAINED A SAMPLE FROM THE FLOWING WATER TO TEST FOR ILLICIT DISCHARGE INDICATORS. THE RESULT FOR PH INDICATED A READING BELOW THE ACCEPTABLE RANGE (5.45). THE VERSAR TEAM RETURNED THE NEXT DAY AND COLLECTED A SAMPLE OF THE FLOWING EFFLUENT. THE RESULT FOR PH ON THE REVISIT INDICATED A READING BELOW THE ACCEPTABLE RANGE (5.15). IN RESPONSE TO THE PH RESULTS OUT OF THE ACCEPTABLE RANGE, THE TEAM INITIATED A TRACKDOWN OF THE NETWORK TO ATTEMPT TO LOCATE A POSSIBLE SOURCE. AT THE FIRST MANHOLE UP-NETWORK FROM THE OUTFALL, THE TEAM OBSERVED POOLED WATER AT THE BOTTOM AND TESTED THE WATER FOR PH LEVELS; THE SAMPLE ALSO HAD A LOW PH READING (5.28). ALTHOUGH THE TEAM DID OBSERVE THAT THERE WAS A SLIGHT TRICKLE OF WATER COMING INTO THE MANHOLE FROM THE MAIN LINE, THE FLOW WAS INSUFFICIENT FOR AN ADEQUATE SAMPLE. AT THE SECOND MANHOLE, THE TEAM FOUND A VERY SMALL AMOUNT OF WATER, BARELY FLOWING; THERE WAS NOT ENOUGH WATER TO QUALIFY FOR A VALID SAMPLE. THE FIELD CREW CONTINUED TO TRACK THE LINE; THE TEAM WAS UNABLE TO OPEN THE THIRD MANHOLE DUE TO RECENT PAVING, AND DID NOT LOCATE THE FOURTH MANHOLE IN THE WOODS. THE TEAM PROCEEDED TO THE BEGINNING OF THE LINE OF STORM WATER INFRASTRUCTURE WHICH WAS AN INLET FROM A DRY CHANNEL ALONGSIDE MARYLAND ROUTE 32. AS THIS CHANNEL WAS DRY, THE TEAM CONCLUDED THAT THE INPUT TO THE STORM WATER LINE CONTRIBUTING TO OUTFALL 112E10001 WAS LIKELY FROM A NATURAL SOURCE OF LOW-PH GROUND WATER.

6/17/2016 CLOSE COMPLAINT

FIELD INSPECTION ON 6/16/2016 AT 2:30PM RESULTED IN THE FOLLOWING FINDINGS: ANNE ARUNDEL COUNTY INSPECTOR LOCATED OUTFALL I12E10001 AND OBSERVED THE SAME FINDINGS AS VERSAR TECHS. INSPECTOR COLLECTED WATER SAMPLE FROM OUTFALL AND TESTED FOR PH. THE RESULTS INDICATED A READING OF 5.25. INSPECTOR CONCLUDED THAT THE RESULT OF LOW PH IS LIKELY FROM LOW-PH GROUNDWATER. THIS COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 311 Location:

Tax ID: 400005799800

Received: 6/15/2016 Details: Tickler: 9/30/2016 Completed:

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 6/15/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 14 13 0473 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

6/15/2016 OPENED COMPLAINT CASE 6/20/2016

ON APRIL 8, 2016, A VERSAR FIELD TEAM INSPECTED OUTFALL F09G5O001, WHICH IS SOUTH OF GAS STATION AND CAR WASH FACILITY AT THE CORNER OF ANNAPOLIS ROAD (MARYLAND ROUTE 175) AND ROCKENBACH ROAD IN HANOVER. VERSAR STAFF HAD INSPECTED A LARGER, ASSOCIATED OUTFALL NEARBY, F09F5O001, IN 2015, AND FOUND HIGH DETERGENT LEVELS IN THE SYSTEM. ON THE FIRST FIELD VISIT DURING THE CURRENT ROUND OF INSPECTIONS, THE CREW DISCOVERED THAT THE OUTFALL F09G50001 WAS BLOCKED BY LAYERS OF CUT TREE LIMBS THAT HAD BEEN STACKED IN FRONT OF THE OUTFALL OPENING; THIS MAKESHIFT DAM ALSO ACCUMULATED FOREST DEBRIS (DIRT, LEAVES, AND STICKS) SUCH THAT THE OPENING FOR THE PIPE APPEARED TO BE BARELY FUNCTIONING AS AN OUTFALL THE CREW OBSERVED WATER BENEATH THE DEBRIS PARTIALLY BLOCKING THE OUTFALL AND WATER SEEPING OUT OF THE GROUND ON THE HILLSIDE ABOVE THE OUTFALL HEADWALL. THIS DISCHARGE AND SEEPAGE COLLECTED IN A SMALL STREAM THAT SUBSEQUENTLY ENTERED A STORM WATER INLET WHICH WAS NOT IDENTIFIED IN THE COUNTY'S GIS DATA SETS. THE CREW ALSO NOTED A WHITE DEPOSITION ON THE BOTTOM OF THE SMALL STREAM CHANNEL. THE FIELD TEAM COLLECTED A SAMPLE OF WATER FLOWING INTO THIS STREAM TO TEST FOR ILLICIT DISCHARGE INDICATORS. THE RESULT FOR DETERGENTS WAS ABOVE 3.0 MG/L, THE HIGHEST FUNCTIONAL LEVEL THAT THE FIELD TEST IS DESIGNED TO DETECT .THE VERSAR TEAM RETURNED THE NEXT DAY AND OBSERVED SIMILAR CONDITIONS AT THE OUTFALL SITE, AND NOTED THE ADDITION OF A GREYISH-WHITE RESIDUE AND FAINT SUDS IN THE STREAM BELOW THE OUTFALL. THE CREW COLLECTED A SAMPLE OF THE FLOWING WATER ENTERING THE STREAM; THE RESULT FOR DETERGENTS ON THE REVISIT WAS ABOVE 3.0 MG/L. THE EXCESSIVE LEVELS OF DETERGENTS AND THE PRESENCE OF SUDS PROMPTED A THOROUGH TRACKDOWN OF THE SOURCE OF THE EFFLUENT AND AN INVESTIGATION OF THE STORM WATER NETWORK ASSOCIATED WITH OUTFALLS F09G5O001 AND F09F5O001.

6/15/2016 CASE NOTE 6/15/2016 6/15/2016

THE CREW MEMBERS INSPECTED THE NETWORK DIRECTLY CONNECTED TO OUTFALL

F09G50001 BY FOLLOWING THE INTERCONNECTED PIPES AND ACCESS POINTS; THEY DOCUMENTED THE LOCATIONS OF STRUCTURES THAT WERE NOT INCLUDED IN THE COUNTY'S GIS (GEOGRAPHIC INFORMATION SYSTEM) DATA SETS, AND TESTED WATER AT SEVERAL LOCATIONS TO ISOLATE THE SOURCE OF THE DETERGENTS. THE CREW INSPECTED THE FIRST MANHOLE IN THE NETWORK, JUST UPHILL FROM THE OUTFALL. THE POOLED WATER AT THE BOTTOM OF THE MANHOLE WAS GREYISH-PURPLE AND EMITTED A FOUL ODOR. THE DETERGENT TEST OF THE WATER IN THE FIRST MANHOLE SHOWED A RESULT OF AT LEAST 3.0 MG/L. THE COUNTY'S GIS DATA SET INDICATED A MANHOLE IN THE NETWORK ON THE HILLSIDE NEAR THE ENTRANCE TO THE CARWASH, BUT THE FIELD CREW DID NOT FIND THIS STRUCTURE ON THE DAY OF THE TRACKDOWN. AS THE CREW MEMBERS PROCEEDED ALONG THE NETWORK INDICATED BY THE GIS DATA LAYER, THEY FOUND AND OPENED THE NEXT AVAILABLE MANHOLE (WHICH SHOULD BE THE THIRD IN THE SERIES). AT THIS ACCESS POINT, WHICH WAS ADJACENT TO THE EXIT FOR THE CAR WASH, THE CREW OBSERVED GREYISH-PURPLE WATER AND EXCESSIVE SUDS .THE TEST FOR DETERGENTS IN A SAMPLE OF THE WATER FROM THE THIRD MANHOLE SHOWED LEVELS ABOVE 3.0 MG/L. ALTHOUGH THERE WERE TRENCH DRAINS IN PLACE NEAR THE ENTRANCE AND EXIT FOR THE CAR WASH, THE FIELD CREW DID NOT FIND SUFFICIENT WATER IN EITHER OF THESE DEVICES TO ACCOUNT FOR THE AMOUNT OF FLOWING WATER OBSERVED IN THE STORM WATER NETWORK. THE TEAM, THUS, SURMISED THAT THE DISCHARGE FROM THE CAR WASH ENTERED THE STORM WATER SYSTEM THROUGH AN ACCESS ROUTE THAT WAS NOT READILY APPARENT - PERHAPS THROUGH AN ILLICIT CONNECTION. THE FIELD CREW ALSO EXTENDED THE INSPECTION COURSE AWAY FROM THE CAR WASH, TOWARD THE LARGE OUTFALL, F09F5O001, AND INCLUDED EXAMINATIONS AND TESTING AT TWO CURB INLETS DOWNSTREAM OF THE PRESUMED SOURCE. AT THE FIRST CURB INLET, THE CREW OBSERVED FLOWING WATER AND DETERGENT LEVELS ABOVE 3.0 MG/L. THIS INLET ALSO EXHIBITED A TIE-IN FOR A SECOND PIPE, LEADING TO THE SOUTHWEST, NOT SHOWN IN THE COUNTY'S GIS COVERAGE. AT THE SECOND CURB INLET, THE TEAM OBSERVED THAT THE WATER APPEARED TO BE POOLED AND THE CATCH BASIN CONTAINED SOME GARBAGE AND DEBRIS; THE WATER SAMPLE FROM THE SECOND CURB INLET ALSO HAD DETERGENT LEVELS ABOVE 3.0 MG/L. THE FIELD TEAM CONSIDERED THAT THE TIE-IN FROM THE FIRST CURB INLET MAY CONNECT TO THE STORMWATER INFRASTRUCTURE FOR OUTFALL F09F50001, SO TEAM MEMBERS INSPECTED TWO OF THE ACCESS POINTS IN THAT NETWORK, ALSO. THE CURB INLET IMMEDIATELY WEST FACILITY LEADS DIRECTLY TO OUTFALL F09F50001, ACCORDING TO THE GIS DATA. THE FIELD TEAM INSPECTED THIS INLET AND FOUND IT TO BE DRY. THE TEAM INVESTIGATED CONDITIONS AT OUTFALL F09F50001 AND FOUND FLOWING EFFLUENT FROM THE PIPE AND SUDS IN THE PLUNGE POOL . A TEST FOR DETERGENTS IN THIS DISCHARGE SHOWED LEVELS ABOVE 3.0 MG/L.

7/6/2016 CASE NOTE

7/29/2016

7/6/2016

SOAP SUDS WERE FOUND IN A NEARBY STORM DRAIN. AN CLOSE BY OUTFALL IS BLOCKED WITH TREES AND DEBRIS. A REPORT HAS BEEN SENT OUT TO THE PROPERTY OWNER. WE ARE WAITING ON A RESPONSE TO PROCEED WITH A PLAN OF ACTION.

8/30/2016 CASE NOTE

9/30/2016

8/30/2016

THE INSPECTOR HAS MET WITH THE PROPERTY OWNER AND OPERATIONS MANAGER ON SITE TO ADDRESS THE ILLICT DISCHARGE INTO THE STORMWATER SYSTEM. THE CAUSE OF THE ISSUE CAN BE ATTRIBUTED TO AN ILLEGAL HOOKUP FROM THE CARWASH INTO THE STORM DRAIN SYSTEM INSTEAD OF THE SANITARY SYSTEM. THE OWNER IS WORKING ON HIRING A CONTRACTOR TO REMEDIATE THE ISSUE. THE INSPECTOR HAS ADVISED THE OWNER TO CONTACT HIM ONCE THE CONTRACTOR IS GOING TO START WORK. DATE OF MEETING WAS 7/7/2016.

Case ID: E - 2016 - 306 Location:

Tax ID: 400004734900

Received: 6/14/2016 Details: Tickler: 9/9/2016 Completed:

STORMWATER MANAGEMENT ISSUES

Inspector: Receiver:

Permit Number: 6/14/2016 Date Assigned: Original ID:

Related Cases: ADC Map:

Critical Area: N Water Front: Ν Violation:

Ν Cty. Council Ind: Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 13 0156 County Map:

> Map No: Suffix Block Parcel **Block** Lot No Sect

Due Date Date Event Request for Trial Date

6/14/2016 OPENED COMPLAINT CASE 6/30/2016

> WHILE INVESTIGATING OUTFALL F09F50001, ON THE EAST SIDE OF THE RIDGEVIEW PLAZA SHOPPING CENTER, A VERSAR FIELD TEAM OBSERVED SIGNS OF DESTRUCTIVE RUNOFF FORCES AT THE OUTFALL. ON THE SOUTHEAST SIDE OF THE OUTFALL, THE ROCKS AND PLASTIC OF THE RIP RAP, INTENDED TO STABILIZE THE BANK, HAD BEEN DISLODGED AND PUSHED DOWNSTREAM. THE FLARED END SECTION OF THE OUTFALL ON THE SAME SIDE SHOWED SIGNS OF CRUMBLING DURING THE FIELD VISIT. ALSO, THE EROSION HAD STARTED TO UNDERCUT THE OUTFALL, SO THAT THE OPENING WAS FOUND TO BE NO LONGER FULLY SUPPORTED UNDERNEATH. THE FORCE OF THE RUNOFF COMING OUT OF THE PIPE HAD ERODED THE OPPOSITE BANK. EXPOSING TREE ROOTS. THE HYDROLOGY OF THE OUTFALL'S FLOW MAY HAVE BEEN ALTERED OVER TIME, IN PART BY THE COLLECTED ROCKS IN THE PLUNGE POOL, SO THAT IT NOW FOLLOWS A PATH TOWARD THE TREES ON THE LEFT BEFORE RETURNING TO THE INTENDED ALIGNMENT.

