PORTAGE COUNTY HEALTH DEPARTMENT



STORM WATER PROGRAM

2015 ILLICIT DISCHARGE DETECTION AND ELIMINATION ANNUAL REPORT



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PCCGHD 3

Introduction

Portage County Combined General Health District (PCCGHD) is pleased to share the achievements and challenges of the Storm Water Program in this 2015 annual report, which documents the implementation and current status of the program. This report is issued in accordance with the tenant of the contractual agreement between PCCGHD and the Portage County Board of Commissioners (PCBC) to execute part of the requirements of the Portage County Storm Water District Program. The purpose of this report is to offer a succinct compilation of all PCCGHD Storm Water Program activities during the year. Additionally, this report is geared towards helping Portage County Storm Water District to fulfill its Ohio Environmental Protection Agency's (Ohio EPA) annual report submission requirement for its Storm Water Program Permit aimed at achieving sustainable water quality.

2015 Action Plan

This action plan is based on, but not limited to the scope of services outlined in the Portage County Storm Water Program contractual agreement between the PCCGHD and the PCBC for storm water services:

- 1. Ensure compliance with Resolution No. 09-0836 (primarily the prohibition of connection or continuation of connection of illicit discharges to Municipal Separate Storm Sewer System (MS4).
- 2. Ensure that PCCGHD storm water personnel are adequately trained through continuous education to detect and identify failing household sewage treatment systems (HSTS) and illicit discharges. Training will include the use of necessary sampling and mapping equipment such as water quality testing equipment, Global Positioning System (GPS) units and Geographical Information System (GIS) software for data collection and mapping. Furthermore, staff will be trained on the design requirements for HSTSs and the monitoring requirements to determine a public health nuisance and the repair or replacement of HSTS.
- 3. Work with all institutions involved in the program, namely Portage County Commissioners (PCC), Portage County Engineer's Office (PCEO), Portage County Soil and Water Conservation District (SWCD). In addition, build on the healthy working relationships with townships, villages, and the citizens for their cooperation to ensure the program's success.
- 4. Continue to compile, organize, and investigate the scope of potential illicit discharges. Research a portion of the PCCGHD HSTS files, note potential failing discharges and compile information received from villages, townships, county engineer, SWCD, and the general public.
- 5. Update the existing comprehensive database of suspected and reported illicit discharges to be utilized in the execution of field work, documentation and reporting.
- 6. Conduct field inspections to identify, evaluate, and confirm failed and illicit discharging systems through random and property transfer inspections. Issue notices of violation, as necessary, to obtain compliance and abatement.
- 7. Public educational outreach through distribution of educational materials and performing outreach to inform citizens about the impacts polluted storm runoff discharges can have on water quality.

- 8. Accept, record, and compile sewage nuisance complaints from, villages, townships, government entities, and residents. Investigate complaints and perform dye testing to confirm public health nuisances and illicit discharges. Issue notices of violation, as necessary, to obtain compliance.
- 9. Gather information from SWCD regarding discharges that were not from HSTS. Assist SWCD upon request with training of village, township, and municipal employees, and development of educational materials, public announcements, and information for homeowners.
- 10. Field inspections to identify, test, and evaluate outfall points for storm water contamination.
- 11. Update suspected illicit discharging HSTS and storm water outfall point maps.
- 12. Attend quarterly Portage County Storm Water Program Task Force Steering Committee meetings. Provide quarterly statistical reporting of inspections, consultations and sampling.
- 13. Compiled PCCGHD Storm Water Program annual report for all stakeholders.

Personnel Changes

In 2015, the Storm Water Program witnessed three key personnel changes. Mary Helen Smith accepted the position of Director of Environmental Health and began supervising the program. Chris Novelli, who has been part of the Storm Water Program for the past four years, replaced Kevin Watson as the new Wastewater Supervisor after the latter became PCCGHD Accreditation Coordinator and consequently moved to the health education division in November. Although no longer directly involved in the day-today activities of the program, Chris Novelli and Kevin Watson will continue to offer their expertise in wastewater management to the Storm Water Program to help eliminate illicit discharging HSTS and Storm Water Program's educational outreach respectively.

Achievements

In pursuance of the Storm Water Program's 2015 action plan for illicit discharge detection and elimination (IDDE) in Portage County townships and villages, Storm Water Program staff rigorously followed the 2015 action plan towards achieving the long term objective of sustainable water quality. The PCCGHD staff continues to enhance the healthy working relationships with townships, villages, County Engineer's office, Water Resources Department, SWCD and the citizenry to achieve our storm water goals.

Suspected Illicit Discharging HSTS Database

A comprehensive database of suspected discharging HSTS in the Storm Water District has been compiled for the implementation of the Storm Water Program's minimum control measure #3 (MCM #3), which requires illicit discharging detection and elimination (IDDE) to ensure sustainable water quality. This database, containing over 3200 suspected discharging HSTSs, is updated continuously as new information becomes available. The Storm Water Program staff believes if the inspection data were extrapolate the

actual number of discharging systems will far exceeds what is collated in the database. A summary of the total suspected discharges compiled per townships and villages in the county as of December 31, 2015, can be found in Table 1 and is graphically represented in Figure 1 below.

