

UNIVERSITY OF TOLEDO

SUBJECT: STORM WATER MANAGEMENT PROGRAM (SWMP)

Procedure No: HM-08-041

PROCEDURE STATEMENT

This procedure is designed to meet requirements of the Ohio National Pollution Discharge Elimination System (NPDES) storm water discharge permitting system and reduce or eliminate environmental problems posed by runoff from the University of Toledo's urban settings into storm water systems.

PURPOSE OF PROCEDURE

This Storm Water Management Program is required to be submitted to the Ohio EPA, Northwest District Office, Division of Storm Water in order for the University of Toledo to receive a storm water Certificate of Coverage. The issued COC permits the University to continue discharging storm water into Ohio's surface waters.

PROCEDURE

This Storm Water Management Program reduces risks posed to the environment from contaminated storm water runoff. This is achieved (to the maximum extent possible) from UT's campuses by implementing six best management practices including Public Education and Outreach, Public Participation/Involvement, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post Construction Runoff Control and Pollution Prevention/Good Housekeeping.

I. INTRODUCTION AND SCOPE

A. INTRODUCTION

1. The Storm Water Phase II Final Rule was published in the Federal Register on December 8, 1999. It requires operators of small municipal separate storm sewer systems (MS4s) in urbanized areas, such as The University of Toledo, to develop and implement a Storm Water Management Program (SWMP) to preserve, protect, and improve the Nation's water resources from polluted storm water runoff. Operators of regulated MS4s are required to design their programs to reduce the discharge of pollutants to the "maximum extent practicable," protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act. Efforts are intended to promote a regional approach to storm water management, coordinated on a watershed basis. The program requires operators of Phase II-designated small MS4s and small construction activity to apply for National Pollutant Discharge Elimination System (NPDES) permit coverage because their storm water discharges are considered "point sources" of pollution. NPDES storm water permits are issued by an NPDES permitting authority. Once the operator of a regulated small MS4 submits a permit application and a permit is obtained, the conditions of the permit must be satisfied and periodic reports must be submitted on the status and effectiveness of the program.

B. SCOPE

1. UT's SWMP will allow Main Campus, Scott Park Campus and the Health Science Campus to continue regulated discharges of storm waters into permitted waterways including the Ottawa River and Swan Creek in accordance with UT's issued MS4 permit.

II. DISCHARGE POINTS AND RECEIVING WATERS

A. DISCHARGE POINTS/RECEIVING WATERS

1. Any new outfalls will be installed and operated in accordance with the requirements of OHQ000003. A portion UT's outfalls discharge directly into surface waters of the state, and the balance discharge into drainage systems operated by the City of Toledo. UT's storm water drainage system discharges, either directly or indirectly into the following surface water bodies:
 - Swan Creek
 - Ottawa River

The University of Toledo is currently in the process of identifying all outfalls which discharge directly or indirectly into the aforementioned surface water bodies. A map including identification number, location of discharge and the name of the receiving water will be created and included as an appendix to this storm water management plan. If any changes should be identified for this list, the changes will be provided to the OEPA. Like all surface waters of the State, these water bodies are protected by water quality standards for specific designated uses. The designated uses are for aquatic life (either cold water or warm water) and wildlife support; agricultural, industrial, and municipal water supply; navigation; and total body contact recreation. The Permit does not authorize the discharge of non-storm water discharges, such as rainwater and snow-melt runoff, as well as discharges of certain non-storm waters that are common and widespread but are not expected to pose a threat to water quality (e.g., runoff from lawn watering and irrigation, individual car washing, and foundation drain systems). A more complete listing of non-storm water discharges is presented in OHQ000003.

III. DEFINITIONS

- A. BMPs - Best Management Practices
- B. Campus Police - University of Toledo Police Department
- C. City - The City of Toledo
- D. COC - Certificate of Coverage for the NPDES Permit
- E. EHRS – The University of Toledo Environmental Health and Radiation Safety Department
- F. HSC – The University of Toledo Health Science Campus
- G. IDEP – Illicit discharge elimination program.
- H. Illicit Connection - A physical connection to the drainage system that 1) primarily conveys illicit discharges into the drainage system or 2) is not authorized or permitted by the local authority (where a local authority requires such authorization or permit).
- I. Illicit Discharge - Any discharge or seepage that is not composed entirely of storm water into the drainage system, except for discharges specified in OHQ000003 of the permit. Illicit discharges include dumping of motor vehicle fluids, hazardous wastes, grass clippings, leaf litter, domestic animal wastes, litter or unauthorized discharges of sewage, industrial waste, food services wastes, or any other non-storm water waste into the drainage system.
- J. Main – The University of Toledo Main Campus
- K. MEP - Maximum Extent Practicable - met by adherence to the requirements of the OEPA approved OHQ000003.
- L. MS4 – Municipal Separate Storm Sewer System
- M. NOI – Notice of Intent (Notification to OEPA)
- N. NPDES - National Pollutant Discharge Elimination System
- O. ODNR – Ohio Department of Natural Resources
- P. ODOT - Ohio Department of Transportation
- Q. OEPA – Ohio Environmental Protection Agency, Northwest District Office, Division of Surface Water
- R. PEP – Public Education Program
- S. Permit - The NPDES Storm Water Permit Number OH issued by OEPA to the UT. Currently, permit # OHQ000003 is in final draft format.
- T. Powerhouse - University of Toledo Health Science Campus Steam Plant
- U. Reports – Mandatory Reporting to the OEPA dealing with Ohio NPDES Storm Water Permitting.
- V. Scott Park – The University of Toledo Scott Park Campus

- W. SWMP - Storm Water Management Program
- X. SWP3 – Storm Water Pollution Prevention Plan
- Y. UT – The University of Toledo

IV. ADMINISTRATIVE REQUIREMENTS OF THE PERMIT

A. LEGAL AUTHORITY

- Unlike a municipality, the UT does not maintain the equivalent of a city code to regulate storm water discharges. However, the UT does operate and maintain a separate storm water system which collects runoff from areas involved in a wide variety of uses including: student housing; institutional, and research activities; food service; science laboratories; and recreational facilities. In this regard, the University's storm water system is representative of similar systems owned by municipalities.
- Authority Under State Law
 - a. UT has the general authority to implement storm water management programs and to control, regulate, and enforce discharges to its storm water system through O.R.C. §3345.21, which provides in part:

“The board of trustees of any college or university which receives any state funds in support thereof, shall regulate the use of the grounds, buildings, equipment, and facilities of such college or university and the conduct of the students, staff, faculty, and visitors to the campus so that law and order are maintained... the board of trustees of each such college or university shall adopt rules for the conduct of the students, faculty, visitors, and staff... All such rules shall be published in a manner reasonably designed to come to the attention of, and be available to, all faculty, staff, visitors, and students. The board of trustees shall provide for the administration and enforcement of its rules...”
 - b. O.R.C. §3345.21 allows the UT board of trustees (by and through O.R.C. §3364.01) to have supervision and control over the use of the UT grounds, buildings, equipment and facilities. The UT, through its board of trustees, therefore has the power to promulgate rules for the operation, management, and maintenance of its storm water system, as well as the power to control illicit discharges, spills, and dumping. The UT has the legal authority to operate its storm water system in a manner necessary to comply with the applicable regulations.
- Application of Authority Under State Law
 - a. UT has adopted rules, policies, procedures, and practices for the operation and maintenance of its storm water system to control the contribution of pollutants to the system, in order to meet the requirements of the Permit. Best Management Practices (BMPs) have been, and will continue to be, developed to support the adopted rules, policies, procedures, and practices. Information on these BMPs is provided in subsequent sections of this document.
 - b. The NPDES regulations establish a definition of storm water associated with industrial activity in 40 CFR 122.26(b)(14) as the discharge from any conveyance which is used for collecting and conveying storm water and is directly related to manufacturing, processing of raw materials, or storage areas. Industries required to obtain storm water NPDES discharge permits are specifically defined in the regulations by industrial category or through the identification of Standard Industrial Classification (SIC) codes.
- Control of Discharges Through Interagency Agreements
 - a. The University of Toledo is currently reviewing its storm water system to determine if it interconnects with the City of Toledo's storm water system. In the event that interconnections are found during the subsequent investigation, UT will notify the City of Toledo of the rules, policies, procedures, and practices that will be relied upon to satisfy terms and conditions of this Permit for drainage system(s) co-operated between the UT and the City of Toledo.
- Control Through Rules

- a. The City of Toledo and OEPA have developed an extensive set of storm water management rules and guidelines. This storm water management plan acts as a guide for the successful implementation of most rules/guidelines related to storm water/small MS4's at UT.

Note: Pages 179 to 246 of TMACOG's Storm water Standards Manual (available on line) contain a variety of potential rules/ordinances, etc. to facilitate compliance with the various BMPs required under the MS4 permit.

- b. These rules are enforceable by both internal (members of the organizational structure at the University of Toledo) and external entities (OEPA/Toledo Department of Environmental Services).
- Compliance and Surveillance
 - a. The UT authorized representatives and/or representatives from the local and state government have the authority to inspect, monitor, and conduct all surveillance necessary of activities on the UT property in order to ensure compliance with Permit conditions.

B. STORM WATER MANAGEMENT PROGRAM RESOURCES

- Management, maintenance and operation of the storm water Permit and system is performed by several UT departments. The primary responsibilities are within the Department of Administration under the direct control of the Office of the Vice President for Administration. Within Administration, EHRS is the unit with primary responsibility for day-to-day management of environmental issues, compliance with environmental regulations, and interaction with regulatory agencies on behalf of UT. EHRS is responsible for the development and oversight of the SWMP, and interacts with all other UT departments, to ensure that the requirements of the permit are met. EHRS additionally maintains trained personnel to address and handle hazardous material responses and clean-ups as well as routine management of hazardous materials and their disposal. Large hazardous material responses and clean ups are coordinated through EHRS and contracted to a vendor. UT has developed or is in the process of developing draft BMPs to outline the roles and responsibilities for its departments related to storm water management. Funding resources for each UT divisions/departments with storm water management responsibilities come from a variety of sources. Funding for EHRS is through the University General Fund. Facilities Maintenance and Construction budget is the primary source of funding for storm water operation and maintenance of the system. Costs for the department are passed directly and indirectly to other UT units; therefore increases in storm water system management will result in increased costs for all UT units, many of which are also funded through the General Fund. Funding for Facilities Maintenance and Construction activities for new projects can come from three main areas: 1) state bonds, 2) internal capital funds, and 3) donor funds. Funding sources vary, but generally fall into the categories outlined above. Actual expenditures and proposed upcoming annual budgets for the various areas are provided to the OEPA in the Reports, when required, and are not shown in this SWMP.

C. CONTACT PERSON

- a. The University of Toledo's storm water program manager:

Timothy S. Niederkorn
Environmental Specialist
University of Toledo
Environmental Health and Radiation Safety Department
2801 W. Bancroft Street MS 219
Toledo, Ohio 43606
(419) 530-3600
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D. STORM WATER MANAGEMENT PROGRAM MODIFICATION

1. Any modifications required for this Management Program, once approved by the OEPA, will be made following requirements of OHQ000003.

Once the storm water management program plan is approved, it may be modified in the following ways, per the requirements of OHQ000003.

- a. The addition of (but not subtracting or replacing) components, controls, or requirements to the

approved storm water management program may be made at any time upon written notification to the OEPA. Such notification will contain a description of the modification.

- b. The replacement of ineffective or unfeasible BMPs specifically identified in the Storm Water Management Program with an alternative BMP may be requested at any time by written notification to the OEPA. Unless denied by the OEPA, the modification shall be deemed approved and may be implemented by the permittee 60 days from submittal of the request. Such requests will include the following
- c. an analysis of why the BMPs are ineffective or unfeasible (including cost prohibitive);
- d. expectations on the effectiveness of the replacement BMPs; and
- e. analysis of why the replacement BMPs are expected to achieve the goals of the BMPs to be replaced.

In addition, per the requirements of OHQ000003, the OEPA may require UT to modify the Storm Water Management Program to:

- a. Address contributions by the drainage system discharges which impair receiving water quality;
- b. Include more stringent requirements necessary to comply with new state or federal statutory or regulatory requirements; or
- c. Include such other conditions deemed necessary by the OEPA to comply with the goals and requirements of the OEPA, including the requirement to reduce the discharge of pollutants from the MS4 to the maximum extent practicable.

2. Assessment of Storm Water Management Program Effectiveness

- a. OHQ000003: "The permittee shall describe the status of compliance with the standards permit requirements in OHQ000003. and any approved alternatives. The report shall describe the progress made towards achieving the identified measurable goals for each of the BMPs, and specific evaluation criteria for the PEP, the IDEP, and TSS." The compliance status information will be compiled and presented in the Progress Reports, as required by OHQ000003.

3. Reporting Requirements

- a. The reporting requirements under this Permit are presented in OHQ000003, and are divided into two distinct types of reports:
 - 1) Progress Report
 - 2) Phase I Annual Report

The subsections below describe the reporting details for each.

a) Progress Report

- i. The progress reports must be submitted to the OEPA annually during the permit period: on or before April 1. The report is required to describe the status of compliance with the standard permit requirements in OHQ000003 of the permit. The report is required to include the following elements:
 - Compliance Assessment: The report must include descriptions of the progress made towards achieving the identified measurable goals for each of the BMPs.
 - PEP: provide a summary of the evaluation of the PEP's overall effectiveness, using the evaluation methods prescribed in the PEP.
 - IDEP: Evaluate the progress made toward the measurable goals, provide documentation of the actions taken to eliminate illicit discharges. For identified illicit discharges, summarize the total estimated volume & pollutant loading eliminated for the main pollutant(s) of concern, and the location(s) of the discharge(s) into both the permittee's MS4 and the receiving water.
 - Discharge Point Location: Provide updated information, in accordance with OHQ000003, that was not previously submitted for newly identified,

constructed, or installed MS4 discharge points. Provide an update on areas added to or removed from the MS4.

