

MCM 6 Pollution Prevention & Good Housekeeping Plan (PPGHP)

East Lampeter Sewer Authority (ELSA)

East Lampeter Township

Lancaster County, PA

MS4 Permit #: PAG133541

Permit Cycle: 2018-2023

Revision: 07/01/2021

Annual Report Year: 7/1/2020-6/30/2021

Planning Year: 7/1/2021-6/30/2022

Municipal operations are generally the largest endeavors undertaken by a municipality. Therefore, operations have the greatest potential to pollute run-off. However, appropriately managed operations have the greatest potential to protect water quality at the same time. Selecting appropriate BMPs under MCM 6 can provide the most impact associated with pollution reduction where issues are encountered. The O&M Plan is the portion of the SWMP related to efforts to prevent or reduce pollutant run-off from municipal operations. It describes the relevant decision process and procedures for program development and implementation. It is a stand-alone summary that supports SWMP focal areas and goals. The O&M Plan is generally the most comprehensive plan of the stand-alone MCM plans.

The following are the standard baseline considerations that need to be addressed by the O&M Plan, per the USEPA "Protocol":

- A description of the O&M program to prevent or reduce pollutant runoff from municipal operations including:
 - municipal operations impacted by the O&M program
 - a list of municipally-owned industrial facilities discharging to the MS4 that are subject to industrial stormwater permitting (including permit number or industrial NOI)
- any government employee training program used to prevent/reduce stormwater pollution from municipal activities, including:
 - a description of exiting materials used
 - a description of how the training program is coordinated with public information and illicit discharge minimum measures
- a program description addressing:
 - maintenance activities, schedules, and long-term inspection procedures for controls to reduce floatables/ pollutants to the MS4
 - controls for reducing or eliminating discharges from streets, parking lots, storage yards, etc.
 - procedures for proper disposal of waste removed from MS4 and municipal operations
 - procedures to ensure flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection
- person(s) responsible for management and implementation of the program/BMPs
- how success of minimum measures are evaluated
- how measurable goals were selected

The USEPA "Protocol" further provides a verification requirement that "the training program for the municipal staff achieves the intended goal of educating staff associated with reducing pollutant runoff from municipal operations." An annual training plan is developed as a component of the annual SWMP review and corresponding O&M Plan review.

East Lampeter Township will review and update the O&M Plan throughout the Annual SWMP Review and Assessment process. The existing O&M Plan is reviewed and assessed with an outline developed of potential changes and modifications during the Annual SWMP Review and Assessment (based on Section 800-1, SMWP goals, and encountered conditions from the previous permit year). Following the annual review (and per the SWMP schedule), the outline is finalized and the O&M Plan is updated with primary activities updated/reflected in the SWMP schedule. Section 500-4 summarizes primary activities and items addressed during the plan update and reflected in the SWMP schedule.

The following outlines considerations, decision processes and details associated with the primary items updated during each annual O&M Plan revision:

- O&M Plan annual update
 - follows the Annual SWMP Review and Assessment, which is based on processes described in Sections 500, 800-1, and other section of the SWMP that may have been tied to the O&M Plan previously
 - includes:
 - results of the assessment(s)(including documented confirmation of the previous permit year training plan)
 - The inventory captures and reflects all township facilities and activities conducted (including activities that are contracted out (e.g. roadway repaving, painting, installation of storm sewer pipe, mowing, etc.)) that have the potential to generate pollution or pollute runoff.
 - Activities are “assigned” to each facility.
 - Individual facilities include a denotation if an impact assessment has been conducted. All facilities in the regulated area are subject to an impact assessment.
 - The SWMP schedule is updated to reflect the timeframe of any assessments yet to be completed or required due to a changed condition.
 - Impact assessments occur once, but additional assessments are conducted as a result of modifications and changes to the facility.
 - Sub-facilities are noted for primary facilities (e.g. fueling station, salt storage and loading, etc. at the Public Works yard).
 - Standard Operating Procedures (SOPs) are provided (or referenced) within the O&M Plan for each activity listed in the inventory.
 - Water quality protection BMPs are assigned to each activity and relevant facilities.
 - Implementation and observation of water quality protection BMPs inherently follow the pollution prevention objectives of the overall program.
 - BMPs implemented are controls to reduce and/or prevent polluted discharges from facilities and activities.
 - The inventory correctly reflects activities and corresponding facilities, along with assigned water quality protection BMPs for the activities.
 - Maintenance and/or operational activities selected for the incoming permit year are selected and outlined.
 - Selected activities are based on any of the following:
 - regular maintenance for a facility
 - MS3 field investigations revealed deficiencies requiring attention and maintenance
 - A master list from the previous permit year is maintained of encountered deficiencies from field investigations for incorporation into the schedule for upcoming permit year. However, emergency activities (e.g. sinkhole) are repaired immediately.

- Dry-weather screening revealed deficiencies requiring attention and maintenance.
 - Inspections of township-owned facilities and BMPs revealed deficiencies requiring attention and maintenance.
 - A SWMP goal requires a specific activity or set of activities to support facilitation of the goal (pollution reduction objectives).
 - any other activities deemed appropriate by the MS4 Committee
- The SWMP schedule is updated to reflect selected and/or regularly occurring maintenance activities.
- Plan processes described
 - Inspection procedures
 - Inspections are conducted to serve two primary purposes:
 - Ascertain if implemented water quality BMPs are performing as intended and reducing and/or preventing the discharge of pollutants.
 - Periodically ensure facilities (and select activities) are operating as intended and are structurally sound with the intent to ascertain if pollutants are being generated (e.g. leaking fuel pump, stormwater run-off interaction with stored materials, etc.).
 - Individual BMP sheets outline inspection procedures for the specific controls.
 - The O&M Plan outlines frequency of inspections: both regular and event inspections.
 - Regular inspections are periodic inspections. Frequency is based on a priority level of probability to discharge pollutants or pollute stormwater runoff for facilities.
 - Temporary-type BMPs (e.g. inlet protection during road work operations) are included in the regular inspection frequency only for the BMPs implemented at that time.
 - Event inspections are driven by defined conditions, and include all facilities and implemented BMPs. Event inspections are triggered by rain events forecasted at 1inch of rain or greater.
 - Event inspections are conducted prior to the forecasted rain, during the event for every 24 hours of continuous rain, and after the rain event.
 - Checklist(s) contained within the O&M Plan are used for inspections (and outline procedures in conjunction with individual BMP sheets for follow-up based on encountered deficiencies). Completed inspections are logged and inserted into the O&M Plan.
 - Waste disposal procedures
 - Waste disposal procedures are incorporated into the O&M Plan via an established sub-plan (Waste Management Plan).
 - The Waste Management Plan includes consideration of waste removed from streets, the MS4, and from discharge points.
 - Spill response and control procedures

- Spill response and control procedures are incorporated into the O&M Plan via an established sub-plan (Spill Control Plan).
- O&M schedule development
 - This is conducted in conjunction, and as a result of, the O&M Plan review and update, and specifically with the maintenance and/or operational activities selected for the incoming permit year.
 - This is outlined in a chart format (or similar) to include the timeframes of planned activities.
 - Includes milestone if public notices are required for development and distribution
 - includes reference, time, or actual activity associated with implementing and/or maintaining water quality protection BMPs
 - The schedule includes O&M Plan supporting inspections.
 - Timeframes selected for inspections are based on activities of the given timeframe. The annual assessment will provide denotation of improvements to certain activities that should be inspected.
 - The assessment will further provide an indication if an inspection will provide support for measuring the progress of a goal (e.g. repetitive trainings associated with a common activity that has been found deficient can be measured for effectiveness based on results of inspections).
 - Primary activities planned for the year are reflected in the master SWMP schedule.
 - Contracted activities are included in the schedule, along with the contracted entity.
 - Water quality protection BMPs and associated training that has been planned for the year are communicated to the contractor. Contracted entities are invited to relevant training where training is focused on respective activities of the contracted entity.
 - The schedule is reviewed monthly and necessary changes/modifications are conducted as an update to the schedule.
- Annual employee training plan development
 - This is denoted in the SWMP schedule and includes:
 - inventory review and update
 - selection of maintenance and/or operational activities for the permit year
 - identified deficiencies based on review of previous permit year inspection records
 - The annual training plan focuses on training municipal staff (and contractors are invited for operations performed by contractors on behalf of the township) related to:
 - maintenance and operational activities that have the potential to pollute and conducted by the township and corresponding water quality protection BMPs
 - IDD&E considerations (including spill response and control)
 - maintenance of stormwater infrastructure
 - maintenance of implemented structural BMPs
 - Selected training topics are based on:
 - deficiencies encountered in previous permit cycles where training has been selected to improve performance and reduce and/or prevent the discharge of pollutants
 - infrequent activity selected for the permit year where training has been selected to prepare for the activity

- common activities where requirements may have changed or a “refresher” has been selected
 - a polluted discharge occurred with a given activity, where training has been selected to improve the prevention and/or reduction of the discharge of pollutants for similar activities in the future
- All proposed training events are included in the training plan. Events where the training materials have yet to be finalized will have a denotation on the SWMP schedule for finalizing training materials.
- The SWMP schedule is updated with a denotation of primary training events, and the training plan is inserted into the O&M Plan, with copies distributed to staff.
- Prioritization of scheduled training events are based on scheduled activities, as in training is conducted prior to the scheduled operational activity.
- Contracted activities are invited to training (including applicable “tail-gate talks” type training events).
 - Water quality protection BMPs and associated training that has been planned for the year are communicated to a contractor. Contracted entities are invited to relevant training where training is focused on respective activities of the contracted entity.
- Primary employee training events
 - Primary employee training events are exercises where:
 - multiple departments, divisions, etc. are involved in the training event
 - outside consultants, contractors, etc. are invited to the training
 - is an IDD&E-focused training event
 - Training is not limited to primary employee training events. Primary training approach includes:
 - “one-on-one” training with selected personnel conducting certain activities
 - “tail-gate” or “toolbox” talks conducted in-house

The following is considered also with plan development, review, facilitation, and updates:

- SWMP goals will indicate control BMPs associated with Standard Operating Procedures (SOPs) that are/will be used for facilitation of the goal.
 - BMPs included in active SWMP goals will be assessed and measured per Section 800-1 based on the previously established individual measurement reference.
 - BMPs included in new or modified SWMP goals will include an individual measurement reference.
- Measurement references may be included in an overall numeric SWMP goal tied with discharge monitoring and MEP methodology.
- The O&M Plan includes two primary sub-plans incorporated into the plan:
 - Waste Management Plan
 - Spill Response and Control Plan
- An annual training plan is developed each year outlining the planned training activities and information that will be reviewed. Training will occur monthly.
 - One of the training sessions is focused on IDD&E activities.
 - Businesses contracted by the township to conduct township operations will be invited to relevant trainings (e.g. mowing contractor would be invited to training focused on open space BMPs).