Table 1: 2015 Suspected Illicit Discharging HSTS and Status (Per Township or Village)

| PORTAGE COUNTY 2015 STORMWATER DISTRICT SUSPECTED ILLICIT DISCHARGES | | | | | | | | | | |
|--|------------------|------|---|--|------------------------------------|---|---|--|--|--|
| Township | Cummantad Ammual | | Total Not in Annual Inspection Program | Total Suspected Illicit Discharging Systems Inspected | Total NOT Illicit Discharges | Total Confirmed Illicit Discharges | Total Confirmed Illicit Discharges Eliminated | Total Confirmed Illicit Discharges Pending Replacement/ Repair | | |
| Atwater | 135 | 37 | 98 | 11 | 8 | 5 | 2 | 3 | | |
| Brimfield | 205 | 78 | 127 | 75 | 27 | 48 | 5 | 43* | | |
| Charlestown | 97 | 45 | 52 | 9 | 1 | 8 | 5 | 3 | | |
| Deerfield | 198 | 105 | 93 | 18 | 16 | 2 | 1 | 1 | | |
| Edinburg | 155 | 56 | 99 | 15 | 5 | 10 | 3 | 7 | | |
| Freedom | 162 | 54 | 108 | 9 | 2 | 7 | 5 | 2 | | |
| Franklin | 161 | 30 | 131 | 5 | 2 | 3 | 2 | 1 | | |
| Hiram | 93 | 29 | 64 | 3 | 0 | 0 3 3 | | 0 | | |
| Mantua | 248 | 93 | 155 | 155 8 1 7 1 | | 6 | | | | |
| Nelson | 114 | 41 | 73 | 3 | 1 | 2 | 1 | 1 | | |
| Palmyra | 181 | 87 | 94 | 7 | 3 | 4 | 3 | 1 | | |
| Paris | 103 | 38 | 65 | 0 | 0 | 0 | 0 | 0 | | |
| Randolph | 191 | 45 | 146 | 10 | 4 | 6 | 2 | 4 | | |
| Ravenna | 443 | 137 | 306 | 32 | 8 | 24 | 8 | 16 | | |
| Rootstown | 376 | 99 | 277 | 277 9 2 7 3 | | 4 | | | | |
| Shalersville | 111 | 43 | 68 | 3 | 1 | 2 | 2 | 0 | | |
| Suffield | 106 | 48 | 58 | 9 | 3 | 6 | 2 | 4 | | |
| Windham | 124 | 53 | 71 | 7 | 3 | 4 | 1 | 3 | | |
| | 3203 | 1118 | | | | | 49 | 99 | | |
| Total | 3203 | 1110 | 2085 | 233 | 87 | 148 | 77 | 17 | | |

^{*}Brimfield has an extraordinary high number of total confirmed illicit discharging systems pending repair/replacement suspended enforcement due to on-going discussions of sewer project possibilities in some Brimfield communities.

Figure 1: 2015 Suspected Illicit Discharging HSTS and Status (Per Township or Village)

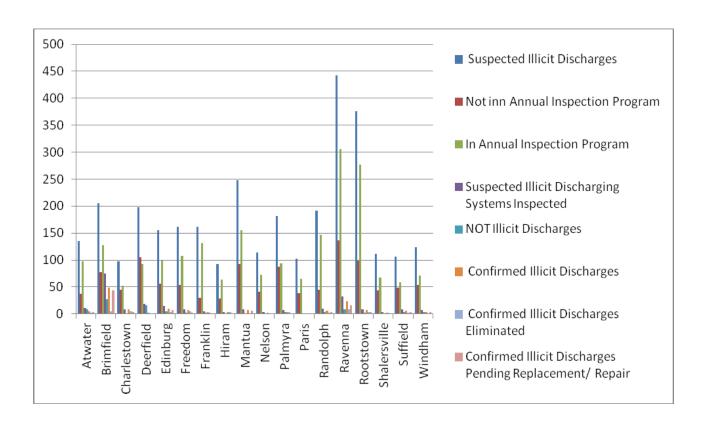


Figure 2: Dye test showing illicit discharges to waters of the state during HSTS evaluation





Maps of Suspected Illicit Discharging HSTS

Using ESRI GIS software, Storm Water Program staff created maps depicting visual representation of the distribution of the suspected discharging HSTSs in the county, townships, and villages. Hydrolines (water bodies) and road features are overlaid on the map to put the locations of the suspected discharging HSTSs in spatial context. The spatial relationship between the location of suspected illicit discharging HSTS and water bodies helps to uncover possible illicit discharging point of entry into the waters of the state. These maps are also updated regularly when new suspected illicit discharging HSTS information is found. A selection of these suspected discharging HSTS maps are also provided below. These maps consist of suspected discharging HSTS maps of Portage County, Franklin Township, Suffield Township, and Hiram Village and Township (see Figures 2-5).

Figure 3: Spatial distribution of 2015 Suspected Illicit Discharging HSTS

Figure 4

Figure 5

Figure 6

Priority Area Map

A priority map depicting areas with significantly higher numbers of illicit discharging HSTS has also been created from our illicit discharging HSTS database. This map will help the Storm Water Program prioritize areas that have concentrated number of illicit discharges.

The PCCGHD Storm Water Program also formed a work group with the Water Resources Department that meets bi-monthly to discuss failing HSTS and illicit discharges in the priority areas. This is proactive plan to deal effectively and efficiently with illicit discharging HSTS in the affected communities to eliminate public health nuisance. Figure 7 below shows the priority map,

Figure 7

Non NPDES Permitted Off-lot Discharging HSTS Inspections

The Storm Water Program staff continued the inspection of previously identified non National Pollutant Discharging Elimination System (NPDES) off-lot discharging HSTSs in the Storm Water database, to detect and eliminate illicit discharges. One thousand one hundred eighteen (1118) of these systems are confirmed off-lot discharging systems as shown in Table 3 at page nine. In 2015, one hundred forty four (144) of these off-lot discharging HSTSs without NPDES permits were inspected by PCCGHD. Forty-two (42), representing 29% of these one hundred forty-four (144) systems inspected were found to be non-complaint. Letters of violation to obtain service contracts were sent to the owners to maintain the systems. Table 2 below is a summary of off-lot system discharging HSTS inspection by PCCGHD.

