

**Stantec Consulting Services, Inc.**  
10509 Timberwood Circle, Suite 100  
Louisville, KY 40299

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To: Abigail Rains

From: Rob Huckaby, PE  
Allison Padron, PE

Company: Energy and Environment Cabinet  
Department for Environmental  
Protection, Division of Water

Address: 200 Fair Oaks Lane, 4th Floor  
Frankfort, KY 40601

Phone: (502) 564-8158 ext. 4891

Date: March 9, 2017

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For Your Information  
 For Your Approval  
 For Your Review  
 As Requested

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**Reference: 2016 Pewee Valley MS4 Annual Report (Digital Submittal)**

Attachment:

Copies	Doc Date	Description
1	3-9-2017	2016 Pewee Valley MS4 Annual Report and Appendices

Please review the enclosed 2016 MS4 Annual Report for the City of Pewee Valley and Appendices. If you have any questions or need additional information, please don't hesitate to contact me at your convenience.

Thank you,



Allison Padron  
Project Engineer, PE  
Phone: (502) 212-5086  
Allison.Padron@stantec.com



Rob Huckaby  
Associate, Project Manager, PE  
Phone: (502) 212-5046  
Rob.Huckaby@stantec.com

# Kentucky Division of Water

## GENERAL PERMIT ANNUAL COMPLIANCE REPORT.

Phase II Stormwater MS4  
Kentucky Division of Water

- NOTE:**
- In order to comply with KPDES sMS4 permits, annual reports must be submitted to the Kentucky Division of Water.
  - **Please type or print in ink.**
  - Please answer all questions **thoroughly** and return the form by the due date.
  - Return this form and any required addenda to the KDW MS4 Coordinator at the address listed in the box on the upper-right.
  - **Due April 15, 2017.**

**For questions regarding this form, contact:**

**Abigail Rains**  
ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL  
PROTECTION  
Division of Water  
300 Sower Boulevard, 3<sup>rd</sup> Floor  
Frankfort, KY 40601  
Phone: (502) 782-7044

**REPORTING  
YEAR**  
(Check one)

- 2015  
 2016  
 2017

### PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Report Completed By:	City of Pewee Valley (MS4 Operator — i.e., name of permit holder)				
2. Permit Number:	K Y G 2 0 0 0 5 1	AI #	1068631	4. Population	1,456 (2010 Census)
5. Mailing Address	Street Address: 312 Mt. Mercy Drive				
<input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Other	Of: Pewee Valley	Zip: 40056	County: Oldham		

### PART B: GENERAL INFORMATION – CONTACT PERSON

6. Contact Person Name (please print):	Mr. Bob Rogers
7. Contact Person Title:	Mayor
8. Phone Number:	(502) 241-7340
9. Facsimile Number (if applicable):	(502) 241-8348
10. E-mail Address (if applicable):	clerk@peweevalleyky.org

**PART C: CONTROL MEASURE ACTIVITIES**

**11. For the following items, please provide a summary of control measure activities related to sMS4 performed during the previous year. List any updated measurable goals from the Stormwater Quality Management Plan (SWQMP), compliance activities, Best Management Practices (BMP) installed or initiated, and updated or developed regulatory mechanisms with effective dates.**

**A. Public Education and Outreach:**

**Describe your public education/outreach efforts during 2016:**

- *The Call of the Pewee* monthly newsletter containing articles on stormwater and the environment (details below)
- Stormwater Webpage (details below)
- Facebook page (details below)
- Council Meetings – updates on stormwater program (details below)
- City events, including Environmental Education Day for 3rd and 5th grade students, and a “Concert in the Park” series
- KYTC Partnership - KYTC with our MS4 and partner communities utilize several approaches to public education. The most pronounced is a mass media play via radio and television. We also utilize a website tied in with the radio and television spots. KYTC in a combined effort with the MS4 communities manage the Adopt-A-Highway program. KYTC also utilizes our Kentucky Engineers Exposure Network (KEEN) to promote stormwater issues in community schools. During 2016 KYTC is conducting a Statewide Stormwater Survey. This survey is a follow-up to the survey conducted in 2008.

*The Call of the Pewee* is a monthly publication developed by the Pewee Valley City Council and the Mayor, and is mailed free of charge to schools, churches, and all of Pewee Valley’s residents. The newsletter is a valuable tool to disseminate information to residents, and includes a feature cover story each month. As part of the SWQMP, *The Call of the Pewee* was identified as a way to feature stormwater education articles to increase community awareness on stormwater quality issues and solutions, as well as to generate involvement in related volunteer groups and activities. Stormwater educational articles were included quarterly in *The Call of the Pewee* newsletter. Back-dated newsletters are also provided via the City’s stormwater website at <http://www.peweevalleyky.org/call-of-the-pewee.html>.

