Complaint and Settlement Agreement between Howard County, Maryland and the Maryland Department of the Environment CO-10-1116

June, 2013
CMOM Audit Report  No. 2

January, 2012

Through

December, 2012

Complaint and Settlement Agreement between Howard County, Maryland and the Maryland Department of the Environment
CO-10-1116

June, 2013
This Self-Audit Report is a requirement of “Paragraph C, CMOM Audit” of the Complaint and Settlement Agreement. One year after the commencement of implementation of the approved CMOM Program, and annually thereafter until termination of this Agreement, the County shall conduct a performance assessment audit to evaluate the CMOM Program and submit a report to MDE certifying and describing:

A. All CMOM tasks completed within approved schedules/milestones and providing an explanation for CMOM work not performed as required;

B. The effectiveness of the CMOM Program in preventing and minimizing the adverse impacts of Overflows and Building Backups; and

C. The number and causes of Overflows and known Building Backups that have occurred in each sewer shed for the previous year; and

D. Actions planned and/or implemented to respond to any failures to perform scheduled CMOM tasks;

E. Any Collection System deficiencies identified during inspections performed pursuant to the CMOM and actions planned or implemented to address them;

F. Whether the County has adequately prioritized rehabilitation work to maximize the reduction of Overflows.

This report is to address the second annual CMOM program Self-Audit. Howard County (County)’s CMOM manual was approved by MDE on June 30th, 2011, and was posted on the County’s website with the approval letter from MDE received on July 1st, 2011. The first CMOM Self-Audit report was submitted to MDE on June 22nd, 2012. The County received the approval letter on December 27th, 2012.
A. All CMOM Tasks Summary in 2012

In order to guide the overall tracking and management of an effective and efficient CMOM program, the County intends to meet the following “General Standards” consistent with the EPA’s CMOM requirements:

- Take all feasible and cost-effective steps, as appropriate, to prevent sanitary sewer overflows and to minimize the impact of sanitary sewer overflows when they do occur.
- Properly manage, operate, and maintain all parts of the sewage collection system operated by or under the control of Howard County.
- Identify sewer system capacity needs and deficiencies to provide adequate collection system capacity to convey base and peak flows.
- Establish a chain for communication for sharing information within County departments, State authorities, and community stakeholders.

As is described in the CMOM manual, the County’s quantitative short-term and intermediate-term and long-term goals are summarized as below:

- Inspect manholes once every five years.
- Clean sewer mains which do not have self-cleaning flow characteristics once every 5 years.
- Perform routine CCTV inspection on approximately 5% of the sewer collector mains each year.
- Enhance the efficiency of maintenance crews to achieve an average response time to routine sewer problems of 1 hour or less.

The County’s collection system is served by 30 pumping stations, approximately 975 miles of sewer ranging in size from 4 to 48 inches, and roughly 30,000 manholes. The average annual flow to the Little Patuxent Wastewater Reclamation Plant (LPWRP) for 2012 was 19.3 MGD. According to the given assumption, the County’s quantitative goals in 2012 are interpreted as:

- Inspect 6,000 manholes.
- Clean 195 miles of sewer mains.
- Perform routine CCTV inspection on approximately 48.75 miles (257,400 ft) of sewer collector mains.
- Enhance the efficiency of maintenance crews to achieve an average response time to routine sewer problems of one (1) hour or less.

To achieve the CMOM goals, the County has implemented an enhanced collection system maintenance program, with different CMOM components listed in the below charts by
month from January through December 2012. Assuming the sewer collection system has a life span of 100 years, the County will repair/replace 1% of the sewer collection system on average each year; that is, to repair/replace 9.75 miles (51,480 ft) of the sewer mains and 300 manholes. However, as the repair work is identified from the assessment projects, the schedule of repair will be developed accordingly, and will very likely vary from year to year.