- Data & Results: Provide a summary of all of the information collected and analyzed, including monitoring data, if any, during the reporting cycle.
- Upcoming Activities: The first year report must include a summary of the storm water activities to be implemented during the next annual reporting cycle.
- BMP: Describe any planned changes in identified BMPs or measurable goals for any of the standard permit requirements.
- Notice of Changes in Nested Jurisdiction Agreements or Reliance on Permitted MS4 Operators: Identify any nested jurisdictions that enter into or terminate permit agreements with the permittee which were not identified in the SWMP.
- Describe any changes in the need to rely on other permitted MS4 operators to satisfy the terms and conditions of this permit, as described in the Phase I Annual Report.

ii. Phase I Annual Report

- Per the requirements of OHQ000003, the Phase I Annual Report must be provided to the OEPA on or before April 1. The report will include a brief summary of information for the period of time following the last annual report and will include the following information:
- Implementation Status: Describe the status of implementing the components of the SWMP.
- Environmental Impacts: Provide an assessment of the pollution reduction and probably receiving water quality impacts associated with program implementation. When applicable, include a statement regarding any negative water quality impacts that may have occurred as a result of any illicit discharges or accidental spills during the report cycle.
- Data Summary: Provide a summary of all of the information collected and analyzed, including monitoring data that is accumulated during the reporting cycle.
- Annual Budget: Provide the previous reporting cycle's annual expenditures and the proposed budget for the reporting cycle following the report.
- PEP Reporting and Program Enforcement: Per the requirements in 40 CFR 122.42(c)(6), provide a summary describing the number and nature of enforcement actions, inspections, and public education programs.

4. Submittals

- a. Copies of the Phase I Annual Report, Progress Reports, SWMPP, outfall additions, Permit modifications, or other requests will be submitted to the OEPA at:

Ohio Environmental Protection Agency, Northwest District Office
OEPA – Division of Surface Water
347 North Dunbridge Road, Bowling Green, Ohio 43402
Phone: (419) 352-8461
Fax: (419) 352-8468

5. Retention of Records

- a. The latest version of the SWMP plan developed in accordance with this permit shall be retained by the permittee and available for inspection. All records and information resulting from the preparation of previous SWMP plans or the progress reports, including all records of analyses performed,

calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation (as required), and recordings from continuous monitoring instrumentation (as required), shall be retained by the permittee for a minimum of three years. The records will be retained in files maintained by EHRS.

6. Notification Requirements

a. UT will make notification to the OEPA under the following circumstances:

1) Discharges Which May Endanger Public Health or the Environment

a) The permittee shall verbally notify OEPA within 24 hours of becoming aware of any discharges to or from the MS4 that the permittee suspects may endanger public health or the environment. After regular working hours, call LEPC at.

The notification will include the following information:

- Name of the person responsible for the discharge (if known),
- Location of the discharge,
- Location where the MS4 discharges to the surface waters of the state,
- Nature of the discharge,
- Pollutants,
- Clean-up and recovery measures taken or planned.

2) Non-Compliance Notification

a) Any non-compliance shall be reported to the OEPA as follows:

- 24-Hour Reporting – Any noncompliance which may endanger health or the environment shall be reported, verbally, within 24 hours from the time the permittee becomes aware of the noncompliance. A written submission shall also be provided within five (5) days.
- Other Reporting – The permittee shall report, in writing, all other instances of noncompliance not described above, at the time monitoring reports are submitted; or, in the case of self-monitoring, within five (5) days from the time the permittee becomes aware of the noncompliance.
- The written documentation will include the following information:
- A description of the circumstances, including the type of noncompliance, and description of the discharge (if applicable);
- The period of noncompliance (if known), including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

3) Additional Notification and Authorization Requirements

a) In addition to other notification requirements, the Permit requires the following notifications and authorizations:

- 1) Tracer Dye Discharges: UT must receive authorization from OEPA for the discharge of tracer dyes into surface waters of the state.
- 2) Water Treatment Additives: UT must receive authorization from OEPA for the discharge of any water additives.
- 3) Identification of Additional Point Source Discharges of Storm Water: If any additional points are identified in the system that are not listed in the storm water outfall map UT will submit an updated map clearly showing the location of the discharge point, unique identification code or number, the latitude and longitude of the discharge point, and the receiving waters of the state to the OEPA.

- 4) Expiration and Reissuance: Per the requirements of OHQ000003, if UT wishes to continue a discharge authorized under the permit beyond the permit's expiration date, UT will submit a written request to the OEPA.

7. Management Requirements

- a. UT recognizes the general management requirements specified in OHQ000003 and has incorporated such requirements into appropriate parts of this SWMP. The management requirements include a duty to comply, proper operation and maintenance of the system, provide containment facilities, recording of results, reporting of additional results, minimizing adverse impacts, and proper handling and disposal of removed substances.

V. SIX MINIMUM CONTROLS AND UT'S COMMITMENT

A. Public Education and Outreach on Storm Water Impacts – Distributing educational materials and performing outreach to our UT community about the impacts polluted storm water runoff discharges can have on water quality.

1. Recognizing the need for public involvement in the effort to reduce storm water pollutants, UT has developed a broad storm water education and outreach program. Specifically, the storm water education curriculum is designed to promote, publicize, and facilitate watershed education. The intended audience for the program is all persons associated with the University who could potentially affect the quality of storm water discharges, including, but not limited to: campus residents; University faculty, staff, and students; visitors to the campus; contractors and vendors working on the campus; and commercial and industrial operations on campus. UT's overall goal is to bring awareness of storm water issues to 50% of the University community by the end of 2019. Levels of storm water awareness are anticipated to vary widely among the different community groups, with more emphasis given to key staff having greater potential to impact storm water quality during their day-to-day work activities. The remainder of the University community is targeted through other means, such as brochures, posters, websites, storm drain markers, PSAs, etc. The following is a description of each of the public education topics identified in the permit, to be included as appropriate, based on the potential impact on the receiving waters:
 - a. Educate the public of hazards associated with illicit discharges and improper disposal of waste. Part of this education is to encourage public reporting of the presence of illicit discharges or improper disposal of materials into the UT drainage system.
 - b. Educate the public concerning the water body that would be potentially impacted by improper actions at or near a person's home.
 - c. Educate the public on the availability, location and requirements for household hazardous waste disposal, travel trailer sanitary wastes, chemicals, grass clippings, leaf litter, animal wastes and motor vehicle fluids.
 - d. Educate the public regarding acceptable application and disposal of pesticides, herbicides, and fertilizers, including the use of phosphorus-free fertilizer alternatives, as appropriate.
 - e. Educate the public on preferred car cleaning agents and procedures for noncommercial car washing.
 - f. Educate property owners with a septic system on proper maintenance and how to recognize system failure.
 - g. Educate riparian land owners of management of lands to protect water quality.
 - h. Educate the public about their responsibilities and stewardship of their watershed.
 - i. Educate the public on the benefits of using native vegetation instead of non-native vegetation.
 - j. Educate commercial and institutional entities likely to have significant storm water impacts. (At a minimum, commercial food services shall be educated to prevent grease and litter discharges to the MS4).
- 1) The following Best Management Practices will be carried out to meet these requirements:
 - a) Storm Water Education Brochures

- i. In cooperation with the UT President's Commission on the River, The UT Civil Engineering Department and the UT Department of Environmental Health and Radiation Safety (EHRS) will develop an electronic brochure to assist various members of the University community in preventing storm water pollution on campus. The brochure has been designed to meet the overall program objectives for the general audience.
 - Measurable Goal: Create Storm Water brochure as needs are identified. The number of new or revised brochures, flyers or other educational media created will be tracked for inclusion in the progress reports. Copies of brochure (and other handouts/postings) will be kept on file.