The stormwater web page on the City’s existing website allows the City to cost-effectively announce events and disseminate public education materials and program documentation, found at [www.peweevalleyky.org](http://www.peweevalleyky.org). A dropdown list on the top menu bar takes the user directly from the homepage to an informational page on program regulations, the City’s stormwater utility, a water quality hotline to report illicit discharges, links to educational resources, and local stormwater ordinances. During 2016, the stormwater page received 101 hits total, which is approximately a 20% increase from last year. Additionally, the City has registered 334 active email addresses on the Pewee Valley distribution list, which is a 12% increase from last year. Periodic emails are sent out notifying residents of community activities and educational information, oftentimes focusing on stormwater quality and environmental messages. This email list is also used to encourage public involvement in community events. Another way Pewee Valley has performed public outreach is to include a message on the stormwater bills to explain why the stormwater program was implemented and how the funds are to be used.

Pewee Valley has also increased their social media outreach by creating a Facebook page which is used to send various messages to followers about City news. The page can also be used to send informational messages about stormwater. The Facebook page has received 753 “Likes” and has been visited by 1,132 people, indicating it has been positively received by the community and that it has been widely seen. In 2016, the City posted information on the Earth Day Tree Giveaway, Environmental Education Day, Hazardous Household Waste Collection events, and Prescription Drop-off Collection events.

The City Council and Mayor are regularly updated on the stormwater program, including implementation schedule, planned education and public participation activities, proposed/budgeted projects, permit reviews, etc. The 2016 stormwater program activities were discussed at City Council meetings during 2016. A total of twelve (12) City Council Meetings took place in 2016. Meeting minutes are available online to the public through the City’s website.

For the second consecutive year, Pewee Valley hosted an Environmental Education Day in Central Park for the 3rd and 5th grade science classes from St. Aloysius School and the Pewee Valley Jr. Academy on May 11th. The hands-on demonstrations taught eighty students about the importance of trees, floodplains, and native plants which make up the butterfly garden and provide habitats and food sources for animals and insects. Students received a milkweed plug to plant, plus a goodie-bag full of information and resources on simple things they can do at home to help the environment. The event was a huge success with the students.

Pewee Valley hosts many events throughout the course of the year, many of which take place at Central Park. The park houses multiple green infrastructure stormwater treatment methods, including a bioswale and pervious pavement. This also provides a way to educate residents about stormwater issues. Events which took place this past year include:

Pewee Valley Tree Give-Away on April 30<sup>th</sup>, Music in the Park on May 15<sup>th</sup>, the Pewee Valley Summer Picnic on August 6<sup>th</sup>, Patriot’s Day on September 11<sup>th</sup>, Movie Night in the Park on October 15<sup>th</sup>, and the Yule Log Celebration in Town Square on December 4<sup>th</sup>.

**PART C: CONTROL MEASURE ACTIVITIES**

The City of Pewee Valley's SWQMP includes cooperative efforts with KYTC, which compliment local initiatives and provides a broad base of resources and a consistent stormwater message across the state. Through the City's partnership with KYTC, coordination is underway to incorporate KYTC resources into the City's stormwater program. These statewide resources and cooperative efforts reflect the stormwater educational messages delivered across EPA, educational resources were used by Pewee Valley in 2016:

The Pewee Valley MS4 Program was audited by the Kentucky Department for Environmental Protection Division of Water (KDOW) Stormwater Coordinator, Ms. Abigail Rains, on December 17, 2013. Ms. Rains determined that Pewee Valley was compliant with the requirements of their MS4 program. The audit results were announced at the first annual City Council meeting on January 6th, 2014. Pewee Valley has continued to implement their program at the level they were when the audit took place.

**Please attach documentation of any public education/outreach activities held in 2016:**

See Appendix B and C.

**Are public education/outreach efforts targeted towards a pollutant of concern or local waterbody or a particular segment of the population?**

The education and outreach efforts are targeted at the entire breadth of the population through the wide reach of the various media, events, and partnerships the City uses to disseminate the information. Special focus is placed on students through the environmental education demonstrations held by the City. The environmental education demonstrations given to children from St. Aloysius School have a reach beyond the students and the City. These students take that knowledge home with them, and as not all live in Pewee Valley, the outreach of the program extends beyond the City. Likewise, when the City provides stormwater information at Oldham County Day, this information is disseminated to the citizens of Pewee Valley and neighboring communities.

**Describe how or why efforts in meeting the MCM requirements were successful:**

The City of Pewee Valley has continued to increase their outreach activities using social media throughout the duration of the permit term. The number of email addresses on the E-New Alert distribution list increased from 294 to 334 over the course of 2016. The recently created Facebook page has received 1,132 visitors, which is approximately 75% of the city's total population. This shows Pewee Valley is constantly reaching a larger audience.

The City Council and Mayor are active in meeting stormwater program requirements and promote activities which take place in the City to meet those requirements. The cooperative efforts with KYTC have also continued throughout the permit term and have enhanced the public education and outreach opportunities for Pewee Valley. The City promotes public events on the City's website, Facebook page, monthly Call of the Pewee newsletter, E-News Alert distribution list, and the Town Hall message board. The increased number of residents which are being reached through these various media distribution methods demonstrates a measure of success for MCM1.