A1. Manhole Inspections:
A2. Sewer Cleaning:

### A2 Main Cleaning In-house vs Contractor in 2012

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2 Contractor, miles</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>22.3</td>
<td>3.36</td>
<td>-</td>
<td>15.0</td>
<td>0.16</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A2 In-House, miles</td>
<td>5.08</td>
<td>9.33</td>
<td>13.4</td>
<td>3.73</td>
<td>8.83</td>
<td>13.8</td>
<td>10.0</td>
<td>7.20</td>
<td>7.03</td>
<td>6.27</td>
<td>3.29</td>
<td>2.33</td>
</tr>
</tbody>
</table>

### A2 Main Cleaning Cumulative in 2012

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
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<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
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</thead>
<tbody>
<tr>
<td>A2 Cumulative</td>
<td>5.08</td>
<td>14.40</td>
<td>27.81</td>
<td>31.53</td>
<td>62.76</td>
<td>79.94</td>
<td>90.00</td>
<td>112.2</td>
<td>119.4</td>
<td>125.6</td>
<td>128.9</td>
<td>131.2</td>
</tr>
<tr>
<td>Goal</td>
<td>16.25</td>
<td>32.50</td>
<td>48.75</td>
<td>65.00</td>
<td>81.25</td>
<td>97.50</td>
<td>113.7</td>
<td>130.0</td>
<td>146.2</td>
<td>162.5</td>
<td>178.7</td>
<td>195.0</td>
</tr>
</tbody>
</table>
A3. Sewer CCTV Inspection

A3 Main CCTV In-house vs Contractor in 2012

A3 Main CCTV Cumulative in 2012
A4. Sewer Main Repairs

The County performed the sewer main repair/replacement on an As-Needed basis. 18 sewer mains were repaired by County’s in-house staff in 2012, totaled 4,888 ft.
A5. Sewer Cleanout Repairs

The County performed the manhole repair/replacement on an As-Needed basis. Sanitary sewer manholes are repaired by County’s in-house staff and contractors. There were 25 manholes repaired in 2012.

A6. Manhole Repairs

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A7. Sewer Right of Way Maintenance

In 2012, there was no smoke testing performed by in-house staff. The County has contracted George, Miles & Buhr (GMB) to provide engineering services with smoke testing the North Laurel Area. The intent of this project is to identify the specific locations where the system defects exist to reduce the quantity of extraneous inflow from entering the North Laurel Pump Station.

A8. Smoke Testing

In 2012, there was no smoke testing performed by in-house staff. The County has contracted George, Miles & Buhr (GMB) to provide engineering services with smoke testing the North Laurel Area. The intent of this project is to identify the specific locations where the system defects exist to reduce the quantity of extraneous inflow from entering the North Laurel Pump Station.
A9. Sewer Pumping Station Inspections

The Howard County sewer pumping station program, as outlined in the CMOM, provides for station checks of each sewer pumping station twice per week.

A10. Root Treatment

In 2012, the County has scheduled root treatment in 44 sewer mains (11,837 ft), 23 Sewer House Connections, and three (3) manholes.

A11. FOG Program

The County’s FOG program inspections consist of:

- Pretreatment staff inspections on Best Management Practices (BMPs), grease interceptors, used cooking oil handling and collection, solid waste handling and disposal; and other activities
- Inspections conducted by the FSEs through their self-monitoring reports
- Inspections conducted by the waste haulers when they pump the interceptors

In 2012, the County has 681 permitted Food Service Establishments (FSEs). Among them 498 have outside interceptors, 135 have inside interceptors, and the rest have neither. The inside interceptors are supposed to be inspected twice every year and the outside interceptors are inspected once every year. Those who don’t have grease interceptors are also inspected and are required to implement BMPs in handling food wastes. A sample FSE inspection checklist is attached in Appendix A-1. The County performed 559 inspections in total in 2012.

On a semi-annual basis, FSEs with inside interceptors are required to submit their self-monitoring reports. See sample semi-annual operation and maintenance report in Appendix A-2. This report shows the dates when the pump outs occurred and when the grease barrels were collected. 270 reports have been received from FSEs in 2012, 148 submitted from the first half year and 122 from the rest.

The County has 244 vehicle service facilities. Among them, 91 have oil/water separators, which are supposed to be inspected once every year. There were 116 inspections performed throughout the year.