Goal	Timeframe	Recordkeeping
Create electronic storm water brochure.	Jan 1, 2014 – Jan 1, 2015	Maintain copy of brochure and revision date for file.
Review brochure – determine additional needs – revise.	Jan 1, 2015 – ongoing	Maintain copies of revisions for file.

b) Storm Water Webpage

- 1) Develop and make live a Storm Water Webpage for EHRS providing useful links for community members seeing more information on Storm Water management. This web site is intended to help students, employees, and visitors in the UT community understand how the University's storm water system operates, various legal requirements, and what individuals can do to reduce contamination in the storm water system from surface runoff. As viewers move through the site they learn about storm water, what they can do to help protect it, how regulations impact the University's operation, and various safe practices
 - Measurable Goal: EHRS will develop a storm water webpage.
 - Measurable Goal: Web hits to Storm Water plan will be tracked for inclusion in the progress reports.

Goal	Timeframe	Recordkeeping
EHRS to create storm water webpage.	2014 – Jan 1, 2015	Capture Screenshot of webpage for file.
Populate EHRS storm water webpage – develop/include web hit tracker.	Jan 1, 2015 – Jan 1, 2016	Capture Screenshot of webpage for file.
Review EHRS storm water webpage – determine additional needs – submit web hits	Jan 1, 2016 – Jan 1, 2017	Capture Screenshot of webpage for submittal of progress report – submit web hits.

c) Storm Water Public Service Announcements

- 1) Develop and disseminate Storm Water Public Service Announcements providing a quick reference for basic Storm Water proactive and protective strategies that community users can employ.
 - Measurable Goal: Development of E-flyer for network screen saver and quantification of views.
 - Measurable Goal: Investigate ability to push message at UT home Football games via big screen.

Goal	Timeframe	Recordkeeping
Create electronic storm	2014 –	Maintain copy of brochure and

water brochure.	Jan 1, 2015	revision date.
Distribute electronic brochure via network screen saver – determine viewing count	Jan 1, 2015 – Ongoing.	Submit screen capture of screen saver – submit estimation of views.
Distribute electronic screen saver at UT football games on big screen. This goal has been modified to distribute stormwater napkin holder flyer via UT Dining Halls and produce a stormwater short video.	Jan 1, 2016 – ongoing. Napkin Holder flyer to be distributed first week of August 2017.	Report estimation of views. Now goal is to save copy of napkin holder flyer to file.

d) Storm Water Education Presentations

1) EHRS provides storm water education presentations to key staff having greater potential to impact storm water quality during their day-to-day work. The remainder of the University community is targeted through other means. The presentations discuss the storm water drainage system; the need for protecting the quality of storm water discharges; the NPDES permit, its legal requirements, and the storm water management program; and the most common storm water pollutants and ways to limit their effects on storm water.

- Measurable Goal: Develop or redevelop existing maintenance and environmental services presentations to discuss Storm Water concerns in greater detail.
- Measurable Goal: Quantify number of staff who attend trainings that include a Storm Water management component.

Goal	Timeframe	Recordkeeping
Develop/Redevelop environmental services/Facilities presentations	2014 – Jan 1, 2015	Submit copies during regular reporting.
Present developed/redeveloped presentations	Jan 1, 2015 – ongoing.	Record and submit number of trained employees.
Review developed/redeveloped presentations – identify needs and redevelop.	Jan 1, 2016 – ongoing	Submit copies during regular reporting.

B. Public Participation / Involvement

UT encourages public input in all aspects of its storm water management program. In order to facilitate public participation, this plan and information related to the storm water management program are made available on the storm water web site. By viewing the Annual Reports that are placed on the web site, the general public and members of local stream and watershed protection organizations can make themselves aware of activities the University carries out under its storm water management program. In addition, when new storm water management program plans are developed and finalized, the City, County, and interested local stream and watershed protection organizations are allowed to review and comment on them. Website feedback link(s) will be provided to facilitate feedback on the SWMP from the community.

- Measurable Goal: The SWMP and NPDES permits will be made available on

the UT EHRS website and dates of inclusion tracked for reporting.

- Measurable Goal: UT EHRS representatives will identify various local watershed organizations.
- Measurable Goal: UT EHRS representatives will participate in at least four meetings per year with various local watershed organizations.
- Measurable Goal: UT EHRS will participate in at least one annual coordinated Storm Water related activity that encourages watershed conservation by maintaining an informational booth, video presentation, etc for public consumption.

Goal	Timeframe	Recordkeeping
EHRS to create storm water webpage.	2014 – Jan 1, 2015	Capture Screenshot of webpage for submittal of progress report.
Identify various local watershed organizations	2014 – Jan 1, 2015	Submit identified organizations as part of progress report.
Include SWMP and NPDES Permit link on web page	Jan 1, 2014 – Jan 1, 2015	Capture Screenshot of webpage for submittal of progress report.
Attend at least two meetings per year with local organizations	Jan 1, 2015 – ongoing.	Submit number of meetings attended
EHRS participation in annual activity which promotes watershed conservation	Jan 1, 2015 – ongoing.	Submit number of activities attended.

C. **Construction Site Storm Water Runoff Control** – Developing, implementing, and enforcing an erosion and sediment control program for construction/development activities that disturb one or more acres of land and requirements to follow BMP's for construction/development activities that disturb less than one acre of land.

1. Construction Activities Disturbing One or Greater Than One Acre (Or Less Than One Acre, If Part of a Larger Common Plan of Development).
 - a. Activities that disturb or are expected to disturb one or more acres (or less than one acre, if part of a larger common plan of development) require a fully developed SWP3 per Ohio Law (See OAC Chapter 1501:15-1 Erosion and Sediment Control). In addition to a written SWP3, a NOI must be sent to the OEPA at least 21 days (and permit coverage granted by OEPA) before groundbreaking may begin. The NOI and SWP3 should be developed by the contractor selected to perform the work and submitted to the OEPA in coordination with UT Facilities project managers.

- Measurable Goal: Include storm water BMP language into construction contract documents.
- Measurable Goal: Copies of written SWP3's will be transmitted by contractors or facilities maintenance managers to EHRS for notification and review purposes. EHRS will include the number of received SWP3 plans submitted during regular reporting to OEPA. It is the responsibility of facilities maintenance project managers to ensure that these SWP3's are sent to EHRS for inclusion in reporting.

Goal	Timeframe	Recordkeeping
Develop and include template storm water BMP language into construction contracts	Jan 1, 2015 – Jan 1, 2016	Submit copy of draft language during regular reporting.
EHRS to collect SWP3	Jan 1, 2016 –	Number of SWP3 plans received to

plans	ongoing.	be submitted to OEPA during regular reporting. Now saved to file.
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2. Construction Activities Disturbing Less Than One Acre.

- i. UT has developed, implemented and enforces a program to reduce pollutants in any storm water runoff to waterways from construction activities that result in a land disturbance of less than one acre.

Our program includes:

- 1) Contractors and/or other entities (including UT personnel) must follow the provisions of this program.
- 2) UT EHRS will implement non-monetary sanctions (typically, electronic letters of non-compliance sent to both internal UT project managers and external contracting entities) in the event of non-compliance with construction related sedimentation or erosion control.

- Measurable goal: Number and nature of letters of non-compliance sent to internal and external parties will be included in reporting to OEPA.

Goal	Timeframe	Recordkeeping
EHRS to develop letter of non-compliance	Jan 1, 2015 – Jan 1, 2016	Submit draft of letter of non-compliance during progress reporting.
Begin distribution of letters of non-compliance for identified projects.	Jan 1, 2016 – ongoing.	Submit number and nature of letters of non-compliance sent to identified contractors/internal entities as part of progress report.