The KYTC Media Outreach Program (MOP), in conjunction with our partner MS4 communities, contracted with the Kentucky Broadcasters Association (KBA) to air a video spot and six audio spots in 2016. The 30 second spots have been aired statewide as a public education initiative to inform the general population about stormwater issues. The ads messages were developed after the statewide survey conducted in 2008 identified that half of the population is unaware that storm drains discharge directly to waters of the Commonwealth without treatment. The ads can be viewed on [stormwater.ky.gov](http://stormwater.ky.gov). The TV and radio plays combined totaled 83,359 plays statewide in 2015 for a total value of \$1,551,493.

KYTC initiated a committee of five MS4 representatives and the DOW representative in 2009 to work with our consultant, New West, to develop the ads. The members are Abby Rains – DOW, Suzie Bradley – Campbellsville, Randy Stambaugh – MSD, Vicki Brackett – Hardin County, Jamie Holtzapfel – SD1 and Jack Wright – Plum Springs Warren County Joint Storm Water Sewer Agency. A mix of general information and specific item ads were developed. The resulting work of the committee was the six audio spots and the one video spot. In 2012 the committee was called together again to develop a new TV advertisement for the stormwater program. The new ad began airing in December 2012. KBA distributes the ads to 230 stations in 132 communities. The KBA receives certified reports from the member stations verifying the number of times the spots are played. Since the inception of the Media Outreach Program there have been 526,781 plays for a total value of \$9,879,321.

The 2016 summary of ad play is as follows:

74,721 radio Spots with a value of \$1,129,745

8,638 television plays with a value of \$421,808

TV and radio plays combined totaled 83,359 plays statewide for a total value of \$1,551,493.

**PART C: CONTROL MEASURE ACTIVITIES**

A new website URL was secured and a new website prepared to help launch the MOP and provide a statewide resource for the KYTC and our partner MS4 communities to promote stormwater issues. The website was designed to address both the public and those involved with the MS4 program either as a permitted community, construction contractor or KYTC. It provides basic information regarding what is stormwater and stormwater pollution, who to contact if more information is needed or a concern needs to be reported, and technical information for MS4 communities and contractors. The website had 474 visits in 2016 and 2466 page views.

Kentucky has participated in the International Adopt-A-Highway Program since 1988. The Commonwealth has one Statewide Adopt-A-Highway Coordinator in central office and twelve (12) Adopt-A-Highway District Coordinators throughout the state. The Adopt-A-Highway program involves community groups to organize and pick up litter. The Transportation Cabinet participates in Adopt-A-Highway meetings as agreed upon by the Local Community and KYTC. There are 674 groups that manage 1,367 miles of roads throughout the state.

The Members of KYTC's KEEN organization held twenty-one presentations at schools and groups across the state. The presentations included the Enviroscope. Some of the locations were Lexington, Waddy, Frankfort, Glasgow, Bowling Green, Shelbyville, Walton, Cold Spring, Erlanger, Alexandria, Bellevue, Brooksville, Villa Hills, Morehead, Mount Sterling, Carlisle and Owingsville.

## B. Public Involvement and Participation:

### Describe any events or activities facilitated by or sponsored by the MS4 in 2016:

The Stormwater Display table was displayed at the Oldham County Day event on July 16th, 2016. This event provided an opportunity for the public to interact with Oldham County residents on stormwater quality issues.

The City had the City Hall water tested for lead in April 2016.

Central Park has continued to flourish through the upkeep of the butterfly garden, complete with milkweed and other native plants which attract butterflies, specifically the monarch butterfly. In addition to creating a habitat for butterflies, the native plants help infiltrate stormwater and reduce runoff rates. Bioswales, a pavilion, benches, and various amenities continue to draw people to Central Park and inspire locals to maintain their own green spaces with native plants and a consideration for the environment. The Central Park improvement project was initially projected to be completed over the course of ten years, but is on schedule to be completed in only five years due to the dedication of the local community. Continuous updates on Central Park's progress were provided in *The Call of the Pewee* newsletter throughout 2016. Central Park has become a primary meeting location for community events, including Movie in the Park Night, Concert in the Park Summer Series, Summer Picnic, and Woman's Club Arts and Crafts Day. As a central meeting location for public events, Central Park offers the City an ideal location for promoting stormwater education.

The City has continued to search for funding options for remodeling the Town Square. The project was anticipated to take approximately one year from approval to completion, however, funding has delayed the project. Improvements include the addition of pervious pavers and ceramic pavers, which will benefit stormwater quality. This ambitious project is associated with Pewee Valley's downtown redevelopment master plan project, which was developed during 2012. The City will continue to explore opportunities to fund and implement these improvements in the heart of Pewee Valley.

The City maintains an active Environmental Board. During the Arbor Day Celebration on April 30th, the board hosted a Tree Give-Away event. Also, for the 21st year in a row, Pewee Valley has been named a Tree City USA by the Arbor Day Foundation in honor of the City's commitment to effective urban forest management. The Tree City USA program is a partnership between the U.S. Forest Service and the National Association of State Foresters. The Environmental Board gave away 170 trees including Redbuds, Flowering Dogwoods, Tulip Poplars, Black Gums, and Red Oaks. The tree give-away is an effort to replace the ash trees lost to the Emerald Ash Borer beetle. Pamphlets and educational materials were also given away as part of the program.

Pewee Valley contracts with Industrial Disposal for bi-weekly curbside recycling pick-up for all residents in the community.