CASE NOTE 7/6/2016 7/6/2016 7/29/2016

> EROSION TO THE OUTFALL IS EXTENSIVE. A REPORT HAS BEEN SENT OUT TO THE PROPERTY OWNER. WE ARE WAITING ON A RESPONSE TO PROCEED WITH A PLAN OF ACTION.

8/30/2016 CASE NOTE 9/9/2016 8/30/2016

> THE INSPECTOR HAS MET WITH THE PROPERTY MANAGER ON SITE TO POINT OUT ALL THE ISSUES WITH OUTFALL F09F0001. THE PROPERTY MANAGER IS FULLY AWARE OF THE ISSUES AND THE METHODS OF REMEDIATION. WE ARE WAITING ON THE PROPERTY OWNER TO APPROVE A LICENSED CONTRACTOR TO PERFORM THE REMEDIAL WORK. I HAVE APPROVED THE REMEDIAL PLAN SO THEY ARE PROCEEDING WITH OBTAINING CONTRACTOR PROPOSALS

AS OF 8/10/2016.

Case ID: E - 2016 - 264 Location:

Tax ID: 400090211369

Received: 5/26/2016 Details:

Tickler: Completed: 5/27/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 5/26/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1:Violator 1:Owner 2:Violator 2:Address:Address:

Phone:

State Map: 37 02 0357 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/26/2016 OPENED COMPLAINT CASE 5/31/2016

A LIMNOTECH FIELD TEAM INSPECTED THE OUTFALL, J15H5ONEW1, LOCATED BEHIND THE BUILDING, AT ON MAY 20, 2016. THE FIELD CREW DISCOVERED THE 4-INCH PVC PIPE OUTFALL AT 10:00 A.M. IN THE WOODED AREA TO THE NORTHWEST OF THE BUILDING. THE CREW FOUND THIS SMALL PIPE IMMEDIATELY ADJACENT TO AN 18-INCH CORRUGATED METAL PIPE OUTFALL (J15H5ONEW2); NEITHER OUTFALL HAD BEEN DOCUMENTED IN THE COUNTY'S LATEST (2014) DIGITAL DATA BASE. THE CREW OBSERVED THAT THE PIPE RELEASED A TRICKLING CLEAR DISCHARGE; THE COLLECTING EFFLUENT IN THE RECEIVING POOL EXHIBITED AN OIL SHEEN. PHOTOGRAPHS TAKEN DURING THE FIRST SITE VISIT ALSO DOCUMENTED A THICK ORANGE SLIME IN THE PIPE AND ORANGE STAINING IN THE PIPE AND ON THE ROCKS IN THE RECEIVING POOL. THE FIELD CREW SURMISED THAT THE ACCUMULATED ORANGE MATERIAL MAY HAVE BEEN A MAT OF IRON-OXIDIZING BACTERIA. THE FIELD STAFF COLLECTED A SAMPLE OF THE DISCHARGE AT THE OUTFALL TO TEST FOR POSSIBLE ILLICIT CONSTITUENTS. THE AS TEST 1. THE RESULTS SHOWED THAT THE PH LEVEL WAS BELOW THE ACCEPTABLE RANGE FOR THE SAMPLE TAKEN ON THE FIRST SITE VISIT (6.25). STAFF MEMBERS RETURNED TO THE SITE ON THE SAME DAY, AT 2:20 P.M., TO ASSESS CONDITIONS AT THE OUTFALL AGAIN. THEY AGAIN OBSERVED AND TESTED FLOWING WATER AT THE OUTFALL; THE LEVEL FOR PH WAS BELOW THE CORRESPONDING ACTION-LEVEL IN THE SECOND TEST (6.3). THE FIELD CREW ATTEMPTED TO LOCATE THE SOURCE OF THE WATER IN THE SMALL PIPE, BUT DID NOT FIND EVIDENCE OF A NETWORK. THE TEAM SURMISED THAT THE PVC PIPE MAY COLLECT AND DISTRIBUTE DRAINAGE FROM THE ROOF OF THE STORAGE BUILDING AS THE ADJACENT METAL PIPE APPEARED TO HAVE THAT FUNCTION.

5/27/2016 CLOSE COMPLAINT

COMPLAINT INVESTIGATED ON 5/26/2016 AT 1:30PM REVEALED THE FOLLOWING: ______HAS SWM PRACTICE OF AN INFILTRATION TRENCH LOCATED BEHIND THE REAR BUILDING. AN ADDITIONAL 4" PVC WAS DISCOVERED NEAR 18" CORRUGATED METAL PIPE OUTFALL, EFFLUENT FROM 4" PVC WAS TESTED AND A PH OF 6.25 WAS OBSERVED. THIS IS JUST ABOVE THE ACTION LEVEL FOR PH. COMPLAINT CAN BE CLOSED AS THIS IS LIKELY THE RESULT OF BAD FILL MATERIAL IN AND AROUND THE AREA.

Case ID: E - 2016 - 234 Location:

Tax ID: 313790036031

Received: 5/12/2016 Details: Tickler: 8/12/2016 Completed:

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 5/12/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 11 08 0019 County Map: 7R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/12/2016 OPENED COMPLAINT CASE 5/17/2016

A VERSAR FIELD TEAM INSPECTED THE OUTFALL, Q06H3F002NEW2, LOCATED EAST OF THE PARKWAY, ON APRIL 26. A FIELD CREW HAD PREVIOUSLY VISITED THIS OUTFALL IN 2013. THE 33-INCH, REINFORCED CONCRETE PIPE OUTFALL DISCHARGED TO A LARGE WET POND. THE TEAM FOUND FLOWING WATER IN THE OUTFALL; THE EFFLUENT SHOWED EVIDENCE OF IRON FLOCCULENT, BACTERIAL GROWTH, AND A SURFACE SHEEN. THE EFFLUENT ALSO EMITTED A SULFUR ODOR. THE FIELD STAFF CAREFULLY COLLECTED A SAMPLE OF CLEAR DISCHARGE AT THE OUTFALL TO TEST FOR POSSIBLE ILLICIT DISCHARGE CONSTITUENTS. PHENOL LEVELS TESTED ABOVE THE ACCEPTABLE RANGE FOR THE SAMPLE TAKEN ON THE FIRST SITE VISIT (4 MG/L). STAFF MEMBERS RETURNED TO THE SITE THE FOLLOWING DAY, APRIL 27. THEY FOUND CONDITIONS AT THE OUTFALL SIMILAR TO THE OBSERVATIONS MADE THE PREVIOUS DAY. THEY AGAIN OBSERVED AND TESTED FLOWING WATER AT THE OUTFALL; PHENOL LEVELS WERE AGAIN ABOVE THE ACCEPTABLE RANGE. DUE TO THE PRESENCE OF ELEVATED CONTAMINANT LEVELS COMBINED WITH CHARACTERISTICS OF CONCERN (ODOR AND EXCESSIVE IRON), THE FIELD CREW INITIATED A TRACKDOWN ON THE SITE TO ATTEMPT TO ISOLATE THE SOURCE OF THE PHENOLS. THE TEAM TESTED FLOWING WATER IN THE PARKING LOT GRATE CLOSEST TO THE OUTFALL, IN THE SOUTHEAST CORNER OF THE PARKING LOT; THE TEST RESULTS DID NOT DETECT PHENOLS. THE TEAM SEARCHED THE LOT FOR EVIDENCE OF ADDITIONAL PIPES ENTERING THE SYSTEM THAT MAY BE CONTRIBUTING TO THE FLOWS, BUT DID NOT DISCOVER ANY SUCH INFRASTRUCTURE. AS THE FLOW AT THE NEAREST GRATE WAS SIGNIFICANTLY LOWER THAN THE FLOWS OBSERVED AT THE OUTFALL, THE TEAM CONSIDERED THAT THERE MAY BE INFILTRATION OF GROUNDWATER INTO THE PIPE AS IT PASSES UNDER THE ADJACENT FIELD, BEFORE DISCHARGING TO THE POND. THE TEAM SEARCHED FOR AN INDICATION OF THE PIPE'S ROUTE BETWEEN THE PARKING LOT GRATE AND THE OUTFALL; WITHOUT SUCH EVIDENCE, THE ASSUMPTION IS THAT THE PIPE DIRECTLY CONNECTS THE TWO ACCESS POINTS IN A STRAIGHT LINE WITHOUT A DEVIATION IN THE PATH. AS PART OF THE SITE EVALUATION, THE TEAM DOCUMENTED THE PRESENCE OF A SIGN ANNOUNCING A POTENTIAL FUTURE USE OF THE PROPERTY AS A FUEL STORAGE SITE. THE TEAM NOTED THAT THE FIELD CONTAINED PVC PIPE MARKERS FOR WELLS. RESEARCH CONDUCTED FOR THIS REPORT REVEALED THAT THE LOT AT PARKWAY HAD BEEN USED AS A FLY ASH DISPOSAL SITE BY _ BETWEEN 1982 AND 1992.

IN 1997, PROPERTY MODIFICATIONS ADDED AN IMPERVIOUS CAP FOR THE MAJORITY OF THE DISPOSAL AREA, IN THE FORM OF A LARGE WAREHOUSE AND ASSOCIATED PARKING AREA. THE EXTENT TO WHICH THE PRESENCE OF A CAPPED FLY ASH DISPOSAL SITE MAY INFLUENCE THE PHENOL LEVELS RECORDED IN THE OUTFALL SCREENING TESTS IS UNKNOWN.

5/16/2016 CASE NOTE

7/29/2016

5/16/2016

INSPECTOR ARRIVED ON-SITE ON FRIDAY, 5/13/2016 AT APPROXIMATELY 12:30 PM. INSPECTOR MADE CONTACT WITH SECURITY GUARDS OF THE WAREHOUSE AT _____ PARKWAY. INSPECTOR LEARNED THAT IT IS A STORAGE WAREHOUSE FOR FILA MERCHANDISE. AFTER GAINING THEIR PERMISSION, INSPECTOR WENT AROUND TO THE BACK OF THE WAREHOUSE PARKING LOT. INSPECTOR FOUND THAT THERE ARE 3 INLETS IN THE BACK PARKING LOT. IN ADDITION TO RECEIVING RUNOFF FROM THE BACK PARKING LOT, THESE 3 INLETS ALSO RECEIVE WATER FROM THE ROOF DRAINS. DUE TO ACTIVE PRECIPITATION, INSPECTOR UNABLE TO DETERMINE IF THERE IS FLOWING WATER SEPARATE FROM THE RAIN RUNOFF. INSPECTOR HAS SINCE DISCOVERED THAT THERE ARE 2 MANHOLES AND/OR FIELD CONNECTORS IN A LARGE OPEN SPACE BETWEEN THE FURTHEST DOWNSTREAM INLET AND THE OUTFALL/INFLOW INTO THE POND. VERSAR FIELD TEAM WILL REVISIT SITE USING CONSTRUCTION DRAWING INSPECTOR FOUND TO LOCATE THESE 2 STRUCTURES AND PERFORM A PHENOL FIELD TEST. INSPECTOR WILL REVISIT COMPLAINT ONCE VERSAR PROVIDES RESULT(S) OF THEIR TESTS.

