

## **5.0 Permit Requirements**

### **E.4. Illicit Discharge Detection and Elimination**

Baltimore County shall maintain its illicit connection detection and elimination 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 MDE or eliminated. The County shall follow the minimum requirements listed below or propose alternative methods for MDE approval:

- a. Field screen at least 150 outfalls annually. Each outfall having a discharge or suspected of having an illicit discharge shall be sampled using a chemical test kit;
- b. Conduct routine surveys of commercial and industrial watersheds for discovering and eliminating pollutant sources;
- c. Maintain a program to address illegal dumping and spills;
- d. Use appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and
- e. Report illicit discharge detection and elimination activities as specified in PART IV of this permit. Annual Reports shall include any requests and accompanying justifications for proposed modification to the illicit discharge detection and elimination program.

## **5.1 Introduction**

The NPDES - Municipal Stormwater Discharge Permit program required full implementation of the County's stormwater outfall screening schedule by September 30, 1997. The *Manual of Practice for Detection and Removal of Illicit Connections* was completed on January 30, 1997 and guides the implementation of this project. The Watershed Monitoring Section of DEPRM is currently responsible for performing the outfall screenings, reporting screening data, and coordinating remedial actions. Specific correction measures may be the responsibility of DEPRM, the Department of Public Works (DPW), or both, depending upon the nature and sources of detected discharges. Certain illicit connections are referred to the Maryland Department of the Environment (MDE) for permitting or enforcement if there are indications that existing permit limits are being exceeded. Water main leaks are referred to Baltimore City Department of Public Works for correction. Because chlorine is extremely toxic to the fauna in a stream, it is of particular concern when leaks or discharges occur from the public distribution system. High volume, chlorinated leaks can go undetected or remain uncorrected for quite some time. This can affect any water quality monitoring projects being conducted downstream.

## **5.2 Program Status**

The results of this reporting period are presented as three separate components: analysis of routine outfall screenings, analysis of illicit connection investigations conducted by WMM staff, and analysis of illicit connection investigations conducted by DEPRM's Regional Environmental Health Program staff. Although the regional program typically focuses on complaint-driven community hygiene issues, a small percentage of those investigations involve illicit connections.

During the calendar year 2007, the Watershed Monitoring Section of DEPRM staff conducted 159 routine outfall screenings in which 35 required further investigative or remedial actions. WMM staff investigated 29 citizen complaints. Based on an analyses of complaints investigated by DEPRM's regional staff over the past five years, approximately 13% the complaints usually involve potential illicit connections.

As revealed in the analysis in the following section, routine outfall screenings for detection of illicit connections appear to compliment citizen complaints of problems they observe. Aside from the benefits of greater public involvement and the resolution of complaints, citizens provide surveillance at a level beyond that of the monitoring staff. A majority of the time citizens call while they are actually observing a problem and often can provide immediate local information that increases the chance of eliminating illicit connections. The routine outfall screenings catch the chronic problems that may be missed by the public, such as chlorine leaks from the municipal water supply.

## **5.3 Analysis of Outfall Screenings**

A routine outfall screening consists of:

- (1) A quantitative analysis of the effluent. This includes measuring the effluent flow rate, temperature and pH, and field-testing with the LaMotte NPDES test kit. This includes parts per million tests for copper, chlorine, and phenol. A qualitative assessment of the effluent, the outfall structure and the receiving channel, noting such conditions as water color, odor, vegetative condition, sedimentation, erosion, damage, etc.
- (2) A visual inspection of each outfall, noting any structural damage.

If the problem is severe enough to warrant immediate correction, then an investigation begins immediately. Some sites are determined to have problems severe enough to warrant immediate investigation and/or corrective action after only one screening.

In Baltimore County, there are approximately 3,610 total outfalls. There are two types of outfalls: major and minor. Major outfalls are >36" and minor outfalls are <36". There are 705 major outfalls in our database and 554 have been prioritized. This includes the 33 outfalls that we have found not to exist or are not in a location where they can be sampled. The minor outfalls are just starting to become prioritized, 52 have been completed so far. There is a greater number of them (Approximately 2,904), so they will be dealt with in phases. Concentration will be on the small outfalls in the area where the Small Watershed Action Plans (Section 7) are being focused.

Outfalls are chosen by their priority. The prioritization system works as follows: Outfalls that have not yet been screened twice have not been prioritized. Outfalls that have been screened two or more times are assigned one of three priority ratings. Outfalls with major problems that require immediate correction and/or close monitoring, or outfalls with recurrent problems will be

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assigned a *Priority 1 (Critical)* rating. Outfalls with moderate to minor problems that have the potential to become severe are assigned a *Priority 2 (High)* rating. Outfalls with minor or no problems that do not require close monitoring are given a *Priority 3 (Low)* rating. Outfalls categorized as “Low Priority” are on a ten-year screening cycle, “High Priority” outfalls are screened once each year, and “Critical” outfalls are screened four times each year. This system allows for a more streamlined approach in selecting outfalls to screen, and provides a more efficient use of manpower. Outfall priority may be changed if it improves or degrades. The small outfalls will be prioritized after one screening, due to there being many more of them than the major outfalls.