Pewee Valley has participated in the Litter Abatement Grant program annually since 2003. In 2016, 51.5 miles of roadway were cleaned of litter, collecting a total of 58 bags of trash. Additional information regarding this ongoing program is available at City Hall.

The City also participated in an annual Oldham County Solid Waste/Recycling Department Hazardous Household Waste Drop-Off Event on October 15<sup>th</sup>, 2016. The City promoted the event on the City's website, Facebook page, monthly *Call of the Pewee* newsletter, E-News Alert distribution list, and the Town Hall message board. Materials accepted at the Drop-Off event include oil-based or lead paints, varnish, Freon cylinders, antifreeze, gasoline, pool chemicals, pesticides, herbicides, and fertilizer, mercury thermometers, and dry cell batteries. Providing an easy, free place for people to dispose of these wastes prevents them from disposing them in such a manner that they end up in the environment.

A Drug Take Back program was initiated in partnership with the DEA, the Oldham County Sheriff's Office, and the Oldham County Police Department as part of the National Drug Take Back Day Initiative. The Drug Take Back was held on April 30<sup>th</sup>, 2016, and was advertised in *The Call of the Pewee*, on the stormwater website, and City's Facebook page. The program allows for the proper disposal of prescription and expired over-the-counter medicines in order to protect the community. Emerging research indicates that prescription and over-the-counter drugs are often not adequately processed/oxidized via traditional wastewater systems, resulting in bioaccumulation in aquatic species causing numerous side effects. These unprocessed drugs in wastewater systems, both onsite systems and regional processing plants are leading to a new challenge, commonly referred to as contaminants of emerging concern (CEC). Therefore, the simplest approach is to get participation from residents and dispose of unused drugs via regional drop-off programs like the program being implemented by Pewee Valley. Additionally, removing old and unused prescription drugs can prevent the accidental or intentional abuse of these potentially dangerous medications. To date, the State of Kentucky has collected 59,719 pounds of prescription medications at these events. Nationwide, over 2.4 tons of unused drugs have been collected in the past four years. The EPA has listed pharmaceuticals as a contaminant of emerging concern due to their potential impact on the greater ecosystem and the increasing detection of these chemicals in surface waters. The City's promotion of this the pharmaceutical drop-off program shows their commitment to addressing progressive water quality concerns.

Multiple articles relating to stormwater were published in the *Call of the Pewee* in 2016 including: "Soil Testing Helps Keep Unnecessary Nutrients Out of Streams", "Septic System Failures", and the "Pewee Valley 2015 MS4 Annual Report Summary" which provided details about the MS4 program and discussed why stormwater is such a critical water quality issue.

### **How can the public find information about the SWQMP?**

All information regarding the Pewee Valley SWQMP may be easily accessed at City Hall.

### **Describe how or why efforts in meeting the MCM requirements were successful:**

Central Park has become a gathering place for the residents of Pewee Valley and has presented a unique opportunity to educate residents on stormwater quality and quantity issues through the installation of bioswales, pervious pavers, and pervious pavement throughout the park. Numerous residents have participated in public clean-up events, Hazardous Household Waste, and National Drug Take Back Day. In addition, the Arbor Day Celebration Tree Giveaway gave away 170 trees to residents to plant in replacement of ash trees destroyed by the Emerald Ash Borer beetle. The City promotes public events on the City's website, Facebook page, monthly Call of the Pewee newsletter, E-News Alert distribution list, and the Town Hall message board. Increased participation in community events has demonstrated a measure of success in meeting the goal of MCM2.

City personnel have noted that the number of residents which participate in the recycling program has also increased. The Litter Abatement program continues to stop more potential floatables from traveling down through the watershed. This year, more miles of roadway were cleaned than ever before (46.5 miles in 2013, 44 miles in 2014, 43.5 miles in 2015, and 51.50 miles in 2016). In 2016, they removed 58 bags of trash. Furthermore, the trend indicates citizens are littering less. In terms of trash per mile, 2016 saw the least of the four years of the program (1.63 bags per mile in 2013, 1.19 bags per mile in 2014, 1.15 bags per mile in 2015, and 1.13 bags per mile in 2016). They saw a 45% reduction in trash per mile between 2013 and 2016. This suggests an increasing awareness amongst residents of the importance of keeping trash out of waterways.

**C. Illicit Discharge Detection and Elimination:**

**Did you have any reported/discovered illicit discharges for 2016? If so, describe the incident and the elimination.**

There were zero (0) potential illicit discharges detected in 2016.

The Pewee Valley MS4 Program was audited by the Kentucky Department for Environmental Protection Division of Water (KDOW) Stormwater Coordinator, Ms. Abigail Rains, on December 17, 2013. Ms. Rains determined that Pewee Valley was compliant with the illicit discharge portion of their MS4 Program. The audit results were announced at the first annual City Council meeting on January 6th, 2014. The City has continued to implement their program to the same standards they had been when they were audited.

**How can the public notify the MS4 of spills or illicit discharges?**

Any illicit discharges or spills can be reported directly to City Hall. A separate voicemail exists specifically for the reporting of water quality concerns.