Also attached in Appendix A-3 is a sample Waste Hauler report. This report contains the condition assessment of the interceptors when they were pumped. The frequency varies from weekly to bi-yearly. The owners or managers of the FSEs make the determination for the pumping, cleaning frequency, and cleaning methods, based on type and size of the FSE, as well as the frequency of usage.
As far as the inspections, reporting requirements, and enforcement actions go, they are consistent with the County’s current sewer use ordinance and draft FOG POLICY. The County is in communication with the restaurant association to finalize the proposed amendment. Now the ball is in County’s court for review.

A12. Pretreatment

The Howard County Pretreatment staff is based at the County’s LPWRP and is responsible for the implementation of the County’s Pretreatment program, including limiting the discharge of fats, oils, and grease (FOG) into the County’s collection system. On January 19th, 2012, the County received an excellent remark on the pretreatment program from MDE for the annual Pretreatment Compliance Inspection (PCI) conducted on July 19th, 2011.

B. The Effectiveness of the Approved CMOM Program

B1. CMOM Programs Recent Performance Summary

The County’s CMOM program has been fully implemented starting January 2011. As of today, the County has submitted five (5) semi-annual progress reports, under the requirement of “Paragraph F, Reporting” of the Complaint and Settlement Agreement with MDE.

In 2012, the County purchased a new version of their Asset Management System, and was in the process of upgrading their Asset Management System from Hansen 7.7 to 8. The County has completed the integration by May 2013. From then on, all the progress of CMOM activities shall be tracked in Hansen 8.

Johnson Mirmiran & Thompson Inc. (JMT) continues the on-site engineering support and contractor management to assist the implementation of the CMOM program. This on-site level of effort is in conjunction with JMT Technology Group’s efforts in developing a Geographic Information System (GIS) for the County’s sanitary collection system and water distribution system.

Starting January 2011, the two County’s on-call contractors, Video Pipe Service (VPS) and TRB Specialty (TRB) have been performing collection system repair/restore/replacement activities concurrently with the maintenance crew of Bureau of Utilities to meet the CMOM goals.

The Self-Audit process involves interviewing the various personnel, observance of field activities, field inspection of equipment and resources, and review of pertinent records and management information systems. Specific audit components include audit findings
(program deficiencies), audit responses (steps to correct each deficiency), and schedules to implement audit responses. In order to assist the Self-Audit process, the County utilizes a CMOM Self-Audit Checklist as shown in Appendix B-1 to track the audit findings and audit responses.

B2. Sewer System Overflows (SSO’s) in the Previous Year

For the period of January through December 2012, there were twenty-four (24) SSO’s within the Howard County Sanitary Sewer Collection system for a total of 19,536,850 gallons. See Appendix C for a detailed break-down with probable causes in 2012.

There was one SSO occurrence at Little Patuxent Water Reclamation Plant (LPWRP), which is caused by power outage during Hurricane Sandy and account for 99.8% of the total overflow volume. LPWRP lost both feeders around 11 p.m. on October 29th, and the electricity was retrieved around 11:30 a.m. the next morning. Although the plant currently holds a backup generator, it can only power the plant for 15 to 30 minutes at a time. In that case, the County has engaged Hazen & Sawyer on a capital project to design a backup diesel generator system by summer 2014, which could supply the power sufficient for 24 hours.

Same as 2011, Howard County maintains a far below national average for the number of sewer overflow occurrence. The national average for SSO is 4.5 per 100 miles of sewer, based on a 2004 EPA report to Congress. The County’s average is 2.4 per 100 miles of sewer.

* Precipitation Data Resources: National Climatic Data Center
The County’s SSO’s have been plotted by month in the above chart. As is shown in the chart, October, when Hurricane Sandy took place, had the greatest amount of precipitation and overflow volume in 2012.

Hurricane Sandy was the deadliest and most destructive hurricane of the 2012 Atlantic hurricane season. Hurricane Sandy affected 24 states, including the entire eastern seaboard from Florida to Maine.