7/7/2016 CASE NOTE

8/12/2016

7/7/2016

INSPECTOR ARRIVED ON-SITE ON WEDNESDAY, 7/6/2016 AT APPROXIMATELY 1:30 PM. THIS VISIT WAS CONDUCTED IN RELATION TO A COMPLAINT RECEIVED FROM DPW-IMD'S OUTFALL SCREENING CONTRACTOR. CONTRACTOR FOUND THAT A STORM DRAIN PIPE OUTFALLING INTO THE PUBLIC ROAD WAS FLOWING DURING A DRY WEATHER PERIOD. THE CONTRACTOR COLLECTED A SAMPLE FROM THE OUTFALL FOR TESTING. TESTS SHOWED HIGH LEVELS OF PHENOLS. AFTER FURTHER RESEARCH, IT HAS BEEN DETERMINED THAT THIS OUTFALL IS PART OF A STORM DRAIN SYSTEM THAT INCLUDES 3 INLETS BEHIND THE WAREHOUSE AT PARKWAY. 2 MANHOLES, AND THEN THE OUTFALL. AFTER FURTHER TESTS IT WAS DETERMINED THAT THE PHENOLS ARE ENTERING THE SYSTEM BETWEEN THE OUTFALL AND THE FIRST MANHOLE UPSTREAM OF IT. THESE STORM DRAINS ARE PART OF A PRIVATE STORM DRAIN SYSTEM. THIS PRIVATE STORM DRAIN SYSTEM IS THE RESPONSIBILITY OF THE OWNERS OF _ **PARKWAY TO** MAINTAIN DUE TO A PRIVATE STORM DRAIN EASEMENT. TO REMEDY THIS ISSUE, PLEASE TAKE THE FOLLOWING ACTIONS: 1. HIRE A CONTRACTOR TO SCOPE THIS SECTION OF PIPE IN ORDER TO DETERMINE THE CAUSE AND/OR LOCATION OF THE PHENOLS INFILTRATING INTO THE STORM DRAIN SYSTEM. 2. TAKE THE PROPER REPAIR ACTIONS BASED ON THE FINDINGS OF THE PIPE SCOPING. A FOLLOW-UP VISIT IS TENTATIVELY SCHEDULED FOR 8/8/2016.

Case ID: E - 2016 - 216 Location:

Tax ID: 500090038212

Received: 5/6/2016 Details:

Tickler: Completed: 5/9/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 5/6/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 03 12 0255 County Map: 2R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/6/2016 OPENED COMPLAINT CASE 5/31/2016

ON APRIL 26, 2016, A VERSAR FIELD TEAM WAS INSPECTING OUTFALLS IN THE AREA AND DISCOVERED WHAT APPEARED TO BE EVIDENCE OF A PETROLEUM SPILL AT OUTFALL DRIVE IN LINTHICUM HEIGHTS, MD. AS TEAM MEMBERS APPROACHED 103E8O003, NEAR THE OUTFALL, THEY OBSERVED SEVERAL ABSORBENT SOCKS DRAPED ACROSS THE PLUNGE POOL; THE STAGNANT WATER WAS DARK GREY AND CLOUDY. THE TEAM NOTED A STRONG ODOR OF OIL AT THE SITE. THE TEAM BRIEFLY ATTEMPTED TO LOCATE A VIABLE SOURCE FOR THE DISCHARGE, AND BEGAN TO SEARCH THE NEARBY NETWORK ACCESS POINTS FOR CLUES. AT THE NEAREST MANHOLE, THE TEAM FOUND FLOWING WATER AND DETECTED AN ODOR OF GASOLINE. STAFF DID NOT FIND OTHER SOURCES OR EVIDENCE ON THE FIRST VISIT. THE CREW COLLECTED A SAMPLE OF THE EFFLUENT IN THE MANHOLE TO TEST FOR ILLICIT DISCHARGE INDICATORS. NO TESTED PARAMETERS EXCEEDED COUNTY ACTION LEVELS. VERSAR STAFF MEMBERS RETURNED TO THE SITE THE NEXT DAY, APRIL 27. THEY FOUND CONDITIONS AT THE OUTFALL AND THE NEAREST MANHOLE SIMILAR IN APPEARANCE AND ODOR TO THOSE DETECTED THE PREVIOUS DAY. STAFF ASSESSED CONDITIONS AT THE TWO ADJACENT MANHOLES ALONG DRIVE AND DETERMINED THAT THE ODORS WERE WEAKER IN THESE LOCATIONS THAN THE LEVEL DETECTED IN THE FIRST MANHOLE. STAFF THEN FOLLOWED THE DRAINAGE LINE TO THE MAIN LINE THAT CONNECTS THE CURB INLETS INSTALLED BEHIND THE BUILDINGS AT 1300 AND 1302 DRIVE. AT THE MANHOLE BEHIND THE BUILDING AT 1302, STAFF DETECTED AN ODOR OF PETROLEUM. UPON CONTINUED INVESTIGATION, STAFF DISCOVERED A SIGN ON THE 1302 BUILDING THAT IDENTIFIED THE LOCATION OF 550-GALLON DIESEL FUEL STORAGE AT THE SITE. AS THE TEAM SURVEYED THE AREA, MEMBERS NOTED EVIDENCE OF RECENT DISTURBANCE: LOOSE STRAW AND NEW GRASS. ALONGSIDE THE BUILDING, THE TEAM NOTED A HOLE IN THE GROUND, WITH EXPOSED LINES .THE TEAM DETECTED THE ODOR OF GASOLINE AT THIS LOCATION, ALSO. THE STAFF MEMBERS SURMISED THAT THIS HAD BEEN THE SITE OF A RECENT FUEL SPILL OR LEAK. SEVERAL CLUES SUGGESTED THAT THOSE RESPONSIBLE HAD IDENTIFIED THE SOURCE OF THE DISCHARGE AND HAD STOPPED THE FLOW NEAR OR IN THE BUILDING.

5/9/2016 CLOSE COMPLAINT

INSPECTOR ARRIVED ON-SITE ON FRIDAY, 5/6/2016, AT APPROXIMATELY 2:15 PM. INSPECTOR OBSERVED SHEEN ON TOP OF THE RUNOFF COMING INTO THE POND FROM THE INFLOW PIPE. IN ADDITION, INSPECTOR OBSERVED THE 4 "FILTER SOCKS" BEING UTILIZED TO DAM THE WATER. WATER LEVEL HAD BUILT UP AND WAS SPILLING AROUND THE SOCKS, FINDING A NEW WAY INTO THE POND. DISTURBED GROUND APPEARED TO HAVE BEEN STABILIZED. NEW UTILITY WORK WAS TAKING PLACE BY THE YELLOW SIGN REFERENCED IN PREVIOUS REPORT. INSPECTOR MAINTENANCE TECHNICIAN AND HAS SINCE SPOKEN WITH A MAINTENANCE SUPERVISOR. INSPECTOR LEARNED THAT A FUEL SPILL HAD TAKEN PLACE NEARLY 2 MONTHS AGO, THAT A CLEANUP EFFORT HAD BEEN STARTED, AND THE CURRENT UTILITY WORK WAS IN RELATION TO THE LAST STEPS OF THE CLEANUP EFFORT. INSPECTOR ALSO LEARNED THAT MDE HAD ALREADY BEEN TO THE SITE AND WAS TAKING ENFORCEMENT ACTIONS. INSPECTOR COULD FIND NO EVIDENCE OF CURRENT ILLICIT DISCHARGE. IT APPEARS THAT SHEEN ON WATER IS POTENTIALLY DUE TO SOME LEFTOVER PRODUCT IN THE STORM DRAIN. HOWEVER, MDE IS ALREADY TAKING ENFORCEMENT ON THIS SPILL AND ITS CLEANUP EFFORT. INSPECTOR RECOMMENDS THAT THIS COMPLAINT CASE BE CLOSED AT THIS TIME AS MDE IS ALREADY TAKING ENFORCEMENT ACTIONS.

Case ID: E - 2016 - 209 Location:

Tax ID: 200090052789

Received: 5/2/2016 Details:

Tickler: Completed: 5/31/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 5/2/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 42 23 0167 County Map: 4R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

5/2/2016 OPENED COMPLAINT CASE 5/7/2016

ON APRIL 19, THE VERSAR FIELD TEAM INSPECTED AN OUTFALL, I19B6O008NEW001, WHICH DRAINS THE PARKING LOT OF , INC. (VERSAR FIELD CREWS PREVIOUSLY VISITED THIS OUTFALL IN AUGUST 2015). AT THE 24-INCH CORRUGATED METAL PIPE OPENING OF THE OUTFALL, THE TEAM OBSERVED A SMALL AMOUNT OF CLOUDY DISCHARGE.A MANHOLE ADJACENT TO THE OUTFALL REVEALED AN INTERSECTION OF TWO CORRUGATED METAL DRAINAGE PIPES; THE PIPE ON THE EAST SIDE EXHIBITED SLOWLY FLOWING WATER. THE TEAM COLLECTED A SAMPLE OF THE FLOWING WATER FROM THE PIPE TO TEST WATER QUALITY. THE TEST RESULTS SHOWED ABOVEACTION- LEVEL CONCENTRATIONS OF AMMONIA (10 MG/L), DETERGENTS (0.5 MG/L), AND FLUORIDE (5.0 MG/L). THE TEAM CONDUCTED A PARTIAL TRACKDOWN OF A SOURCE WITHIN THE DRAINAGE SYSTEM ON APRIL 19. AT THE NEXT ACCESS POINT TO THE EAST OF THE INTERSECTION, THE TEAM DOCUMENTED FLOWING WATER IN THE YARD INLET IN THE PARKING LOT, NEAR THE PASS-THROUGH. ON APRIL 20, THE VERSAR TEAM RETURNED TO THE SITE AND FOUND CONDITIONS AT THE OUTFALL SIMILAR TO THE PREVIOUS DAY'S OBSERVED CHARACTERISTICS; THE TEAM NOTED A STRONG SULFUR SMELL ON THE REVISIT. THE TEAM COLLECTED A SAMPLE OF WATER FLOWING FROM THE PIPE IN THE MANHOLE NEAR THE OUTFALL AND TESTED IT FOR CONTAMINANTS. THE RESULTS FOR DETERGENTS (1.5 MG/L) AND FLUORIDE (3.1 MG/L) WERE ABOVE THEIR RESPECTIVE ACTION LEVELS. DUE TO THE ELEVATED LEVELS OF CONSTITUENTS, THE TEAM CONTINUED TO INVESTIGATE CONDITIONS IN THE SYSTEM. THE TEAM TRACKED THE FLOW ALONG THE EAST DRAINAGE LINE TO THE FOURTH YARD GRATE UP THE NETWORK, LOCATED ADJACENT TO THE ENTRANCE GATE TO A STORAGE AND MAINTENANCE LOT. THE LOT INCLUDED A WASHDOWN AREA THAT APPEARED TO BE CONNECTED TO THE FOURTH YARD INLET VIA A 6-INCH PVC PIPE. THE TEAM MEMBERS OBSERVED THAT THE FLOOR OF THE INLET WAS DAMP,

5/2/2016 CASE NOTE 5/2/2016 5/2/2016

BUT THEY DID NOT DETECT FLOWING WATER.

CONTINUED. THE FIELD TEAM DID NOT OBTAIN ADDITIONAL INFORMATION WHICH MIGHT

CONFIRM THE SOURCE OF THE ILLICIT DISCHARGE. THE TEAM SURMISED THAT THE ORIGIN MAY BE NEAR THE TOP OF THE DRAINAGE SYSTEM LEADING FROM THE AREA ADJACENT TO THE _____ WASHDOWN AREA; THE YARD GRATES IN THIS AREA WERE BOLTED OR WELDED SHUT, MAKING THEM DIFFICULT TO SAMPLE. EVIDENCE COLLECTED THUS FAR SUGGESTS THAT THE POTENTIAL SOURCE MAY BE EFFLUENT FROM THE _____ WASHDOWN AREA OR ASSOCIATED WATER CONVEYANCE FACILITIES.

5/31/2016 CLOSE COMPLAINT

COMPLAINT RECEIVED ON 5/2/2016 WAS DELAYED ON INSPECTION BECAUSE OF ADVERSE WEATHER CONDITIONS. COMPLAINT WAS INSPECTED ON 5/27/2016 WITH THE FOLLOWING **OBSERVATIONS:** MAINTENANCE YARD HAS A WASH-DOWN AREA FOR LARGE VEHICLES. THE WASH-DOWN AREA IN ENTIRELY CONTAINED WITHIN A SANITARY SYSTEM, THE TRENCH DRAIN DOES NOT DRAIN INTO STORMWATER INLET LIKE IT WAS THOUGHT TO BY VERSAR TECHS. DURING HEAVY RAIN EVENTS THE PARKING LOT DOES PICK UP SOME DEBRIS AND SEDIMENT AND CONVEY IT TOWARDS A STORMWATER INLET. DURING INSPECTION OF VEHICLE WASHING WAS OBSERVED AT A ADJACENT INDUSTRIAL BUILDING. THE VEHICLE WASHING WAS BEING PERFORMED BY A DETAILING COMPANY. SOAPY WATER DISCHARGE WAS OBSERVED INTO NEARBY STORMWATER INLET WHICH DISCHARGES INTO NEARBY STORMWATER MANAGEMENT POND. CONTACTED EMPLOYEES OF DETAILING BUSINESS, INFORMED THEM THAT ALL VEHICLE WASHING MUST OCCUR IN AN APPROVED WASH-DOWN AREA WHICH CONNECTS TO A SANITARY SYSTEM. THEY DID HAVE A DESIGNATED VEHICLE WASH AREA, BUT WERE EXTRA BUSY THAT DAY BECAUSE OF NICE WEATHER AND DECIDED TO WASH VEHICLES OUTSIDE OF DESIGNATED AREA. CONTACTED OWNER OF BUSINESS AFTER DIRECTING EMPLOYEES TO CEASE ALL VEHICLE WASHING OUTSIDE OF WASH BAY, AND INFORMED HIM OF THE SITUATION. OWNER INFORMED INSPECTOR OF A WASTEWATER DISCHARGE PERMIT FOR THE BUSINESS. INSPECTOR INFORMED OWNER THAT THIS PERMIT ONLY ALLOWS OWNER TO DISCHARGE INTO A SANITARY SYSTEM NOT A STORM DRAIN SYSTEM. BASED ON INSPECTORS FINDINGS THIS COMPLAINT CAN NOW BE CLOSED. WILL CONTINUE TO MONITOR FOR VEHICLE WASHING OUTSIDE OF DESIGNATED AREA.