Table 5-1 lists the number of outfalls 36 inches or larger in diameter by watershed and by the priority classification described above. To date, 118 of the outfalls 36 inches or larger in diameter have not been sampled sufficiently to be prioritized. Additional screening effort will allow the County to assess and prioritize the status of these outfalls.

**Table 5-1: Major Outfalls by Watershed and Priority Classification**

<b>Watershed</b>	<b>Priority 1</b>	<b>Priority 2</b>	<b>Priority 3</b>	<b>Total</b>
<b>Upper Western Shore</b>				
Loch Raven	5	35	31	71
Lower Gunpowder	2	17	7	26
Gunpowder River	0	0	0	0
Little Gunpowder Falls	0	2	0	2
Bird River	2	9	28	39
Middle River	0	8	5	13
<b>Total</b>	9	71	71	151
<b>Patapsco-Back River</b>				
Patapsco	2	8	65	75
Gwynns Falls	6	41	99	146
Jones Falls	0	18	35	53
Back River	5	46	56	107
Baltimore Harbor	4	9	9	22
Liberty Reservoir	0	0	0	0
<b>Total</b>	17	122	264	403
<b>Grand Total</b>	26	193	335	554

The locations of the prioritized major outfalls and those remaining to be prioritized are shown in Figure 5-1. As can be noted from the figure, the majority of the outfalls occur within the Urban-Rural Demarcation Line. There is no consistent pattern of outfall location in relation to the prioritization category.

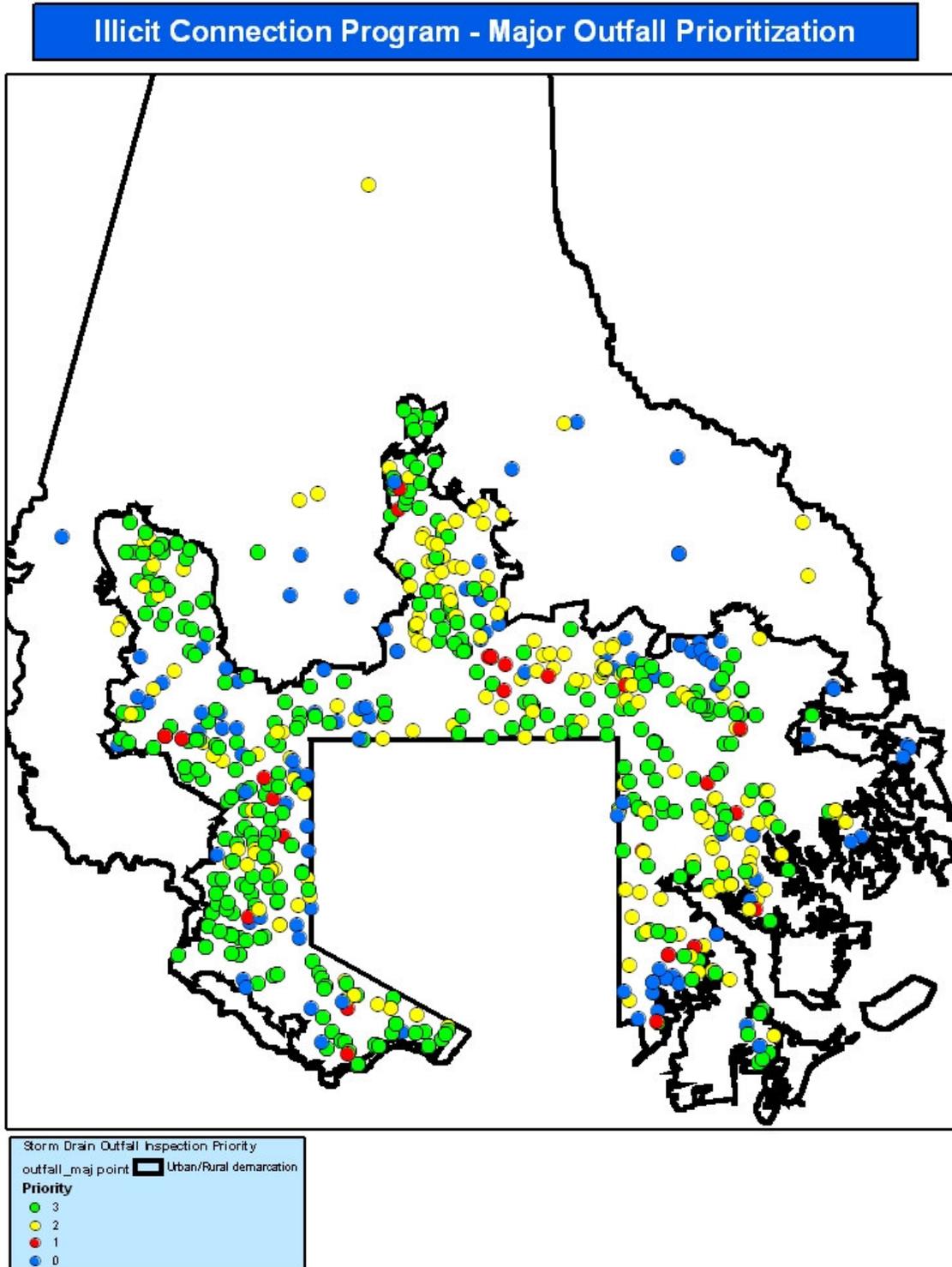


Figure 5-1. Major Outfall Prioritization. Note most outfalls are inside the Urban-Rural Demarcation Line (URDL).