- b. Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

- 1) Construction site contractors (or internal UT facilities project managers) must follow applicable BMP's for Soil Erosion and Sedimentation Control. BMP's are typically determined on a project-by-project basis by facilities maintenance project managers and their respective contractors. Typically, BMP's cover construction and maintenance of:

- Access Roads
- Construction Barriers
- Tree Protection
- Buffer and Filter Strips
- Filter Fencing
- Storm Drain Inlet Filter Fabric
- Street Sweeping

Note: A useful, comprehensive list of BMP's can be found at <http://www.dnr.state.oh.us/tabid/9186/default.aspx>

- Measurable Goal: Number of storm water BMP inspections will be kept by EHRS for inclusion in reporting to OEPA.

Goal	Timeframe	Recordkeeping
Develop storm water inspection template.	Jan 1, 2015 – Jan 1, 2016	Submit copy of draft inspection template during progress reporting.
Inspect construction sites for BMP's	Jan 1, 2016 – ongoing.	Submit number of inspections during regular reporting

- c. Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site that may cause adverse impacts to water quality;

- 1) Construction site contractors (or internal UT facilities project managers) must ensure that no activities such as improperly discarded building materials, concrete truck washout, chemicals,

litter and sanitary waste create a situation in which rinsate or leachate from construction related materials negatively impacts storm water.

- 2) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- 3) Projects and associated appropriate BMP's and/or SWP3 plans shall be discussed at a project meeting with the following specific outcomes:
 - i. Generation of potential storm water impacts.
Issues that must be addressed in BMP's are located at <http://codes.ohio.gov/oac/1501%3A15-1-03>
 - ii. A BMP plan of action to address aforementioned storm water impacts.
 - iii. Measurable Goal: Lists of potential storm water impacts, BMP's and/or SWP3 plans (as necessary) designed to mitigate impacts will be delivered to EHRS to provide an inspection benchmark for the project. It is the responsibility of the project manager to ensure that this information is transmitted to EHRS. Number of BMP plans of action and/or SWP3 plans reviewed will be submitted to OEPA during regular reporting.

Goal	Timeframe	Recordkeeping
Develop storm water inspection template.	Jan 1, 2015 – Jan 1, 2016	Submit copy of draft inspection template during progress reporting.
Inspect construction sites for BMP's	Jan 1, 2016 – ongoing.	Submit number of inspections during regular reporting

- 4) Procedures for receipt and consideration of information submitted by the public;
 - a) EHRS welcomes comments regarding the storm water permit and our storm water management plan via our web page feedback link located at <http://www.utoledo.edu/depts/safety/Stormwater.html>
 - Measurable Goal: EHRS will develop a storm water feedback mechanism on its EHRS website.
 - Measurable Goal: EHRS will track the number of comments received and transmit them to OEPA during regular reporting.

Goal	Timeframe	Recordkeeping
EHRS to create storm water webpage.	2014 – Jan 1, 2015	Capture Screenshot of webpage for submittal of progress report.
Populate EHRS storm water webpage – develop/include feedback tab	Jan 1, 2015 – Jan 1, 2016	Submit number of comments received from feedback tab during progress report.

- 5) Procedures for site inspection and enforcement of control measures.
 - a) Inspections of work sites are essential to controlling erosion and sedimentation concerns. Personnel from EHRS have received training on storm water pollution prevention related topics. The inspections focus on compliance with written BMP's (required for projects smaller than one acre) or the SWP3 plan (required for projects larger than one acre). Conditions can change at maintenance, renovation, and construction sites and the inspectors should make adjustments to the erosion and sedimentation control measures, as needed.
 - i. EHRS or their designee, who have received training in storm water construction site inspections, will inspect sites weekly during maintenance, renovation, and construction activities and following significant rain events.
 - ii. Sites 1 acre and above will be inspected within 24 hours of the rain event to comply

with National Pollution Discharge Elimination System (NPDES) inspection requirements.

- iii. Issues and concerns will be referred to the project/construction manager or designee for correction. The contractor will make any necessary repairs or corrections to the control measures within 24 hours, if waters of the state are being impacted. Other corrections, not impacting waters of the state will be made within 5 days. The project/construction manager will report any issues that cannot be corrected within 5 days to EHRS.

Additional detail as to why the correction cannot be made in that time frame will be required.

- Measurable Goal: Sites will be inspected weekly and after rain events until final stabilization of the project site. The number of site inspections performed annually on UT sites will be tracked for subsequent reporting.
- Measurable Goal: Select staff from EHRS and they will receive storm water related training. The number of UT staff who receive training will be tracked for subsequent reporting.

Goal	Timeframe	Recordkeeping
Select EHRS personnel to attend storm water related training	Jan 1, 2015 – ongoing.	Submit number of EHRS staff trained and course names during progress reporting.
Develop storm water inspection template.	Jan 1, 2015 – Jan 1, 2016	Submit copy of draft inspection template during progress reporting.
Inspect construction sites for BMP's	Jan 1, 2016 – ongoing.	Submit number of inspections during regular reporting

- 6) BMP's for emergency projects/unscheduled maintenance that disturb soil.
 - a. Some projects that take place on campus to preserve life, health, the environment and standards of living are, by nature, unplanned. In these cases, it can be necessary to disturb earth to fix the unforeseen issue without standard contractor involvement. When these cases arise – UT personnel shall implement the following BMP's as a minimum level of environmental protection.
 - 1) Evaluation of the site to determine the location of the nearest inlet to the storm water drainage system.
 - 2) Determination if soil will be excavated or disturbed during the maintenance activity.
 - 3) Removal of any unused soil from the site as soon as maintenance activities are completed.
 - 4) Grading and re-vegetating the work area if necessary.
 - 5) Remove all erosion and sedimentation control devices from the site once final site stabilization has been completed.
 - 6) Evaluate the need to have nearby catch basins cleaned and initiate appropriate actions.
 - 7) Evaluate the need to have the street or surface parking area cleaned following completion of the work and initiate the appropriate actions.
 - 8) Report any sediment releases into the storm water drainage system to EHRS during all stages of the project.

D. Post Construction Storm Water Runoff

- 1. The goal of the University is to protect receiving water quality and limit the rate at which surface water runoff discharges from any specific site during and following development or redevelopment to not exceed

the pre-development hydrologic regime. On projects where detention on site is not feasible UT requires a minimum of structural BMPs to improve the water quality leaving the site (sedimentation traps, etc.) and advocates for regional containment within the runoff basin for quantity control.

- a. Examples of existing regional detention systems constructed across campus include:
 - 1) An approximately 3.1 acre existing pond on the Scott Park Campus
 - 2) An approximately 1 Acre existing pond on the Health Science Campus
 - 3) Two 0.5 Acre ponds on the Health Science Campus
- b. Storm water management practices and facilities for new development and redevelopment projects may be designed with any or all of the following objectives:
 - 1) Incorporate design standards that control water quantity and quality;
 - 2) Encourage innovative storm water management practices that meet the criteria contained within UT's storm water permit;
 - 3) Ensure future maintenance of facilities by planning for it as part of system design;
 - 4) Make the safety of the facility a priority;
 - 5) Strengthen the protection of natural features; and
 - 6) Encourage more effective soil erosion and sedimentation control measures.
 - Measurable Goal: By January 1, 2015 UT will issue Post-Construction Storm Water Requirements guideline which details the minimum treatment volume standard and channel protection criteria. The guideline will be provided as an appendix to this document.