Case ID: E - 2016 - 198 Location:

Tax ID: 220390034910

Received: 4/28/2016 Details:

Tickler: Completed: 6/3/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 4/28/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 36 24 0376 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

4/28/2016 OPENED COMPLAINT CASE 5/3/2016

6/3/2016 CASE NOTE 6/3/2016 6/3/2016

HAD TO RETYPE 6/3/16. WAS ORIGINALLY ENTERED IN SYSTEM AS ILLEGAL CASE INSTEAD OF CASE NOTE ON 4/29/16.ON APRIL 18, 2016, A LIMNOTECH FIELD TEAM INSPECTED TARGET OUTFALL I17D50001 NEAR ________ IN CROFTON, MD. THIS OUTFALL DRAINS THE SOUTHEAST END OF _______ COURT, AND A PARKING LOT ASSOCIATED WITH THE

CENTER, INTO A STORMWATER POND. THE TEAM OBSERVED A DISCHARGE FLOWING FROM THE PIPE .THE TEAM OBTAINED A SAMPLE TO TEST FOR ILLICIT DISCHARGE INDICATORS. THE RESULT FOR PH INDICATED A READING BELOW THE ACCEPTABLE RANGE (6.35). THE LIMNOTECH TEAM RETURNED THE NEXT DAY AND COLLECTED A SAMPLE OF THE FLOWING EFFLUENT. RESULT FOR PH ON THE REVISIT INDICATED A READING BELOW THE ACCEPTABLE RANGE (6.35). DUE TO THE PH RESULT OUT OF THE ACCEPTABLE RANGE, THE TEAM INITIATED A TRACKDOWN OF THE NETWORK TO ATTEMPT TO LOCATE A POSSIBLE SOURCE. THE TEAM TRACKED THE FLOW UP THE DRAINAGE LINE TO THE THIRD CATCH BASIN IN THE SYSTEM; THIS CATCH BASIN INCLUDED A 4-INCH PIPE FROM WHICH A STEADY TRICKLE OF DISCHARGE FLOWED INTO THE DRAINAGE SYSTEM .THE TEAM COLLECTED A SAMPLE OF THE FLOWING WATER; THE RESULT FOR PH AT THIS PIPED INPUT TO THE CATCH BASIN INDICATED A READING BELOW THE ACCEPTABLE RANGE (3.65). THE LIMNOTECH TEAM DID NOT IDENTIFY ANY OTHER FLOWING CONTRIBUTIONS TO THE TARGET OUTFALL ON APRIL 19. THE TEAM WAS ALSO UNABLE TO DETERMINE THE ORIGIN OF THE 4-INCH PIPE AT THE CATCH BASIN OR TO FIND ADDITIONAL EVIDENCE TO IDENTIFY THE SOURCE OF THE ILLICIT DISCHARGE.

6/3/2016 CLOSE COMPLAINT

COMPLAINT RECEIVED 4/28/2016 FROM VERSAR TECH WAS INVESTIGATED BY ANNE ARUNDEL COUNTY INSPECTOR AND THE FOLLOWING WAS DETERMINED: INITIAL FOLLOW-UP FOR

INSPECTION WAS DELAYED DUE TO ADVERSE WEATHER, FOLLOW-UP INSPECTION COULD NOT BE PERFORMED UNTIL 5/27/2016 UPON WHICH DATE THE INLET WHERE ILLICIT FLOW WAS LOCATED WAS COMING FROM 4" DRAIN TILE, LOCATED ON ______COURT, WAS TESTED FOR ABOVE ACTION LEVELS OF PH. PH WAS TESTED AND FOUND TO BE 4.25 WHICH IS OUTSIDE OF EXCEPTABLE RANGE FOR PH. IT WAS DETERMINED THAT THE OUT OF RANGE TESTING FOR PH IS THE RESULT OF LIKELY CONTAMINATED GROUNDWATER IN THE AREA. MULTIPLE LOCATIONS IN AND AROUND THIS INLET HAVE BEEN TESTED WITH SIMILAR RESULTS. THE 4" DRAIN TILE TIED INTO STORMWATER INLET WAS LIKEY PUT IN PLACE TO ALLEVIATE SATURATION ON THE ADJACENT HILLSIDE. THIS COMPLAINT CAN NOW BE CLOSED BUT WILL CONTINUE TO MONITOR AFTER EXTENDED DRY PERIODS.

Case ID: E - 2016 - 197 Location:

Tax ID: 272710576031

Received: 4/28/2016 Details:

Tickler: Completed: 6/3/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: 4/28/2016 Inspector:

Date Assigned: Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 42 05 0173 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

4/28/2016 OPENED COMPLAINT CASE 5/3/2016

4/29/2016 ILLEGAL DISCHARGES VIOLATION 5/4/2016 5/14/2016

ON APRIL 18, THE LIMNOTECH FIELD TEAM INSPECTED THE TARGET OUTFALL, 117B6O007, WHICH IS LOCATED ON THE WEST SIDE OF CRAIN HIGHWAY, OPPOSITE THE SHOPPING CENTER IN CROFTON, MD. AT THE 72-INCH OUTFALL, THE FIELD TEAM OBSERVED A RUST-COLORED DISCHARGE. THE TEAM OBTAINED A SAMPLE TO TEST FOR ILLICIT DISCHARGE INDICATORS. THE RESULT FOR PH INDICATED A READING BELOW THE ACCEPTABLE RANGE ON APRIL 19, THE LIMNOTECH FIELD TEAM CONDUCTED A SECOND SITE VISIT AND COLLECTED AND TESTED THE DISCHARGE. THE RESULT FOR PH INDICATED A READING BELOW THE ACCEPTABLE RANGE ON THE DAY OF THE SITE REVISIT, ALSO 4.80. THE LIMNOTECH FIELD CREW CONDUCTED A PARTIAL TRACKDOWN ON THE SECOND SITE VISIT. THE CREW DETERMINED THAT THE FLOW WAS COMING FROM THE DRAINAGE LINE LEADING EAST UNDER THE PARKING LOT OF A VERSAR TEAM VISITED THE SITE ON APRIL 20 TO CONTINUE THE INVESTIGATION OF THE SOURCE OF THE DISCHARGE; THE TEAM DOCUMENTED A LOW PH READING AT THE OUTFALL OF 5.50 ON APRIL 20. THE VERSAR TEAM FOLLOWED THE MAIN DRAINAGE LINE THAT EXTENDS EASTWARD UNDER CRAIN HIGHWAY, IN FRONT OF THE AND THE RESTAURANT, AND TOWARD THE CENTER. AT THE MANHOLE IN THE PARKING LOT JUST SOUTHEAST OF THE THE TEAM OBSERVED FLOW; A TEST RESULT INDICATED A PH OF 5.66. THERE WAS INSUFFICIENT SAMPLE VOLUME TO TEST OTHER PARAMETERS. THE TEAM DETERMINED THAT OTHER PIPES IN THE VICINITY RESTAURANT DRIVE-THROUGH AND IN THE PARKING LOT BEHIND THE CENTER) DID NOT CONTRIBUTE TO THE DISCHARGE. THE VERSAR TEAM DID NOT FIND ADDITIONAL EVIDENCE THAT WOULD FURTHER CLARIFY THE SOURCE OF THE ILLICIT DISCHARGE ON APRIL 20.

6/3/2016 CLOSE COMPLAINT

COMPLAINT RECEIVED 4/28/2016 FROM VERSAR TECH WAS INVESTIGATED BY ANNE ARUNDEL COUNTY INSPECTOR AND THE FOLLOWING WAS DETERMINED: INITIAL FOLLOW-UP FOR INSPECTION WAS DELAYED DUE TO ADVERSE WEATHER, FOLLOW-UP INSPECTION COULD NOT BE PERFORMED UNTIL 5/27/2016 UPON WHICH DATE THE 72" OUTFALL LOCATED ON THE WEST SIDE OF MD ROUTE 3 SOUTH WAS TESTED FOR ABOVE ACTION LEVELS OF PH. PH WAS TESTED AND FOUND TO BE 6.25 WHICH IS JUST OUTSIDE OF EXCEPTABLE RANGE FOR PH. IT WAS DETERMINED THAT THE OUT OF RANGE TESTING FOR PH IS THE RESULT OF LIKELY CONTAMINATED GROUNDWATER IN THE AREA. MULTIPLE LOCATIONS IN AND AROUND THIS OUTFALL HAVE BEEN TESTED WITH SIMILAR RESULTS. THIS COMPLAINT CAN NOW BE CLOSED BUT WILL CONTINUE TO MONITOR AFTER EXTENDED DRY PERIODS.

Case ID: E - 2016 - 140 Location:

Tax ID: 400002346995

Received: 3/30/2016 Details:

Tickler: Completed: 4/4/2016

STORMWATER MANAGEMENT ISSUES

Receiver: Inspector:

Date Assigned: 3/30/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 29 05 0125 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/30/2016 OPENED COMPLAINT CASE 4/29/2016

WPRP I&P RECEIVED A COMPLAINT FROM VERSAR REGARDING THE _______AT___ODENTON, MD. THE COMPLAINT WAS DATED 1/7/2016 BUT RECEIVED BY I&P ON 3/23/2016. THE POND HAS SINCE BEEN RETROFITTED BY DPW/WPRP AND COMPLETED LATE FEBRUARY. WHEN COMPLAINT WAS RECEIVED BY I&P AN INSPECTION WAS PERFORMED AND THE FOLLOWING DEFICIENCIES WERE NOTED: INSPECTION BY WPRP INSPECTOR ON 3/28/2016 REVEALED THAT THE POND HAS SINCE BEEN RETROFITTED AND THE BASIS OF THE COMPLAINT HAS BEEN FIXED BY THE RETROFIT. WHILE INSPECTING THIS COMPLAINT A FEW OTHER DEFICIENCIES WERE NOTED: THE OUTFALL BARREL HAS RUSTED OUT ROUGHLY 7-8 FEET INTO THE PIPE. THERE IS SLOUGHING OCCURRING ON AN INTERIOR SLOPE AND HAS WASHED DOWN INTO POND. THERE IS ALSO NO COUNTY LOCK ON THE ACCESS GATE. THIS SITE STILL REMAINS IN VIOLATION AND CANNOT BE PUT INTO COMPLIANCE.

4/4/2016 CLOSE COMPLAINT

POND HAS BEEN RETROFITTED AND COMPLAINT HAS BEEN FIXED BY THE RETROFIT.

Case ID: E - 2016 - 133 Location:

Tax ID: 400090221369

Received: 3/24/2016 Details:

Tickler: Completed: 4/8/2016

STORMWATER MANAGEMENT ISSUES

Receiver: Inspector:

Date Assigned: 3/24/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1:Violator 1:Owner 2:Violator 2:Address:Address:

Phone:

State Map: 13 20 0195 County Map: 4R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/24/2016 OPENED COMPLAINT CASE 4/29/2016

WHILE INVESTIGATING OUTFALL C10E4O001, A VERSAR FIELD TEAM DISCOVERED THE OUTFALL CRUSHED AND BURIED IN SEDIMENT. THE TEAM DETERMINED THAT THE OPENING OF THE CORRUGATED METAL PIPE HAD BEEN SO REDUCED IN SIZE THAT IT MAY NO LONGER EFFECTIVELY FUNCTION; THE OUTFALL OPENING WAS SURROUNDED BY POSSIBLE REMNANTS OF FILL DIRT (SMALL ROCKS) AND WELL-ESTABLISHED VEGETATION. THE OUTFALL APPEARED TO HAVE BEEN INSTALLED TO DRAIN AN AREA THAT WAS VERY RECENTLY DEVELOPED. THE NEW BUILDING ON THE LOT, WHICH IS NOW ______ROAD, IS PART OF THE _____BUSINESS

PARK. THERE IS EVIDENCE IN GOOGLE MAPS

(HTTPS://WWW.GOOGLE.COM/MAPS) THAT A ROAD, _____COURT, USED TO PASS THROUGH THE LOT THAT HAS NOW BEEN DEVELOPED; IT IS POSSIBLE THAT OUTFALL C10E40001 PROVIDED DRAINAGE FOR THAT ROAD IN PREVIOUS YEARS, AND THAT THE OUTFALL MAY NO LONGER BE IN SERVICE. THE FIELD TEAM SURMISED THAT A NEW INFRASTRUCTURE NETWORK LIKELY HAS BEEN INSTALLED TO CONTROL RUNOFF FROM THE NEW BUILDING AND PARKING LOT; THUS, IT IS ALSO POSSIBLE THAT PIPES TO THE OUTFALL C10E40001 HAD BEEN

CONNECTED TO THE REVISED NETWORK DURING CONSTRUCTION, AND THAT IT NOW FUNCTIONS IN A LIMITED CAPACITY FOR SOME OF THE RUNOFF.