The percentages of the 554 outfalls, which have been given a rating, in each category are shown in Figure 5-2.

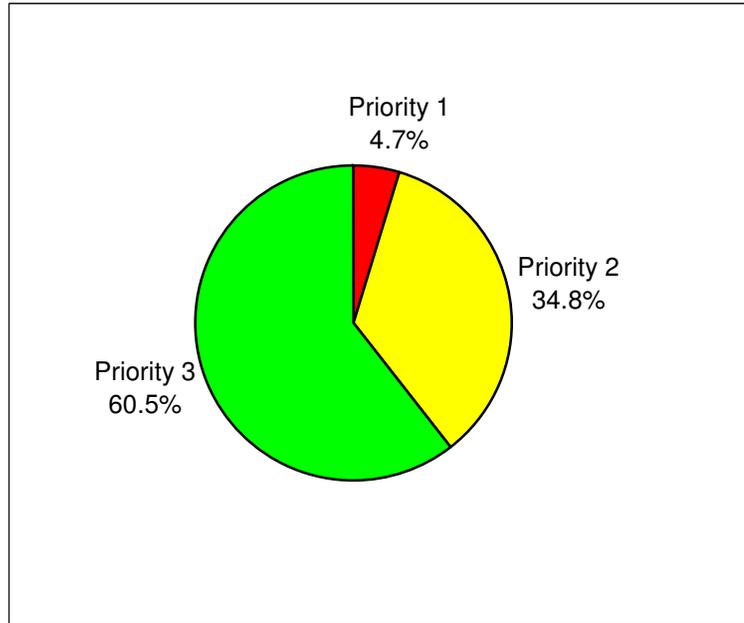


Figure 5-2: Major Outfall Screening Priority Distribution

Of the 158 outfalls screened during 2007, 138 were major outfalls and 20 were minor outfalls. They were selected from the newly prioritized database based on the following criteria:

- Citizens who called or wrote to express concern about stream water quality, but the indicated conditions did not warrant an immediate investigation; and
- Previous screenings indicated water quality problems might exist.

Figure 5-3 shows the quantitative problems and Figure 5-4 shows the qualitative problems found. As indicated in Figure 5-3, by the bar labeled “*none detected*”, 116 out of the 158 routine outfall screenings had no detectable quantitative problems. Phenol, chlorine, and copper are considered as indicators if they are above zero. Temperature is considered a potential problem if it exceeds 75 degrees F (23.9 degrees C), which occurred in 26 outfalls. The criteria used to determine if pH is out of range is if it is under 6.0 or above 9.0, and a problem was detected at one outfall. Copper was detected at eight outfalls and phenol was detected at three outfalls. Chlorine was detected at nine outfalls. There were a total of 47 quantitative problems.

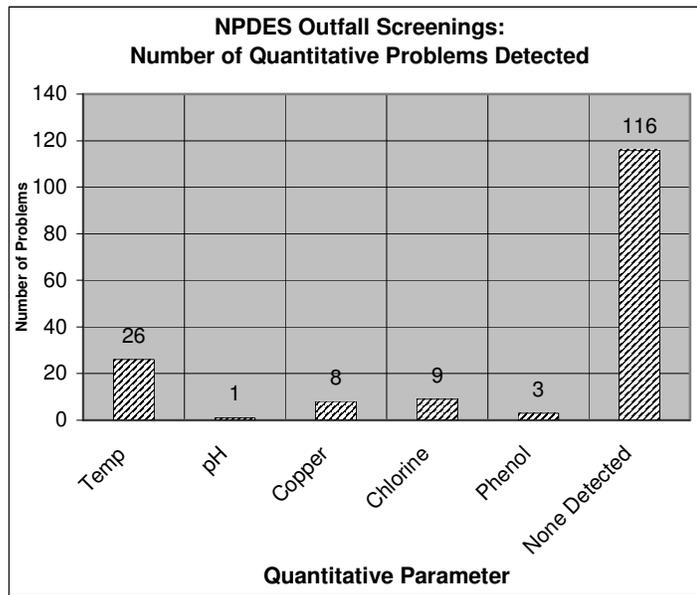


Figure 5-3. Number of *quantitative* problems detected.

Figure 5-4 illustrates incidences of problems observed during *qualitative* assessments such as: visual evidence of sewage, oil, and structural problems. Qualitative and “visual problems” were those most frequently encountered which included observations regarding color, odor, clarity, and receiving water characteristics and sediment deposition immediately at and below each outfall. Trash, erosion, and sediment deposition were observed at 122, 57, and 133 outfalls, respectively. Of the total 158 outfalls screened, there were a total of 364 qualitatively assessed problems, however, 14 had no observed or qualitatively assessed problems. Many of the outfalls screened had more than one problem.