C. **The Number and Causes of Overflows and Known Building Backups**

As is described in Section B2, 99.8% of the total overflow volume was caused by Hurricane Sandy, an act of god. Except for the incident at the LPWRP, the total overflow quantity was the least of the previous 10 years’ record. In the CMOM Self-Audit Checklist, the causes of overflows have been categorized into:

<table>
<thead>
<tr>
<th>Category</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity Related</td>
<td>SSO’s are storm related</td>
</tr>
<tr>
<td>Maintenance Related</td>
<td>SSO’s due to debris obstruction and roots</td>
</tr>
<tr>
<td>Operations Related</td>
<td>SSO’s due to power failure</td>
</tr>
<tr>
<td>Caused By FOG</td>
<td>SSO’s due to restaurant grease blockage</td>
</tr>
<tr>
<td>Caused By Sources Other Than FOG</td>
<td></td>
</tr>
<tr>
<td>Caused By Pipe/Equipment Failures</td>
<td></td>
</tr>
<tr>
<td>Caused By Damage</td>
<td>SSO’s due to vandalism, contractor misconduct, etc.</td>
</tr>
</tbody>
</table>

The number and probable causes of SSO’s and building backups in 2012 have been illustrated in Appendix C.

To take a further step into the long-term investigation, the County researches the causes and numbers of SSO occurrence from 2001 to 2012.
As is shown in the above chart, the top three (3) causes of overflows county-wise are: grease blockage, pipe/equipment failure, and debris obstruction. While taking the estimated overflow amount into consideration, power failure, storms, pipe and equipment failures rank the highest of the total SSO volume contribution.
Location wise, the County’s SSO’s from 2001 to 2012 are plotted on the GIS map, and SSO’s are symbolized by the seven (7) major causes defined in the CMOM Self-Audit Checklist. See Appendix E.

Unlike many municipalities that are struggling to control overflows and maintain an aging infrastructure system, Howard County’s collection system is comparatively young and sized to avoid most capacity issues. Howard County has positioned itself with sufficient resources to adequately maintain the existing sanitary sewer collection in the sanitary sewage system and keep pace with current needs.

D. Actions Planned and/or Implemented to Respond to Any Failures

D1. Successes and Failures in Achieving the Goals in 2012

As is shown in the Section A and Appendix B, although most CMOM tasks completed in 2012 didn’t achieve the goal, the County has improved in the following aspects comparing to the previous year:

a. Inspected and repaired more sewer mains
b. Kicked off the first smoke testing program to target the I&I problem in North Laurel
c. Less customer complaints; and most importantly,
d. Less number of SSO occurrences.

D2. Action Planned and/or Implemented in Achieving the Goals for 2013

The collection system repair/replacement will still be conducted on an as-needed basis. The County has planned more CCTV main inspections-A3, and smoke testing-A8 in 2013. The cleaning, CCTV and smoke testing activity progress has been illustrated in Figure A1, A2 and A3 respectively in the Appendix D.

E. Collection System Deficiencies Identified and Actions Planned or Implemented

E1. Collection Systems Deficiencies Identified under CMOM

As we concluded in Section C, the area of greatest need with regard to the collection system is to control the County’s SSO’s which are caused by blockages (grease, debris, and roots). The County has programmed various CMOM components to be performed in order.
The cleaning team is scheduled to go first. Based on the notes taking by the cleaner, the County is able to identify the problematic area with grease, roots, debris and other obstructions. Then the County engages the CCTV contractor to conduct a NASSCO PACP certified condition assessment. Therefore, the engineers could decide the rehabilitation method according to the defects qualified and quantified during CCTV inspections. The County also schedules the comprehensive smoke testing projects. The contractors are looking for locations such as roof drains or storm drain inlets directly to the sewer collection system, as well as defective mains and cleanouts caps. The final steps will be rehabilitation design and construction.

By the end of 2012, the County has completed the CCTV inspections for the problematic sewers notified by cleaner in the following drainage basins: small pump stations above route 99, Tiber and Sucker Branch, Route 40 pump station, and Plumtree. The drainage basins are illustrated in Appendix D & E.

E2. Collection Systems Deficiencies Identified under SSES

The SSES report for the Little Patuxent was submitted to MDE on May 25th, 2010 in accordance with the Agreement. The contractor completed the necessary improvements by November 2011. Three progress reports have been submitted to MDE to describe the activity/action taken to reduce I&I along the Little Patuxent Interceptor. The first progress report was submitted on March 24th, 2011, the second was submitted on June 2nd, 2011 and the third progress report was submitted to MDE on January 3rd, 2012.