4/8/2016 CLOSE COMPLAINT

THE CRUSHED OUTFALL BARREL IS NO LONGER IN USE AND DOES NOT SEEM TO DRAIN ANY STORMWATER AT THIS TIME. NEW CONSTRUCTION HAS BYPASSED THIS PIPE AND NOTHING IS

TIED INTO THIS PIPE ANYMORE. THIS COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 131 Location:

Tax ID: 400002382015

Received: 3/24/2016 Details:

Tickler: Completed: 4/7/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/24/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 36 18 0065 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/24/2016 OPENED COMPLAINT CASE 3/29/2016

A VERSAR FIELD TEAM INSPECTED THE OUTFALL BEHIND THE SOUTHWEST SIDE OF THE PARCEL) LOCATED AT THE ADDRESS NOTED ABOVE. NOTE THAT VERSAR FIELD CREWS HAD DOCUMENTED POTENTIAL ILLICIT DISCHARGE CONDITIONS AT THIS SITE ON AUGUST 14, 2015. 'S BUSINESS OPERATIONS INCLUDE A MARKET AND A CARRYOUT BUSINESS. FIELD STAFF CONDUCTED THE FIRST VISIT ON MARCH 10. STAFF FOUND THE OUTFALL IN THE WOODS BEHIND THE LOT AND OBSERVED THAT THE WATER IN THE OUTFALL WAS STAGNANT. THE TEAM OBSERVED THAT THE WATER WAS CLOUDY AND GREYISH; THE ROCKS AND SURFACES IN THE WATER HAD A PURPLE-RED DEPOSITION ON THEM .IN ONE AREA, THE WATER TRAPPED IN THE RIP RAP HAD AN OILY SHEEN. THE TEAM NOTED THAT THE WATER HAD A FAINT SMELL OF SEAFOOD BY-PRODUCTS. THE FIELD TEAM INSPECTED THE STORM SYSTEM LEADING TO THE OUTFALL AND NOTED THAT THE STORM DRAIN WAS OPEN WITH AN ABSORBENT SOCK ACROSS THE INLET OPENING. ALTHOUGH THE TEAM MEMBERS DID NOT DETECT FLOW AT THE OUTFALL, THEY COLLECTED AND TESTED A WATER SAMPLE FROM THE POOL. STAFF RETURNED TO THE SITE THE FOLLOWING DAY, MARCH 11. STAFF OBSERVED THAT WATER AT THE OUTFALL WAS SLIGHTLY FLOWING, BUT STILL SLUGGISH. THE TEAM NOTED THAT THE RIP RAP WAS WET BETWEEN THE OUTFALL AND THE STREAM .THIS IMPLIES THAT WATER HAD FLOWED THROUGH THE SYSTEM BETWEEN THE TWO SITE VISITS WITH SUFFICIENT VOLUME TO LEAVE A TRACE. THE TEAM OBSERVED THAT, COMPARED WITH THE OBSERVATIONS FROM THE PREVIOUS DAY, THE WATER WAS STILL GREY, BUT CLEARER. STAFF COLLECTED AND TESTED THE WATER. FIELD STAFF WERE APPROACHED BY AN EMPLOYEE OF ON MARCH 10, AND THE SAME EMPLOYEE AND THE OWNER ON MARCH 11. THE BUSINESS OWNER REPORTED THAT BUSINESS STAFF HAD WASHED THE INTERIOR OF A TRUCK EARLIER IN THE DAY, TO CONFORM TO HEALTH DEPARTMENT REGULATIONS (FOR USE AT A CATERED EVENT). HE ALSO CLAIMED THAT THE INLET DRAIN HAS A TREATMENT FILTER INSTALLED IN IT AND THAT THE FILTER IS PUMPED OUT OCCASIONALLY. VERSAR STAFF NOTED, AND DOCUMENTED, SUBSTANTIAL AMOUNTS OF BULK DEBRIS IN THE LOT ON THE FIRST SITE VISIT, MARCH 10. THE CONDITIONS

ON MARCH 11 REGARDING LIQUID WASTE MANAGEMENT ISSUES SHOWED SOME EVIDENCE OF POSSIBLE DISCHARGES FROM THE FACILITY OPERATIONS; CONDITIONS FOR BULK WASTE MANAGEMENT HAD SIGNIFICANTLY IMPROVED. BUSINESS STAFF HAD ALSO FORTIFIED THE BLOCKADE AT THE INLET GRATE BETWEEN THE FIRST AND SECOND SITE VISITS AND INSTALLED A TEMPORARY MAKESHIFT FILTER FOR LARGE PARTICLES ABOVE THE GRATE AT THE PARKING LOT SURFACE. VERSAR FIELD STAFF COMMUNICATED ILLICIT DISCHARGE SCREENING RESULTS TO THE ENVIRONMENTAL HOTLINE ON MARCH 11.

3/28/2016 CASE NOTE

4/29/2016

3/28/2016

COMPLAINT RECEIVED FROM VERSAR ON MARCH 23, 2016 REVEALED THE FOLLOWING: FIELD TECHS OBSERVED STAGNANT WATER IN OUTFALL. WATER TESTED ABOVE NORMAL LEVEL FOR DETERGENTS AND AMMONIA. FIELD TEAM WAS TOLD THAT EARLIER IN THE DAY A CATERING TRUCK HAD BEEN WASHED OUT. VERSAR INFORMED WORKERS THAT THERE IS ABSOLUTELY NO WASHING TO BE DONE ON THE PROPERTY. WORKERS CLAIM TO HAVE PUT UP ABSORBENT SOCK TO HELP CATCH LARGER ITEMS AND FILTER OUT POLLUTANTS, BUT SOCK IS JUST FILLED WITH PEA GRAVEL. ADDITIONAL FILTER WITHIN INLET IS NOTHING MORE THAN A PLASTIC TRAY. AT MY TIME OF INSPECTION NO WASHING WAS OCCURRING, NO FLOW FROM OUTFALL WAS OCCURRING, TALKED WITH MANAGER AND INFORMED HIM YET AGAIN THAT THERE IS NO WASHING TO BE DONE ON THE PROPERTY. ALSO LARGE AMOUNTS OF TRASH WERE NOTED AROUND DUMPSTER AREA. TRASH WAS CLEANED UP AND A GENERAL CLEANLINESS WAS OBSERVED AT TIME OF INSPECTION. WILL CONTINUE TO MONITOR SITE TO MAKE SURE ALL WASHING HAS CEASED AND TRASH DOES NOT BECOME A PROBLEM.

4/7/2016 CLOSE COMPLAINT

INSPECTION SHOWED THAT ALL TRASH HAS BEEN CLEANED UP AND STRAW WAS PUT DOWN ON ALL BARE SOIL AREAS. NO WASHING WAS GOING ON AT TIME OF INSPECTION. THIS COMPLAINT CAN BE CLOSED. WILL OCCASIONALLY STOP BY TO CHECK FOR CONTINUED COMPLIANCE.

Case ID: E - 2016 - 128 Location:

Tax ID: 400005678600

 Received:
 3/24/2016
 Details:

 Tickler:
 7/29/2016
 Completed:

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/24/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1:Violator 1:Owner 2:Violator 2:Address:Address:

Phone:

State Map: 36 18 0152 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/24/2016 CASE NOTE 7/29/2016 3/24/2016

COMPLAINT RECEIVED ON 3/23/2016 FROM VERSAR TECHS REVEALED THE FOLLOWING: ___ PROPERTY IS CONTRIBUTING A LARGE AMOUNT OF TRASH INTO WOODED AREA NORTH OF PARKING LOT. THE PARKING LOT WAS GENERALLY CLEAN AT TIME OF INSPECTION. TRASH IS MOST LIKELY BEING BLOWN INTO WOODS BY WIND. ADVISED STORE MANAGER TO ADD ADDITIONAL TRASH RECEPTICLES THROUGHOUT PROPERTY AND TO CLEAN UP TRASH IN WOODS. WILL CONTINUE TO MONITOR SITE UNTIL CLEAN.

3/24/2016 OPENED COMPLAINT CASE 4/29/2016

ON A DAY WHEN A VERSAR FIELD TEAM WAS SCREENING OUTFALLS IN THE AREA, THE TEAM DISCOVERED A WASTE MANAGEMENT ISSUE ASSOCIATED WITH THE **BUSINESS AT THE** ABOVE ADDRESS. THE BUSINESS ACTIVITIES INCLUDED A CONVENIENCE STORE AND A FUELING STATION; A STATION FOR VACUUMING VEHICLES MAY HAVE BEEN INSTALLED AT ONE CORNER IN THE PAST. THE TEAM NOTED THAT ON-SITE WASTE DISPOSAL AND STORAGE AT THE BUSINESS SEEMED TO BE MANAGED GENERALLY WELL; THE LOT WAS GENERALLY CLEAN, AND THE DUMPSTER WAS IN GOOD CONDITION. THE TEAM DOCUMENTED A LITTER PROBLEM ON THE NORTHEAST SIDE OF THE PARKING LOT, ALONG AN ADJACENT WOODED AREA; THIS REGION HAD ACCUMULATED AN EXCESSIVE AMOUNT OF DEBRIS. THE TEAM SURMISED, FROM THE TYPES OF TRASH FOUND (FOOD CONTAINERS AND WRAPPERS) THAT THE SOURCES MAY HAVE INCLUDED PEOPLE WHO WERE CLEARING THEIR CARS WHILE PREPARING TO USE AN ONSITE VACUUM SYSTEM, OR PATRONS WHO DISPOSED OF CONTAINERS AND WRAPPERS ASSOCIATED WITH CONSUMABLES PURCHASED AT THE STORE. THE TEAM INVESTIGATED THE EXTENT OF THE TRASH DISTRIBUTION AND FOUND THAT DEBRIS WAS ALSO SCATTERED ALONG THE CURBS, WITHIN THE GRASS STRIP BETWEEN THE FUEL ISLAND AND THE WOODS AND WELL INTO THE WOODS .THE TEAM INFERRED FROM THE CHARACTERISTICS OF THE DEBRIS THAT SINCE CUSTOMERS MAY HAVE BEEN LARGELY RESPONSIBLE FOR THE INAPPROPRIATE DISPOSAL OVER TIME, THE BUSINESS' WASTE MANAGEMENT PROTOCOL SHOULD INCLUDE DEBRIS REMOVAL EFFORTS FOR THE FULL LOT AS WELL AS STRATEGIC PLACEMENT OF TRASH RECEPTACLES. THE DEBRIS FIELD IS ADJACENT TO A DRAINAGE DITCH THAT MAY SERVE AS A CONDUIT FOR TRANSPORT OF TRASH TO SURFACE WATERS DOWNSTREAM.

Case ID: E - 2016 - 111 Location:

Tax ID: 457190072057

Received: 3/16/2016 Details:

Tickler: Completed: 7/5/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/16/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 29 09 0086 County Map: 11R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/16/2016 OPENED COMPLAINT CASE 3/31/2016

A FIELD TEAM COMPOSED OF VERSAR AND LIMNOTECH STAFF INSPECTED THE OUTFALL, G13G7O006, BEHIND THE ____MAINTENANCE LOT AND ITS ASSOCIATED STORMWATER **NETWORK LOCATED AT** ROAD IN ODENTON. STAFF CONDUCTED THE FIRST VISIT ON MARCH 9. STAFF FOUND THE OUTFALL IN THE WOODS BEHIND THE LOT AND OBSERVED THAT THE WATER IN THE OUTFALL WAS STAGNANT. FIELD TEAM MEMBERS DETECTED THE SOUND OF FLOWING WATER IN THE PIPE. THEY FOLLOWED THE PIPE NETWORK TO THE NEXT AVAILABLE OBSERVATION POINT - A SLAB TOP YARD INLET LOCATED IN THE GRASSY AREA BEHIND THE LOT NEAR THE EDGE OF THE WOODS WITHIN THE INLET, STAFF MEMBERS OBSERVED CLEAR FLOWING WATER; THEY OBTAINED A WATER SAMPLE TO TEST FOR POSSIBLE ILLICIT CONSTITUENTS. THE RESULTS OF THE TESTS ARE PROVIDED IN TABLE 1, FOR TEST 1. DETERGENTS TESTED ABOVE THE ACCEPTABLE RANGE FOR THE SAMPLE TAKEN ON THE FIRST SITE VISIT (0.75 MG/L). STAFF RETURNED TO THE SITE THE FOLLOWING DAY, MARCH 10. STAFF OBSERVED THAT THE STAGNANT WATER AT THE OUTFALL WAS FAINTLY OPAQUE AND BROWN, AND THAT THE WATER EXHIBITED A SURFACE FILM WITH BUBBLES. THE TEAM AGAIN OBSERVED THAT THE OUTFALL DID NOT OVERTLY EXHIBIT DRY WEATHER FLOW, AND THAT THE NETWORK WAS CONVEYING EFFLUENT BETWEEN THE OUTFALL AND THE MAINTENANCE BUILDING. STAFF SAMPLED THE EFFLUENT FROM THE YARD INLET AGAIN. DETERGENTS TESTED ABOVE THE ACCEPTABLE RANGE (1 MG/L); AMMONIA WAS ALSO ELEVATED (2 MG/L). PROMPTED BY THE RESULTS FROM THE FOLLOW-UP TEST, STAFF CONDUCTED A TRACKDOWN TO DETERMINE THE SOURCE OF THE POLLUTION FROM THE FACILITY. THE UP-NETWORK EXTENT OF THE STORMWATER NETWORK ACCORDING TO THE GIS DATA LAYER WAS A YARD GRATE LOCATED AT THE CORNER OF THE FUELING STATION. WHEN STAFF INSPECTED THIS CONNECTION, THEY DISCOVERED THAT THE NETWORK CONTINUED TOWARD THE MAINTENANCE BUILDING, AND THAT THE NETWORK OF STORMWATER PIPES FOLLOWED A CORRESPONDING NETWORK OF RECENTLY REPAVED ASPHALT. STAFF TESTED THE EFFLUENT FROM THE YARD GRATE AT THIS LOCATION AND FOUND HIGH LEVELS OF DETERGENTS (1 MG/L) AND AMMONIA, CONSISTENT WITH THE READINGS FROM THE INLET

FARTHER AWAY FROM THE BUILDING. STAFF DOCUMENTED THAT THE LINE OF REPAVED PARKING LOT COULD BE TRACED TO THE CORNER OF THE MAINTENANCE BUILDING. NEAR THE CORNER IT SEPARATED INTO TWO FEEDER LINES: ONE LINE CAME FROM A TRENCH INLET JUST OUTSIDE THE BAY DOORS THE PATH FOR THE OTHER LINE CONTINUED UNDER THE BUILDING, BUT GENERALLY LED IN THE DIRECTION OF OTHER TRENCH INLETS THAT WERE JUST ON THE INSIDE EDGE OF BAY DOORS FOR THE BUILDING. STAFF CONFIRMED THAT THE OUTSIDE GRATES CONTAINED WATER, BUT THE FIELD CREW WAS NOT ABLE TO OBTAIN SAMPLES FOR TESTING ON THE DAY OF THE SECOND SITE VISIT.