- Trainings would involve considerations for the SOP itself and the set of BMPs (water quality protection BMPs) that are assigned to the SOP to protect water quality.
- Training shall be designed specifically for different departments and their duties and daily operations and how those duties and operations relate to stormwater management. The township will document training activities, employees in attendance, and other applicable information. The objective is to train municipal employees on stormwater management and the various ways to minimize or prevent pollutant discharges. Training shall be designed to include the following:
 - annual training to public works personnel in the recognition and reporting of illicit discharges
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed during road, street, and parking lot maintenance
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed in and around maintenance and public works facilities
 - annual training to public works personnel in good housekeeping and pollution prevention practices that are to be employed in and around recreational facilities
 - public works personnel shall have training in spill response
 - office and public works personnel shall have training in how to respond to a complaint regarding an illicit discharge
- An SOP (with focus on the actual activity –no reference to water quality considerations at first) exists for every activity conducted by the township.
 - A set of controls (or BMPs) designed to protect water quality and reduce the potential for polluted run-off is assigned to each SOP.
 - The sets of BMPs will be taken from, and modified to reflect the township more appropriately, the Lancaster Inter-municipal Committee (LIMC) Good Housekeeping Guidance and BMP Manual.
 - Modifications to the SOP may be conducted to better incorporate a control or BMP.
- An inventory of township-owned facilities and township conducted activities (both self-performed and contracted) is reviewed annually to ensure it is up-to-date and accurate.
 - The inventory indicates areas (MS3s) where facilities are located, and where activities will be performed.
 - A documented “Water Quality Impact Assessment” is conducted for each facility to prioritize facilities from higher potential to pollute receiving waterways to very low potential to pollute receiving waterbodies. The assessment is revisited if conditions or activities change at the facility.
 - An intent of the assessment is to further outline physical controls or BMPs that may be necessary to protect water quality.
- A schedule will be maintained outlining timeframes and durations that standard activities will be conducted.
 - Timeframes and durations may be increased for a specific area (e.g. High Priority Area) where an increase may be necessary to assist, or was determined it is required to support, an established SMWP goal.
- Primary objective of good housekeeping is pollution prevention for “normal” and “every-day” activities. Certain activities or changes in frequency of activities (e.g. increased system maintenance for removal of sediment for areas encountered during an inspection) are selected to help achieve the pollution reduction objective generally supported by an overall SWMP goal.

- Reference the minimum MS4 Permit requirements for selection of BMPs to implement and facilitate a SWMP goal.
 - The MS4 Permit requires the following at a minimum:
 - BMP #1: facilities and activities inventory
 - BMP #2: written plan (O&M Plan)
 - BMP #3: employee training program
 - Example:
 - A delineated MS3 that is primarily comprised of residential land uses is classified as a High Priority Area due to elevated nutrients and sediment in discharges.
 - A set of operational activities are planned (as a component of a SWMP goal) to reduce nutrients and sediment in discharges.
 - Street sweeping frequency is set for once a month to remove sediment build-up on streets.
 - Inlets, catch basins, etc. are cleaned twice a year to remove sediment build-up and reduce the potential for the sediment to be flushed via outfall during rain events.
 - The activity of applying turf fertilizers is removed from township facilities.
 - The annual training plan is completed, and training is conducted regarding street sweeping and system cleaning (along with considerations of water quality protection controls and BMPs).
 - Discharge monitoring and screening activities will help determine if adjustments are necessary to the frequency of current activities or other activities are necessary.

PPGHP Responsible Persons		
Primary <u>(MS4 Committee)</u> <ul style="list-style-type: none"> Reviews/ Revises the PPGHP & O&M Plan May assign PW work orders May assign or conduct WQ BMPs, Impact assessments, Facility or Activity inspections May determine & implement WQ BMPs Advise ELSA & Public Works Develops, schedules, &/or hosts education & training events & materials 	<u>East Lampeter Township Manager</u> Ralph Hutchison	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 rhutchison@eltwp.org
	<u>East Lampeter Township Assistant Township Manager</u> Tara Hitchens, AICP	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 thitchens@eltwp.org
	<u>East Lampeter Township Director of Public Works</u> Charles Thomas	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 cthomas@eltwp.org
	<u>East Lampeter Township Director of Planning</u> Colin Siesholtz	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 csiesholtz@eltwp.org
	<u>East Lampeter Township Stormwater Coordinator</u> Charles Hayes	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 chayes@eltwp.org
	<u>East Lampeter Township Engineer</u> Scott Hain, PE	<u>David Miller Assoc. Inc.</u> 1075 Centerville Road, Lancaster, PA 17601 (717) 898-3402 shain@dmai.com
	<u>East Lampeter Township Stormwater Technician</u> A.J. Wasilewski	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 awasilewski@eltwp.org
	<u>East Lampeter Township Supervisor of Roads</u> John Brooks	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 jbrooks@eltwp.org
	<u>SWMP Consultant</u> LandStudies, Inc	<u>LandStudies, Inc.</u> 315 North Street, Lititz, Pennsylvania 17543 (717) 627-4440 Mike@landstudies.com
Secondary <u>(Public Works)</u> <ul style="list-style-type: none"> Performs day to day Activities Implements the PPGHP & O&M Plan Hosts/ Schedules Trainings Develops/ Reviews SOPs Identifies/ Implements WQ BMPs Performs WQ Impact Assessments Inspects Facilities, Activities, & WQ BMPs Orders, oversees, & coordinates Activities & Facilities Advise the MS4 Committee PPGHP & O&M record keeping 	<u>East Lampeter Township Director of Public Works</u> Charles Thomas	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 cthomas@eltwp.org

Secondary (Public Works) <ul style="list-style-type: none"> Performs day to day Activities Implements the PPGHP & O&M Plan Hosts/ Schedules Trainings Develops/ Reviews SOPs Identifies/ Implements WQ BMPs Performs WQ Impact Assessments Inspects Facilities, Activities, & WQ BMPs Orders, oversees, & coordinates Activities & Facilities Advises the MS4 Committee PPGHP & O&M record keeping 	<u>East Lampeter Township Supervisor of Roads</u> John Brooks	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 jbrooks@eltwp.org
	<u>East Lampeter Township Supervisor of Sewers</u> Larry Frankford	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 lfrankford@eltwp.org
	<u>East Lampeter Township Supervisor of Parks</u> Troy Bresch	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 tbresch@eltwp.org
	<u>East Lampeter Township Assistant Township Manager</u> Tara Hitchens, AICP/ZO	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 thitchens@eltwp.org
	East Lampeter Township Public Works	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567
	East Lampeter Township Sewer Authority (ELSA)	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567
	<u>East Lampeter Township Stormwater Coordinator</u> Charles Hayes	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 chayes@eltwp.org
	<u>East Lampeter Township Stormwater Technician</u> A.J. Wasilewski	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567 awasilewski@eltwp.org
Secondary (ELSA) <ul style="list-style-type: none"> MS4 Permit Holder O&M of the MS4 	<u>East Lampeter Sewer Authority (ELSA)</u>	2250 Old Philadelphia Pike, Lancaster, PA 17602 (717) 393-1567
	<u>ELSA Engineer of Record</u> HRG, Inc	HRG, Inc 369 East Park Drive Harrisburg, PA 17111 (717) 564-1121

PPGHP Annual Review & Assessment Summary		
Component	Assessment	Notes
PPGH Program	Maintain	<ul style="list-style-type: none"> The PPGHP was reviewed following the SWMP Review & Assessment. WQ Impact Assessments will begin to be scheduled for Facilities, see the O&M Schedule. Activities will be reviewed for integration of WQ BMPs, see the O&M Schedule.
Municipal Facilities Inventory	Maintain	<ul style="list-style-type: none"> The Inventory was reviewed and updated, as needed, following the SWMP Review & Assessment
Municipal Activities Inventory	Maintain	<ul style="list-style-type: none"> The Inventory was reviewed and updated, as needed, following the SWMP Review & Assessment
O&M Plan	Modify	<ul style="list-style-type: none"> The O&M Plan has been reviewed following the SWMP Review and Assessment. An O&M Schedule has been reviewed and revised as needed.

		<ul style="list-style-type: none"> • Inspection forms and procedures for Facilities and Activities are to begin being drafted in the next Annual Progress Reporting Year. • Facilities and Activities inspections are to be scheduled. • WQ protecting BMPs are to be identified and assigned to activities. Inspection checklists are to be developed for the WQ BMPs.
Training Plan	Modify	<ul style="list-style-type: none"> • The Training Plan was updated 7/1/2021. • The Training Plan must maintain focus on Primary Trainings while implementing improved SOP's. • Contracted Services are to be invited to applicable trainings • The Annual Training Plan needs to include the following specific trainings: <ul style="list-style-type: none"> ◦ Dedicated IDD&E training ◦ IDD&E resident complaint training ◦ Spill Prevention updates

MCM 6 BMP 2: Operations & Maintenance (O&M) Plan

Measurable Goal: (1) Draft an O&M Plan that meets the minimum requirements of MCM6 BMP 2 and submit along with the first Annual Progress Report to PA DEP following the first year of coverage of the 2018-2023 MS4 permit cycle, this Goal has been met. (2) Annually review and if necessary revise the O&M Plan and O&M Schedule each successive year of the 2018-2023 MS4 permit, this Goal is ongoing.

Rational: Drafting, and then annually reviewing and revising, the O&M Plan and Schedule are required as a part of the MS4 permit MCM6.

Assessment Criteria: Submission of an O&M Plan, or revision to the O&M Plan, along with submission of the MCM 6 PPGHP with the Annual MS4 Progress Report for each year of coverage under the 2018-2023 MS4 Permit Cycle.

Timelines/Frequencies/Milestones: The O&M Plan is to be monthly assessed for effectiveness and applicability, and is annually comprehensively reviewed and revised following the annual SWMP Review and Assessment. A revised O&M Plan is submitted with a revised MCM 6 PPHGP to PA DEP by Sept. 30th of each year of MS4 permit coverage.

O&M Plan

The PPGHP O&M Plan aims to identify, respond, and prevent non-stormwater discharges from municipal facilities and activities, including contracted activities, to the ELSA MS4 or local waterways. Potential discharges are identified through accounting and reviewing municipal facilities, activities, and associated operating procedures through inspections, water quality impact assessments, and Standard Operating Procedure (SOP) drafting and review. Facilities, activities, and procedures identified as causing, or having the potential to cause, non-stormwater discharges are investigated for integration of water quality (WQ) protecting protocols and/or best management practices (BMPs).

O&M Plan prevention and response of and to non-stormwater discharges to the MS4 and/or local waterways are through a combination of education and training. Annual education and training about illicit discharges, parameters attributed to illicit discharges, and spill response procedures, based on the

MCM 3 Plan and SWMP Section 600, are incorporated into the Training Plan for municipal operators. Where, through inspections or as a result of Outfall screenings or field investigations, an opportunity or need for IDD&E education is observed, that opportunity is evaluated for integration with the MCM 1 and/or MCM 2 plans. The Training Plan outline, which includes training events that occurred over the last Annual Reporting period, and those planned for the next Annual Reporting period, is included under the Training Plan section of this O&M Plan.

The O&M plan additionally seeks to train, educate, and prevent non-stormwater discharge from municipal activities and facilities through establishing, and annually reviewing, procedures for municipal operator's disposal of wastes and response to spill events. The Waste Disposal Plan, a standalone plan under the O&M Plan, documents protocols municipal operators are to follow in properly disposing of various classifications of wastes. The Spill Control Plan (SCP), another, separate sub-plan of the O&M Plan, identifies the general processes municipal operators are to take in responding to a known or suspected spill event. The SCP and the Waste Disposal Plan act as training and education guides by providing standardized guidelines for municipal operators, regardless of length of employ or types of previous trainings obtained. The plans aid in preventing non-stormwater discharge by providing an educational tool for municipal operator trainings, and as a reference guide in the event of a spill incident.