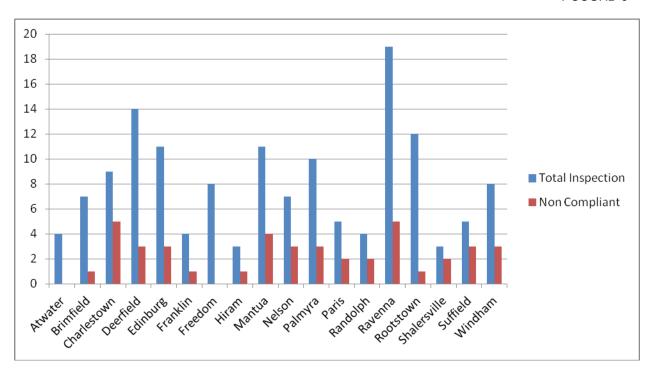
Table 2: 2015 Off-lot Discharging Inspections by PCCGHD

| Township | Inspections in Township/Village | Non Compliant in Township/Village |
|----------|---------------------------------|--------------------------------------|
|----------|---------------------------------|--------------------------------------|

| Atwater | 4 | 0 |
|--------------|-----|----|
| Brimfield | 7 | 1 |
| Charlestown | 9 | 5 |
| Deerfield | 14 | 3 |
| Edinburg | 11 | 3 |
| Franklin | 4 | 1 |
| Freedom | 8 | 0 |
| Hiram | 3 | 1 |
| Mantua | 11 | 4 |
| Nelson | 7 | 3 |
| Palmyra | 10 | 3 |
| Paris | 5 | 2 |
| Randolph | 4 | 2 |
| Ravenna | 19 | 5 |
| Rootstown | 12 | 1 |
| Shalersville | 3 | 2 |
| Suffield | 5 | 3 |
| Windham | 8 | 3 |
| Total | 144 | 42 |

The bar chart found on page 14 below shows the graphical representation of this inspection activity for off-lot discharging HSTS without NPDES permits found in the townships and villages across Portage County as depicted in table 3.

Figure 8: Non NPDES Off-lot Discharging HSTS Inspections in Townships or Villages



The remaining two thousand seventy-one (2071) suspected discharging systems that are not in the annual inspection program are evaluated to prioritize inspection locations. During storm water inspection of these systems, a suspected illicit discharging HSTS that needs further evaluation is dye tested to determine whether the system is illicitly discharging or not. The geographical coordinate points of the locations of all confirmed illicit discharges are captured with GPS and uploaded into the Storm Water GIS database. When discharging HSTSs are determined to be causing a public health nuisance, the owners are given six (6) months, upon notification, to correct these violations by installing an approved HSTS in accordance with Chapter 3701-29 of the Ohio Administrative Code (OAC), Section 3718 of the Ohio Revised Code (ORC) Sewage Treatment Systems Regulations, and the PCCGHD Supplemental Sewage Treatment Regulations in order to avoid escalated enforcement through the legal system.

Storm Water Program HSTS inspections conducted since the inception of the Storm Water Program indicate that some communities are stuffed with overwhelming numbers of illicitly discharging HSTSs. These systems are either completely failing or do not meet current United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) standards. PCCGHD is working with the residents of these communities who have expressed strong desires to get sewer systems as installation of public sanitary sewers in those communities appears to be the best option to correct the public health nuisance. In 2012, the County Board of Commissioners directed the Water Resources Department to initiate feasibility studies of providing sanitary sewer service for Oakwood Acres in Brimfield Township, after the residents petitioned for public sanitary sewer. The Water Resources Department has completed the architectural drawings of the proposed sanitary sewer project and is preparing to submit it to bidding after public forum discussion of the project. The PCCGHD Storm Water Program and Portage County Water Resources are also working with Ravenna City that has agreed in principle to allow the residents of Bryn Mawr Street and Seabury Drive to tie into the city's sewer system.

Suspected Illicit Discharging Nuisance Complaints

Nuisance complaint investigation is one of the effective tools employed by PCCGHD for illicit discharging detection and elimination. Consequently, all nuisance complaints received were investigated promptly. With homeowners and residents permission, HSTSs and laundry drains were dye tested or sampled to determine the validity of the complaints and determination of a public health hazard. The components and status of the HSTSs serving the affected houses were documented in the Storm Water Program Database.

Besides verbally informing parties involved in nuisance complaints about the outcome of the investigations, emails and letters were sent to them indicating whether complaints were justified. Additionally, corrective enforcement action was initiated after validation of waste water illicit discharging complaint. Furthermore, we encouraged everyone to continue to report any future waste water nuisance they may observe, even if previous complaints were found unjustifiable.

Homeowners of failing illicitly discharging HSTSs were given six (6) months, upon the receipt of the notice of violation to correct any breaches and avoid escalated enforcement action by complying with Chapter 3701-29 of the Ohio Administrative Code (OAC), Section 3718.011 of the Ohio Revised Code (ORC) Sewage Treatment Systems regulations, and the PCCGHD Supplemental Sewage Treatment Regulations. Furthermore, the addresses of failing systems that require upgrade, replacement or sewer connection were referred to our wastewater staff to manage and supervise the replacement/repair or sewer connection process. Finally, legal enforcement actions were pursued against recalcitrant and uncooperative property owners to ensure the elimination of the public health nuisance when all reasonable attempts to achieve compliance proved futile.