3/31/2016 CASE NOTE

4/29/2016

3/31/2016

A FIELD MEETING WITH CHARLES TONKIN OF VERSAR AND _____OF __ WAS CONDUCTED ON 3/30/2016 AT 1:50 P.M. THE PURPOSE OF THE MEETING WAS TO TEST POSSIBLE ILLICIT DISCHARGE AT AN ___ FACILITY. VERSAR AND LIMNOTECH INSPECTORS WERE ON SITE 3/9/2016 AND 3/10/2016 TESTING A POSSIBLE ILLICIT DISCHARGE AND FOUND THAT THERE WERE ELEVATED LEVELS OF AMMONIA AND DETERGENTS. FLOW WAS NOTICED IN INLET THAT WAS TESTED. TRACED FLOW BACK THROUGH 4 STORMWATER INLETS AND FOUND THE WATER SOURCE TO BE COMING THROUGH A CRACK IN A CURB INLET. THIS CURB INLET IS THE FIRST INLET IN THIS STORM DRAIN SYSTEM. THE INLET HAS HEAVY STAINS FROM WATER PENETRATION AS WELL AS THE SURROUNDING CURB AREA, INDICATIVE OF GROUND WATER. VERSAR TECH ON SITE 3/30/2016 CHARLES TONKIN SAMPLED THE GROUND WATER AND AGAIN IT TESTED ABOVE-ACTION-LEVEL CONCENTRATION FOR DETERGENTS.

4/4/2016 CASE NOTE

4/29/2016

4/4/2016

A FOLLOW UP INSPECTION WAS MADE ON 4/1/2016 AT 10:00 AM WITH SUPERVISOR ______, AND ______ OF ____. WE OBSERVED WATER PENETRATING A INLET THROUGH A CRACK IN THE POURED CONCRETE. TRACED THE STORMWATER LINE THROUGH 4 MORE INLETS TO WHERE 2 SYSTEMS JOIN. TESTED EFFLUENT AT THIS CONTROL STRUCTURE AND AGAIN TEST WAS ABOVE-ACTION-LEVEL CONCENTRATION FOR DETERGENTS. THE EFFLUENT TESTED WAS FROM ANOTHER INLET ON PROPERTY WHICH IS NOT CONNECTED TO THE OTHER INLETS THAT WERE TESTED PREVIOUSLY. THIS INDICATES THAT AT MULTIPLE INLETS, AND AT MULTIPLE LOCATIONS ARE ALL TESTING ABOVE-ACTION-LEVEL CONCENTRATIONS. _____ IS GOING TO INVESTIGATE FURTHER. A TEST HOLE COULD BE DRILLED TO SEE IF GROUNDWATER IS PRESENT AND AT WHAT LEVELS. IF GROUNDWATER IS PRESENT FURTHER TESTING SHOULD BE PERFORMED TO DETERMINE THE SOURCE OF THE DETERGENTS.

4/6/2016 CASE NOTE

4/6/2016

4/6/2016

DETERGENT TEST USES MBO AS COLORAMETRIC REAGENT WHICH CHANGES COLOR IN PRESENCE OF ANIONIC SURFACTANTS WHICH TYPICALLY ARE IN DETERGENTS. BUT PHOSPHATES, SULFATES AND CARBOXAL COMPOUNDS WILL ALSO CAUSE MBO'S TO CHANGE COLOR. PHOSPHATES AND SULFATES ARE ALSO KNOW TO EXIST IN GROUNDWATER. SUSPECT WATER LEAKING INTO INLET IS GROUNDWATER WITH SULFATES FROM AREA SOILS. JP

6/15/2016 CASE NOTE

6/15/2016

6/15/2016

FOLLOW-UP VISIT WAS CONDUCTED WITH VERSAR TECHS ON 6/14/2016 AT 12:30 PM. INSPECTION SHOWED THE FIRST TEST WAS OF GROUND WATER IN AN TEST HOLE (WHICH ___ HAD DRILLED OUT IN THE LAST MONTH OR SO) LOCATED IN THE GRASSY AREA BEHIND THE DIRT PARKING LOT IN THE NORTH EASTERN SIDE OF THE PROPERTY. TESTS OF THIS WATER RESULTED IN A DETERGENT LEVEL READING OF 1.5 MG/L. THE SECOND TEST WAS COLLECTED FROM THE OUTLET OF A PVC PIPE LOCATED IN THE GRASSY AREA BETWEEN THE MAINTENANCE LOT AND _____ RD ON THE SOUTH SIDE OF THE PROPERTY. THIS PVC PIPE WORKS AS FRENCH DRAIN INSTALLED TO DEAL WITH WATER SEEPAGE UNDER THE PARKING LOT IN FRONT OF THE FACILITY. THIS WATER TESTED AT 0.75 MG/L OF DETERGENTS. WITH THE RESULTS GIVEN IT IS LIKELY THAT THE GROUNDWATER HAS TESTED HIGHER DETERGENTS FROM IMPROPER FILL MATERIALS USED WHEN SITE WAS CONSTRUCTED. THIS COMPLAINT CAN NOW BE CLOSED.

7/5/2016 CLOSE COMPLAINT

COMPLAINT CAN NOW BE CLOSED. INSPECTOR ______FROM MDE PERFORMED A SITE VISIT ON 6/28/2016 AND FOUND NO VIOLATIONS ON SITE REGARDING THIS COMPLAINT OF HIGH DETERGENTS. MDE WILL MAKE A DETERMINATION AS TO THE NEED FOR A SW PERMIT AT THIS SITE. THE DECISION WILL BE COMMUNICATED TO ____ AND NO ACTION IS REQUIRED FROM ___ AT THIS TIME.

Case ID: E - 2016 - 97 Location:

Tax ID: 468090058148

Received: 3/9/2016 Details:

Tickler: Completed: 3/17/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/9/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 21 15 0569 County Map: * 1

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/9/2016 OPENED COMPLAINT CASE 3/31/2016

A VERSAR FIELD TEAM DISCOVERED WHAT APPEARED TO BE A LARGE PILE OF ROAD DE-ICING SALT IN THE PARKING LOT ON THE WEST SIDE OF THE REAR PARKING LOT OF THE ____SHOPPING CENTER ON_____BLVD. AT THE TIME OF THE SITE VISIT, THE PILE WAS UNCOVERED, TWO TARPS WITH WEIGHT STONES WERE PLACED ON THE PAVEMENT IMMEDIATELY ADJACENT TO THE PILE. THE FIELD CREW NOTED THAT A LINE OF RESIDUE LEADING FROM THE AREA OF THE PILE ALONG THE SIDE OF THE PARKING LOT TO THE STORM DRAIN. THE PLACEMENT OF SALT ON AN IMPERVIOUS SURFACE INTRODUCES THE RISK OF DISTRIBUTION OF SALT PARTICLES AND ASSOCIATED NUTRIENTS – BY WIND, RAIN, OR PHYSICAL DISTURBANCE – WHICH COULD THEN BE CARRIED VIA STORMWATER RUNOFF INTO

ADJACENT STORM DRAIN INLETS OR OPEN WATER.

3/10/2016 CASE NOTE 3/31/2016 3/10/2016

COMPLAINT RECEIVED ON 3/9/2016 FROM VERSAR FIELD INSPECTION TEAM REVEALED A STOCKPILE OF LEFT OVER ROAD DE-ICING SALT. ANNE ARUNDEL COUNTY INSPECTOR OBSERVED TWO PILES OF SALT. ONE IS NOT COVERED AND SHOWS EVIDENCE OF ENTERING A STORM DRAIN INLET. THE OTHER PILE IS COVERED ADEQUATELY AT TIME OF INSPECTION. INSPECTOR SPOKE WITH _____ THE STORE MANAGER FOR ________, HE ADVISED THAT THE SALT WOULD BE CLEANED UP AND REMOVED IN THE COMING WEEKS. INSPECTOR WILL CONTINUE TO MONITOR SITE UNTIL COMPLIANCE IS GAINED. THIS COMPLAINT SHOULD

REMAIN OPEN UNTIL ALL SALT IS REMOVED.

3/17/2016 CLOSE COMPLAINT

AREA OF SALT HAS BEEN CLEANED UP.

Case ID: E - 2016 - 96 Location:

Tax ID: 400003855600

Received: 3/9/2016 Details:

Tickler: Completed: 3/15/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/9/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 13 11 0020 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/9/2016 OPENED COMPLAINT CASE 3/31/2016

A VERSAR FIELD TEAM INVESTIGATED ONE OR MORE PARCELS, LOCATED AT ____ AND ____ ROAD, AT THE CORNER WITH ____ROAD, FOR A POSSIBLE ISSUE WITH WASTE MANAGEMENT. THE TWO LOTS APPEARED TO FUNCTION, TOGETHER, AS STORAGE LOTS FOR MISCELLANEOUS CONSTRUCTION DEBRIS AND DISCARDED FURNITURE. A SIGN ON ONE BUILDING INDICATED THAT IT MAY HAVE FUNCTIONED AS A SNOWBALL STAND AT ONE TIME. A SIGN ON ONE OF THE LOTS ADVERTISED BUILDING MATERIALS FOR SALE. THE TEAM ALSO FOUND A COLLECTION OF BUCKETS STORED OUTDOORS THAT THE TEAM SURMISED CONTAINED ROOFING OR ASPHALT SEALING TAR. ONLY ONE OF THE LABELS IS BARELY LEGIBLE IN THE PHOTOGRAPH; THE OTHERS APPEAR TO BE WEATHER-WORN BEYOND IDENTIFICATION. THE TEAM DID NOT INVESTIGATE THE BUCKETS TO DETERMINE IF ANY OF THEM STILL CONTAINED ROOFING MATERIALS THAT COULD PRESENT A POLLUTION HAZARD IF LEAKED TO THE ENVIRONMENT.

3/15/2016 CLOSE COMPLAINT

AFTER VISITING THE SITE THERE DOES NOT SEEM TO BE ANY VIOLATIONS HERE. THE EXCESS WATER FROM WASHING VEHICLES WAS DRAINING INTO A GRASS SWALE AND DOES NOT LEAD TO A STORM DRAIN. THIS SITE ALSO DOES NOT HAVE A STORMWATER MANAGEMENT AGREEMENT. CLOSE COMPLAINT.