The O&M Plan Schedule was developed following the annual review and assessment of the O&M Plan, and identifies the municipal activities, and general timeframe of the activities, expected to occur over the next Annual Reporting Year.

O&M Plan Schedule		
Month	Activities	WQ BMPs & Inspections
July 2021	Building O&M, HVAC O&M, Custodial Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
August 2021	Building O&M, HVAC O&M, Custodial Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
September 2021	Building O&M, HVAC O&M, Custodial, Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport,	Pending WQ Impact Assessment

	Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	
October 2021	Building O&M, HVAC O&M, Custodial Duties, Oil-water Sep. O&M, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
November 2021	Building O&M, Custodial Duties, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Fire Fighting Activities, Road Maintenance, Salt Storage/Loading, Spreader Calibration, Road Salting, Snow Plowing, Vehicle Storage, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
December 2021	Building O&M, Custodial Duties, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Fire Fighting Activities, Road Maintenance, Salt Storage/Loading, Road Salting, Snow Plowing, Vehicle Storage, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
January 2022	Building O&M, Custodial Duties, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Fire Fighting Activities, Road Maintenance, Salt Storage/Loading, Road Salting, Snow Plowing, Vehicle Storage, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
February 2022	Building O&M, Custodial Duties, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Fire Fighting Activities, Road Maintenance, Salt Storage/Loading, Road Salting, Snow Plowing, Vehicle Storage, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
March 2022	Building O&M, Custodial Duties, Nutrient Management/soil testing, Pest/Weed Control, Fertilizing, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Storm Sewer System & Roadside Ditch	Pending WQ Impact Assessment

	O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	
April 2022	Building O&M, HVAC O&M, Fire Suppression System O&M, Custodial Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Street Sweeping, Storm Sewer & Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
May 2022	Building O&M, Custodial Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Storm Sewer System O&M, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment
June 2022	Building O&M, Custodial Duties, Mowing, Pest/Weed Control, Material Storage & Transport, Haz-Mat Storage & Transport, Waste Storage & Disposal, Vehicle Fluid Change, Vehicle Washing, Vehicle Fueling, Vehicle/ Machine Repair, Earthmoving/ Excavation, Soil Screening, New Construction, Construction Demolition, Fire Fighting Activities, Fire Hydrant/ Waterline Flushing, Road Maintenance, Vehicle Storage, Road Paving, Road Patching, Storm Sewer System O&M, Street Sweeping, Roadside Ditch O&M, Port-a-Johns O&M, Sewer System O&M, Sewer Pump Station O&M	Pending WQ Impact Assessment

MCM 6 BMP 1: Municipal Facilities & Activities Inventory

Measurable Goal: (1) Compile an inventory of all facilities and associated activities for which polluted runoff or discharges may occur at or through, this Goal has been met through previous submission of two inventories, one documenting qualifying municipal facilities and one documenting qualifying municipal activities. (2) Annually review and update the inventories with municipal operators, and alongside the annual MCM 6 review and revision, for each Progress Reporting Year of the 2018-2023 MS4 permit; this Goal is ongoing.

Rational: Creating inventories of municipal facilities and activities that may generate polluted runoff, and then annually reviewing and revising said inventories are required as a part of the MS4 permit MCM 6 BMP1.

Assessment Criteria: Submission of a municipal facilities and activities inventory, or revision to the inventories, along with submission of the MCM 6 PPGHP with the Annual MS4 Progress Report for each year of coverage under the 2018-2023 MS4 Permit Cycle.

Timelines/Frequencies/Milestones: Annual review, revision, and submission to PA DEP by or before September 30th of each year of the 2018-2023 MS4 permit cycle.

The Municipal Facilities Inventory catalogues temporary and permanent, “primary” and “sub-” facilities owned, operated, or maintained by the Township or ELSA. The Facilities Inventory identifies the normally occurring activities at the site, and the potential pollutants that could be discharged through the activities to the MS4 or local waterways. The status of facility Water Quality Impact Assessments is additionally noted in the inventory.

The Municipal Activities Inventory catalogues the activities, performed by Township operators and contracted operators, in normal, expected operations of municipal facilities. The Activities Inventory identifies what Standard Operating Procedures (SOPs) are attributed to the individual activities; and what Best Management Practices (BMPs) have been assigned and/or developed for each individual activity to protect water quality from polluted discharges. The Activity Inventory indicates if the activity is planned to occur during the next MS4 Annual Progress Reporting Year or not, to aid in identifying potential focus areas for inspections and/or WQ BMP development and/or integration.

Both the Facilities and Activities Inventories are annually reviewed and updated per SWMP Sections 500 and 800. The Inventories are reviewed by ELT and ELSA personnel and directors for accuracy and applicability. Notes from the most recent review of the inventories are included in the PPGHP Annual Review and Assessment Summary matrix above. The most recent editions of the inventories have been attached at the end of this MCM plan.

Waste Disposal Plan (sub-plan MCM 6 BMP 2)

Purpose

The purpose of this plan is to outline practices taken by municipal staff in the disposal of various types of waste generated by municipal procedures. Outlining this procedure is part of an overall strategy to protect local water quality by preventing pollutants from entering the MS4. In order to ensure that waste, chemicals, and pollutants do not gain access to the MS4, Township staff follows the procedures listed below:

Disposal Types

Hazardous Waste, Sediment, Yard Waste, Paint, Oil

Training/Staff/Equipment

OSHA HCS-GHS basic understanding/CDL/Forklift Safety/On-the-job/1 or more as needed/see individual disposal type for equipment needed

Procedures for Hazardous Waste

Hazardous waste is any waste substance that poses a risk to human and/or environmental health, and/or possesses one or more of the characteristics of ignitability, corrosivity, reactivity, and/or toxicity. Common hazardous substances may include, but are not limited to adhesives, auto fluids, batteries (auto/household), floor/furniture polish, fuel (kerosene/gasoline), household cleaners, herbicides, pesticides, and items containing mercury.

Hazardous waste should be stored on pallets or storage lockers above ground level. Hazardous material storage areas should be sited in highly impervious and containable areas. Do not place storage areas directly adjacent to drains or waterways. Clearly label all stored hazardous materials and keep an inventory of products stored. Review OSHA Hazard Communication Standards Globally Harmonized System to understand hazardous material labeling. Be aware of non-compatible chemicals when storing hazardous materials. A hardcopy SDS for each hazardous material should be kept in a universally, and readily, accessible location.

Hazardous materials should have a hazardous waste label in accordance with applicable EPA and DOT regulations affixed to the container. Certain hazardous wastes may be disposed of at the LCSWMA HHW facility. In regards to aerosol cans, if emptied the can may be disposed of in non-hazardous waste bins, if content or pressure still remains dispose of as a hazardous waste. In regards to rags and towels which have come in contact with hazardous materials, store in a flammable rated container prior to disposing of as a hazardous waste. Hazardous waste disposal records detailing waste composition, amount, date, and location of disposal must be accounted to the Stormwater Coordinator.

Procedures for Sediment

Dry sediment meeting sufficient quality and content standards for use as clean-fill may be stockpiled at the Flory Park fill stockpile. Enclose the sediment stockpile with a filter-sock, the filter-sock is to be maintained in good conditions; and replaced as needed.

Stockpile dry sediment to be disposed of in the Public Works storage yard, beneath an impervious cover, until accumulating sufficient amounts to fill a Township dump truck for disposal at the LC-SWMA Frey Farm Landfill. Dam the sediment stockpile with a filter-sock product across the enclosure opening. See that the filter-sock product is well maintained and is replaced as needed.

Wet sediment, such as that collected from construction run-off filtering or inlet cleaning, should be impounded in the public works storage yard. The wet material should be surrounded by a filter-sock and left to dry. Wet sediment piles should be covered with an impervious liner if precipitation and/or strong winds are expected. Sediment can then be disposed of at the Frey Farm Landfill. Filter-sock devices are to be of good condition, and replaced as necessary; as identified through periodic inspections.

All sediment disposal trips should be recorded with the date, material composition, dry weight of disposed materials, and location of disposal. Disposal records are to be turned in to the Stormwater Coordinator.

Procedures for Yard Waste

Yard waste can consist of leaf/leaf debris, small branches, pruning waste, and lawn clippings. Under Township Ordinance 258 *Recycling* all yard waste must be recycled. The Township does not collect residential yard waste, however all waste haulers operating within the Township are required to offer recyclables collection. Township residents can additionally recycle yard waste by self-transport to the Manheim Township Compost Park at 2775 Oregon Pike, Lititz, PA 17543.

Township originated yard waste is typically generated from park maintenance and tree trimming in the ROW. Mulch Woody trimmings according to SOP-PW-L008 as applicable. Mulch can then be applied to Township owned properties. Grass clippings resultant of mowing may be spread evenly and left on the ground to decompose naturally. Grass clippings and other miscellaneous yard waste should be kept from obstructing stormwater management infrastructure. All other yard waste not left in place to decompose, or mulched for use in Township facilities, should be stockpiled in the Public Works storage yard until amassing sufficient quantity to warrant transport to the Manheim Township Compost Park. Records detailing the amounts, contents, and dates of materials transported to the Compost Park are to be noted and maintained with the Stormwater Coordinator.

Procedures for Paint

Some latex or water-based paints may also be hazardous wastes, depending on the toxicity of the pigments and other constituents. Refer to waste disposal instruction on the paint containers or accompanying SDS sheet. Materials that contain toxic metals (such as beryllium, heavy metals such as arsenic, cadmium, chromium, lead, mercury, osmium, selenium and silver), corrosive liquids and solids, flammable liquids and solids, oxidizing agents, peroxides, poison liquid and solids, organic peroxides, flammable and non-flammable gases are all classified as HAZMAT and must be disposed of as hazardous waste. Paint-associated debris (i.e. paint scrapings, stripping materials) must be disposed of as hazardous waste. Correct disposal methods for liquid paints are dependent on the types and compositions of paints being used. Users of painting products should identify if the composition of the paints being used includes hazardous materials before disposing of any residual paints, or painting related, products.

Paint containers that are dry and empty (the standard measure of which per EPA is less than 3 percent of original content remaining in the container) may generally be disposed of as regular trash. Solidified latex paint with greater than 3 percent residual content may be disposed of in the regular trash. Absolutely no free liquid, such as wet paint, is allowed to be placed in a dumpster or standard landfill.

Procedures for Oil

Substances completely comprised of motor oil may be disposed of via the Township's waste oil disposal facility, a.k.a. the Public Works garage heater. SOP-PW-G003, SOP-PW-G008, and SOP-PW-G010 outline the correct procedures for collecting, amassing, and disposing of waste motor oil in the Public Works garage heater.

All other types of oils (including food, mineral, polishes, etc.), and/or oils contaminated with other substances (e.g. anti-freeze) cannot be burned in the Public Works garage; and should follow the appropriate disposal method as directed by the Lancaster County Solid-Waste Management Authority (LCSWMA).

Schedule

Disposal of various Township wastes is completed on an as needed basis. In situations which require wastes stored prior to disposal, those operating procedures are listed above in their respective categories.

Spill Control Plan (SCP) (sub-plan MCM6 BMP 2)

Purpose

The purpose of this plan is to describe the process for identifying and addressing any illicit discharges detected during storm sewer inspection or otherwise reported illicit discharges impacting the storm sewer system. This procedure applies to all Public Works and Township employees that witness a suspected illicit discharge, or receive illicit discharge complaints.