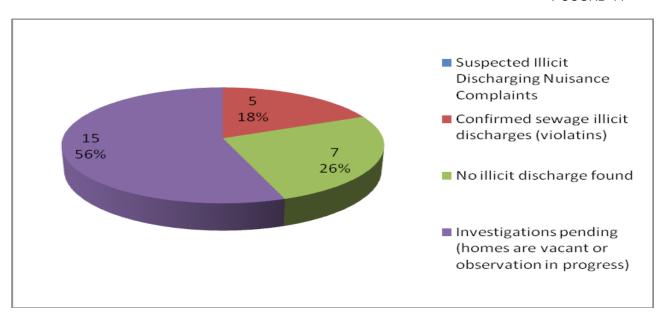
Suspected Illicit Discharging Nuisance Complaints Data Analysis

In 2015, PCCGHD received twenty-seven (27) suspected illicit household wastewater discharging written complaints. These nuisance complaints were fairly distributed across the townships and villages we serve. A thorough investigation of the twenty-seven (27) suspected illicit discharging nuisance complaints confirmed five (5) of them, representing 18%, were in violation, seven (7), constituting 26%, were determined to be not illicitly discharging, and fifteen (15), representing 56%, are still pending because the homes are either vacant or further examinations are needed to ascertain validity of the complaints. Scores of nuisance complaints could not be investigated because the complainants wanted to remain anonymous and did not want to continue with the process for fear of offering information they thought could potentially reveal their identity to the people they are complaining about. This information is summarized in Table 3 and Figure 8 below.

Table 3: Suspected Illicit Discharging Nuisance Complaints

| Confirmed sewage illicit discharges (violations) | 5 | 18.52% |
|--|----|---------|
| No illicit discharge found | 7 | 25.93% |
| Investigations pending (homes vacant or observation in progress) | 15 | 55.56% |
| Total | 27 | 100.00% |

Figure 9: Suspected Illicit Discharging Nuisance Complaints



The PCCGHD is also dealing with a particular nuisance complaint received from Chin Allotment in Ravenna Township that appears to be affecting more than two hundred homes, which are not included in the nuisance complaints data analysis above. Sewage odor and black water discharge found at the complainant's backyard and on Red Brush Road suggest that there is potentially huge HSTS discharging problem occurring in the neighborhood .However, initial preliminary inspection and dye testing of a couple of the suspected homes on Woodlawn Avenue suggest that there may be multiple discharging points of the septic effluent. The Ohio EPA has also been contacted by the complainant. This nuisance problem will require a holistic approach and more time to alleviate the problem. This process is underway and the PCCGHD has met with Portage County Water Resources Department officials, who have collected neighborhood data to inform the decision making process.

Private Real Estate Transfer HSTS Inspection

In addition to the nuisance complaints, annual inspection program, and routine random storm water inspections, Storm Water Program Staff also performed real estate transfer inspections of HSTSs upon request. Real estate transfer inspections of HSTSs appears to be one of the most effective and efficient methods of IDDE. It offers the best compliance rate among all the programs offered to eliminate confirmed illicit HSTS discharges because all the parties involved in real estate transfer transactions typically have vested interested to purge the violation to ensure that the deal could be closed on a timely manner. The enforcement process of illicit discharging HSTS found during property transfer HSTS inspection is the same as dealing with illicit discharges found during a storm water routine inspection. The homeowners are given six (6) months time limit from the date a notice of violation is issued to correct confirmed violations. The homeowners are required to install an approved HSTS in accordance with the ODH sewage treatment system statues and the PCCGHD Supplemental Sewage Treatment Regulations in order to avoid escalated enforcement through court. It must be noted that PCCGHD does not stop the sales process when we determine that an HSTS is causing a public health nuisance during a real estate transfer inspection despite the issuance of replacement/repair orders to enforce rectification of the public health problem. The eradication of any public health nuisance caused by illicit discharging HSTS becomes the responsibility of the new property owner if the property transfers before it is brought into compliance.

In 2015, twenty-eight (28) HSTS failing systems found among almost one hundred real estate transfer HSTS inspections were added to the nuisance complaint database. Similar to the nuisance complaint enforcement process, all failing HSTSs were referred to the Storm Water Program for replacement/repair enforcement in accordance with Chapter 3701-29 of the Ohio Administrative Code (OAC), section 3718.011 of the Ohio Revised Code (ORC) Sewage Treatment Systems regulations, and the PCCGHD Home Sewage Treatment Regulation 13.01 to 13.20.

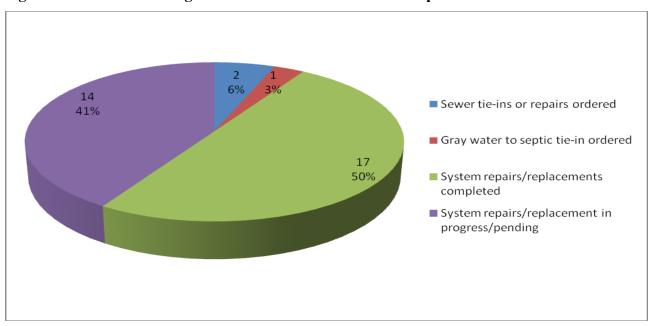
Status of Illicit Discharge Elimination Enforcement Orders

In 2015, a total of thirty-four (34) illicit discharge elimination enforcement orders comprising of two (2) sewer-tie-in, one (1) gray water to septic tie-in, and thirty-one (31) HSTS repairs/replacement orders were issued as a result of nuisance complaint investigations or real estate property transfer inspection that turned into nuisance complaint. Seventeen (17) repairs/replacements, representing 50% of total replacement orders were completed and the nuisance complaints were abated. One sewer connection was also completed. We still have fourteen (14) systems, representing 41% ordered for repairs/replacement pending completion. This information is summarized in table 4 and graphically represented in figure 9 below.