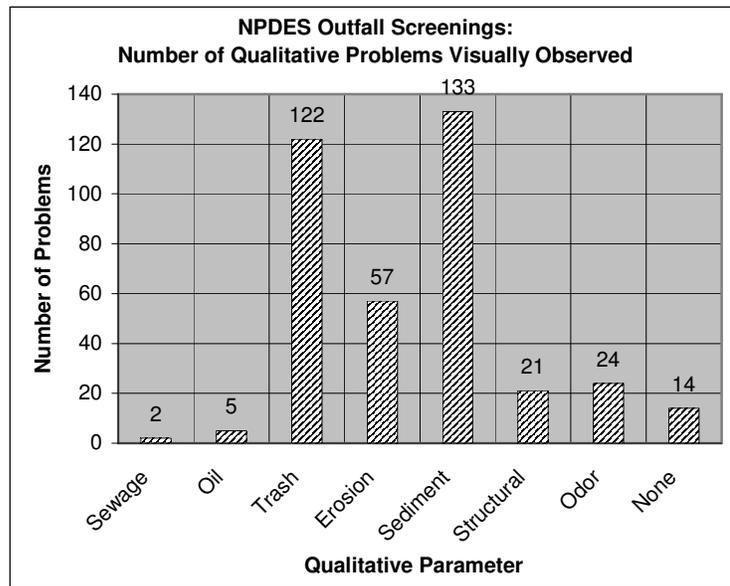


Figure 5-4. Number of qualitative problems visually observed.

As described above, routine outfall screenings include a quantitative analysis, a qualitative assessment and a visual inspection. Based on these three procedures, a total of 413 problems were encountered during the 158 routine outfall screenings during this reporting period. Many of the outfalls had more than one problem. Observations regarding the receiving channel within the immediate vicinity of the outfall were also included.

During 2007, outfall screening was distributed among seven watersheds as follows: Gwynns Falls (39), Back River (44), Baltimore Harbor (6), Patapsco (8), Liberty (2), Loch Raven (23), Bird River (5), Little Gunpowder (2), Lower Gunpowder (23), and Jones Falls (6).

#### 5.4 Illicit Connections Investigations and Corrections

During the calendar year 2007, the Watershed Monitoring section processed eighty-seven complaints, of which seventeen were citizen complaints. Forty-one cases were referred to other agencies. Of those forty-one, fourteen are still ongoing. DEPRM is handling the remaining forty-six complaints. Of those, thirty-seven have been closed and nine remain ongoing investigations. These complaints and their status are detailed in Table 5-2.

Table 5-2: Complaints Processed from January 1, 2007 through December 31, 2007

Case No.	COMPLAINT / DATE	ACTION TAKEN	STATUS	LOCATION
07-001	Citizen complained about lack of fish in stream. 1/11/07	Investigated and found poor fish habitat.	Took water samples to be certain habitat is the only limiting factor. Nitrate levels were high but within limits, otherwise water quality was fine. <b>Case closed</b>	Benson Mill Rd. and Yeoho Rd. 11-E1
07-002	Routine outfall investigation; excessive algae and foul smell found. 1/24/07	Traced phenols to a manhole near several businesses.	Need to do dye testing to find which business is the source. <b>On-going</b>	27 H-6, right across from 695 ramp on Cromwell Bridge Road

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07-003	Citizen complained of flooding downstream of bridge. 1/31/07	Citizen seemed to think the cause was cut trees blocking the stream.	The trees did not seem to be causing a problem. Referred to CIP. <b>On-going</b>	Race Road bridge at Stemmers Run. 37 B-6
07-004	Recreation and Parks complained of stream erosion. 1/31/07	Stream restoration project has come apart, erosion continues. Recreation and parks are worried about bridge stability.	Referred to CIP. <b>On-going</b>	Entrance road to Double Rock Park off Belair Road. 28 H12
07-005	Citizen complained of orange water. 1/17/07	Found that the orange color came from clay deposition. Water was running clear, looked like old deposition. Talked to Sediment Control and no construction is going on in the area. Also talked to property manager of 1001 Cromwell Bridge Rd.	Caused by pipe flushing. <b>Case Closed</b>	Beaverbank and Cromwell Bridge Rd. 27 H6
07-006	Citizen complaint of playhouse built in wildlife preserve. 1/16/07	The playhouse was encroaching on stream and several trees had been cut down.	Brian Lindley reported that DPW would remove the playhouse. It is located on Baltimore County property and none of the homeowners will claim it. <b>Case closed</b>	Between 11716 and 11748 Mayfield Dr. next to stream. 18 F12
07-007	Citizen complaint of trash in stream/tidal area. 1/23/07	Some of the waste is large and has possible hazardous materials (fridge and microwave).	Environmental Health found site to be clean. A no dumping sign is unnecessary because the site is on a busy residential street. <b>Case closed</b>	163 Riverside Road. 37 A9
07-008	Citizen complaint of Owings Mills Car Wash dumping trash and discharging into stream. 1/29/07	Will do more water quality test to determine if algae is from an illicit connection.	PDM issued violation and trash was cleaned up. <b>On-going</b>	11629 Reisterstown Road. 16 D12
07-009	Citizen complaint of orange colored water. 1/30/07	Visited stream and determined orange stain and color to be iron bacteria.	More water quality tests supported the conclusion of iron bacteria, which is natural. <b>Case closed</b>	Behind 9914 Orbitran. 28 F9
07-010	Routine inspection found outfall ¾ full of concrete/rock debris. There were also covered blue drums sitting in grass swale that drains outfall. 1/16/07	Referred to DPW and Environmental Health.	Blue drums were empty except one, which contained motor oil and is being removed. SHA is looking into who is responsible for maintenance on this outfall. <b>On-going</b>	End of Landstreet Road. 18 J10
07-011	Routine inspection found outfall pipe had broken and was now sitting crooked. 3/9/07.	Apron is missing and a deep hole is forming below the outfall.	Referred to DPW Storm Drain Design Section. <b>On-going</b>	Behind 959 Shirley Road. 16 D10