Case ID: E - 2016 - 94 Location:

Tax ID: 400002363200

Received: 3/9/2016 Details:

Tickler: Completed: 3/15/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/9/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1:Violator 1:Owner 2:Violator 2:Address:Address:

Phone:

State Map: 13 12 0050 County Map: 1

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/9/2016 OPENED COMPLAINT CASE 3/31/2016

IN THE MIDDLE OF THE AFTERNOON OF WEDNESDAY, MARCH 2, A VERSAR FIELD TEAM OBSERVED POSSIBLY IMPROPER VEHICLE WASHING ACTIVITY IN THE PARKING LOT OF THE BUSINESS AT THE ABOVE ADDRESS. THE BUSINESS ACTIVITIES

INCLUDE USED CAR SALES AND AUTO DETAILING SERVICES; A SIGN ADVERTISES HAND WASHING AND DETAILING SERVICES FOR VEHICLES. WHEN THE FIELD CREW APPROACHED THE LOT, CREW MEMBERS WITNESSED AN EMPLOYEE FROM THE BUSINESS POWERWASHING A WHITE HATCHBACK VEHICLE IN THE PARKING LOT. FIELD TEAM NOTED THAT THERE WAS A TARP COVERING AN OPEN STRUCTURE ON THE SOUTHEAST SIDE OF THE BUILDING; THE CREW SURMISED THAT THIS MAY HAVE BEEN INTENDED AS A TEMPORARY COVER FOR VEHICLE-WASHING ACTIVITIES, AS WOULD BEAPPROPRIATE. WHILE THE FIELD CREW MEMBERS PHOTO-DOCUMENTED THE ACTIVITIES, THE BUSINESS EMPLOYEE PROCEEDED TO USE A SPONGE FROM A BUCKET OF LIQUID TO SCRUB THE VEHICLE . LATER, AS THE FIRST EMPLOYEE BEGAN TO WORK INSIDE THE WHITE VEHICLE, A SECOND EMPLOYEE BEGAN TO POWER-WASH ANOTHER VEHICLE - A BEIGE SUV. THE FIELD CREW INVESTIGATED THE NATURE OF FLOWS ON AND FROM THE PARKING LOT AND DETERMINED THAT THE PARKING LOT SLOPED DOWN TOWARD THE SOUTH CORNER OF THE LOT, WHICH APPEARS TO TERMINATE AT A GRASSY STRIP ALONG AN UNNAMED SIDE STREET. THE CREW DID NOT FIND EVIDENCE OF A STORM DRAIN IN LINE WITH THE PRESUMED PATH OF FLOWS FROM THE PARKING LOT. IT IS POSSIBLE THAT THE BUSINESS HAS A SYSTEM IN PLACE IN THE PARKING LOT TO DIVERT THE WASTE WATER FROM VEHICLE WASHING ACTIVITIES TO THE SANITARY SEWER SYSTEM, BUT THE FIELD TEAM COULD NOT VERIFY THAT SUCH A SYSTEM WAS BEING USED, AS TEAM MEMBERS DID NOT ENTER THE PARKING LOT TO INVESTIGATE FOR SUCH A SYSTEM. THE FIELD TEAM REPORTED THE ACTIVITY, AND THE POSSIBLE PRESENCE OF AN ILLICIT DISCHARGE TO THE ENVIRONMENTAL HOTLINE ON THE SAME DAY.

3/15/2016 CLOSE COMPLAINT

THERE IS NO EVIDENCE OF AN ILLICIT DISCHARGE OR STORMWATER VIOLATIONS AT THIS SITE. THERE ARE STACKED BUCKETS CONTAINING SOME MATERIALS THAT COULD BE CONSIDERED AN ILLICIT DISCHARGE IF THEY WERE TO LEAK BUT SINCE THERE IS NO EVIDENCE OF LEAKAGE I HAVE NO FURTHER ISSUES WITH THIS SITE. CLOSE COMPLAINT.

Case ID: E - 2016 - 93 Location:

Tax ID: 447606469246

Received: 3/9/2016 Details:

Tickler: Completed: 7/25/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 3/9/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 21 11 0577 County Map: * 6R

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

3/9/2016 OPENED COMPLAINT CASE 3/31/2016

A VERSAR FIELD TEAM INVESTIGATED THE SITE OF A PAVING OPERATION ALONG THE FRONT OF THE LONG WAREHOUSE ON THE RIGHT SIDE OF ROAD AND FOUND TWO PILES OF MATERIAL DEPOSITED ON IMPERVIOUS SURFACES NEAR THE PAVING AREA. THE TEAM FOUND A PILE OF SAND IN THE SOUTHEAST CORNER OF THE PARKING LOT. THERE WAS EVIDENCE THAT VEHICLES HAD DISPERSED SOME OF THE SAND THROUGHOUT THE PARKING LOT. THE TEAM ALSO FOUND A PILE OF CRUSHED CONCRETE ALONG THE EDGE OF THE CUL-ROAD. THE LOCATION OF THIS MATERIAL PRESENTS MORE OF A CONCERN DE-SAC OF THAN THE SAND BECAUSE THERE IS A GRATED STORM DRAIN INLET DOWNGRADE OF THE CEMENT. THE TEAM NOTED THAT TIRE TRACKS ON THE GROUND ABOVE THE INLET IMPLY THAT TRUCKS MAY BE USING THIS AREA FOR TURNING OR BACKING INTO THE WAREHOUSE DOCKS, AND THUS ROUTINELY DISTURBING THE SOIL IMMEDIATELY ADJACENT TO THE STORM INLET. TEAM MEMBERS PHOTO-DOCUMENTED THE RELATIVE LOCATION OF THE CONCRETE TO THE INLET. THE VERSAR TEAM SURMISED THAT IF PAVING CREWS WERE STILL ACTIVE IN THE AREA THESE MATERIALS MAY YET BE REMOVED, IN DUE COURSE OF COMPANY BUSINESS ON THE SITE; HOWEVER, THE PROXIMITY OF THE CONCRETE TO THE STORM INLET, AND THE POTENTIAL OF UNINHIBITED CONCRETE PARTICLES ENTERING THE STORM DRAIN AFTER DISTURBANCE FROM ROUTINE HEAVY TRUCK MANEUVERS AT THE SITE, DENOTE A SIGNIFICANT CONCERN. LIGHTER PARTICLES OF CONCRETE, AND THE COMPONENT MATERIALS (INCLUDING THE POSSIBILITY OF LEAD), MAY ALSO ENTER THE STORM DRAIN WITH RAIN AND WIND EVENTS.

3/10/2016 CASE NOTE 3/31/2016 3/10/2016

COMPLAINT RECEIVED FROM VERSAR FIELD INVESTIGATION TEAM ON 3/9/2016 AT ______ RD.
UPON INSPECTION BY ANNE ARUNDEL COUNTY ENVIRONMENTAL CONTROL INSPECTOR IT WAS
REVEALED THAT THE SITE HAS ACTIVE WORK AND IMPROVEMENTS ON GOING. I SPOKE WITH
_____ ON SITE AND HE INFORMED ME OF THE ON GOING IMPROVEMENTS. ALL
WORK SHOULD BE COMPLETED IN UP COMING WEEKS. INSPECTOR WILL CONTINUE TO

MONITOR SITE UNTIL IN COMPLIANCE. KEEP CASE OPEN UNTIL FOLLOW-UP INSPECTION IS MADE.

6/8/2016 CASE NOTE 6/8/2016 6/8/2016

MET ON SITE WITH PROPERTY OWNER TO GO OVER REMAINING REPAIRS NEEDED ON SITE. OWNER IS IN THE PROCESS OF FINDING A NEW CONTRACTOR TO COMPLETE THE REPAIRS. WILL CONTINUE TO MONITOR SITE FOR REPAIRS.

7/1/2016 CASE NOTE 7/29/2016 7/1/2016

SITE VISIT ON 6/30/2016 REVEALED THAT THE REPAIRS NEEDED ARE UNDER WAY. MT. AIRY CHIP AND TAR HAS BEEN CONTRACTED TO DO THE CLEAN-UP REPAIRS. THE DUMPED ASPHALT CHIPPINGS WERE BEING REMOVED. REPAIRS TO REMAINING PARKING LOT UNDER WAY AS WELL. WILL CONTINUE TO MONITOR SITE FOR COMPLIANCE.

7/25/2016 CLOSE COMPLAINT

SITE VISIT ON 7/20/2016 REVEALED THAT ALL ASPHALT REPAIRS HAVE BEEN MADE. THIS COMPLAINT CAN NOW BE CLOSED.

Case ID: E - 2016 - 54 Location:

Tax ID: 400090045371

Received: 2/11/2016 Details:

Tickler: Completed: 5/4/2016

STORMWATER MANAGEMENT ISSUES

Inspector: Receiver:

2/11/2016 Permit Number: Date Assigned: Original ID:

Related Cases: ADC Map:

Water Front: Ν Critical Area: N Violation:

Case Org: Cty. Council Ind:

Complainant:

Owner Information Violator Information

Violator 1: Owner 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 13 0114 County Map: 2A

> Suffix Block Parcel Plat **Block** Lot No Map No: Sect

Date Event Due Date Request for Trial Date

2/11/2016 OPENED COMPLAINT CASE 3/31/2016

> RESTAURANT AT THE ABOVE ADDRESS, A VERSAR FIELD TEAM BEHIND THE DISCOVERED COLLAPSING INFRASTRUCTURE ASSOCIATED WITH THE CURB-OPENING INLET AND THE OUTFALL PIPE. AT THE CURB BEHIND THE RESTAURANT, FIELD CREWS DOCUMENTED THAT THE CURB INLET AND OUTFALL PIPE WERE SUBSIDING, YET STILL CONNECTED. THE TOPSOIL BEHIND THE CATCH BASIN HAD ERODED, EXPOSING THE FILL. THE TEAM DOCUMENTED THAT THE CATCH BASIN IS SEPARATING FROM THE TOP SLAB AS IT SINKS. THE FIELD TEAM OBSERVED THAT A NEARBY PORTION OF THE SIDEWALK WAS ALSO RESTING ON ERODING SOIL; THE VEGETATION DOWNHILL OF THIS SECOND EROSION AREA SHOWS A DISTINCT GROWTH PATTERN, IMPLYING THAT THERE ARE MULTIPLE EFFECTS OF THE RUNOFF IN THIS SECTION. THE DEPRESSION THAT HAS DEVELOPED BEHIND AND ALONGSIDE THE CATCH BASIN EXACERBATES THE POTENTIAL FOR DAMAGE FROM FLOWING RUNOFF AND TRAPPED WATER. ALTHOUGH THE COLLAPSED INFRASTRUCTURE WAS THE PRIMARY CONCERN DURING THE SITE VISIT, THE PHOTOGRAPHS TAKEN DURING THE INSPECTION ALSO SHOW STAINS IN THE PARKING LOT LEADING FROM THE CORNER OF THE THE CURB INLET; SUGGESTING THAT THERE MAY HAVE BEEN LEAKAGE FROM A CONTAINER

ON THE PREMISES AT SOME POINT.

4/8/2016 **CASE NOTE** 4/29/2016 4/8/2016

> HELD A MEETING WITH THE CONTRACTOR HIRED TO FIX THE OUTSTANDING ISSUES ON APRIL 6. 2016. I WENT OVER ALL THE ISSUES THAT NEEDED TO BE REPAIRED AND LANDSCAPING ASSURED ME THAT HE AND HIS CREW COULD HANDLE THE WORK. HE HAS SCHEDULED THE WORK FOR ABOUT 2 WEEKS AFTER OUR MEETING AND SHOULD ONLY TAKE HIM A DAY TO MAKE ALL NECESSARY REPAIRS. ANOTHER UPDATE WILL FOLLOW ONCE THE SITE IS IN COMPLIANCE.

5/4/2016 **CLOSE COMPLAINT**

> ALL WORK HAS BEEN COMPLETED ON SITE. ALL AREAS OF EROSION HAVE BEEN REPAIRED. THIS COMPLAINT CAN BE CLOSED.

Case ID: E - 2016 - 53 Location: 0 FLOOD PLAIN

Tax ID: 338890060065

Received: 2/11/2016 Details:

Tickler: Completed: 5/2/2016

ILLEGAL DISCHARGES COMPLAINT

Inspector: Receiver:

Permit Number: 2/11/2016 Date Assigned: Original ID:

Related Cases: ADC Map:

Water Front: Ν Critical Area: N Violation:

Ν Cty. Council Ind: Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Owner 2: Violator 2: Address: Address:

Phone:

State Map: 17 13 0446 County Map:

> Map No: Suffix Block Parcel Sect **Block** Lot No

Due Date Date Event Request for Trial Date

2/11/2016 OPENED COMPLAINT CASE 2/16/2016

ILLICIT DISCHARGE FROM A STORM DRAIN SYSTEM (STRONG ODOR AND FUNKY COLOR).

3/1/2016 CLOSE COMPLAINT

COMPLAINT RECEIVED ON FEBRUARY 10, 2016 FROM DPW REVEALED THE FOLLOWING. INSPECTOR WENT OUT ON SITE TO INVESTIGATE A POSSIBLE ILLICIT DISCHARGE COMPLAINT. UPON ARRIVAL INSPECTOR WALKED TO OUTFALL AREA TO OBSERVE NO DISCOLORATION IN THE WATER. A SLIGHT ODOR OF OILY FOOD/WASTE POSSIBLY DIESEL FUEL WAS NOTICED IN THE AIR AROUND STORM DRAIN OUTFALL. NO ODOR WAS COMING FROM WITHIN STORM DRAIN. ALL INLETS FEEDING INTO STORM DRAINS WERE CHECKED. A TOTAL OF 13 STORM WATER INLETS WERE INSPECTED. MOST WERE FREE OF DEBRIS, SOME HAD LEAVES, STICKS, AND SEDIMENT IN THEM, BUT NOTHING MAJOR. INLET ID Q09I302 LOOKED LIKE SOMEONE HAD DUMPED FIREPIT DEBRIS, CHARRED WOOD AND ASH INTO THIS INLET. A SLIGHT ODOR WAS OBSERVED AT THIS INLET AS WELL. THESE ARE ALL PUBLIC STORM WATER INLETS. COMPLAINT

CAN BE CLOSED WITHIN INP, REFER TO DPW ROADS.