**Do you have a written IDDE Plan in place?**

In the event of illicit discharge suspicion, the City Engineer notifies the relevant authorities and agencies. Several of the major roadways that intersect Pewee Valley are under the authority of the State Highway Department and in the event of spills and discharges are taken care of under the State Highway Plan.

**Have you completed the mapping of major outfalls?**

Yes, on August 31st, 2011, outfall mapping and dry-weather screening was performed within the City of Pewee Valley for current Permit Term (2010-2015, which has been administratively continued). The City collected and maintains stormwater information in a geographic information system (GIS) database.

The State of Kentucky, Division of Water has administratively continued the current permit until the new stormwater permit is issued. Therefore, the City of Pewee Valley remains in compliance with the most current stormwater permit.

**Have you dry-screened your major outfalls?**

Yes, dry-weather screening was completed ahead of schedule. On August 31<sup>st</sup>, 2011, all mapped outfalls were screened within the City of Pewee Valley. Dry-weather screening is completed once per permit term.

**Describe how or why efforts in meeting the MCM requirements were successful:**

Pewee Valley had zero (0) reported illicit discharges in 2016, which may indicate that residents are taking steps to prevent pollutants from entering their waterways. Increased public education and participation through media outreach and community events has made residents aware of the need to keep pollutants from reaching waterways, which would demonstrate the success of MCM3.



**D. Construction Site Stormwater Run-off Control:**

**How can the public notify the MS4 of possible noncompliance at construction sites?**

The public can contact the City. In turn, the City sends the City Engineer to inspect the site for noncompliance issues.

**Do you give the developer/contractor a permit from you, the MS4, for land disturbances for one acre or larger, or smaller than one acre if part of a larger common plan of development or sale?**

Permits are issued through the Oldham County Planning and Development Services Office. They provide a Storm Water Quality Management and Erosion Control Permit for commercial, industrial, multi-family, and residential development over 1 acre per Ordinance No. 05-830-326 for the control of construction site runoff of pollutants and sediment to the streams and waterways of Oldham County.

**How many permits were issued by the MS4 in 2016?**

The City issued no permits in 2016 – permits were instead issued through Oldham County.

**Does the MS4 or its designee perform plan reviews for land disturbances for one acre or larger, or smaller than one acre if part of a larger common plan of development or sale? Is there a standardized form that is used to review plans?**

Due to the varying nature and low frequency of major construction in the community, the City Engineer reviews each site on a case by case basis. No standardized form is used.

**At what frequency are inspections occurring at active construction sites?**

Inspections occur on an as needed basis. Site visits in 2016 included:

- Old Floydtsburg Rd to check erosion control
- Multiple visits to Rosswoods to check for drainage issues, erosion control, etc.
- Visits to Colonel to clean road and maintain erosion control
- Visit to Elm to clean road and maintain erosion control
- Visit to Tulip to clean road and maintain erosion control
- Visit to Central to check erosion control

**How many inspections in 2016 resulted in enforcement actions? Fines collected?**

One (1) inspection resulted in enforcement action in 2016. 147 Rosswoods Drive was reported for lacking a permit. Multiple site visits occurred following the initial action to inspect and check progress on the site. No fines were collected.

**Describe any training given to operators/contractors in 2016?**

Training materials were provided to City employees, including the City Engineer.

**Describe how or why efforts in meeting the MCM requirements were successful:**

Only one site required enforcement action in 2016, and the issue was immediately addressed and corrected through actions by the City. This suggests the program is successful – both in such a low number of instances and in the immediate correction of the issue when a problem did arise.

**E. Post-construction Stormwater Management in New Development and Redevelopment:**

**Describe how the MS4 is implementing the post-construction stormwater management in new development or redevelopment requirements in your MS4; including the 80% stormwater treatment standard.**

In 2009, the City developed and introduced a Water Quality Management Ordinance, which includes a section (Section 8) that requires a Post-Construction Water Quality Pollution Prevention Plan be submitted to and approved by the City prior to any land disturbing activities for sites of 20,000 square feet (0.45 acres) or greater. The plan must meet requirements, as specified in the ordinance, to implement long-term stormwater management controls. Long-term stormwater management includes options for either on-site structural best management practices with a maintenance agreement or in-kind contribution to regional facilities in the same watershed. The ordinance was adopted on May 4, 2009. With respect to the 80% stormwater treatment standard, the draft language for the ordinance was reviewed at the City Council meeting on March 31, 2011. Draft ordinance language was submitted to KDOW. KDOW responded on April 5, 2011 indicating that no change to the existing ordinance was needed at this time and the existing ordinance was strict enough to meet the standard required by the permit. Pewee Valley's stormwater management regulations are available on the City's website.

**Does the MS4 do follow-up inspections to review the efficacy of the installed BMPs for post-construction or permanent stormwater management for new development or redevelopment?**

The MS4 provides monthly maintenance to the BMP's the City has implemented. During 2016, City officials maintained the Green Infrastructure Demonstration project in Central Park by cleaning bioswales, watering the butterfly garden, and cleaning the filters in the fish pond. Drainage ditches around Town Hall and in Central Park were cleared multiple times during the year. The City continues to investigate opportunities to implement additional phases to the Central Park Master Plan, as well as the Town Square Redevelopment Project. Potential additions listed in these Master Plans include installing rain gardens, educational displays, infiltration practices, and a pervious parking lot.