The SSES reports for the Patapsco Basin and Hammond/Guilford Basin were delivered to MDE on December 7th, 2011, followed by the Recommendations and Implementation Schedule sent through email on August 23rd, 2012. MDE approved both SSES reports along with the Recommendations and Implementation Schedule on October 2nd, 2012. Meanwhile, the County had started investigating the rehabilitation activities recommended in the SSSES reports, and prioritized the investigation and rehabilitation activities towards the defects based on their I&I contribution. By 2013 July, the County has almost completed all corrective actions which lead to major I&I contribution.

E3. Collection Systems Deficiencies Identified during Routine Preventive O&M

The County’s in-house staff implements a preventive O&M program, which is to investigate the collection system on a regular basis and rehabilitate the deficiencies as needed. The County’s in-house staff also takes care of the customer complaints and responds to the overflow emergencies.
F. **Whether the County has adequately prioritized rehabilitation work to maximize the reduction of Overflows**

Since sanitary sewer systems are subject to harsh and corrosive conditions, the CMOM program is required to assess the structural condition of the system through field investigations including CCTV inspections. The results of the assessments lead to identifying and ranking the long-term and short-term rehabilitation actions to correct the problems.

Regarding the rehabilitation actions recommended in the SSES reports of Little Patuxent, Patapsco, Guilford Run/Hammond Branch, the consultants use the combined results not only from the field investigation, including manhole inspections, CCTV sewer main condition assessment, flow monitoring, but also the hydraulic model to prioritize the work to maximize the reduction of overflows.

![Sewer System Overflows 2002-2012](chart)

As is shown in the above chart, over the past 11 years from 2002 to 2012, the County has the SSOs/mile/year ranging from 1.2 to 3.8, while the national average posted by EPA in 2004 is 4.5. What’s more, the County’s overall trend of SSOs/mile/year is downward.

To further investigate the correlation between numbers of SSO occurrence to the total amount, the 11 years’ precipitation data is plotted in the below chart. Although the
numbers of SSO occurrence over the years keep a downward trend, the total overflow amount is severely affected by the by-pass incident that happened during Hurricane Sandy at LPWRP.

This report serves the purpose of the County’s second yearly Self-Audit. The County will continue to monitor the performance of the CMOM program annually to make sure the County

- Properly manage, operate, and maintain, at all times, the parts of collection system that they own or have operational control.
- Provide adequate capacity to convey base flows and peak flows.
- Take all feasible steps to stop and minimize the impact of sanitary sewer overflows.
- Provide notification to parties with a reasonable potential for exposure to pollutants associated with an overflow event.
- Develop a written summary of their CMOM program and make it available to the public upon request including self-audits.
Appendix A-1

Sample FSE Inspection Checklist
Howard County Government
Food Service Establishment Checklist

1. Facility Name: Domino's Pizza  Inspection Date: 05/21/2012
2. Facility Address: 6010 Meadowridge Center Drive, Elkridge, Maryland, 21075
3. Facility Manager: Manuel Sanchez
4. Type of food service operation (café, cafeteria): Pizza Restaurant

I Grease Trap/Interceptor  Size: 1000 Gallons
1. Type (under the sink, in-ground, automatic): Outside
2. Location: In the front of Kupcake & Company/which is located in the rear of the Building
3. Pump out schedule (monthly, weekly, etc.): Quarterly
4. Pumper/service provider: Hatfield's Septic Service
5. Yes ☑ No Maintenance log available on-site
   Note: Management must observe pumping to ensure it is done properly.

II Kitchen Equipment/Devices
1. Yes ☑ No  Fine mesh strainers are in place in all floor drains and sinks.
   
   Dry Cleanup
   1. Yes ☑ No  Are serving wares, utensils or food preparation surfaces wiped clean before washing?
   2. Yes ☑ No  Are employees provided the necessary training and tools (rubber scrapers, brooms, absorbent materials for spills) for dry cleanup?
   3. Yes ☑ No  Are garbage cans present in pre-wash area?
   4. Yes ☑ No  Are floors swept before mopped or hosed down?