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07-012	Routine inspection found outfall 100% submerged. 3/20/07	Sediment deposition in stream is causing water to pool around outfall.	DPW ditched outfall and stream. <b>Case closed</b>	Owings Mills Blvd. and Kendig Mill Rd. 16 G10
07-013	Routine inspection found outfall separated from pipe at joint. 3/20/07	Referred to DPW.	Since this is not a safety issue it will be repaired when a crew is available. <b>Case closed</b>	Gwynnwest and Knight. 16 G9
07-014	While doing fieldwork DEPRM staff found a pvc pipe draining to stream buffer. 3/28/07	Pipe seemed to be pool drainage.	Environmental Health inspected and pipe was not pool drainage. <b>Case closed</b>	8214 Marcie Drive. 25 J6
07-015	Received complaint of cloudy white discharge coming from an outfall. 3/27/07	Suspect the drainage was from hotel across the street that was painting.	Found no evidence of dumping, but still educated the citizen on proper disposal of paint. <b>Case closed</b>	8225 Town Center Road. 29 E11
07-016	Received copy of BGE permit from MDE for stream water withdrawal for hydrostatic testing. 4/2/07	Wanted to see where the water was getting discharged to after the test and whether another permit was required.	Spoke to MDE Industrial Waste and they said the water was discharged back into the stream and no other permit was needed; the discharge water is considered clean. <b>Case closed</b>	Gum Spring and Trumps Mill Road. 36 J1
07-017	While doing fieldwork received complaint of stream erosion from landowner. 3/27/07	Owner of land adjacent to stream is concerned about erosion undermining trees and carport.	Not severe enough to warrant project. Recommended homeowner stop mowing to stream and plant buffer. <b>Case closed</b>	3525 Barton Oaks Rd. 25 H11
07-018	While doing fieldwork DEPRM staff witnessed a pool being drained into a storm drain inlet. 4/2/07	Waltham Woods Apartments had an industrial hose draining into the gutter, which was running across the sidewalk into the storm drain.	Advised owners of property on proper disposal and told them they needed a permit to discharge to the storm drain and gave them MDE contact information. <b>Case closed</b>	Townhill Road. 28 C6
07-019	Routine outfall inspection found stream with excessive trash. 3/1/07	Referred to Environmental Health.	No violations were found at time of inspection. Business owners were advised to keep dumpster lid closed. <b>Case closed</b>	Behind 9920 York Rd. 18 J8
07-020	Routine outfall inspection found excessive trash. 3/21/07	Source of trash is a dumpster behind a liquor store.	PADM investigated, not enough trash present to issue correction notice. <b>Case closed</b>	Behind 9645 Reisterstown Road 25 A5
07-021	Routine outfall inspection found excessive trash. 3/21/07	Source of trash are dumpsters behind Fairground plaza. Trash has been blown and is	Notice given for misc. trash and litter. Inspector went back and they are now in	Behind Fairgrounds Plaza. 18 K12

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		stuck to fence.	compliance. <b>Case closed</b>	
07-022	Routine outfall inspection found water discharging from outfall had bubbles in it and water was cloudy. 3/28/07	Traced water to an inlet that had pipes from sidewalk draining into it. Suspect it to be overflowing wastewater from houses.	Environmental Health investigated and found that discharge was from a sump pump, not washwater. <b>Case closed</b>	Woodland and First. 28 E/F8
07-023	Complaint of pipe in stream discharging black water with bad smell periodically. 3/20/07	Suspect pipe is possibly connected to neighbors septic system.	Water samples did not show anything unusual. Environmental Health investigated neighbor's septic tank and it is in working order. Advised complainant that when he saw the black water again to call us so we could get a sample. <b>Case closed</b>	4405 Butler Road. 16 D5
07-024	Complaint of foam in the stream behind Pot Spring Elementary School. 3/28/07	Visited site and determined the foam to naturally occurring.	<b>Case closed</b>	19 B9
07-025	Citizen volunteering at a tree planning noticed algae on a sanitary sewer stack in creek. 4/12/07	Algae are bright green and present even in extreme cold weather.	Environmental Health could not locate the sewer stack, left message with complainant for help in locating it. <b>Case closed</b>	25 H/J9. Old Court Road and Herring Way
07-026	Complaint of road salt affecting a well. 3/28/07	Took water sample at stream above his well at Pleasantville and Fork.	Sent citizen lab results and letter explaining the results of the county evaluation of the problem. <b>Case closed</b>	2 Forkspring Court. 21 D2
07-027	Routine outfall investigation found excessive iron bacteria. 4/26/07	Traced to inlet above outfall. Sanitary sewer manhole is located next to inlet, could possible be leaking.	No sanitary sewer leaks, iron bacteria naturally occurring. <b>Case closed</b>	8113 Clydebank Rd. 27 H9
07-028	Citizen complained of foul smelling, discolored water after storm events. 4/18/07	Examined stream and took water samples. Nothing unusual came back in the lab results and stream looked normal.	Told citizen to call WMM directly next time it happens. If we can witness it, we may be able to determine what is happening. <b>Case closed</b>	3114 Lightfoot Drive.
07-029	Citizen complaint of slimy orange material in stream. 5/1/07	Examined stream and found no evidence of material. Most likely were iron bacteria, which are naturally occurring.	Emailed citizen our findings and advised him to notify us if it was seen again. <b>Case closed</b>	Sudbrook Park near Shamrock Lane. 25 D12
07-030	Illegal sump pump hook-up. 6/8/07	DPW asked that we make sure the homeowners have done the repair.	PDM plumbing inspection reports that problem has been corrected. <b>Case closed</b>	6816 Old Pimlico Rd. 26 C10