Personnel

One or more

Training

Water Quality Testing with the IDDE Kit

Equipment

Township E-tablet, IDDE Test Kit, Spill Response Materials, Camera, Township Radio or Cellphone, Notepad, Writing implement, Township ID, Township Vehicle, Eurofins testing supplies (if applicable)

Initial Notification

Complaints/reports to the Township will be promptly logged into MyGov. Information to collect from the reporter should include: Location of issue, Name and Contact Information of reporter, Description of report/concern, Frequency of event occurrence, and permission to access the property if the reporter is an authorized representative of the property owner. Illicit discharge complaints should be promptly reported to the Stormwater Coordinator for follow-up.

NOTE: if an unknown or not fully determinable substance is encountered at any time or location which exhibits ANY possible characteristics of a hazardous material, USE EXTREME CAUTION. Unknown substances are to be considered hazardous materials until proven otherwise.

If a suspected illicit discharge is encountered by chance through ancillary municipal actions, report the suspected discharge to the Stormwater Coordinator immediately. Photo-documentation of suspected events is encouraged. If a discharge is overt, and substantial, promptly notify PADEP. Initiate spill containment procedures if feasible and safe to do so.

If an illicit discharge is definitively encountered through municipal activities, or as a direct result of municipal activities, immediately notify the Director of Public Works, the Stormwater Coordinator, PADEP, and 9-1-1 as necessary. Initiate spill containment actions immediately if safe to do so.

If an illicit discharge is noted within the storm sewer system, report the discharge to the Stormwater Coordinator, and any other agencies as necessary. Initiate spill containment procedures if safe and feasible to do so. Monitor downstream storm sewer components, sequester illicit discharges before outfalls if possible.

Discharge Identified

- Sanitary Sewer Overflows: Public Works Sewer staff will be notified immediately and the cleanup procedures regarding spills will be followed to address the remaining discharge that remains from the spill. If necessary a custom cleanup plan will be implemented. See dye testing below if clear break is not readily identifiable.

- Petroleum/gas: Spills are to be cleaned and reported to the Public Works Director or Stormwater Coordinator. Contact DEP if necessary spill threshold is met.
- Hazardous/Dangerous: If the contaminant is identified as dangerous, the fire department or hazmat shall be contacted by the Public Works Director.
- Wash Water/Non-Emergency: Issues identified as Trench dewatering, wash water disposal, or improper disposal of liquids, the staff responsible shall be notified by the Stormwater Coordinator immediately to cease operations. The Stormwater Coordinator shall educate the responsible party on proper disposal methods moving forward.

Discharge Not Identified

If the source is not immediately identifiable, the following steps will be performed:

- GIS/Visual: Visual observation of the MS3 sewershed will be conducted for flow/colors/odors/floatables and using mapping will trace the path of where the discharge may be coming from. Manholes and inlets closest to the outfall should be investigated first.
- Dye Testing: If there are any improper connections between sanitary and storm sewers or to determine which systems are flowing from one to another if GIS mapping does not clearly delineate this.
- Camera Equipment: Camera piping to see if any additional sources of discharge may be found that are not mapped or documented.
- Water Testing: If a discharge is not identifiable after these additional steps, water testing at various locations in the MS3 Sewershed may need to be taken. These will be sent to Lancaster Labs to determine the cause of the impairment and analyzed by the Stormwater Coordinator or an outside entity to determine a type of impairment associated with a certain business or discharge.

Follow-up

Once the source of the discharge is confirmed, the Stormwater Coordinator and/or PW Staff shall ensure the discharge is fixed or mitigated. Upon confirmation that the discharge has been eliminated, Staff should follow-up within 48 hours to ensure that IDDE is completely eliminated. All of the follow-up should be documented as well.

MCM 6 BMP 3: Employee Training Plan

Measurable Goal: (1) Develop an education and training plan for municipal employees that includes primary training events to include an annual review of the PPGHP and O&M Plans, spill control and response procedures, IDD&E education, and communicating with residents issuing IDD&E related complaints, this Goal has been met. (2) Annually review and update the Training Plan based on the annual SWMP and MCM 6 review and assessments, including documentation on trainings that occurred in the previous reporting year, and submit along with the update to the MCM 6 PPGHP for each Progress Reporting Year of coverage of the 2018-2023 MS4 permit; this goal is ongoing.

Rational: Drafting, and then annually reviewing and revising, an employee training plan is required as a part of the MS4 permit MCM 6 BMP 3.

Assessment Criteria: Submission of a training plan and documentation of previous reporting year training events, along with submission of the MCM 6 PPGHP with the Annual MS4 Progress Report for each year of coverage under the 2018-2023 MS4 Permit Cycle.

Timelines/Frequencies/Milestones: Annual review, revision, and submission to PA DEP by or before September 30th of each year of the 2018-2021 MS4 permit cycle.

The Training Plan has been revised following the Annual SWMP Review & Assessment, and in consideration of MCM 6 and MCM3. The Training Plan captures training events which occurred during the current Annual Progress Reporting Year, as well as those planned for the next Annual Reporting Year.

MCM 6 Training Log and Planned Activities			
Training Topic	Date	TAG	Description
PRP Pre-Con Site Visit (Tailgate Training)	7/14/2020	Public Works	Visit to potential PRP site at Community Park, describing goals & project extent
SOP Review & Update (Tailgate Training)	8/11/2020	Public Works	Training Cancelled
PRP Pre-Con Site Visit (Tailgate Training)	9/8/2020	Public Works	Training Cancelled
Wet or Dry Outfall Screening Procedure (Tailgate Training)	10/13/2020	Public Works	Review of ELSA IDDE outfall field screening process
Spreader calibrations w/SOP Review & Update (Tailgate Training)	11/12/2020	Public Works	Salt spreader calibration exercise with review & revision update of PW SOPs by PW operators and application to MS4 objectives.
SOP Review & Update (Tailgate Training)	12/8/2020	Public Works	Training Cancelled
SCADA Training	1/13/2021	Public Works	Training on new SCADA system.
MS4 Overview & Pollution Prevention Tailgate Training	2/9/2021	Admin Staff	Overview of what MS4 is, how it relates to local water quality, and what ELT strives to accomplish under the permit. Discussion on how to handle resident stormwater concerns.
PRP Walking Tour Tailgate Training	3/9/2021	Admin Staff	Walking discussion about the campus basin retrofit projects.
Work Party	4/13/2021	Public Works	Supplemental planting of the Mill Bridge Camp Resort PRP buffer.
Ag BMPs (Tailgate Training)	5/11/2021	Public Works	Field discussion by LCCD about Ag BMPs on a local farm.
Water Quality/Fish Survey (Tailgate Training)	6/8/2021	Public Works	Water Quality/Fish survey activity with LCCD to assess effectiveness of the Gibbon's Park stream restoration site and PRP goals.
MS4 & Pollution Prevention	7/20/2021	Public Works	Overview of the MS4, SWMP, & pollution prevention in municipal operations.
Inlet cleaning/street sweeping (Tailgate train)	8/10/2021	Public Works	Review inlet clean outs & street sweeping operations for water quality objectives.

PRP Site Visit	9/14/2021	Public Works	Field discussion about a potential PRP site off of N. Eastland Drive.
BMP Inspection, Maintenance, & PRP Site Review	10/12/2021	HACC / Public Works	Joint training between PW & HACC grounds crews on conducting BMP inspections, associated maintenance, and possible related remedies.
Spreader calibrations w/SOP Review & Update (Tailgate Training)	11/9/2021	Public Works	Salt spreader calibration exercise with review & revision update of PW SOPs by PW operators and application to MS4 objectives.
MS4 & Pollution Prevention	12/14/2021	Admin Staff	Overview of the MS4, SWMP, pollution prevention, & communicating with residents, to township staff.
Spill Prevention Plan/SOP Review, WQ Impact Assessment	1/11/2022	Public Works	Review Spill Prevention Plan & municipal operations and/or facilities for pollution prevention and implementation of water quality protection BMPs. Craft or revise SOPs accordingly.
SOP Review, WQ Impact Assessment	2/8/2022	Public Works	Review municipal operations and/or facilities for pollution prevention and implementation of water quality protection BMPs. Craft or revise SOPs accordingly. Maintaining SW infrastructure.
Illicit Discharge Field ID & Source Tracing, & taking public concerns	3/8/2022	Public Works	IDD&E related field identification, field source tracing, and communicating with residents.
Buffer O & M training	4/12/2022	Public Works	Stream Buffer O & M training @ TBD
Review & Assessment of Inventory & Training Plan	5/10/2022	Public Works	Review & assessment of past trainings & the municipal inventory with Public Works.
Water Quality/Fish Survey (Tailgate Training)	6/14/2022	Public Works	Water Quality/Fish survey activity with LCCD to assess effectiveness of the Gibbon's Park stream restoration site and PRP goals.
MS4 & Pollution Prevention	7/12/2022	Public Works	Overview of the MS4, SWMP, & pollution prevention in municipal operations.

MCM 6 Activities Inventory						
Activity	Self-performed/Contracted	Frequency/ Timelines	To Be done in 2021-2022	Pollutants	SOP	WQ Protection BMPs
Building O&M	Both	Annually/ As Needed/ Year Round	Yes	Sediment, Nutrients, Metals, Detergents, Oil/Grease, Pesticides, Organics, Trash	G001, G002, G005, G006, G007, G009	Pending WQ Impact Assessment
HVAC O&M	Both	Twice Annually/ As Needed/ Spring & Fall (typ.)	Yes	Detergents	G007, S004	Pending WQ Impact Assessment
Fire Suppression System O&M.	Contracted	Annually/ As Needed/ Summer (typ.)	Yes	Fire chem, Chlorine	S004	Pending WQ Impact Assessment
Custodial Duties	Both	Daily/ As Needed/ Year Round	Yes	Solvents, Pathogens, Detergents	S004, G007	Pending WQ Impact Assessment
Oil-Water Sep. O&M	Self	Annually/ Spring & Fall	Yes	Sediment, Nutrients, Metals, Detergents, Oil/Grease, Trash	G002, G007, S004	Pending WQ Impact Assessment
Mowing	Self	Annually/ Every 2 Weeks/ Growing Season	Yes	Sediment, Nutrients, Oil/Grease	L002, G007	Pending WQ Impact Assessment
Pest/Weed Control	Self	Annually/ Year Round	Yes	Pesticides, Organics	G004, G007, V002, L004, L005, L006, L007, S004	Pending WQ Impact Assessment
Fertilizing	Self	Annually/ Spring & Fall	Yes	Nutrients	L006, L007, S004, G004, NMP	Pending WQ Impact Assessment
Material Storage & Transport	Self	Annually/ As Needed/ Year Round	Yes	Sediment, Nutrients, Metals, Detergents, Oil/Grease, Pesticides, Organics, Trash	G007, S004	Pending WQ Impact Assessment
Haz-Mat Storage & Transport	Self	Annually/ As Needed/ Year Round	Yes	Sediment, Nutrients, Metals, Detergents, Oil/Grease, Pesticides, Organics, Trash	G007, G010, S004	Pending WQ Impact Assessment
Waste Storage & Disposal	Both	Annually/ As Needed/ Year Round	Yes	Sediment, Nutrients, Metals, Detergents, Oil/Grease, Pesticides, Organics, Trash	G007, S004	Pending WQ Impact Assessment
Waste Oil Disposal	Self	Annually/ As Needed/ Winter	Yes	Metals, Oil/Grease	G008, G003, S004, G007	Pending WQ Impact Assessment
Vehicle Fluid Change	Both	Annually/ As Needed/ Year Round	Yes	Oil/Grease, Metals, Trash	G007, G008, V002, G003	Pending WQ Impact Assessment