Goal	Timeframe	Recordkeeping
Develop post-construction storm water requirements guideline.	Jan 1, 2017 – Jan 1, 2018.	Include in this document and maintain.

- c. Non-structural and Structural BMPs
 - 1) To meet the objectives, UT may implement various non-structural and structural BMPs where appropriate. Non-structural BMPs are preventative actions that involve management and source controls. Examples of issues that are covered in non-structural BMPs used on campus include but are not limited to the following:
 - a) Buffers along sensitive water bodies
 - b) Education programs for developers and the public about project designs that minimize water quality and quantity impacts
 - c) Minimum disturbance of soils and vegetation;
 - d) Restrictions on directly connected impervious areas;
 - e) Preservation of the natural environment;
 - f) Minimization of impervious surfaces; and
 - g) Use of vegetated swales and natural storage.
 - 2) Structural BMPs are physical controls, including storage practices, which improve water quality. Examples of issues covered in structural BMPs used on campus include but are not limited to the following:
 - a) Wet ponds and extended detention outlet structures;
 - b) Filtration practices such as grassed swales, sand filters, and filter strips; and
 - c) Infiltration practices such as infiltration basins and infiltration trenches.

- Measurable Goal: Facilities and Construction Department will review all construction and renovation plans for use of structural and nonstructural BMPs to prevent receiving water quality from the impacts of development and limit the rate at which surface water runoff discharges from any specific site to not exceed the pre-development hydrologic regime. The number of sites implementing various non-structural and structural BMPs will be tracked annually for subsequent reporting. Examples of BMPs to be tracked for reporting may include but are not limited to those identified above.

Goal	Timeframe	Recordkeeping
Review construction and renovation projects to prevent water quality impacts.	Jan 1, 2016 – ongoing.	Submit number of sites implementing non-structural BMP's during progress reporting.

3) Operation and Maintenance of BMPs

- a. Any non-structural BMPs that are implemented at a facility are incorporated into day to day activities for the operation of the facility or into maintenance schedules. Structural BMPs related to storm water detention and retention basins are subject to scheduled maintenance inspections. Non-scheduled activities are completed as they arise.

- Measurable Goal: Storm water management basins on campus will be inspected annually, at a minimum. The number and frequency of inspection of storm water basins will be tracked for subsequent reporting. Maintenance issues identified during these inspections will be tracked until corrected.

Goal	Timeframe	Recordkeeping
Develop storm water management basin inspection checklist	Jan 1, 2015 – Jan 1, 2016	Include copy of storm water management basin inspection checklist with progress reporting
Inspect storm water management basin	Jan 1, 2016 – ongoing.	Track number of storm water management basins inspected for progress reporting.

4) Site Plan Review

- a) UT has established programs to control the quality of storm water runoff from development or redevelopment activities through the review of site plans. This program is the same as that used for controlling storm water runoff on construction sites. Please see Section D.b.2 of this plan for a complete description of the site plan review program.

- Measurable Goal: Facilities and Construction review all plans to ensure projects have adequate post construction storm water management controls. The number of plan reviews will be tracked and submitted to EHRS for subsequent reporting.

Goal	Timeframe	Recordkeeping
Review construction and renovation projects to prevent water quality impacts.	Jan 1, 2016 – ongoing.	Submit number construction and renovation plans reviewed during progress reporting.

E. Illicit Discharge Elimination Program

- The removal of illicit discharges is an ongoing program being conducted by UT. As illicit discharges are identified, they are discontinued or otherwise corrected. The program described in this section will be used to determine the existence, location, and extent of possible illicit connections and discharges to the storm water drainage system.

- a. Storm Sewer Map

- 1) EHRS (in conjunction with Facilities and Construction) will develop a storm sewer map. The map must include the location of all discharge points the permittee owns or operates, and the names and location of all surface waters of the state which receive discharges from the MS4.
 - Measurable Goal: By January 1, 2014 UT will create a storm sewer system map identifying the location of all if its discharge points and the names and locations of all the surface waters that the MS4 discharges into.
 - Measurable Goal: The storm sewer system map will be updated periodically as discharge points are identified or added. The dates of modification of the system map will be tracked and kept on file.

Goal	Timeframe	Recordkeeping
Develop storm sewer system map.	Jan 1, 2014 – Jan 1, 2015	Include map in this document and submit during progress reporting.
Update storm sewer map	Jan 1, 2015 – as needed.	Include updated map in this document and submit during progress reporting.

b. Dry Weather Screening

- 1) The purpose of dry weather field screening is to determine the existence, location, and extent of possible illicit discharges into UT's storm water drainage system. The screening program has been designed to target discharge points within the storm water system that will help identify non-storm water flow. This procedure will be updated periodically, and the most current copy of the procedure will be available for review in the EHRS offices.
 - a) For the purposes of dry weather screening, UT will be divided into three regions. The regions are as follows:
 - Main Campus
 - Scott Park Campus
 - Health Science Campus
 - Measurable Goal: UT will perform dry weather screening on each MS4 discharge point at least once every 5-years beginning on January 1, 2015 to determine the existence, location, and extent of possible illicit discharges into the UT storm water drainage system on all three campuses. This is typically done during four to five rounds of screening. Any issues identified for further investigation or correction will be tracked for subsequent reporting. The number of illicit discharges and connections identified and subsequently corrected or removed will be tracked for subsequent reporting.

Goal	Timeframe	Recordkeeping
Develop dry-weather screening guidelines	Jan 1, 2015 – Jan 1, 2016	Include dry-weather screening guidelines in this document and submit during progress reports.
Inspect 20% of all identified discharge points annually.	Jan 1, 2016 – ongoing.	Record and report number of illicit discharges/connections identified and corrected during progress reporting.

c. Public Reporting of Illicit Discharges

1) Public involvement in the reporting of illicit discharges to the storm water system is a voluntary program. The University maintains a 24-hour emergency response system (419-530-2600) which is coordinated and manned by the University of Toledo Police Department. Any calls reporting dumping, accidental spills, etc. are dispatched from UTPD to EHRS for emergency response, containment and control. In addition, calls can be made to EHRS directly reporting such incidents for emergency response.

- Measurable Goal: The emergency response system on campus will be maintained by UTPD (24/7) for use by the public to report illegal dumping, spills or suspicious discharges at the University throughout the permit term. The number of calls received by the UTPD/EHRS emergency response call system on potential discharges to the storm water system will be tracked for subsequent reporting. The number of incidents remedied as a result of these calls will also be tracked and reported regularly.