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07-031	Stream has an unusual odor. 4/18/07	Visited site and determined the unusual smell was gas in the nearby storm drain inlet.	BGE repaired the leaking gas main. <b>Case closed</b>	2219 Dalewood Road. 19 D10
07-032	Routine outfall visit found crack in the apron and severe stream erosion. 6/11/07	Referred cracked apron to Storm Drain Design and erosion to CIP.	<b>On-going</b>	Outfall #677, Waltham Woods Road 28 C6
07-033	Routine visit found outfall filled 100% with sediment. 6/26/07	Referred to DPW to be cleaned out.	<b>On-going</b>	Outfall # 517. Near railroad tracks at Arbutus Ave.
07-034	Complaint of milky white colored stream water. 4/6/07	Investigated and did not find the discolored water. Lab samples showed nothing unusual.	Left message to notify citizen of findings. <b>Case closed</b>	Fairways Apartments. 27 G9
07-035	Volunteers cleaning stream noticed sewage smell. 6/3/07	Referred to Environmental Health	Manhole on top of concrete sewer pipe was missing its lid; it has been replaced by DPW. <b>Case closed</b>	Near 6 Oella Avenue. 40 F4
07-036	Tree in danger of falling and stream eroding. 6/18/07	Referred tree to DPW Highways and erosion to CIP.	Tree was removed. <b>On-going</b>	322 Worthington Avenue. 27 E9
07-037	Bad odor and cloudy water observed at outfall. 7/5/07	Investigated and referred to DPW.	Sanitary sewer system operating fine. The smell is coming from a stagnant storm water pond. Cloudy water came from some contractors dumping down the storm drain. <b>Case closed</b>	9414 Tulsmere Road. 24 D10
07-038	Routine visit found outfall #535 filled 75% with debris. 7/17/07	Referred to DPW Highways.	DPW Highways will be cleaning this outfall. <b>Case closed</b>	42 K9
07-039	Routine visit found outfall #710 had apron damage. 7/17/07	Referred to DPW Storm Drain Design Section.	<b>On-going</b>	42 A11
07-040	Routine outfall visit found large items of trash dumped and plunge pool containing black water. 8/2/07	Referred trash to PDM, will investigate the black water.	Black water was the result of sulphur oxidizing bacteria, which are naturally occurring. PDM forwarded trash to DPW and the local community association. <b>On-going</b>	36 E4
07-041	Illegal dumping. 8/2/07	Referred to PDM.	Dirt has been mounded to close area to vehicles and trash has been removed. <b>Case closed</b>	36 E11
07-042	Routine visit found outfall #683 75% full of sediment. 7/10/07	Referred to CIP.	This outfall was hit by a car and thrown off, it is on the list to be corrected by a contractor. <b>Case closed</b>	18 H7

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07-043	Large items of trash dumped behind 3167 Jeffland. 7/18/07	Referred to PDM	<b>On-going</b>	33 C4
07-044	Stream water colored milky white. 9/5/07	Investigated and found little evidence remaining of color or source.	Spoke to MDE who also investigated the case and has been unable to locate the source due to intermittent nature. DEPRM checked up on the site once more and found no problems. <b>Case closed</b>	26 K7
07-045	Routine outfall visit found chlorine present. 6/22/07	Traced chlorine to a storm drain inlet in front of 7425 Ricksway Road.	Referred to Baltimore City. Notified MDE of the city's noncompliance with multiple requests for repair. <b>On-going</b>	33 D1
07-046	Homeowner complained of severe erosion in her backyard. 8/29/07	Referred to CIP.	<b>On-going</b>	6713 Queensferry Rd. 27 G10
07-047	Citizen complained of soapy water in stream. 9/10/07	Visited the site twice and found no evidence of soapy discharge. Checked nearby schools for evidence of dumping and found nothing.	Told citizen to call us if she saw it again. <b>Case closed</b>	Padonia Road where stream crosses road, across from the Dulaney Valley Memorial Gardens. 19 B9
07-048	Significant trash and debris on property that washes into Cooper's Run. 9/5/07	Referred to PDM.	Notice was issued to remove a small amount of trash. <b>Case closed</b>	409 Oella Avenue. 40 H3
07-049	Trash from property getting into Miller's Run. 9/5/07	Referred to Environmental Health.	Inspector will be contacting regional manager of Bedding Barn to have the litter cleaned up and maintained in the future. <b>Case closed</b>	6613 Baltimore National Pike. 40 K1
07-050	Trash from property getting into Miller's Run. 9/5/07	Referred to PDM.	Inspector found the area to be very clean. <b>Case closed</b>	6619 Baltimore National Pike. 40 K1
07-051	Trash from property getting into Miller's Run. 9/5/07	Referred to PDM.	Violation was issued to clean up area around dumpster. <b>Case closed</b>	6631 Baltimore National Pike. 32 J13
07-052	Abandoned car in woods. 9/17/07	Referred to PDM.	Inspector did not locate any abandoned vehicles. <b>Case closed</b>	Wooded area next to 9920 Quad Avenue. 36 F11
07-053	Outfall 75% submerged. 9/17/07	Referred to DPW.	Outfall will be shoveled out and routinely maintained. <b>Case closed</b>	Wooded area next to SWM. 36 G11
07-054	Outfall found to have rusted holes in metal apron. 9/7/07	Referred to DPW.	<b>On-going</b>	Next to 9629 Harford Road. 28 E/F7
07-055	Low levels of copper	Investigated and found no	<b>Case closed</b>	Outfall 547. 28 C4