Vehicle Washing	Self	Weekly/ As Needed/ Year Round	Yes	Detergents, Oil/Grease, Metals, Trash, Sediment	G002, G007, V003, V004, S004	Pending WQ Impact Assessment
Vehicle Fueling	Both	Daily/ As Needed/ Year Round	Yes	Oil/Fuel/Glycol	V001, G007, S004	Pending WQ Impact Assessment
Vehicle/Machine Repair	Both	Annually. As Needed, Year Round	Yes	Oil/Fuel/Glycol, Metals, Acid, Solvents	G008, V001, V002, V003, V004, S004	Pending WQ Impact Assessment
Vehicle Storage	Self	Annually/ Year Round/ As Needed	Yes	Oil/Fuel/Glycol, Metals	V004, S004	Pending WQ Impact Assessment
Earthmoving/ Excavation	Both	Per Project Schedule	Yes	Sediment	S004, S001, G007	Pending WQ Impact Assessment
Soil Screening	Self	As Needed/ Per Project Schedule	Yes	Sediment	S004, S001, G007	Pending WQ Impact Assessment
New Construction	Both	Per Project Schedule	Yes	Sediment, Nutrients, Fertilizer, Oil/Fuel/Glycol	S004, S001, G007	Pending WQ Impact Assessment
Construction Demolition	Contracted	Per Project Schedule	Yes	Sediment, Oil/Fuel/Glycol, Trash, HazMat	Under Development	Pending WQ Impact Assessment
Spill Incident Response	Both	Annually, As Needed, Year Round	Yes	Unknown, All	S004, G007, SPC, Waste Disposal Plan	Pending WQ Impact Assessment
Fire Fighting Activities	Contracted	Annually/ Year Round	Yes	Oil/Fuel/Glycol, Pathogens, HazMat, Chlorine	Under Development	Pending WQ Impact Assessment
Fire hydrant/ Waterline flushing	Contracted	Annually/ Per Lancaster City	Yes	Chlorine	Under Development	Pending WQ Impact Assessment
Road Maintenance	Self	Annually/ As Needed/ Year Round	Yes	Fuel/Oil/Glycol, Sediment, Petro-chem	G007, S004	Pending WQ Impact Assessment
Salt Storage/Loading	Self	Annually/ As Needed/ Year Round & Winter	Yes	Sediment, Salt	G007, S004	Pending WQ Impact Assessment
Road Salting	Self	Annually/ Fall, Winter, Spring	Yes	Salt	Under Development	Pending WQ Impact Assessment
Snow Plowing	Self	Annually, As Needed, Fall, Winter, Spring	Yes	Salt, Oil, Sediment, Unknown	Under Development	Pending WQ Impact Assessment
Road Paving	Both	Annually/ Per Paving Season	Yes	Petro-chem, Sediment	G007, S004	Pending WQ Impact Assessment

Road Patching	Both	Annually/ As Needed/ Spring, Summer, & Fall	Yes	Petro-chem, Sediment	G007, S004	Pending WQ Impact Assessment
Street Sweeping	Self	Multiple Times Annually/ Spring, Summer, & Fall	Yes	Nutrients, Sediment, Organic Matter, Oil/Fuel/Glycol, Trash	G007, S004	Pending WQ Impact Assessment
Roadside Ditch O&M	Self	Annually/ Spring, Summer, & Fall	Yes	Sediment, Nutrients, Trash	L002, L008, G007, S001, S004	Pending WQ Impact Assessment
Port-a-Johns O&M	Contracted	Monthly/ As Needed/ Spring, Summer, & Fall	Yes	Solvents, Nutrients, Pathogens	Under Development	Pending WQ Impact Assessment
Sewer System O&M	Self	Daily/ As Needed/ Year Round	Yes	Sediment, Nutrients, Pathogens	G007, S004	Pending WQ Impact Assessment
Sewer Pump Station O&M	Self	Annually/ Year Round	Yes	Nutrients, Pathogens, Detergents, Solvents	G010, S004, G007	Pending WQ Impact Assessment
Small Water Systems O&M	Contracted	Annually/ Spring, Summer, & Fall	Yes	Pathogens, Hazmat	Under Development	Pending WQ Impact Assessment
Spill Prevention Plan	Self	Annually/ As Needed/ Year Round	Yes	Nutrients, Detergents, Fuel, Coolant, Solvents	Under Development	Pending WQ Impact Assessment
Nutrient Management Plan	Self	Annually/ Year Round	Yes	Nutrients	Under Development	Pending WQ Impact Assessment


MS4 ACTIVITY RECORD SHEET EAST LAMPETER TOWNSHIP

Date of Activity: 2/11/2020			
Location: Twp Office, outside			
Watershed (circle one):	Pequea Creek	Mill Creek	Conestoga River
			ALL
Type of Activity (circle one):	Education	Complaint	IDDE
			Project
			Training/Workshop
Who was Involved:			
<div style="display: flex; justify-content: space-around;"> <div> <p>Alvando Medeiros</p> <p>Christina O'Brien</p> <p>Tony De Luca</p> <p>John Bush</p> <p>Jaylin Amato</p> </div> <div> <p>Tommy Bitts</p> <p>Paul Kelly</p> <p>Dan Kelly</p> <p>Danny Traylor</p> </div> <div> <p>Brian Good</p> <p>Mr. Miller</p> <p>John Miller</p> </div> </div>			
Describe the Activity:			
ELT PW training demonstration on wet-weather outfall screenings.			
MCM Category (check one):			
<input type="checkbox"/>	MCM 1 – Public Education and Outreach		
<input type="checkbox"/>	MCM 2 – Public Participation and Involvement		
<input type="checkbox"/>	MCM 3 – Illicit Discharge Detection and Elimination		
<input type="checkbox"/>	MCM 4 – Construction Site Runoff Control		
<input type="checkbox"/>	MCM 5 – Post Construction Stormwater Management		
<input checked="" type="checkbox"/>	MCM 6 – Pollution Prevention and Good Housekeeping		
Authorized Signature: Charles H. Thomas			
Printed Name: CHARLES H. THOMAS.			

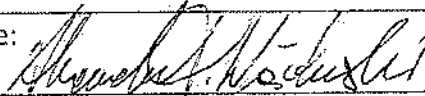
MS4 ACTIVITY RECORD SHEET EAST LAMPETER TOWNSHIP

Date of Activity: 7/15/2020			
Location: Hobson Community Park			
Watershed (circle one):	Pequea Creek	<u>Mill Creek</u>	Conestoga River ALL
Type of Activity (circle one):	<u>Education</u>	Complaint	IDDE Project <u>Training/Workshop</u>
Who was Involved:			
<div style="display: flex; justify-content: space-between;"> <div> <p><i>A. I. Washington</i></p> <p><i>Tracy Burch</i></p> <p><i>Brian Rhine</i></p> <p><i>Kevin Hill</i></p> </div> <div> <p><i>Jaylin Quast</i></p> <p><i>Dan Burch</i></p> <p><i>Mark McPhail</i></p> <p><i>Lance Shergar</i></p> <p><i>Donna H. H. H.</i></p> <p><i>Carl</i></p> </div> <div> <p><i>Donal Hood</i></p> <p><i>Tony Bitts</i></p> <p><i>Danny Frankford</i></p> </div> </div>			
Describe the Activity:			
Field visit to future, potential, PRP project site.			
MCM Category (check one):			
<input type="checkbox"/>	MCM 1 – Public Education and Outreach		
<input type="checkbox"/>	MCM 2 – Public Participation and Involvement		
<input type="checkbox"/>	MCM 3 – Illicit Discharge Detection and Elimination		
<input type="checkbox"/>	MCM 4 – Construction Site Runoff Control		
<input type="checkbox"/>	MCM 5 – Post Construction Stormwater Management		
<input checked="" type="checkbox"/>	MCM 6 – Pollution Prevention and Good Housekeeping		
Authorized Signature: <i>Charles H. Thomas</i>			
Printed Name: CHARLES H. THOMAS			

MS4 ACTIVITY RECORD SHEET EAST LAMPETER TOWNSHIP

Date of Activity: 10/13/2020			
Location: Flory Park			
Watershed (circle one):	Pequea Creek	Mill Creek	Conestoga River <u>ALL</u>
Type of Activity (circle):	Education	Complaint	IDDE Project <u>Training/Workshop</u>
Who was Involved: Charlie Hayes Jaybin Aument Lance Shoemaker Mark McPhail Duke Bral Keith Hillegas Derek Good Ty Quast E. J. Hutter Tony Bitter CHARLIE THOMAS Larry Frankford Bill Wadsworth			
Describe the Activity: Tailgate training on wet-weather outfall screening process.			
MCM Category (check one):			
<input type="checkbox"/>	MCM 1 -- Public Education and Outreach		
<input type="checkbox"/>	MCM 2 -- Public Participation and Involvement		
<input type="checkbox"/>	MCM 3 -- Illicit Discharge Detection and Elimination		
<input type="checkbox"/>	MCM 4 -- Construction Site Runoff Control		
<input type="checkbox"/>	MCM 5 -- Post Construction Stormwater Management		
<input checked="" type="checkbox"/>	MCM 6 -- Pollution Prevention and Good Housekeeping		
Authorized Signature: 			
Printed Name: Alexander J. Wasilewski			

MS4 ACTIVITY RECORD SHEET EAST LAMPETER TOWNSHIP

Date of Activity: 11/12/2020	
Location: Public Works Garage	
Watershed (circle one):	Pequea Creek Mill Creek Conestoga River ALL
Type of Activity (circle):	Education Complaint IDDE Project Training/Workshop
Who was Involved: <div style="display: flex; justify-content: space-between;"> <div> <p>John Bush</p> <p>Lacey Shoemaker</p> <p>Quinn Henley</p> <p>Ty Bush</p> <p>Boyle Good</p> </div> <div> <p>Tom Bitts</p> <p>Mark McPhail</p> <p>Jaylen Hunt</p> <p>Bill Hunt</p> </div> </div>	
Describe the Activity: SOP / Demo - Calibrating Salt Spreader	
MCM Category (check one):	
<input type="checkbox"/>	MCM 1 – Public Education and Outreach
<input type="checkbox"/>	MCM 2 – Public Participation and Involvement
<input type="checkbox"/>	MCM 3 – Illicit Discharge Detection and Elimination
<input type="checkbox"/>	MCM 4 – Construction Site Runoff Control
<input type="checkbox"/>	MCM 5 – Post Construction Stormwater Management
<input checked="" type="checkbox"/>	MCM 6 – Pollution Prevention and Good Housekeeping
Authorized Signature: 	
Printed Name: Alexander I. Wasihewski	

Salt Instr Snowplow's Handbook

- 0 m-019P .1 cl - 300-800 lbs/hour rate
 m-016 - Varies per storm
 C-018P - trucks in each truck
 C-017P - drums on truck
 C-015P - Calibrate
 S-003P - No mix, pure salt
 S-005P - Salt as pre-treat.
 S-006P - little salt when plowing
 S-031P - is there a DEP standard?
 S-007P - no plow if rain called for.
 S-008P - Plow route 3 Salt piles
 S-009P - Set tags on cand.
 S-010P - Skid loader, run for fuel.
 S-012P
 S-014P
 S-015P

A S-019P 30 plus

S-039P
 S-020P
 S-021P

X S-022P
 S-023P 15 plus
 S-025P

CALIBRATION

ifferent materials will spread at different rates at the same setting, so spreaders must be calibrated with the material that will be used.