**MS4 staff must be trained in the fundamentals of long-term stormwater-quality treatment management practices and in how to review such practices on construction plans and how to inspect practices for long-term protection, operation and maintenance. Please describe the training of staff in 2016.**

Through the City's partnership with KYTC, coordination is underway to partner on roles and responsibilities. Efforts by KYTC are reported through KYTC's Division of Environmental Analysis each year. The following are activities identified in the City's SWQMP to meet partnership goals: Qualified Inspector Training. The City Engineer, Mel Milburn, is well-versed in erosion prevention and sediment control best management practices. Mr. Milburn provides training to developers and contractors when he discusses the Stormwater Pollution Prevention Plan (SWPPP) and during inspections. There was only one (1) violation at any construction site within the City, which indicates this one-on-one training is effective.

**Describe how or why efforts in meeting the MCM requirements were successful:**

The City requires a Post-Construction Water Quality Pollution Prevention Plan for land disturbing projects and has staff members which provide training to developers and contractors to protect local water quality.

Due to its largely residential land use, the City of Pewee Valley developed a strategy for implementing a post-construction program that would address multiple aspects of the MS4 permit. By planning and implementing stormwater demonstration projects in the City, these projects have a dual benefit of treating onsite stormwater runoff as well as educating and involving the community and MS4 staff by showcasing BMPs. The nearly completed Central Park project has provided a dedicated open space and other stormwater quality management practices within the City's MS4 boundary, while also providing a local gathering place for community events. The Town Square Redevelopment Project will expand the stormwater quality management practices utilized within the City.

**F. Pollution Prevention and Good Housekeeping for Municipal Operations:**

**The permittee must develop and implement an Operation and Maintenance (O & M) program that includes a training component with the goal of preventing or reducing pollutant runoff from municipal operations. Please describe the progress the Pollution Prevention/Good Housekeeping Program has made in 2016.**

As a small, mostly residential community, the City of Pewee Valley utilizes very minimal staff, operations and municipally owned facilities. The City currently has no commercial or municipal refueling outlets, and one (1) part-time employee applies fertilizers. One (1) part-time employee maintains the City's right-of-ways, manages the removal of snow, tree limbs, and debris. Salt/brine for road de-icing is kept at an off-site storage facility. No City personnel apply pesticides or herbicides. The City does not have a canine park.

The City has developed a Municipal Employee Training Manual provide consistent procedures for preventing and reducing pollutant runoff. The manual will contain instructions for General Facility Operations and Maintenance; vehicle and equipment fueling; spill response measures; vehicle maintenance, repair, and cleaning; maintenance and repair project in the field; snow plowing; and road de-icing. However, non-emergency maintenance activities and equipment are stored outside of City limits.

To meet the intent for this minimum control measure, the City has developed activities to best fit the profile of Pewee Valley and set a good example for the community to protect water quality. Stormwater demonstration projects for the City owned Central Park property adjacent to City Hall were advanced and maintained throughout 2016.

The City promotes homeowner pollution prevention practices through regular announcements and news articles in *The Call of the Pewee* newsletters, which are sent to all 1,500 Pewee Valley residents. The City also promotes public events and education on the City's website, Facebook page, E-News Alert distribution list, *Call of the Pewee* newsletter, and the Town Hall message board.

**Has a comprehensive assessment of the pollutant discharge potential for all municipally-owned facilities been conducted? If not, indicate a status and planned completion date.**

The City of Pewee Valley does not operate a municipally owned public works facility within their MS4 boundary. Municipally owned facilities within the MS4 boundary, such as City Hall, do not contain large amounts of potential pollutants, such as household cleaners. Any materials which could be considered potential pollutants are stored indoors in their proper containers

**Is the Operation and Maintenance Program/Plan formalized or written?**

The City does not operate a municipally owned public works facility. Training is provided on how employees can respond to relevant potential issues and problems within the realm of issues expected for the City. The formal Employee Training Manual covers proper operation and maintenance of substances and equipment within the City.

**Describe any training presented to city staff on pollution prevention/good housekeeping in 2016.**

Pollution prevention and good housekeeping is covered in the Municipal Employee Training Manual which is provided to each employee of the City.

**Describe how or why efforts in meeting the MCM requirements were successful:**

A staff of employees properly trained in pollution prevention and prepared to handle issues that arise with respect to good housekeeping and maintenance indicates a measure of success for MCM6.

In 2016, a City employee noticed herbicides being placed improperly in a ditch, resulting in harm to the plants and potential for increased erosion in the channel. The employee then notified the workers and informed them of better practices for the future. This type of direct action against issues by City employees is a testament to their training and continued commitment to improving the water quality of Pewee Valley.

The Pewee Valley MS4 Program was audited by the Kentucky Department for Environmental Protection Division of Water (KDOW) Stormwater Coordinator, Ms. Abigail Rains, on December 17, 2013. Ms. Rains determined that Pewee Valley was compliant with the pollution prevention and good housekeep requirements of their MS4 program. The City has continued to implement their MCM6 activities at the same level as they were during the audit.