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	found during routine outfall screening. 9/7/07	sources of copper. Determined that copper is from non-point sources.		
07-056	Outfall pipe coming apart at seam. 9/13/07	DPW sealed the joint inside the pipe.	<b>Case closed</b>	Outfall 037. 44 J3
07-057	Carts dumped in stream and chlorine present. 9/13/07	Will investigate the source of the chlorine.	PDM will hire contractor to clean up carts and bill BGE who owns the property. <b>On-going</b>	Outfall 038. 44 J3
07-058	Couches dumped in stream. 9/13/07	Referred to PDM.	Inspector did not find any couches. <b>Case closed</b>	Outfall 506. 44 H1
07-059	Trash dumping in stream. 10/5/07	Referred to PDM.	Inspector issued a notice to clean up trash by 12/9 or violation will be issued. <b>Case closed</b>	Outfall 628. 33 E3
07-060	Exposed pipe on eroded stream bank. 10/18/07	Referred to DPW Utilities.	Only a clean out pipe for home. <b>Case closed</b>	Outfall 607. 16 D13
07-061	Severe erosion downstream of outfall and chlorine detected. 10/5/07	Referred erosion to CIP. Referred chlorine leak to DPW. Referred landscape dumping to EIR.	Landscape dumping will be cleaned up by apartment maintenance. Notified MDE of the city's noncompliance with request for repair. <b>On-going</b>	Outfall 630. 33 E6
07-062	Trash dumping behind shopping center. 9/17/07	Referred to Environmental Health.	Violation issued. <b>Case closed</b>	Outfall so-954. 28 A11
07-063	Excessive trash dumping and abandoned cars in undeveloped wooded lot. 10/22/07	Referred to Environmental Health.	<b>On-going</b>	Outfall 250. 36 E11
07-064	Excessive trash on abandoned property. 10/22/07	Referred to Environmental Health	Violation issued. <b>Case closed</b>	Outfall 657. 36 J1
07-065	Staff noticed several violations in sediment control and building on a construction site. PVC pipe leading right to stream for purposes of draining the pool. 11/8/07	Referred pipe drainage to Environmental Health. Referred violations to Environmental Enforcement and Sediment Control.	Homeowners had permits for everything. Pipe was discharging surface water during construction of pool, had already been removed. <b>Case closed</b>	3619 Woodvalley Dr. 25 G7 0
07-066	Mulch and sediment dumped in stream buffer from landscaping. 10/16/07	Referred to Sediment Control.	No violation issued at this time, neighborhood is under close watch for the future. <b>Case closed</b>	25 K9
07-067	Ground around sewer manhole is very mushy and water is coming up from the ground and pooling. 10/10/07	Called Utilities emergency sewer line.	Sewer manhole is functioning properly. No chlorine present. Water is naturally occurring spring. <b>Case closed</b>	Behind 3311 Terrapin. 25 H9
07-068	Citizen complained of outfall with cloudy water	Visited site and water was clear.	Determined foam to be naturally occurring.	840 Oella Mills. 40 F3