Table 4: Repairs/replacements status

| Sewer tie-ins or repairs ordered | 2 | 5.88% |
|--|----|---------|
| 1 | 1 | |
| Gray water to septic tie-in ordered | 1 | 2.94% |
| System repairs/replacements completed | 17 | 50.00% |
| System repairs/replacement in progress/pending | 14 | 41.18% |
| Total repair/replacement orders | 34 | 100.00% |

Figure 10: Pie chart showing the distribution of the status of complaints



PCCGHD 13

Mindful of the economic disadvantage of some of our homeowners, the PCCGHD Storm Water Program worked with institutions such as the Portage County Board of Commissioners, Portage County Regional Planning Commission (PCRPC), Neighborhood Development Services (NDS), Community Action Council, and the United States Department of Agriculture (USDA), to assess possible funding for HSTS replacement, repair, and public sewer construction or connection into an existing one.

Homeowners with financial burden who could not afford the replacement or repair from their own resources are referred to the above-mentioned institutions for possible of funding assistance. However, financial assistance from these institutions are not guaranteed and only offered when funds are available. Qualification for such financial assistance in the form of soft loans or grants is means-tested and applicants must meet certain conditions determined by the individual funding organization without any influence from the PCCGHD as to how funding is disbursed or who is considered for assistantship. Available financial support to qualified applicants is disbursed on first come, first serve basis.

Water Pollution Control Loan Fund Grant

Judging from the enormity of the financial needs for illicit discharge elimination in the county, the Storm Water Program is constantly looking for new funding sources to broaden the base of the financial assistance for our homeowners for septic replacement, repair, and sewer connection. To this end, the Storm Water Program, with the support of our stakeholders, applied for and received a \$300,000 Water Pollution Control Loan Fund (WPCLF) Grant from Ohio Environmental Protection Agency (EPA) to help our low to moderate income homeowners who need HSTS replacement or repair. The WPCLF will offer a limited amount of principal forgiveness to qualifying projects during 2016/2017. PCCGHD will disburse this grant to qualified applicants, who meet the guidelines for funding on first come first serve basis.

Education and Community Outreach

In collaboration with our stakeholders, the Storm Water staff organized and attended public forums to provide educational sessions to participants with the aim of informing them of our goals and objectives to achieve sustainable water quality in accordance with the EPA's Clean Water Act demands as well as elicit public cooperation and support for the successful implementation of the program. Additionally, the PCCGHD Storm Water Program created a brochure and a flier (shown in Figure 8 and 9) offering a succinct explanation of the Storm Water Program mandate as part of our educational outreach. Furthermore, the brochure explains the importance of proper maintenance of a HSTS, and offers information on myths and facts about HSTSs. PCCGHD Storm Water staff gives homeowners copies of this brochure during inspections. Staff also offers them timely notification about findings of the inspection of their systems by a check mark as to whether it:

- (a) Passed visual survey,
- (b) Is failing, needs repaired/replaced, or
- (c) Needs further evaluation.

Finally, Storm Water Program staff provides information and education on operation and maintenance, repairs/replacement of HSTS, and prevention of storm water contamination by phone, email, and office consultation on an on-going basis.

Figure 11

Myths and Facts about Household Sewage Treatment (Septic) Systems

MYTH: A septic system will work forever once installed; you do not need any maintenance or pumping. "If it ain't broke why fix it?" If you are not having problems, don't worry about a septic system.

<u>FACT</u>: A septic system properly maintained on regular basis could last between 20-30 years on the average. Lack of proper maintenance shortens the lifespan of a septic system and eventually leads to costly repairs or replacement, if it is allowed to get to the "problem" stage.

<u>MYTH:</u> Regular maintenance of a septic system is more expensive than fixing the system once it has failed.

<u>FACT:</u> It is far cheaper to prevent a system failure than it is to correct.

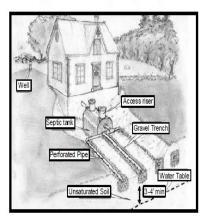
<u>MYTH:</u> Septic system additives will help grow the bacteria needed and take the place of having the septic tank pumped regularly.

<u>EACT:</u> Scientific study of experts in Canada and the United States have found that septic system additives do not keep a system "healthy" and definitely do not take the place of regular maintenance of a septic system.

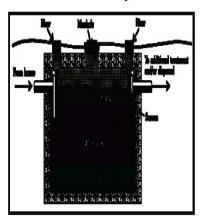
<u>MYTH:</u> Household chemicals, such as disinfectants, medicines, paint thinner, water softener brine, etc. are not harmful to a septic system

EACT: The septic tank and leaching system are full of living organisms (bacteria) that make the septic system work properly. Normal household cleaners that are introduced into the septic system in moderation will not adversely affect it. Excessive amounts of these products can have a detrimental effect on the organisms.