4/26/2016 OPENED COMPLAINT CASE 5/31/2016 4/26/2016

A VERSAR FIELD TEAM INSPECTED OUTFALL. DETERGENT LEVELS TESTED ABOVE THE

ACCEPTABLE RANGE.

5/2/2016 CASE NOTE 5/2/2016 5/2/2016

> PURSUANT TO THE COMPLIANT ISSUED ON APRIL 25, 2016, BY THE COUNTY VIA VERSAR ALLEGING POSSIBLE ILLICIT DISCHARGE (DETERGENTS) WITH SOUR RANCID SMELL AT OUTFALL Q09C3O001, SITE VISITS WERE CONDUCTED ON APRIL 25, 2016 (NO PRECIPITATION), APRIL 26, 2016 (NO PRECIPITATION), AND APRIL 27, 2016 (MINIMAL PRECIPITATION EVENT), TO FURTHER INVESTIGATE BY PERFORMING ADDITIONAL FIELD DETERGENT TEST, OBSERVÍNG OUTFALL, AND TRACING COMMUNITY INLETS LEADING TO THE OUTFALL. NO SIGNIFICANT FINDINGS WERE OBSERVED IN THE INLETS, SWM MANHOLES/PIPES, OUTFALL OR

SURROUNDING COMMUNITY LOTS AND ROADWAYS. RESULTS OF THE FIELD LAB TEST YIELDED A DETERGENTS READING OF < 0.25 MG/L, BELOW ACTION LEVEL OF > .50 MG/L. VERSAR FIELD TESTING ALSO YIELDED AN ACCEPTABLE DETERGENTS LEVEL READING ON APRIL 19, 2016; TEST 2 WAS 0.1 MG/L. THESE SUBSEQUENT LOW READINGS BELOW ACTION LEVEL INDICATE A POSSIBLE ISOLATED DETERGENTS INCIDENT. OBSERVATION OF THE INLETS AND MANHOLES THAT LEAD FROM THE SURROUNDING COMMUNITY TO OUTFALL Q09C3O001 ALSO DID NOT YIELD SIGNIFICANT FINDINGS. MANHOLE SHOWN IN FIGURE 2, EXHIBITED MINIMAL FLOWING WATER (TRICKLE) FOLLOWING PRECIPITATION AND THE MANHOLE SHOWN IN FIGURE 3 EXHIBITED LESS THAN ½ INCH OF STANDING WATER BY MEANS OF VISUAL OBSERVATION AND WATER WAS LOCATED IN THE PIPE BEND ONLY. THE HOMEOWNER RESIDING AT ______ AVENUE, LOCATED AT THE SOUTHWESTERN INLETS LEADING TO THE OUTFALL, WAS AVAILABLE TO COMMENT INDICATING THAT HE HAS NOT NOTICED SOUR OR RANCID SMELLS FROM THE INLETS, SEEN ANY ILLEGAL DUMPING ACTIVITY OR LEAKAGE LEADING TO THE INLETS.

5/2/2016 CASE NOTE

CONTINUED.OUTFALL Q09C30001 WAS PREVIOUSLY INVESTIGATED BY WPRP INP INSPECTOR, ____ON FEBRUARY 10, 2016, AS PER PRIOR COUNTY ID COMPLAINT (SEE ATTACHED INSPECTION REPORT). IN CONVERSING WITH ____ REGARDING HIS INVESTIGATION, HE ADVISED THAT THE COMPLIANT WAS REFERRED TO DPW ROADS TO FLUSH THE SURROUNDING STORMWATER SYSTEM. A FOLLOW-UP CALL WAS PLACED TO DPW ROADS ON 4/27/2016, AND WE WERE ADVISED THAT ____ OF DPW ROADS WAS ON-SITE TO INVESTIGATE THE STORMWATER OUTLETS AND PIPES. ____ EVALUATED THE STORM STRUCTURES AND DETERMINED NO FLUSH WAS REQUIRED AND CLOSED THE REQUEST ON 4/6/2016.

5/2/2016

5/2/2016

5/2/2016 CLOSE COMPLAINT

RECOMMENDATION TO CLOSE CASE AT THIS JUNCTURE DUE TO LACK OF SIGNIFICANT FINDINGS BY BOTH WPRP INP AND DPW ROADS AND ACCEPTABLE LOW LEVELS OF DETERGENTS IN SUBSEQUENT FIELD LAB TESTS. SUSPECTED LIKELY ISOLATED DETERGENTS INCIDENT.

Case ID: E - 2016 - 33 Location:

Tax ID: 200001831850

Received: 1/20/2016 Details:

Tickler: Completed: 5/12/2016

ILLEGAL DISCHARGES COMPLAINT

Receiver: Inspector:

Date Assigned: 1/20/2016 Permit Number: Original ID:

ADC Map: Related Cases:

Water Front: N Critical Area: N Violation:

Cty. Council Ind: N Case Org:

Complainant:

Owner Information Violator Information

Owner 1: Violator 1: Violator 2: Address: Address:

Phone:

State Map: 51 A 22 0290 County Map:

Map No: Suffix Block Parcel Plat Sect Block Lot No

Date Event Due Date Request for Trial Date

1/20/2016 OPENED COMPLAINT CASE 1/25/2016

CONSULTANTS (VERSAR) FOR STORM WATER MONITORING AT CHURCH CREEK THINK THERE

MAY BE AN ILLICIT DISCHARGE OCCURRING UPSTREAM OF THE RT 2 SAMPLE HUT.

1/20/2016 CLOSE COMPLAINT

ON FRIDAY AFTERNOON, JANUARY 15, INSPECTOR _______ VISITED THE BUILDING AT ANNAPOLIS HARBOUR CENTER WHERE THE CULVERT CROSSES RTE. 2. HE FOUND SOAP SUDS IN ONE INLET LOCATED AT THE BACK OF THE BUILDING. AFTER SPEAKING WITH THE SHOPS' MANAGERS, HE COULD FIND NO EVIDENCE OTHERWISE OF WHO OR WHERE THE SUDS CAME FROM. HE EDUCATED ALL THE SHOPS' MANAGERS THAT MOP/ SOAPY WATER SHALL NOT BE DISCHARGED INTO THE STORM INLETS, BUT INTO BASINS OR SINKS LOCATED

INSIDE THE BUILDING.

3/1/2016 OPENED COMPLAINT CASE 3/6/2016 3/1/2016

OUR NPDES MS4 PERMIT SUPPORT CONSULTANTS HAVE ONCE AGAIN FOUND SOME SOAP SUDS IN THE CULVERT AT THE CHURCH CREEK SAMPLING STATION (DOWNSTREAM SIDE OF RT 2 BETWEEN THE SUBARU DEALERSHIP AND THE CAR WASH). THIS IS THE SECOND TIME THEY HAVE OBSERVED THIS. EARLIER THIS YEAR (JANUARY 15) THEY ALSO OBSERVED SOAP SUDS AT THE SITE AND YOU QUICKLY RESPONDED TO THAT COMPLAINT (COMPLIANCE CASE # E-

2016-33).

3/1/2016 CASE NOTE 3/31/2016 3/1/2016

UPON CLOSE INVESTIGATION OF THE CHURCH CREEK AREA, BOTH THE HARBOUR CENTER SIDE OF RT 2 AND THE SUBARU SIDE, INSPECTOR ______ FOUND NO SUDS. HOWEVER, MR.

______SPOKE WITH _____, THE PROPERTY MANAGER OF THE ______, EXPLAINED THE CONCERNS OF RECURRING "SUDS" COMPLAINT, AND SHE WAS KIND ENOUGH TO CONFIRM THAT VEHICLES ARE BEING WASHED BEHIND THE LIGHTHOUSE BUILDING CONTAINING THE MOVIE THEATER, POTBELLY'S, AND THE PA DUTCH FARMER'S MARKET. MR. INGLESBY TOLD

THAT WASHING VEHICLES AND ALLOWING THE SOAPY WATER TO ENTER THE STORM DRAIN SYSTEM IS NOT ALLOWED AND THAT THIS PRACTICE MUST CEASE IMMEDIATELY. WAS VERY RECEPTIVE AND ASSURED HIM THAT SHE WILL ADVISE THE PEOPLE WASHING THE VEHICLES THAT THEY SHALL NOT WASH VEHICLES THERE ANYMORE. WILL REVISIT THE FOR THE NEXT 30 DAYS TO CONFIRM THAT THIS PRACTICE HAS CEASED. IF IT CONTINUES, HE WILL ISSUE A CITATION TO THE OFFENDING PARTY. THIS COMPLAINT IS LOGGED UNDER THE SAME #, E-2016-33, FROM JANUARY.

5/12/2016 CLOSE COMPLAINT

ON FRIDAY AFTERNOON, JANUARY 15, 2016, INSPECTOR VISITED THE BUILDING AT WHERE THE CULVERT CROSSES RTE. 2. SOAP SUDS WERE FOUND IN ONE INLET LOCATED AT THE BACK OF THE BUILDING. AFTER SPEAKING WITH THE SHOPS' MANAGERS, COULD FIND NO EVIDENCE OTHERWISE OF WHO OR WHERE THE SUDS CAME FROM. INSPECTOR EDUCATED ALL THE SHOPS' MANAGERS THAT MOP/ SOAPY WATER SHALL NOT BE DISCHARGED INTO THE STORM INLETS, BUT INTO BASINS OR SINKS LOCATED INSIDE THE BUILDING. ON TUESDAY AFTERNOON, MARCH 1, 2016, INSPECTOR INVESTIGATED ANOTHER COMPLAINT OF SUDS AT THE MONITORING STATION ON THE NORTHBOUND SIDE OF RTE 2. UPON CLOSE INVESTIGATION OF THE CHURCH CREEK AREA, BOTH THE HARBOUR CENTER SIDE OF RTE 2 AND THE SUBARU SIDE, FOUND NO SUDS. HOWEVER, INSPECTOR SPOKE WITH . PROPERTY MANAGER OF , EXPLAINED OUR CONCERNS AND OUR RECURRING "SUDS" FROM COMPLAINT, AND SHE CONFIRMED THAT VEHICLES ARE BEING WASHED BEHIND THE LIGHTHOUSE BUILDING CONTAINING THE MOVIE THEATER, POTBELLY'S, AND THE PA DUTCH WAS TOLD THAT WASHING VEHICLES AND ALLOWING THE SOAPY FARMER'S MARKET. WATER TO ENTER THE STORM DRAIN SYSTEM IS NOT ALLOWED AND THAT THIS PRACTICE MUST CEASE IMMEDIATELY. ___WAS VERY RECEPTIVE AND ASSURED INSPECTOR THAT SHE WILL ADVISE THE PEOPLE WASHING THE VEHICLES THAT THEY SHALL NOT WASH VEHICLES THERE ANYMORE. ON THURSDAY AFTERNOON, MARCH 3, 2016, INSPECTOR OBSERVED AN **EMPLOYEE OF THE** USING SPRAY NINE, A MULTI-PURPOSE CLEANER AND DISINFECTANT, TO CLEAN OUT JUICING MACHINES USED INSIDE . INSPECTOR APPROACHED THE EMPLOYEE AND EXPLAINED THAT CLEANSERS ARE NOT ALLOWED TO BE DISCHARGED INTO STORM DRAINS. THE EMPLOYEE CEASED THE USE OF THE CLEANSER AND SAID HE WOULDN'T USE IT AGAIN. SOON AFTER, ANOTHER EMPLOYEE EXITED THE BUILDING AND ASKED TO SPEAK WITH INSPECTOR REGARDING WHAT, IF ANYTHING, WAS ALLOWED TO BE DISCHARGED INTO THE STORM DRAIN SYSTEM. INSPECOTR EDUCATED THE EMPLOYEE, , THAT ONLY WATER IS SUPPOSED TO BE DISCHARGED INTO THE STORM DRAIN SYSTEM. SAID THAT HE WOULD DISSEMINATE THIS INFORMATION TO THE REST OF THE EMPLOYEES AND THAT WE SHOULD NOT EXPERIENCE THIS PROBLEM AGAIN. WILL CONTINUE TO MONITOR UNTIL MARCH 31, 2016, AND AFTER, AS NEEDS ARISE.ON MARCH 13, 2016, SUDS HAD BEEN OBSERVED BY VERSAR AGAIN AT THE TESTING STATION AT THE CULVERT UNDER ROUTE 2. INSPECTOR HAD THE ASSURANCE OF THE PROPERTY MANAGEMENT COMPANY THAT THIS WOULD NOT OCCUR AGAIN. AS PER AN EMAIL FROM , DATED 3/7/2016, SHE MANAGEMENT, PROHIBITING THEM WAS GOING TO DISTRIBUTE A LETTER TO THE AT THAT LOCATION AGAIN. INSPECTOR HAS BEEN OUT TO THE SITE EVERY WEEKDAY SINCE 3/3/2016. THE PERPETRATORS ARE NOT WASHING THE CARS/TRUCKS DURING THE WEEK. ALL REASONABLE EFFORTS HAVE BEEN EXHAUSTED TO DETER CAR-WASHING AT __. AS OF 4/1/2016, SUDS HAVE NOT RE-OCCURRED SINCE 3/13/2016. COMPLAINT IS CLOSED.