**PART D: MISCELLANEOUS INFORMATION**

**12. Provide any data regarding the following indicators (if applicable). Attach separate sheets as necessary, and indicate, as appropriate, the rationale behind not using a listed indicator.**

**a) Number or percentage of citizens that aware of storm water quality issues**

100% of residents receive stormwater materials through *The Call of the Pewee* newsletter. The stormwater website received 101 hits in 2016. The number of email addresses receiving the Pewee Valley E-News Alert email increased to 334. The City Facebook page has received 753 "Likes". Stormwater quality issues in the town are continually displayed through these methods of educational and social media outreach.

**b) Number and description of meetings, training sessions, and events conducted in 2016 to involve citizens**

The city held twelve (12) city council meetings in 2016. The city provides training materials for employees. The Municipal Employee Training Manual is available to citizens at City Hall. The Earth Day Tree Giveaway, Environmental Education Day, Hazardous Household Waste Collection, Prescription Drop-off Day, and Oldham County day were all events in which the city involved citizens in stormwater quality issues.

**c) Number or percentage of citizens that participate in storm water quality improvement projects in 2016.**

The Arbor Day Tree Giveaway event gave 170 trees to locals to be planted in the city. Residents also participate in the Litter Abatement Program and multiple City functions in Central Park over the course of the year, including the Concert in the Park Series. For more information on events, see the sections on MCM1 and MCM2.

**d) Number and location of storm drains marked in 2016.**

The majority of the stormwater flow in Pewee Valley is sheet flow to streams and open roadside ditches with culverts. No storm drains are marked.

**e) Estimated linear feet or percentage of MS4 conveyances mapped in 2016.**

Due to Pewee Valley's small size and location at the top of several watersheds, runoff is almost entirely sheet flow. Areas of shallow concentrated flow that discharge to waters of the commonwealth are identified in the City's GIS as a stormwater outfall. There are a total of twenty-two (22) outfalls mapped within the City's system.

**f) Number and location of MS4 area outfalls mapped in 2016.**

A total of twenty-two (22) outfalls have been mapped and screened for illicit discharges. The City maintains a Stormwater Hotline to track and inspect reported illicit discharges.

**g) Number and location of MS4 area outfalls screened for illicit discharges in 2016.**

A total of twenty-two (22) outfalls have been mapped and screened for illicit discharges. The City maintains a Stormwater Hotline to track and inspect reported illicit discharges.

**h) Number and location of illicit discharges detected in 2016.**

There were no illicit discharges reported in 2016.

**i) Number and location of illicit discharges eliminated in 2016.**

There were no illicit discharges reported in 2016.

**j) Number of, and amount of material collected from, hazardous household waste (HHW) collections in 2016.**

Currently, residents drop off hazardous household waste (HHW) at the Oldham County Recycling Center (OCRC). Because the OCRC provides this service countywide, there is no way to determine how much was disposed of by Pewee Valley residents and businesses.

**k) Number and location of citizen drop-off centers for automotive fluids in 2016.**

Residents drop off automotive fluids at the Oldham County Recycle Center.

**l) Number or percentage of citizens that participate in HHW collections in 2016.**

Currently residents drop off hazardous household waste (HHW) at the Oldham County Recycling Center. Because the OCRC provides this service countywide, there is no way to determine how much was disposed of by Pewee Valley residents and

businesses. The City advertises such events on the Stormwater webpage, Facebook page, in the Call of the Pewee newsletter, and in Town Hall.

**m) Number of construction sites permitted for storm water quality in 2016.**

No construction sites greater than an acre were permitted in the City in 2016.

**n) Number of construction sites inspected in 2016.**

A total of seven (7) sites were inspected in 2016.

**o) Number and type of enforcement actions taken against construction site operators in 2016.**

One (1) enforcement action was taken for the lack of a permit.

**p) Number of public informational requests received related to construction sites in 2016.**

No requests were submitted in 2016.

**q) Number, type, and location of structural BMPs implemented in 2016.**

No new structural BMPs were implemented in 2016, however, many existing BMPs were maintained.

**r) Number, type, and location of structural BMPs inspected in 2016.**

Central Park BMPs, including bioswales and pervious pavers, were inspected as needed.

**s) Number, type, and location of structural BMPs maintained, or improved in 2016.**

The City maintains a butterfly garden, bioswales, and walkways composed of pervious pavers.

**t) Type and location of nonstructural BMPs utilized in 2016.**

The City utilized a variety of nonstructural BMPs, including educational events, distributions of *The Call of the Pewee* newsletter, the City's website, the City's Facebook page, public meetings where the stormwater program was discussed, and various other activities.

**u) Estimated acreage or square footage of open space preserved and mapped in 2016.**

One (1) acre of open space is preserved at the City Park.

**v) Estimated acreage or square footage of mapped pervious and impervious surfaces in 2016.**

Based on mapping, impervious surfaces make up an estimated 6.3% of the total area of the City.

**w) Number and location of retail gasoline outlets or municipal, state, federal, or institutional refueling areas with implemented BMPs.**

No gasoline outlets or municipal, state, federal, or institutional refueling areas exist within the MS4 area of Pewee Valley.