   Employee Awareness Training
   1. Yes ☑ No  Is BMP poster on display at the 3 compartment sink? Are employees trained on FOG BMPs and are employees trained on these follow these procedures?

   Grease Disposal
   1. Yes ☑ No  Are outside oil and grease storage bins kept covered?
   2. Yes ☑ No  Is there a cooking oil caddie to prevent oil and grease spills while transferring from inside the restaurant to the outside storage bin?
   3. Yes ☑ No  Are the outside storage bins located away from storm drains and catch basins?
   4. Name of Hauler: N/A  Tele No: N/A

Customer Signature: ________________________________
Howard County Government
Food Service Establishment Checklist

1. Facility Name: Cafe' Bagel  
   Inspection Date: 05/23/2012

2. Facility Address: 6010 Marshall Drive, Elkridge, Maryland, 21075

3. Facility Manager: Andy Lee

4. Type of food service operation (café, cafeteria): Bagel Shop

I Grease Trap/Interceptor  Size: N/A  Gallons

1. Type (under the sink, in-ground, automatic): N/A

2. Location: SOLID WASTE PERMIT/Not required to have trap/interceptor

3. Pump out schedule (monthly, weekly, etc.): N/A

4. Pumper/service provider: N/A

5. Yes  No  Maintenance log available on-site
   Note: Management must observe pumping to ensure it is done properly.

II Kitchen Equipment/Devices

1. Yes  No  Fine mesh strainers are in place in all floor drains and sinks.

Dry Cleanup

1. Yes  No  Are serving wares, utensils or food preparation surfaces wiped clean before washing?

2. Yes  No  Are employees provided the necessary training and tools (rubber scrapers, brooms, absorbent materials for spills) for dry cleanup?

3. Yes  No  Are garbage cans present in pre-wash area?

4. Yes  No  Are floors swept before mopped or hosed down?

Employee Awareness Training

1. Yes  No  Is BMP poster on display at the 3 compartment sink? Are employees trained on FOG BMPs and are employees trained on these follow these procedures?

Grease Disposal

1. Yes  No  Are outside oil and grease storage bins kept covered?

2. Yes  No  Is there a cooking oil caddie to prevent oil and grease spills while transferring from inside the restaurant to the outside storage bin?

3. Yes  No  Are the outside storage bins located away from storm drains and catch basins?

4. Name of Hauler: N/A  Tele No: N/A

Customer Signature: ____________________________________________
Appendix A-2

Sample Semi-annual Operation and Maintenance Report
Report Must Be Posted Near Grease Trap
SEMI-ANNUAL OPERATIONS AND MAINTENANCE REPORT

Name of Establishment: Royal Farms #54

Facility Address: 8268 Lark Brown Road, Elkridge, Maryland, 21075

Contact Person: Series Peeyush Title: Manager

Tel. No.: 410-371-9580 Fax No: 410-889-8347

Report Period (please circle one) from: 8/1 to: 1/31 or from: 2/1 to: 7/31

<table>
<thead>
<tr>
<th>GREASE TRAP MAINTENANCE LOG</th>
</tr>
</thead>
<tbody>
<tr>
<td>When was it last cleaned</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When Was the Barrels Picked Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Was the Barrels Picked Up</td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Name of Rendering Company:

Telephone Number of Rendering Company:

DO ALL SINKS AND FLOOR DRAINS HAVE SCREENS (STRAINERS) IN PLACE? YES NO

CERTIFICATION: To the best of my knowledge, I certify that the above information is true, complete and correct.

PRINT NAME: ____________________________

SIGNATURE: ____________________________

TITLE: ____________________________ DATE: ____________________________

REPORTS ARE DUE BY: FEBRUARY 1ST AND AUGUST 1ST OF EACH YEAR. REMEMBER: WE START ACCEPTING FORMS BEGINNING JANUARY AND JULY FOR THE CORRESPONDING CYCLE

FAX TO: 410-880-5812

Revised: 7/22/10
Appendix A-3

Sample Waste Hauler Report
Howard County
Department of Public Works
BUREAU OF UTILITIES

Little Patuxent Water Reclamation Plant
8900 Greenwood Place, Savage, Maryland 20763
Tel.: 410-880-5810  Fax: 410-880-5812