Spreader Calibration Procedure

Calibration of spreaders is simply calculating the pounds per mile actually discharged at various spreader control settings and truck speeds. It is carried out by first counting the number of auger or conveyor shaft revolutions per minute, measuring the salt discharged in one revolution, then multiplying the two and finally multiplying the discharge rate by the minutes it takes to travel one mile. An excellent example of a calibration chart in spreadsheet format can be found on the Salt Institute website. Operational spreadsheets can be found on the same page. A sample calibration chart is on this page.

With hopper-type spreaders, specific gate openings must be calibrated. Measure from floor of conveyor to bottom edge of gate.

Each spreader must be calibrated individually; even the same models can vary widely at the same setting.

Equipment needed:

1. Scale for weighing
2. Canvas or bucket/collection device
3. Chalk, crayon or other marker
4. Watch with second hand

Calibration steps:

1. Warm truck's hydraulic oil to normal operating temperature with spreader system running.
2. Put partial load of salt on truck.
3. Mark shaft end of auger or conveyor.
4. Dump salt on auger or conveyor.
5. Rev truck engine to operating RPM (at least 2000 RPM).
6. Count number of shaft revolutions per minute at each spreader control setting, and record.
7. Collect salt for one revolution & weigh, deducting weight of container. (For greater accuracy, collect salt for several revolutions and divide by this number of turns to get the weight for one revolution.) This can be accomplished at idle or very low engine RPM. Multiply shaft RPM (Column A) by discharge per revolution (Column B) to get discharge rate in pounds per minute (Column C), then multiply discharge rate by

minutes to travel one mile at various truck speeds to get pounds discharged per mile.*

*For example, at 20 MPH with 30 Shaft RPM and 7 lb discharge - $30 \times 7 = 210 \times 3.00 = 630$ lb per mile.

Calibrating Automatic Controls

Automatic controls come with factory calibration cards that indicate the proper rate of spread for each setting. However, when there is a need to calibrate, use the following steps:

1. Remove or turn off spinner.
2. Set auger on given number, such as No. 2.
3. Tie sack or heavy canvas under discharge chute.
4. Mark specific distance, such as 100 or 1,000 ft.
5. Drive that distance with spreader operating.
6. Weigh salt collected in sack or canvas.
7. Multiply weight of salt by 5.3 (in case of 1,000 ft) or 52.8 (in case of 100 ft).

This will be the amount of salt discharged per mile, which remains constant regardless of speed, but calibration must be done for each control setting.

Calibration Chart

Agency: _____
 Location: _____
 Truck No.: _____ Spreader No.: _____
 Date: _____ By: _____

Gate Opening (Hopper Type Spreaders)				Pounds Discharged Per Mile								
Control Setting	A Shaft RPM (Loaded)	B Discharge Per Revolution (Pounds)	C Discharge Rate (lb/min)	Minutes to Travel One Mile								
				5 mph x 12.00	10 mph x 6.00	15 mph x 4.00	20 mph x 3.00	25 mph x 2.40	30 mph x 2.00	35 mph x 1.71	40 mph x 1.50	45 mph x 1.33
1		This weight remains constant										
2												
3												
4												
5												
6												
7												
8												
9												
10												

CALIBRATION

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Calibration steps:

1. Warm truck's hydraulic oil to normal operating temperature with spreader system running.
2. Put partial load of salt on truck.
3. Mark shaft end of auger or conveyor.
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5. Rev truck engine to operating RPM (at least 2000 RPM).
6. Count number of shaft revolutions per minute at each spreader control setting, and record.
7. Collect salt for one revolution & weigh, deducting weight of container. (For greater accuracy, collect salt for several revolutions and divide by this number of turns to get the weight for one revolution.) This can be accomplished at idle or very low engine RPM. Multiply shaft RPM (Column A) by discharge per revolution (Column B) to get discharge rate in pounds per minute (Column C), then multiply discharge rate by

minutes to travel one mile at various truck speeds to get pounds discharged per mile.*

*For example, at 20 MPH with 30 Shaft RPM and 7 lb discharge - $30 \times 7 = 210 \times 3.00 = 630$ lb per mile.

Operating Automatic Controls

Automatic controls come with factory calibration cards that indicate the proper rate of spread for each setting. However, when there is a need to calibrate, use the following steps:

1. Remove or turn off spinner.
2. Set auger on given number, such as No. 2.
3. Tie sack or heavy canvas under discharge chute.
4. Mark specific distance, such as 100 or 1,000 ft.
5. Drive that distance with spreader operating.
6. Weigh salt collected in sack or canvas.
7. Multiply weight of salt by 5.3 (in case of 1,000 ft) or 52.8 (in case of 100 ft).


This will be the amount of salt discharged per mile, which remains constant regardless of speed, but calibration must be done for each control setting.

Calibration Chart

Agency: _____
 Location: _____
 Truck No.: _____ Spreader No.: _____
 Date: _____ By: _____

Gate Opening (Hopper Type Spreaders)				Pounds Discharged Per Mile								
Control Setting	A Shaft RPM (Loaded)	B Discharge Per Revolution (Pounds)	C Discharge Rate (lb/min)	Minutes to Travel One Mile								
				5 mph x 12.00	10 mph x 6.00	15 mph x 4.00	20 mph x 3.00	25 mph x 2.40	30 mph x 2.00	35 mph x 1.71	40 mph x 1.50	45 mph x 1.33
1		This weight remains constant										
2												
3												
4												
5												
6												
7												
8												
9												
10												

East Lampeter Township MS4 Activity Record Sheet

Date of Activity: 1/12/2021	
Location: ELT Office	
Watershed (circle one)	Pequea Mill Conestoga <u>All</u>
<p>Attendees:</p> <p>Larry Frankford Jr M & M</p> <p>Troy Bresel Lance Shoemaker</p> <p>Keith Hillgas Dwight Henry</p> <p>Bill Hume</p> <p>Derek Good Charles H. Thomas</p> <p>John Brook</p> <p>Jayla Amest</p> <p>Tony Bitts</p> <p>Don RACE</p>	
<p>Activity Description:</p> <p>PW Tailgate Training about the Township's MS4 permit and Stormwater Management Program.</p>	
MCM Category (check one)	
<input type="checkbox"/>	MCM 1- Public Education & Outreach
<input type="checkbox"/>	MCM 2- Public Participation & Involvement
<input type="checkbox"/>	MCM 3- Illicit Discharge Detection & Elimination
<input type="checkbox"/>	MCM 4- Construction Site Runoff Control
<input type="checkbox"/>	MCM 5- Post-Construction Stormwater Management
<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping
<p>Authorized Signature: </p> <p>Printed Name: Alexander J. Wasikowski</p>	

MS4- Municipal Separate Storm Sewer System

- What is ELT MS4?- Any stormsewer, and anything connected to or draining to the stormsewer. Anything that goes into the MS4 is the same as if it goes right into a stream, under state and federal laws.
 - BMPs, Catch Basins, Pipes, Ditches are all MS4
- We “own” the stormwater runoff that drains from our Township. Stormwater runoff is dirty and polluted, but it has to go somewhere. The Feds and the State “permit” us to drain our stormwater into nearby waterways (at outfalls) so long as we prove we meet (A) the 6 MCMs, (B) work to reduce bacteria in stormwater, and (C) install big projects that actively remove pollutants from runoff.
- What is Not ELT MS4?-
 - Natural water features- springs, streams, rivers, sinkholes
 - Agricultural BMPs
 - Stormsewer that is completely privately owned or is completely owned by another MS4 permit holder (i.e. PA DOT, or another Township). If ELT stormwater gets into someone else’s stormsewer, we are responsible for the water that gets into that system; even if it’s from just one inlet.

Stormwater Management Program (SWMP)- ELT’s official guide and plan for managing stormwater and reducing pollution

- The 6 MCM Plans
 - 1 PEOP- educate the public about stormwater
 - Send out newsletter, talk to people
 - 2 PIPP- Get the public involved in stormwater program decisions and events
 - Stream cleanups, tree planting events, training workshops, watershed group meetings
 - 3 IDD&E- Find and eliminate sources of pollution to the MS4 system
 - Stormsewer mapping, inspection sanitary systems, outfall inspections, responding to dumping complaints, tracking/follow-up about spills
 - 4 CSRC- Ensure construction site runoff is properly managed, mostly handled by LCCD, PA DEP (we have a legal agreement with them), and DM/A
 - 5 PCSM- Inspect BMPs and make sure they are kept in good working order.
 - 6 PPGHP- Anything and everything we, and anyone working for us, does and how it could impact water quality.
 - SOPs, trainings, good garage housekeeping
 - Includes all activities, all sites, all processes, anything that could impact water quality
- Pollution Control Measures (PCMs)- plan for identifying, tracking, and reducing bacteria (a.k.a. pathogens) in stormwater runoff.
- PRPs- Pollution Reduction Plans- the Conestoga, the Mill Creek, and the Pequea Creek are “impaired” (are really polluted) with too much sediment, nitrogen, phosphorous, and pathogens; so we need to reduce these pollutants with targeted projects.
 - The Campus Basin retrofits
 - The Mill Bridge Camp Resort project
 - Community Park streambank project
 - HACC Lancaster campus streambank project
 - Country Club/ High Industries streambank project
 - North Eastland Swale project

NPDES National Pollutant Discharge Elimination System

O&M Operation and Maintenance

PADEP Pennsylvania Department of Environmental Protection

PCM Pollutant Control Measure (in our case, a BMP for removing bacteria)

PCSM Post Construction Stormwater Management (how rainwater is managed after construction, also MCM 5)

PCSMF Post Construction Stormwater Management Facility (a BMP)

PCWA Pequea Creek Watershed Association

PennDOT Pennsylvania Department of Transportation

PEOP Public Education and Outreach Plan (MCM 1)

PIPP Public Involvement and Participation Plan (MCM 2)

POC Priority Organic Compound

PPGHP Pollution Prevention & Good Housekeeping Plan (MCM 6)

PRP Pollutant Reduction Plan

QAPP Quality Assurance Project Plan

QLP Qualifying Local Program (for construction site erosion control inspections, we have an MOU with LCCD instead)

SCM Stormwater Control Measure (a BMP)

SOP Standard Operating Procedure

SSO Sanitary Sewer Overflow

SWM Stormwater Management

SWMP (or SMP) Stormwater Management Program (the MS4 program)

SWPPP Stormwater Pollution Prevention Plan

TAG Target Audience Group

TMDL Total Maximum Daily Load (max amount of a pollutant that is allowed to go into a waterway on any given day)

TN Total Nitrogen (amount of nitrogen in a water sample)

TP Total Phosphorous (amount of phosphorous in a water sample)

TSS Total Suspended Sediment (amount of dirt in a water sample)