Goal	Timeframe	Recordkeeping
Track calls received to UTPD/EHRS that are storm water related	Jan 1, 2014 – ongoing	Submit number of calls taken and incidents remedied during progress reporting.

d. Follow-up Corrective Action

1) Identification of illicit discharges and connections is the first stage of the illicit discharge elimination program. Once the discharges are identified, they must be effectively eliminated to prevent future impacts on the receiving waters of the State. The following program for corrective action has been developed to remove identified illicit connections and discharges.

a) Correction of Illicit Connections

i. Illicit connections are physical connections to the storm water drainage system that can convey a discharge that should not be entering it. These connections typically require the involvement of UT Department of Facilities and Construction for correction. Activities involved in the corrective action include:

- Identify the source of the discharges to the illicit connection and stop the discharges.
- Notify the owner of the discharge point and ask them to contact UT Department of Facilities and Construction through the work order system to initiate the removal of the connection.
- UT Department of Facilities and Construction will prioritize the problem with other maintenance activities underway on campus. A higher priority will be assigned if the connection presents an immediate concern. A lower priority will be assigned if the owner can operate without discharging to the connection until repairs are implemented.
- A schedule for corrective action will be included with the progress reports if the illicit connection cannot be removed within a reasonable time. It will be listed as

identified and corrected if the connection can be removed prior to the reports.

b) Correction of Illicit Discharges

i. Identification of potential illicit discharges will come from either public involvement in reporting or from EHRS staff members identifying problems during routine activities at University facilities. Every individual in the University community has a responsibility for reporting illicit discharges to EHRS if they are observed. The education program is designed to enhance this effort. Once identified, EHRS will perform follow-up actions to remove the discharge and prevent future occurrences. The correction of an illicit discharge typically involves modifying an unwanted behavior. The following actions will be taken by EHRS once the responsible individual or unit is identified:

- The activities of the individual or unit will be reviewed to determine the appropriate disposal method to use. The discharge will be reviewed for appropriate reporting requirements under environmental regulations.
- The individual or unit will be directed to stop discharging and change operations to the appropriate disposal method.
- EHRS will respond to the area for cleanup if the discharge can be removed from the system. An outside contractor with vacuum truck capabilities may be required to remove the material.
- EHRS will perform appropriate follow-up with the supervisor of the individual or unit to ensure future discharges do not occur.
- A review will be performed of similar operations that could have similar concerns. Education efforts will be made with individuals or units associated with the similar activities, if appropriate.

c. Recordkeeping

i. Once an illicit discharge or connection is identified and appropriate follow-up actions are initiated, the following items will be investigated and recorded. The records will be maintained by EHRS.

- Steps will be taken to mitigate the situation immediately. All actions initiated to eliminate the discharge and effect cleanup will be noted.
- These records may involve memoranda prepared by EHRS regarding actions taken and cleanup efforts. They may also involve discussions with Facilities Maintenance and Construction regarding correction of illicit connections.
- The material or pollutant discharged will be identified. This can typically be obtained through interviews, reviews of inventory data, and Safety Data Sheets.
- The location of the discharge to the UT storm water drainage system will be identified. This information will be tracked through discussions with the Facilities Maintenance and Construction, review of drawings, or dye testing if needed.
- The location of the storm water system outfall to waters of the State will be identified. This information will be obtained through review of the storm water drainage plans for the UT property.

F. Pollution Prevention/Good Housekeeping for University Operations

1. The ultimate goal of the pollution prevention/good housekeeping program is preventing or reducing pollutant runoff to the maximum extent practicable from university operations that discharge storm water to the surface waters of the state.

a. The University's storm water pollution prevention and good housekeeping initiatives include, but are not limited to the following six areas:

- Structural Controls
 - Roadways
 - Fleet Maintenance
 - Storm Sewer Labeling
 - Flood Control Projects
 - Pesticides and Fertilizers
- b. Each area has operation and maintenance BMPs with the ultimate goal of reducing and in some cases preventing pollutant runoff from University operations to the maximum extent practicable. The University's storm water pollution prevention and good housekeeping initiatives are described in the following sections.

1) Structural Controls

Structural controls are permanent physical features that control and prevent storm water pollution. Each structural control has routine scheduled maintenance and long-term inspection procedures to ensure that they remove storm water pollutants to the maximum extent practicable.

- a) Several retention and detention basins have been identified as part of the UT storm water system. These structures receive direct run-off from the UT storm water system. UT is in the process of developing a list identifying additional structural controls and corresponding inspection and maintenance schedule.
- b) Facilities and Construction is responsible for administration of the inspection program for storm water retention facilities. Maintenance activities for the retention facilities are scheduled by Facilities and Construction based on results of the inspections.
 - i. Most inlets to the storm water drainage system have catch basins in them to collect sediments and other debris so it does not enter the system. Facilities and Construction is responsible for maintenance of the catch basin system. Basins are cleaned on a as-needed basis, with emphasis on higher traffic areas. Any debris that is collected from the catch basins is temporarily stored at a collection site before disposal at a solid waste landfill. Liquid that is collected with the debris is decanted into a sanitary sewer prior to offloading at the temporary storage location. Liquid waste from storm water maintenance activities will be drained to an approved sanitary sewer location. If vacuum services are performed at an off-site location, the vacuum truck operator shall decant the liquids back to a sanitary drain prior to leaving the site. Solid waste generated from these activities is taken off-site for disposal.
 - Measurable Goal: Storm water management basins will be inspected every other year during the permit term. The number and frequency of inspections on the UT retention basins and detention basins will be tracked for subsequent reporting.
 - Measurable Goal: Maintenance cleaning of the catch basins and storm sewer system piping will be performed periodically, with higher traffic areas and those identified via service requests receiving more attention. The goal will be to clean 20% catch basins in the system at least once per 5-year cycle. The number of catch basins maintained will be tracked for subsequent reporting.
 - Measurable Goal: By January 1, 2014 a list of municipal properties and structural storm water controls owned or operated by UT will be created, which includes the type and number of properties and structural controls. This listing will be kept on file.

Goal	Timeframe	Recordkeeping
Inspect storm water management basins every other year	Jan 1, 2016 – ongoing	Record and submit number of inspections conducted during progress reporting.

Goal	Timeframe	Recordkeeping
Clean 20% of catch basins per 5 year cycle.	Jan 1, 2017 – ongoing	Record and submit number of catch basins maintained during progress reporting.
Develop list of municipal properties and structural storm water controls	Jan 1, 2015 – Jan 1, 2016	Keep on file.

2) Roadways and Parking Structures

a. The University maintains numerous parking structures and surface parking lots throughout its campuses. Maintenance of the UT roadways and parking structures incorporates sediment control activities. Street sweeping removes potential storm water pollutants before they are carried into receiving waters in runoff from a storm event. Street sweeping and leaf and litter collection is performed by the University in an effort to prevent large debris from entering the storm water system. Litter is disposed as normal municipal waste and leaves are composted at a single location on each campus. Maintenance activities on these structures and surfaces include street sweeping, leaf pick-up, litter and pollution controls, snow and ice removal, and roadside vegetative maintenance. These activities are discussed in greater detail below.

- Measurable Goal: Street sweeping, leaf and litter collection will be performed periodically throughout the permit term. The number of employee hours invested in the maintenance and cleaning/sweeping of numerous parking structures, surface lots and roadways throughout the University will be tracked for subsequent reporting.
- Measurable Goal: Develop BMPs to control dust and suspended solids in runoff from unpaved roads and parking lots. A list of unpaved roads and parking lots will be created (2015).
- Measurable Goal: The use of coal tar emulsions to seal asphalt surfaces will be prohibited.

Goal	Timeframe	Recordkeeping
Track employee hours invested in maintenance and cleaning/sweeping of lots/structures	Jan 1, 2017 – ongoing.	Record and submit number of employee hours during progress reporting.
Develop list of unpaved roads/parking lots	Jan 1, 2017 – Jan 1, 2018	Record and submit number of unpaved parking lots.
Develop BMP to control dust and solids from unpaved lots/roads on campus	Jan 1, 2017 – Jan 1, 2018	Include BMP's in this plan.
Develop contract language to prohibit use of coal tar emulsions to seal asphalt surfaces	Jan 1, 2018 – Jan 1, 2019	Include copy of language in progress reporting.