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	discharging to the Patapsco. Also concerned about foam coming from upstream. 11/5/07		Plume was from concrete trucks being washed out, the site inspector has been made aware of the situation. <b>Case closed</b>	
07-069	Routine outfall testing found high pH. 10/18/07	Probably due to natural condition of algae in pond. Will do more water quality tests to be certain.	<b>On-going</b>	Outfall 584. 16 H13
07-070	During fieldwork found a construction site with sediment fences that had fallen down. 11/13/07		Referred to Sediment Control. <b>On-going</b>	26 A10
07-071	During fieldwork found severe erosion that was undermining the gabion basket at an outfall. 10/23/07		Stormwater Engineering issued a correction notice for several violations. <b>Case closed</b>	26 B8
07-072	Excessive trash in stream buffer coming from bottling plant. 10/5/07	Referred to PDM.	Inspector did not find excessive trash. <b>Case closed</b>	Behind 1620 Whitehead Court. 33 D9
07-073	Field staff witnessed contractors working on culvert dumping buckets into stream. 12/4/07	Referred to MDE.	<b>On-going</b>	Culvert at 83 near Coppermine Terrace. 26 E9
07-074	Homeowners remodeling and dumping debris into the stream. 12/4/07	Referred to Environmental Health.	Violations were found. <b>Case closed</b>	Behind 6606 and 6610 Falls Road. 26 E9
07-075	Water bubbling up from road and running into a storm drain inlet. 12/18/07	Referred to Baltimore City Public Works.	Water line has been repaired. <b>Case closed</b>	604 Alleghany Avenue. 27 B6
07-076	Businesses dumping construction debris into stream. 12/11/07	Referred to Environmental Health.	<b>On-going</b>	1408 Shoemaker Road. 26 E/F9
07-077	Chlorine found while screening outfall. 8/2/07	Referred to Baltimore City DPW.	<b>On-going</b>	Outfall #315. 27 E7
07-078	Citizen complaint of gray stream water. 12/07	Investigated and found water to be clear. Told citizen to call again if he sees the problem.	<b>Case closed</b>	9204 Chenoak. 28 D7
07-079	Area posted with forest conservation sign is being mowed. 12/27/07	Referred to Baltimore City Forestry	Area is actually private property. <b>Case closed</b>	End of Altamont. 26 G11
07-080	Field staff witnessed dump truck full of bags being unloaded in to forest buffer. 12/11/07	Referred PDM.	PDM will not investigate without an exact address and this parcel does not have one. <b>Case closed</b>	Near Railroad Avenue. 26 G11
07-081	Outfall 75% blocked by sediment and debris. 12/18/07	Referred to DPW	<b>On-going</b>	Belmar Park. 36 E2
07-082	Outfall apron damaged. 12/18/07	Referred to DPW	<b>On-going</b>	Outfall 135. 36 G4

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07-083	Citizen complaint of blue-green colored stream. 4/6/07	Visited the site twice and did not observe unusual color. Water quality tests confirmed no pollution problem.	<b>Case closed</b>	1400 Coppermine Terrace. 26 E9
07-084	Outfall was discharging an unusually high amount of water. 12/07	Tested outfall and found it was chlorinated water.	Referred to Baltimore City. <b>On-going</b>	3018 Lightfoot. 25 K10
07-085	Routine outfall inspection found excessive iron bacteria. 6/19/07	Tests and inspection determined iron bacteria to be naturally occurring.	<b>Case closed</b>	Outfall 460. 42 A5
07-086	Citizen complained of stream flooding due to sediment build-up. 10/23/07	Referred to DPW Highways.	Problem is not severe enough to warrant action at this time. <b>Case closed</b>	Outfall 174. 28 B10
07-087	Trib to Gunpowder Falls full of silt. 5/7/07	Visited twice and could not find any sources of sediment.	Determined sediment to be from stream erosion and non-point sources. <b>Case closed</b>	Falls Road. 7 A6

**5.5 Regional Illicit Connections Investigations and Complaint Database**

For many decades, Baltimore County health inspectors have investigated complaints that are now categorized as potential illicit connections. These complaints include septic systems, leaky refuse and grease containers, the dumping of used motor oil, leaky engines, and industrial maintenance activities among others. Because these investigations are only a small percentage of the thousands of complaints received each year by the regional programs, it was difficult to separate complaints with a potential illicit connection from the rest of the caseload. These thousands of complaints were analyzed and broken down into the categories seen in Figure 5-5. After looking at the data from the past five years, it was determined that the breakdown into categories is approximately the same each year and we can assume these numbers will continue to be the same in the future; therefore, starting this year we will not analyze the cases by category.

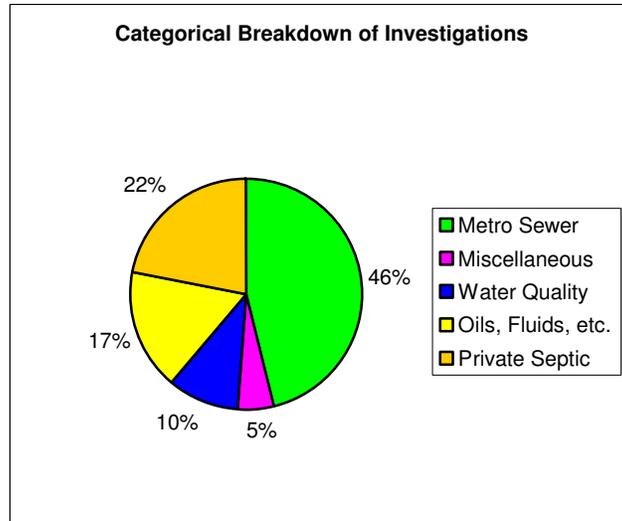


Figure 5-5. Involvement of the Regional Programs in the Investigation of Illicit Connections. This is the approximate breakdown of cases based on past data.

### 5.6 Summary

The Outfall Prioritization Program has increased efficiency in detecting pollutants. A database is used to assign a priority rating for each outfall based on past screening data and the potential for having illicit connections. Outfalls are screened periodically based on their priority rating, which is assigned or appropriately changed when information is entered. The type and severity of pollution determines the outfall's position in the queue. The combination of citizen involvement, routine outfall screenings and the regional staff complaint investigations is working well to our continuing goal of preventing and eliminating illicit connections.