**x) Number and location of entities that have containment for accidental releases.**

The City currently has no commercial or municipal facilities that facilitate the need for secondary containment.

**y) Estimated acreage or square footage and location where pesticides, herbicides and fertilizers are applied by the entity.**

The City currently has no personnel that apply pesticides or herbicides. One (1) part-time employee applies fertilizers.

**z) Estimated linear feet or percentage and location of unvegetated swales and ditches that have an adequately sized vegetated filter strip.**

Swales and ditches within the City are vegetated whenever possible. The City does not own or maintain paved ditches.

**aa) Estimated linear feet or percentage and location of stormwater sewer cleaned or repaired in 2016.**

Maintenance, including cleaning of ditches, was performed on an as-needed basis.

**bb) Estimated linear feet or percentage and location of roadside shoulders and ditches stabilized in 2016.**

Roadside ditches were cleaned on an as-needed basis. No additional maintenance was required in 2016.

**cc) Number and location of storm water outfall areas remediated from scouring conditions in 2016.**

Outfall conditions were collected during dry-weather screening on August 31st, 2011. Erosion was not an issue at any of the outfalls within the City at that time, nor have they been an issue since then.

**dd) Number and location of de-icing salt and sand storage areas covered or otherwise improved to minimize storm water exposure in 2016.**

De-icing salt is stored in bags in a self-storage facility located at 6240 Old LaGrange Road, Crestwood, KY 40014.

**ee) Estimated amount, in tons, of salt and sand used for snow and ice control in 2016.**

The City purchased 9.8 tons of salt for snow and ice control in 2016.

**ff) Estimated amount of material collected from catch basin, trash rack, or other structural BMP cleaning in 2016.**

The City collected fifty-eight (58) bags of trash along 51.5 miles of City roadways.

**gg) Estimated amount of material collected from street sweeping in 2016.**

The City does not own or operate a street sweeper.

**hh) Number or percentage and location of canine parks sited at least 150 feet away from a surface water body.**

There are no canine parks in Pewee Valley.

**ii) Other**

**13. Stormwater Quality Management Plan**

**a.) Have there been any changes to the urbanized area covered by the MS4? If yes, is this reflected by updates to the SWQMP?**

There have been no changes to the boundary of the Pewee Valley MS4 area.

**b) Are there any proposed changes to the goals or BMPs in the SWQMP?**

The City has introduced a new Town Square plan which will introduce more BMPs. They are in the process of moving some utilities.

**14. Discuss any problems encountered during this period (include any BMP changes in response to problems encountered).**

The City of Pewee Valley has had difficulty securing grants to complete their Town Square project.

This year, the City of Pewee Valley was unable to secure grants to fund the annual tree give-away. The City funded the project from its own funds.

**15. Identify any new funding source(s) for implementing this permit.**

The City secured another Litter Abatement Grant for 2016.

**16. Provide a summary of complaints received and the follow-up actions taken in reference to storm water quality issues.**

No complaints were received in reference to storm water quality issues in 2016. Residents may report illicit discharges or water quality concerns to the City.

The City continues to investigate funding and grant opportunities to continue implementation of the Central Park and Town Square Redevelopment Master Plans.

**17. Implementation status:**

a. Are the six minimum control measures being implemented within the compliance schedule and SWQMP timetables?

Yes    No\*

\* If no, submit revised compliance schedule and SWQMP Timetables.

b. Do you foresee any problems which may affect full implementation of all the measures?

Yes  No\*

\* If yes, explain:

**18. Do you have any impaired streams? If so, impaired for what pollutant?**

There are no impaired streams within the Pewee Valley MS4 area.

**19. TMDL – Do you have a TMDL in your MS4? For which stream segments? What is the impairment?**

Total Maximum Daily Loads (TMDLs) have been developed for the two watersheds significantly downstream of Pewee Valley – Floyd's Fork watershed and Harrods Creek watershed. Pewee Valley is upstream of Harrods Creek, which is impaired for organic enrichment. The segments of Harrods Creek listed as impair are not within the jurisdictional boundary of Pewee Valley. Point sources (wastewater treatment plants) were the identified source of the Harrods Creek impairment when the TMDL was accepted in 1995.

Tributaries from Pewee Valley flow into a 303(d) listed stream, Floyds Fork (miles 34.1 to 61.9), which is impaired for E.coli, fecal coliform, nutrient/eutrophication biological indicators, organic enrichment (sewage) biological indicators, and sedimentation/siltation. TMDLs have been established for E.coli and fecal coliform for the impacted reach of Floyds Fork, however the TMDLs are not established for the waterways within the Pewee Valley MS4 area.

**20. What can the Division of Water do to assist you with program compliance?**

The City requests assistance with securing funding and grants to complete their Town Square Renovation Project to integrate more stormwater BMPs into the City.



**PART E: CERTIFICATION AND SIGNATURE**

► The individual completing this report, listed in "PART A: GENERAL INFORMATION – MS4 OPERATOR" must sign the following certification statement:

*"By signing this annual report, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Type or Print Name: Bob ROGERS

Signature: Bob Rogers

Date: MAR 9 2017  
(mm/dd/year)