UA Urbanized Area

USEPA United States Environmental Protection Agency

USGS United States Geological Survey

WLA Waste Load Allocation

WLT West Lampeter Township

WQ Water Quality

303(d) list Clean Water Act Section 303(d) List of Water Quality Limited Segments

BMP Best Management Practice

CBPRP Chesapeake Bay Pollutant Reduction Plan

CFR Code of Federal Regulations

COMID National Hydrography Dataset common identifier code for waterbodies

CSRCP Construction Site Runoff Control Plan (MCM 4)

CSS Combined Sewer System

CWA Federal Water Pollution Control Act (also known as the Clean Water Act)

ELT East Lampeter Township

E&S Erosion & Sedimentation

ESC Erosion & Sedimentation Controls (construction site BMPs)

ESA Environmentally Sensitive Area

GI Green Infrastructure (nature-like design)

GIS Geographic Information System (computer mapping)

HHW Household Hazardous Waste

HOA Home Owners Association (also, COA= Condo association and RA= Resident's Association)

IDD&E Illicit Discharge Detection and Elimination (MCM 3)

LA Load Allocation

LCCD Lancaster County Conservation District

LCCWC Lancaster County Clean Water Consortium

LID Low Impact Development (like Green Infrastructure)

MCM Minimum Control Measure

MEP Maximum Extent Practicable

MOU Memorandum of Understanding (legal agreement)

MOS Margin of Safety

MS3 Municipal Separate Storm Sewershed

MS4 Municipal Separate Storm Sewer System


NFWF National Fish & Wildlife Foundation

NHD National Hydrography Dataset (map of federal waterways by USGS)

NOI Notice of Intent (application for the MS4 permit)

NOV Notice of Violation

East Lampeter Township MS4 Activity Record Sheet

Date of Activity: 2/9/2021													
Location: ELT Public Meeting Room													
Watershed (circle one)	Peaque Mill Conestoga <u>All</u>												
<p>Attendees:</p> <div style="display: flex; justify-content: space-between;"> <div> <p>Steph Leakway</p> <p>Kathy Treier</p> <p>LASHAUNDA MARTIN</p> <p>Gina Beath</p> <p>Kevin Hostetter</p> <p>David Sinopoli</p> <p>Cindy Sherk</p> </div> <div> <p>Angelic Mallory</p> <p>Alecia Hair</p> <p>Charles Hager</p> <p>CHARLIE THOMAS</p> </div> </div>													
<p>Activity Description:</p> <p>ELT public staff education and discussion regarding the ELT SWMP, MS4, & MS4 permit</p>													
<p>NCM Category (check one)</p> <table border="1"> <tr> <td><input type="checkbox"/></td> <td>MCM 1- Public Education & Outreach</td> </tr> <tr> <td><input type="checkbox"/></td> <td>MCM 2- Public Participation & Involvement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>MCM 3- Illicit Discharge Detection & Elimination</td> </tr> <tr> <td><input type="checkbox"/></td> <td>MCM 4- Construction Site Runoff Control</td> </tr> <tr> <td><input type="checkbox"/></td> <td>MCM 5- Post-Construction Stormwater Management</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>MCM 6- Pollution Prevention & Good Housekeeping</td> </tr> </table>		<input type="checkbox"/>	MCM 1- Public Education & Outreach	<input type="checkbox"/>	MCM 2- Public Participation & Involvement	<input type="checkbox"/>	MCM 3- Illicit Discharge Detection & Elimination	<input type="checkbox"/>	MCM 4- Construction Site Runoff Control	<input type="checkbox"/>	MCM 5- Post-Construction Stormwater Management	<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping
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<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping												
<p>Authorized Signature: </p>													
<p>Printed Name: Alexander J. Wasilewski</p>													

What is Stormwater Runoff?: Any rainwater that runs over the land, and isn't soaked into the ground, is stormwater runoff. Stormwater runoff can carry pollutants, including heavy metals, toxic chemicals, excess nutrients, and large amounts of dirt, into our MS4, or directly into local waterbodies.

What is MS4?: The Municipal Separate Storm Sewer System is a collection of pipes, ditches, drains, swales, BMPs, and drainage areas that act to control, direct, manage, and move stormwater runoff away from properties and infrastructures; and into local waterbodies. An MS4 does not (or should not) have sanitary sewage going into it. Systems that managed sanitary effluent and stormwater in the same pipes are called Combined Sewer Systems (CSS). The point where an MS4 discharges into a waterbody is called a Regulated Outfall. Please note that MS4 discharges do not go to a water treatment plant, what goes down a storm drain goes right into a river. MS4 systems are legally protected much the same as a river or stream, and the township is therefore required to have a federal permit to discharge stormwater from our MS4 into local waterbodies.

The MS4 Permit: The EPA started the National Pollution Discharge Elimination System (NPDES) Phase II MS4 permit for municipal discharges in 2003 with the intent to manage and reduce polluted stormwater runoff and illegal dumping into federal waterways. The MS4 permit program basically says that the EPA will only let stormwater runoff from East Lampeter drain into federal waterways if the township: A) meets the 6 MCMs outlined by the permit, B) implements PCMs to manage pathogens, and C) drafts and implements a PRP to reduce sediment, nitrogen, and phosphorous levels in stormwater runoff; the township's Stormwater Management Program (SWMP) was created to map out how exactly these requirements will be met before the MS4 permit expires.

The MS4 permit is issued in 5 year cycles, the current permit cycle is 2018-2023. We submit Annual Status Reports to PA DEP showing our progress towards fulfilling the 5 year MS4 permit requirements. If we do not meet all of our permit requirements at the end of the permit cycle, we may not be issued a new MS4 permit. If we do not have an MS4 permit, the township may be subject to fines, consent decrees, and enhanced federal oversight.

MS4 Permit 6 Minimum Control Measures (MCMs)- a series of 6 interrelated, but individual, plans relating to water quality protection:

- 1) PEOP- Educate the public and identified Targeted Audience Groups (TAGs) about MS4, water quality, and pollution prevention. Evaluate the effectiveness of education and outreach methods. Examples- newsletters, informative signs
- 2) PIPP- Engage and Involve the public in activities and decisions regarding the MS4 permit, the stormwater management program, and community activities. Evaluate the effectiveness of involvement and participation plans. Examples- stream clean-ups, public meetings.
- 3) IDD&E- Map and inventory the MS4, the sanitary system, and water system; then evaluate and inspect same for possible failures and/or O&M needs. Inspect all MS4 regulated outfalls during dry weather at least once during every MS4 permit. Receive, investigate, and respond to reports of suspected illicit discharges (illegal dumping) in a timely manner. Implement an enforceable legal mechanism to prevent non-stormwater discharges to the MS4 and WOTUS. Integrate IDD&E related training into the PEOP, PIPP, and PPGHP.

- 4) CSRC- Require and review plans and installations of ESCs and SWPPPs for construction sites. Inspect construction sites and site controls for compliance and functionality, and respond to complaints related to the same. ELT has signed an MOU with LCCD, under PA DEP, that LCCD and/or PA DEP review plans for sediment controls, and inspect construction sites.
- 5) PCSM- Inspect and require O&M when necessary of NPDES permitted BMPs.
- 6) PPGHP- Inventory all municipal facilities and activities that may impact water quality; develop plans and procedures to improve the same. Train municipal operators, including contracted services, on pollution prevention and water quality protection.

The Township's Stormwater Management Ordinance was updated in part to help meet different parts of the 6 MCMs.

PCMs Pollution Control Measures- ELT's sections of the Conestoga River and Mill Creek are contaminated with pathogens (bacteria, particularly from poop). Our MS4 permit says we need to identify the source of where the pathogens are likely coming from, and develop programs and BMPs to reduce the pathogens in stormwater runoff. We also need to develop and implement an ordinance to manage animal waste.

Chesapeake Bay PRP- Because of the amount of sediment (TSS), nitrogen (TN), and phosphorous (TP) pollution washing into the Conestoga River, Mill Creek, and Pequea Creek, ELT was required to draft and implement a Pollution Reduction Plan. The PRP is a legally binding, publically reviewed and approved, planning document for how, where, and at what financial cost ELT will build projects to remove TSS, TP, and TN.

Why care about Sediment, Nitrogen, & Phosphorous?- Sediment clouds the water, affecting how well aquatic plants can grow, and impacting how well fish can breathe. Sediment also carries other pollutants, like metals and pesticides, along into waterways. Phosphorous and Nitrogen can harm fish life, and can cause invasive plant species and algae blooms to take over water habitats. Polluted runoff from PA has been identified as a contributor to ecological "dead-zones" in the Chesapeake Bay.

We are required to install enough projects to remove 558,974.96 lbs. of TSS, 429.12 lbs. of TP, and 2,663.71 lbs. of TN by 2023. We have met about 1/3 of our requirements with projects we've installed so far.

PRPs we've done:

- ELT Office Basin Raingarden Retrofits
- Mill Bridge Camp Resort Streambank Restoration
- Annual inlet cleanings

We used to pay for the SWMP, including PRP projects, with a mix of grant funding, and from ELT's budgeted general fund. The Stormwater Fee was pursued, in part, to have a reliable source of funding to move forward on PRPs without waiting on grant funds that may or may not come.

303(d) list Federal Clean Water Act Section 303(d) required PA to ID what streams are “impaired” (polluted), what they are impaired by, and by how much; this is related to TMDLs.

Ag Agriculture- anything referring or relating to farming

BMP Best Management Practice- such as infiltration pits, detention basins, raingardens, etc.

CBPRP Chesapeake Bay Pollutant Reduction Plan- lays out what projects we are going to do to reduce polluted stormwater runoff to the Chesapeake Bay.

CFR Code of Federal Regulations, 40 CFR deals with Federal environmental regulations

Chapter 93 25 Pa Code Chapter 93 deals with water quality and protections

Chapter 102 25 Pa Code Chapter 102 deals with Erosion and Sedimentation controls, usually related to construction sites.

Chapter 105 25 Pa Code Chapter 105 deals with dam safety and waterways. In MS4, a Chapter 105 permit may be needed for some stream restoration projects.

CSS Combined Sewer System- sewer system that collects sanitary waste and stormwater in the same pipes

CWA Federal Water Pollution Control Act (also known as the Clean Water Act)

E&S Erosion & Sedimentation- natural or human-caused

ESC Erosion & Sedimentation Controls (construction site BMPs)

ESA Environmentally Sensitive Area

FEMA Federal Emergency Management Association- identifies floodplains and development restrictions in floodplains

FIRMs Flood Insurance Rate Maps- FEMA published maps. FIRMs show where floodplains are, and how likely flooding may happen in a given floodplain (there are different kinds of floodplains).

GI Green Infrastructure (nature-like design)

GIS Geographic Information System (computer mapping)

GP General Permit an environmental permit for a project that is issued by LCCD, PA DEP, and/or USACE. The “GP” will be followed with a number for the specific permit type, such as a GP-03 for working on a stream bank, or a GP-04 for installing a new stormwater discharge pipe.