A Typical Trench-Style Septic System



Cross Section of a Septic Tank



Portage County Health Department Administration Building 449 South Meridian Street Ravenna, OH 44266

Phone: 330-296-9919
Fax: 330-297-3597
Email: pchd@portageco.com
http://www.co.portage.oh.us/healthdepartment.htm

Portage County Health District Environmental Division

Proper
Maintenance For
Your Septic System



Portage County Health Department Administration Building 449 South Meridian Street Ravenna, OH 44266

Phone: 330-296-9919 Fax: 330-297-3597

Email: pchd@portageco.com

http://www.co.portage.oh.us/healthdepartment.htm

The Portage County Health District is conducting an EPA-mandated stormwater management program. This program is based on the premise that areas with illicit septic discharging systems have a greater potential to impact water quality. Currently, a stormwater specialist is inspecting all suspected illicit discharging septic systems and septic nuisances in the entire Health District, for the purpose of detecting and correcting failing systems. Homeowners with properly functioning systems will not be required to upgrade to meet today's standards.

Maintenance of Your Septic System Protects Your Investment, Saves Money, and Reduces Risk to Streams and Drinking Water

- ☑ Properly maintained septic system can last over 20 years.
- Improper maintenance leads to costly damage, repair and replacement.
- New septic systems currently cost between \$9,000 and \$25,000.
- Improperly maintained system pollutes soil, streams and drinking water systems.

THERE IS NO FEE FOR THE INSPECTION CONDUCTED.

You do not have to contact the Portage County Health District, unless instructed in the Findings Section.

Findings of Stormwater Inspection

We included a copy of your septic system record.

| | Yes |
|--|-----|
|--|-----|

☐ No, not available

We determined your system:

□ Passed the visual survey
□ Is failing, needs repaired/
replaced. Please contact the district
stormwater specialist listed below.
□ Needs further evaluation. Please
contact the district stormwater

specialist listed below.

AMOS SARFO: 330-296-9919, Ext. 111 or asarfo@portageco.com

For more information please visit www.co.portage.oh.us/ healthdepartment.htm or contact the district stormwater specialist listed above.

Proper Maintenance Is Very Important For Your Septic System

- ☑ Have your system inspected periodically by a septic expert and pump the tank at least every 3 years. A list of sewage tank cleaners could be obtained from this department or the Yellow Pages.
- Avoid using any type of chemical or biological septic tank additive. They are not necessary for proper functioning of a septic tank, nor do they reduce the need for routine tank pumping.
- Avoid dumping paints, household cleaners, oils, or fats down your drains. Never flush items such as cat litter or paper towels.
- Avoid driving and parking vehicles on your septic system.
- Direct rainwater and surface water away from the leachfield.
- Avoid "flooding" your system by using too much water at one time.
 - Wash laundry throughout the week instead of all on one day.
 - Repair leaky faucets, and toilets.
 - Run the washing machine and dish washer only when they are full.

Illicit Discharging Sewage System Policy

Effective April 24, 2014, PCCGHD established an official written <u>Illicit Discharging Sewage Systems Policy</u> to clearly define appropriate procedures in addressing illicit discharging sewage systems detected through various health department Storm Water and Sewage Treatment System Program activities. This policy outlines corrective requirements/options and enforcement timeframes for ALL illicit discharging sewage systems discovered via: property transfer evaluations; home use changes; lot split proposals; nuisance complaints; and those within Portage County Health Department's annual aeration inspection process. A copy of this policy is provided below (see Figure 13-15)

Figure 13

| G CE | Portage County Health De Ravenna, Ohio | |
|----------------|---|--|
| PROTECTION TAM | Title: Illicit Discharging Sewage Systems Policy | Program area: Wastewater/Stormwater (Environmental) |
| Health Dept. | Approved by: Unwaye Control 4/29/2019 Health Commissioner Date | Loyd Doves 4-23-14 Director Date |
| | Original Effective Date: 4/24/2014 Reviewed/Revised Dates: | Supervisor Date |

POLICY PURPOSE:

To clearly define for all employees the accurate procedures to follow in addressing illicit discharging sewage systems discovered through various programs/activities.

PROCEDURES:

Home Sale/Property Transfer Evaluations:

<u>ALL</u> discharging systems not covered under an NPDES permit will be deemed unacceptable as an illicit discharge and will be required to be replaced: with an on-lot soil-absorption based system if possible; or an NPDES permitted discharging system IF an on-lot system is not possible, and there is an acceptable discharge point, and there is no sewer available and accessible within 400 feet of the property. * ' **

*Enforcement action will proceed after 6 months if system replacement has not been initiated.

Home Use Changes – Addition or Home Replacement:

<u>ALL</u> discharging systems not covered under an NPDES permit will be deemed unacceptable as an illicit discharge and will be required to be replaced: with an on-lot soil-absorption based system if possible; or an NPDES permitted discharging system IF an on-lot system is not possible, and there is an acceptable discharge point, and there is no sewer available and accessible within 400 feet of the property. * ' **

*For those homes serviced by "Class I" aeration discharging systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Inspection Program, IF the homeowner chooses NOT to proceed with the proposed home use changes, no enforcement action will be taken at that time, with notification of the status as an illicit discharge indicating that replacement will become necessary in the future upon any property transfer, home use changes, lot split, malfunction that cannot be repaired to original manufacturer's specifications, or other further enforcement action enacted by the Ohio EPA and/or the Health Department. **

Figure 14

Lot Splits – Lots with Existing Home and Sewage System On Them:

Evaluation/Inspection of the existing sewage system will be required as part of the lot review. <u>ALL</u> discharging systems not covered under an NPDES permit will be deemed unacceptable as an illicit discharge and will be required to be replaced with an on-lot soil-absorption based system in order to approve the splitting off of the lot. In addition to this required new system to be installed, an approved designated replacement system area will also be required to approve the split.