Hauler Inspection Report

Facility Information
Name: Copeland's
Address: 10280 Winthrop Circle
Hauler Company:

Frequency: 4 X Per Month or Per Year

Interceptor

<table>
<thead>
<tr>
<th>Grease / Used Oil Layer</th>
<th>1/4 Inches</th>
<th>Total 27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids / Sludge Accumulation</td>
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<td></td>
</tr>
<tr>
<td>Influent / Effluent Drops Intact</td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td>Baffles / Interceptor Intact</td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td>Manholes Accessible</td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td>Cleanouts Missing Caps Full of Debris</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hauler Driver Initials:

Requires Immediate Inspection of County Official Yes No

Facility Employee Signature:

Disposal Location:

You May leave yellow copy at Weigh Station
White – Business  Yellow – Agency  Pink – Hauler
Appendix B

CMOM Self-Audit Checklist
## I. CMOM Programs Recent Performance Summary

### Performance Measures for Year 2012

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Year 2013</th>
<th>Month</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Goal</td>
<td>Actual</td>
<td></td>
</tr>
</tbody>
</table>

| A. Number of Customer Complaints | 0 | 687 | Plugged sewer service line: 512  
Plugged sewer main: 17  
Clean out cap and/or panella issue: 100  
Shared Septic Sewer Overflow: 1  
Sewer gas odor: 18  
Sanitary sewer overflow: 8  
Struck sewer service, main or asset: 6  
Sewer Inquiry: 23 |

| B. Number of NPDES Permit Violations | 0 | 0 | |

| C. Number of Capacity Related Overflows | 0 | 0 | SSOs storm related |

| D. Number of Maintenance Related Overflows | 0 | 7 | SSOs due to debris obstruction and roots |

| E. Number of Operations Related Overflows | 0 | 1 | SSOs due to power failure |

| F. Number of Overflows Caused By FOG | 0 | 0 | SSOs due to restaurant grease blockage |

| G. Number of Overflows Caused By Sources Other Than FOG | 0 | 11 | SSOs due to grease blockage |

| H. Number of Overflows Caused By Pipe/Equipment Failures | 0 | 3 | |

| I. Number of Overflows Caused By Damage | 0 | 2 | SSOs due to vandalism, contractor misconduct, etc. |

| J. Monthly Average Treatment Plant Flow Rate (gallon per capital-day [gpcd]) | 179 | 138 | Goal is defined in the 2013 water and sewer allocation report |
## I. CMOM Programs Recent Performance Summary

<table>
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<tr>
<th>Performance Measures for Year 2012</th>
<th>Year 2013</th>
<th>Month June</th>
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<td>Q. Number of Manholes Repaired</td>
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<td>T. Number of Pumps Stations Repaired</td>
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Appendix C

2012 Sewer System Overflows (SSO’s) Report
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DATE</th>
<th>CAUSE: LOCATION</th>
<th>CAUSE: RESTAURANT</th>
<th>GREASE BLOCKAGE</th>
<th>GREASE BLOCKAGE</th>
<th>DEBRIS OBSTRUCTION</th>
<th>ROOTS</th>
<th>VANDALISM</th>
<th>UNKNOWN STORM FLOWS</th>
<th>PIPE / EQUIP FAILURE</th>
<th>DAMAGED BY OTHERS</th>
<th>POWER FAILURE</th>
<th>DURATION in hours</th>
<th>ESTIMATED AMOUNT - GALLONS</th>
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## Probable Causes of Sewer System Overflows – 2012

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<tr>
<th>Location</th>
<th>Date</th>
<th>Cause:</th>
<th>Grease Blockage (Restaurant)</th>
<th>Grease Blockage</th>
<th>Debris Obstruction</th>
<th>Roots</th>
<th>Vandalism</th>
<th>Unknown Storm Flows</th>
<th>Pipe / Equipment Failure</th>
<th>Damaged by Others</th>
<th>Power Failure</th>
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Total incidents: 24
Appendix D

Action Planned and/or Implemented in 2013
Appendix E

2001-2012 Sewer System Overflows (SSO’s) Map