HHW Household Hazardous Waste

HOA Home Owners Association (also, COA= Condo association and RA= Resident’s Association)

LA or WLA Load Allocation or Waste Load Allocation- related to a TMDL calculation

LCCD Lancaster County Conservation District- handles some local construction and waterway permits

LCCWC Lancaster County Clean Water Consortium- local group that we are a member of

LID Low Impact Development (like Green Infrastructure)

MCM Minimum Control Measure- required actions we need to do to for the MS4 permit

PEOP Public Education and Outreach Plan (MCM 1)

PIPP Public Involvement and Participation Plan (MCM 2)

IDD&E Illicit Discharge Detection and Elimination (MCM 3)

CSRPC Construction Site Runoff Control Plan (MCM 4)

PCSM Post Construction Stormwater Management (how rainwater is managed after construction, also MCM 5)

PPGHP Pollution Prevention & Good Housekeeping Plan (MCM 6)

MEP Maximum Extent Practicable

MOU Memorandum of Understanding (legal agreement)

MOS Margin of Safety- related to lab testing or calculations

MS3 Municipal Separate Storm Sewershed- the whole area that drains into a storm sewer system, usually ends at an outfall

MS4 Municipal Separate Storm Sewer System

NFWF National Fish & Wildlife Foundation

NGO Non-Government Organization- usually refers to a non-profit group of some kind

NHD National Hydrography Dataset (map of federal waterways by USGS)

NHD COMID common identifier code- a number used by USGS to ID specific waterbodies

NOI Notice of Intent (application for the MS4 permit)

NOV Notice of Violation

NPDES National Pollutant Discharge Elimination System

NRCS Natural Resources Conservation Service- a department of the USDA

O&M Operation and Maintenance

PA CSL PA Clean Streams Law, PA General Assembly Act of Jun. 22, 1937, P.L. 1987, No. 394- the basis for waterbody protections in PA

PADEP Pennsylvania Department of Environmental Protection

PCM Pollutant Control Measure (in our case, a BMP for removing bacteria)

PCSMF Post Construction Stormwater Management Facility (a BMP)

PCWA Pequea Creek Watershed Association

PennDOT/PADOT Pennsylvania Department of Transportation

POC Priority Organic Compound

QAPP Quality Assurance Project Plan- how a laboratory assures accurate testing results

QA/QC Quality Assurance & Quality Control (related to QAPP)

QLP Qualifying Local Program- Program for how a municipality will monitor construction sites if they haven't signed an MOU with LCCD (we have an MOU with LCCD)

SCM Stormwater Control Measure (a BMP)

SOP Standard Operating Procedure

SSO/CSO Sanitary Sewer Overflow/ Combined Sewer Overflow

SWM Stormwater Management

SWMP (or SMP) Stormwater Management Program (the MS4 program)

SWPPP Stormwater Pollution Prevention Plan- usually related to construction sites or industrial properties

TAG Target Audience Group- a specific group of people ID'd for a specific reason, like for education, or a focus group

TMDL Total Maximum Daily Load (max amount of a pollutant that is allowed to go into a waterway on any given day)

TN Total Nitrogen (amount of nitrogen in a water sample)

TP Total Phosphorous (amount of phosphorous in a water sample)

TSS Total Suspended Sediment (amount of dirt in a water sample)

UA Urbanized Area- US Census defined area based on population density. In MS4, the UA is also related to the Regulated Area and/or Planning Area. The Regulated Area includes the area of ELT subject to the MS4 permit. The Planning Area is where we look to install Pollutant Reduction Projects (PRPs).

USACE United States Army Corps. Of Engineers

USDA United States Dept. of Agriculture

USEPA United States Environmental Protection Agency

USGS United States Geological Survey

WAP Watershed Action Plan- basically the same thing as a WIP, or a CAP. If you hear about an IM-WAP, the "IM" means Inter-municipal, or more than one municipalities are involved with the plan.

WIP Watershed Implementation Plan- A planning document setting out steps to meeting specific water quality improvement goals. The PA Phase III WIP is titled "Healthy Waters, Healthy Communities". Under the Phase III WIP, Lancaster County has drafted a Countywide Action Plan (CAP) to reduce Nitrogen and Phosphorous polluted runoff.

WOTUS Waters of the US, a.k.a. Navigable Waters, and Jurisdictional Waters A1, A2, A3, & A4

WQ Water Quality

Year Storm (25, 50, 100, etc.) Refers to the probability of a rainfall event happening in a year, so a 100 year storm event has about a 100-to-1 chance, or 1%, of happening this year. It is possible to have multiple 100 year storm events back-to-back, it just isn't very likely.

MS4 ACTIVITY RECORD SHEET EAST LAMPETER TOWNSHIP

Date of Activity: 3/9/2021			
Location: ELT Municipal Complex			
Watershed (circle one):	Pequea Creek	Mill Creek	Conestoga River ALL
Type of Activity (circle):	Education	Complaint	IDDE Project Training/Workshop
Who was Involved:			
Cindy Shenk Lashawnda Martin Alecia J. Hair CHARLIE THOMAS Gina Reath [Signature]			
Describe the Activity:			
A walking tour and discussion of the ELT municipal complex stormwater management basin structures & P&R projects; targeted to ELT office staff.			
MCM Category (check one):			
<input type="checkbox"/>	MCM 1 – Public Education and Outreach		
<input type="checkbox"/>	MCM 2 – Public Participation and Involvement		
<input type="checkbox"/>	MCM 3 – Illicit Discharge Detection and Elimination		
<input type="checkbox"/>	MCM 4 – Construction Site Runoff Control		
<input type="checkbox"/>	MCM 5 – Post Construction Stormwater Management		
<input checked="" type="checkbox"/>	MCM 6 – Pollution Prevention and Good Housekeeping		
Authorized Signature:			
[Signature] Printed Name: Alexander J. Wasikowski			

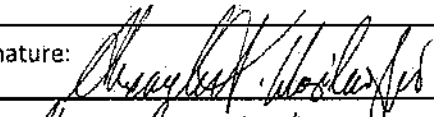
East Lampeter Township MS4 Activity Record Sheet

Date: <u>4/13/2021</u>	
Location: <u>Mill Bridge Camp Resort</u>	
Watershed (circle) Mill Creek <u>Pequea Creek</u> Conestoga River All Other	
Activity Type (circle) <u>Training</u> Project IDDE Complaint Other	
Attendance: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <u>Lance Shomaker</u> <u>mat mcphee</u> <u>Tony Bitts</u> <u>Dwight Hunsley</u> <u>Dan Good</u> <u>Jaylin Amst</u> <u>Bill Rhine</u> </div> <div style="width: 45%;"> <u>Kurt Kelly</u> <u>Larry Frankford</u> <u>Bylund</u> </div> </div>	
Description: <ul style="list-style-type: none"> - A Public Works Tailgate Training with members of the Mill Bridge Camp Resort staff on inspection and maintenance of the PRP buffer installed in 2019. This is a "work party" event, where members of PW work with staff members of the Camp Resort on Spring-time buffer O&M. - PW was onsite from 12:45 to 14:00. Representatives of the Mill Bridge Camp Resort did not attend the planting event. Plants that were installed, or used to replace dead plants, included Red Osier Dogwood, Silky Dogwood, Button bush, Spice bush, & Sugar bush. 	
MCM Type (check)	
<input type="checkbox"/>	MCM 1- Public Education & Outreach
<input checked="" type="checkbox"/>	MCM 2- Public Participation & Involvement
<input type="checkbox"/>	MCM 3- Illicit Discharge, Detection, & Elimination
<input type="checkbox"/>	MCM 4- Construction Site Runoff Control
<input type="checkbox"/>	MCM 5- Post-Construction Stormwater Management
<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping
Print Name <u>Alexander I. Wasikowski</u>	
Sign: <u>Alexander I. Wasikowski</u> <u>4/13/2021</u>	

Plants came from
HCCD.

East Lampeter Township MS4 Activity Record Sheet

Date of Activity: 5/11/2021																	
Location: 2061 Jarvis Rd., East Lampeter Twp., Lancaster, PA. 17601.																	
Watershed (circle one)	Pequea Mill <u>Conestoga</u> All																
<p>Attendees:</p> <table border="0"> <tr> <td>Charlie Hayes</td> <td>Lance Shorrock</td> </tr> <tr> <td>Jeremy Wiener (Team Ag, Inc)</td> <td>Mark McPhail</td> </tr> <tr> <td>CHARLIE THOMAS</td> <td>John Burk</td> </tr> <tr> <td>Troy Busch</td> <td>Larry Frankford Jr</td> </tr> <tr> <td>Jaybin Aument</td> <td>Keith Hillegas</td> </tr> <tr> <td>Brian</td> <td>Tony Bitts</td> </tr> <tr> <td>Greg</td> <td>Derek Good</td> </tr> <tr> <td></td> <td>Jeff Musser</td> </tr> </table>		Charlie Hayes	Lance Shorrock	Jeremy Wiener (Team Ag, Inc)	Mark McPhail	CHARLIE THOMAS	John Burk	Troy Busch	Larry Frankford Jr	Jaybin Aument	Keith Hillegas	Brian	Tony Bitts	Greg	Derek Good		Jeff Musser
Charlie Hayes	Lance Shorrock																
Jeremy Wiener (Team Ag, Inc)	Mark McPhail																
CHARLIE THOMAS	John Burk																
Troy Busch	Larry Frankford Jr																
Jaybin Aument	Keith Hillegas																
Brian	Tony Bitts																
Greg	Derek Good																
	Jeff Musser																
<p>Activity Description:</p> <p>Team Ag. gave a brief presentation on Ag. BMPs installed on 2061 Jarvis Road.</p>																	
MCM Category (check one)																	
<input type="checkbox"/>	MCM 1- Public Education & Outreach																
<input type="checkbox"/>	MCM 2- Public Participation & Involvement																
<input type="checkbox"/>	MCM 3- Illicit Discharge Detection & Elimination																
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<input type="checkbox"/>	MCM 5- Post-Construction Stormwater Management																
<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping																

Authorized Signature:	
Printed Name:	Alexander I. Wasieleski

East Lampeter Township MS4 Activity Record Sheet

Date of Activity: 6/8/2021

Location: Gibbons Park, ELT

Watershed (circle one) Pequea Mill Conestoga All

Attendees:

Buckline	Derek Good	Lance Shoemaker
John Bull	Kerth Hillegas	Alexander Wasilowski
Charles Hays	Dwight Hensley	
Mrs. M. Hays	Nate Strain	
Jaylin Hunt	Breanna Beers	
CHARLIE THOMAS	Bryce Workman	
Tony Bitts	Matt Kofoth	
Larry Frankford Jr		

LCCD

Activity Description:

LCCD's Matt Kofoth, Nate Strain, Breanna Beers, & Bryce Workman performed a fish survey & discussion with ELT PW in attendance. The purpose of the survey was to catalogue species diversity 1 year post-construction of a stream restoration project completed at the former Township park. Gibbons Park at Nott's Mill. Members of the PW Crews were able to actively participate in the surveying, while asking questions of the LCCD staff.

MCM Category (check one)	
<input type="checkbox"/>	MCM 1- Public Education & Outreach
<input checked="" type="checkbox"/>	MCM 2- Public Participation & Involvement
<input type="checkbox"/>	MCM 3- Illicit Discharge Detection & Elimination
<input type="checkbox"/>	MCM 4- Construction Site Runoff Control
<input type="checkbox"/>	MCM 5- Post-Construction Stormwater Management
<input checked="" type="checkbox"/>	MCM 6- Pollution Prevention & Good Housekeeping

Authorized Signature: Alexander T. Wasilowski

Printed Name: Alexander T. Wasilowski