Enforcement action will proceed after 6 months if system replacement has not been initiated.

•In the event that the lot split is not approvable, and/or the homeowner chooses NOT to proceed with the proposed lot split, for those homes serviced by "Class I" aeration discharging systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Inspection Program and are found upon inspection to be operating properly and not creating an observable nuisance, no enforcement action will be taken at that time, with notification of the status as an illicit discharge indicating that replacement will become necessary in the future upon any property transfer, home use changes, lot split, malfunction that cannot be repaired to original manufacturer's specifications, or other further enforcement action enacted by the Ohio EPA and/or the Health Department. **

Nuisance Complaints:

<u>ALL</u> discharging systems not covered under an NPDES permit, or that are not "Class I" aeration systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Aeration Inspection Program will be deemed unacceptable as an illicit discharge and will be required to be replaced: with an on-lot soil-absorption based system if possible; or an NPDES permitted discharging system IF an on-lot system is not possible, and there is an acceptable discharge point, and there is no sewer available and accessible within 400 feet of the property. * ' **

"Class I" aeration discharging systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Aeration Inspection Program and are found upon inspection to be operating properly and not creating an observable nuisance will "pass" the inspection, with notification of the status as an illicit discharge indicating that replacement will become necessary in the future upon any property transfer, home use changes, lot split, malfunction that cannot be repaired to original manufacturer's specifications, or other further enforcement action enacted by the Ohio EPA and/or the Health Department. **

"Class I" systems found upon inspection to be malfunctioning will be required to be repaired to original manufacturer's specifications and will then be sampled by the Health Department to ensure they meet the 20/40 BOD/SS standards.

Those "Class I" systems that cannot be repaired to original manufacturer's specifications, cannot meet the 20/40 BOD/SS standards, or that remain in non-compliance with noted repair requirements will be required to be replaced: with an on-lot soil-absorption based system if possible; or an NPDES permitted discharging system IF an on-lot system is not possible, and there is an acceptable discharge point, and there is no sewer available and accessible within 400 feet of the property. * ' **

Portage County Health Department's Annual Aeration Inspection Program:

"Class I" aeration discharging systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Aeration Inspection Program and are found upon inspection to be operating properly and not creating an observable nuisance will "pass" the inspection and be designated a "Working System", with notification of the status as an illicit discharge indicating that replacement will become necessary in the future upon any property transfer, home use changes, lot split, malfunction that cannot be repaired to original manufacturer's specifications, or other further enforcement action enacted by the Ohio EPA and/or the Health Department. **

Systems found upon inspection to be malfunctioning will be required to be repaired to original manufacturer's specifications and will then be sampled by the Health Department to ensure they meet the 20/40 BOD/SS standards.

Those that cannot be repaired to original manufacturer's specifications, cannot meet the 20/40 BOD/SS standards, or that have repeatedly been found to be malfunctioning or in non-compliance with noted repair requirements will be required to be replaced: with an on-lot soil-absorption based system if possible; or an NPDES permitted discharging system IF an on-lot system is not possible, and there is an acceptable discharge point, and there is no sewer available and accessible within 400 feet of the property. * ' **

* In the event that an on-lot soil-absorption based system is not possible, there is no acceptable discharge point for an NPDES permitted discharging system, and there is no sanitary sewer service available and accessible to the property, a sealed vault holding tank will be the only available replacement system option for the required elimination of the illicit discharge.

** "Class I" aeration discharging systems installed between 1986 and 2006 that fall within the Portage County Health Department's Annual Aeration Inspection Program MAY be able to be upgraded to NPDES standards and thus qualify for NPDES permit coverage with the inclusion of additional treatment components, in lieu of full system replacement, if such additions are approvable per the manufacturer, ODH/TAC, the Ohio EPA, and the Health Department.

As members of the Portage County Storm Water Task Force and Steering Committee, the PCCGHD Director of Environmental Health and the Storm Water Program Staff attended Portage County Storm Water quarterly meetings to discuss all pertinent storm water issues. At these meetings, the PCCGHD presented a written summary of the statistics of inspections, consultations, and correspondence concerning the Storm Water Illicit Discharge Program. Table 6 shows a summary of 2015 storm water/illicit discharge program activities. The table shows the inspections, dye testing, office/field consultations or research, GIS and data search. It also summarizes orders issued for replacement/repairs, court appearances, telephone consultations and field investigations as they occur during the performance of our daily activities.

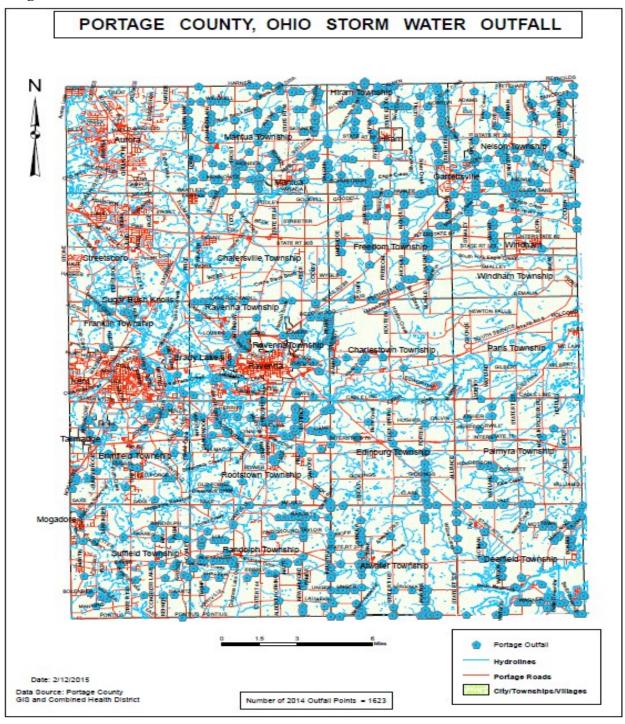
Table 5

| | | | STO | RM WATE | R/ILLICIT | DISCHARG | E PROGRA | М | | | | |
|------------------------|----------------------------|--------------------------------------|-------------------------|-----------------------|------------------|----------------------|----------------------------|---------------------|-----------------------------------|-----------|-------------------|--------|
| ANNUAL 2015 | Inspection/ Dye Testing | Office: Consultation/ Research | Office: GIS and Data | Field Consultation | Orders Issued | HSTS Replacements | Prosecutor Consultation | Court Appearance | Eng/Soil Water Consultation | Telephone | Field Research | Totals |
| TOWNSHIPS | | | 111111 | 111111 | 111111 | 1111111 | (11111) | /////// | 111111 | | | 11111 |
| Atwater | 87 | 66 | 9 | 5 | 5 | 2 | 8 | 8 | 0 | 62 | 0 | 252 |
| Brimfield | 6 | 8 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 14 | 0 | 33 |
| Charlestown | 0 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 25 |
| Deerfield | 8 | 24 | 8 | 0 | 0 | 3 | 0 | 0 | 0 | 32 | 0 | 75 |
| Edinburg | 4 | 15 | 1 | 0 | 0 | 0 | 4 | 4 | 0 | 17 | 0 | 45 |
| Franklin | 10 | 13 | 4 | 0 | 0 | 1 | 1 | 1 | 0 | 34 | 0 | 64 |
| Freedom | 6 | 19 | 5 | 0 | 0 | 0 | 2 | 2 | 0 | 25 | 0 | 59 |
| Hiram | 28 | 31 | 11 | 0 | 0 | 1 | 1 | 1 | 0 | 30 | 0 | 103 |
| Mantua | 1 | 10 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 10 | 0 | 26 |
| Nelson | 14 | 25 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 34 | 0 | 77 |
| Palmyra | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 12 |
| Paris | 10 | 23 | 7 | 0 | 0 | 1 | 0 | 0 | 0 | 24 | 0 | 65 |
| Randolph | 0 | 110 | 24 | 10 | 10 | 2 | 7 | 7 | 0 | 98 | 0 | 268 |
| Ravenna | 23 | 31 | 7 | 2 | 2 | 1 | 0 | 0 | 0 | 41 | 0 | 107 |
| Rootstown | 12 | 28 | 6 | 2 | 2 | 1 | 3 | 3 | 0 | 36 | 0 | 93 |
| Shalersville | 18 | 35 | 11 | 0 | 0 | 5 | 2 | 2 | 0 | 67 | 0 | 140 |
| Suffield | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 16 |
| Windham | 1 | 205 | 108 | 1 | 1 | 0 | 15 | 15 | 0 | 153 | 29 | 528 |
| General | 296 | 685 | 212 | 21 | 21 | 20 | 46 | 46 | 0 | 727 | 29 | 2,103 |
| Township Totals | 525 | 1350 | 422 | 41 | 41 | 39 | 92 | 92 | 0 | 1430 | 59 | 4,091 |
| CITIES/VILLAGES | ////// | <i>IIIIIII</i> | IIIII | MIIII | MILL | MIIIII | MIIIII | MIIII | (11111) | | (11111) | ////// |
| *Aurora | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Brady Lake | 0 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 9 |
| Garrettsville | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Hiram Village | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Mantua Village | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Mogadore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Ravenna | | | | | | | | | | | | |
| *Streetsboro | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sugar Bush Knolls | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Windham Village | 14 | 66 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 152 |
| Cities/Villages Totals | 14 | 82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 76 | 0 | 172 |
| TOTAL INSP | 539 | | | | | | | | | | | |
| TOTAL TELE | 1506 | 1 | | | | | | | | | | |
| OFFICE: CON/RES | 1432 | 1 | | | | | | | | | | |
| OFFICE: GIS & DATA | 422 | 1 | | | | | | | | | | |
| FIELD RESEARCH | 59 | 1 | | | | | | | | | | |
| TOTAL CON | 1604 | 1 | | | | | | | | | | |
| OVERALL TOTAL | 5562 | 1 | | | | | | | | | | |

Storm Water Outfalls

Spatial data of storm water outfall points were mapped in 2014. In 2015, the database and map were used for a limited sample field verification of the outfall points. The database and outfall map will be utilized in subsequent years to fully field verify all the outfall points. Additionally, the database and the map will be updated and used to support the Storm Water Program's monitoring, detection, and elimination of illicit discharges. Figure 10, below, is the GIS outfall map depicting the visual representation and distribution of the known outfall points in the Storm Water District.

Figure 16



Conclusion

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Overall the Storm Water Program continues to be one of the most effective and efficient environmental programs for illicit discharge detection and elimination of waste water from non-storm water sources such as HSTS to prevent surface water pollution. The Storm Water Program performed exceedingly well in 2015 in the execution of its mandate. PCCGHD Storm Water Program partners, supports, and cooperates with all stakeholders for successful implementation of the program to accomplish its laudable goals and objectives aimed at achieving sustainable water quality in accordance with EPA Clean Water Act.