3) Street and Parking Structure Sweeping and Leaf Disposal

- a) Personnel in Facilities and Construction are responsible for cleaning the UT street system. Street sweeping, including parking lots and structures. All lots and structures are cleaned on as-needed (periodic) basis.
- b) Leaf collection on campus does not occur except in rare situations, with most leaves being

mulched as they are mowed. Leaves that are collected are taken to a central composting location on the Health Science, Main Campus or Scott Park Facilities and Construction Maintenance or Plant Operations buildings. If any Storm Water catch basins are found to be broken or defective during leaf collection or other maintenance activities, they are reported to Facilities and Construction for repair.

- Measurable Goal: Identify maintenance operations (composting, bus washing, vehicle washing) that occurs in proximity to existing storm drains and develop an appropriate plan of action to ensure receiving waters are not adversely impacted.

Goal	Timeframe	Recordkeeping
Identify maintenance operations which occur in proximity to storm drains.	Jan 1, 2015 Jan 1, 2016	Record and submit number of problems identified during progress reporting.
Develop plan of action for identified issues with maintenance operations.	Jan 1, 2016 – Jan 1, 2017	Record and maintain action plans for identified locations.
Effect repairs/mitigate impacts to receiving waters from receiving liquids from maintenance activities.	Jan 1, 2017 – Jan 1, 2018	Record and maintain repairs/mitigations for identified locations..

4) Litter and Pollution Controls

- a) Facilities and Construction is responsible for the daily collection of litter on campus. Litter is collected and sent for off-site disposal as municipal waste.

5) Snow and Ice Removal

- a) Facilities and Construction predominantly uses salt for performing snow maintenance activities on the streets. Both rock salt and salt brine are used depending on the weather conditions. Brine reduces the amount of rock salt used and in some instances the brine material is mixed with beet juice to enhance effectiveness and decrease salt usage. Typically, rock salt is pre-wet to enhance its melting power. This results in an overall reduction of salt used, because lower application rates are employed. Facilities and Construction implements Best Management Practices (BMPs) to reduce the amount of pollutants produced from snow management activities. Proper calibration of de-icer application equipment and training of equipment operators is emphasized in this program. UT also ensures that proper storage procedures are used for the salt, liquid, and other de-icers used for snow maintenance. This provides environmental protection of the site and prevention of possible loss of materials. Other BMPs include: closing areas that are not frequently traveled, initiating night time snow removal crews, and alternative deicing products, anti-icing techniques, and innovative application and snow removal equipment.

- Measurable Goal: Incremental annual reduction in the use of salt for roadway de-icing by 20% over 10 years, with a target goal of 2% reduction per calendar year.
- Measurable Goal: Increase the use of alternative de-icers annually to replace/supplement salt use. The quantity of alternative de-icers will be tracked on an annual basis.

Goal	Timeframe	Recordkeeping
Calculate 10 year average annual salt and alternative deicing product usage.	Jan 1, 2015 – Jan 1, 2016	Record and submit average number of tons of salt and alternative deicing product used over 10 year period during progress reporting.
Develop 10 year strategy to reduce roadway salt usage across campuses by 2% per year.	Jan 1, 2016 – Jan 1, 2017	Include strategy in progress report.

6) Roadside Vegetative Maintenance

a) Facilities and Construction is responsible for the vegetative maintenance of campus property. UT uses slow release fertilizers twice per year (on average) on grass areas. A broad leaf herbicide is applied annually and is only done selectively. Dormant oil and some insect control agents are also used, as needed. The University employs State of Ohio certified commercial pesticide applicators. UT presently minimizes pesticide and herbicide use through integrated pest management practices. In addition, Facilities and Construction is examining alternative landscaping measures for low maintenance vegetation along in public areas. One such measure is by using a "Rough-mow" or "no-mow" approach in several areas so that the grass will develop an extensive root system. This practice is used in select, low visibility areas and areas which are environmentally sensitive including:

- Main Campus Law Center, near the Ottawa River;
- Health Science Campus Technology Park
- Scott Park Campus

This measure allows grass roots to grow deeper, which creates a greater plant mass to increase the ability of the vegetation to retain water.

- Measurable Goal: All applicators (technicians) will be trained in pesticide and fertilizer use. The number of pesticide and fertilizer technicians will be tracked on an annual basis.
- Measurable Goal: Develop a mowing priority schedule for all of campus areas.
- Measurable Goal: Determine additional areas to be included into a "low-mow", "rough-mow" and "no-mow" priority schedule.

Goal	Timeframe	Recordkeeping
Train all pesticide applicators on pesticide and herbicide usage	Jan 1, 2015 – Jan 1, 2016	Submit number trained during progress reporting.
Develop campus mowing priority schedule.	Jan 1, 2016 – Jan 1, 2017	Keep priority schedule on file.
Determine additional areas to be included in "low-mow", "rough-mow" and "no-mow" management.	Jan 1, 2017 – Jan 1, 2018	Submit number of areas included in progress reporting.

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7) Road Repairs

- a) UT presently has the practice of scheduling road work, as much as possible, during the summer months to reduce the possibility of debris from entering the storm water system during the rainy season and to lessen the customer impact to our customers. During all road repair, or other practices (i.e., cutting, grinding, drilling, hydrodemolition) which may disturb the concrete or asphalt, protective measures are taken to protect the storm water drainage system.

8) Fleet Maintenance

- a) UT owns and operates a large fleet of vehicles, including buses and cars, that is maintained by the Facilities and Construction Department. UT also owns and operates a fleet of equipment, including lawn mowers and rototillers that is maintained by Facilities and Construction, University Athletics, and other individual departments. All vehicles and equipment are regularly maintained to ensure proper and effective operation as well as prevent impacts on storm water quality.

b) Equipment Washing

- i. UT's fleet maintenance areas are properly managed to prevent the release of polluting materials to the waters of the State of Ohio. Currently, EHRS is reviewing building drawings to determine if fleet maintenance area floor drains are routed through oil interceptors, which are connected to the sanitary sewer system. Currently, EHRS is reviewing washing procedures and locations in order to prevent oil or other fluids from being discharged to surface waters of the state. EHRS is currently reviewing equipment maintained activities/locations performed by Facilities and Construction to confirm that during washing, care is taken to make sure neither wash water nor equipment fluids enter any storm drains.

- Measurable Goal: Confirm locations of vehicle/equipment maintenance and confirm that no impact to surface waters results from tasks for each campus.

Goal	Timeframe	Recordkeeping
Confirm locations of vehicle/equipment maintenance	Jan 1, 2015 – Jan 1, 2016	Include locations in plan.
Confirm vehicle maintenance operations do not drain to waste/wash water to surface waters.	Jan 1, 2016 – Jan 1, 2017	Include language in plan detailing impact/no-impact.
Fix/mitigate identified maintenance issues which could impact surface waters.	Jan 1, 2017 – Jan 1, 2018	Detail number of surface water impacts identified and number of surface water impacts fixed/mitigated.

c) Vehicle Fluid Dispensing

- a. All vehicle fluids are stored and transferred at the fleet maintenance areas in accordance with our internal Spill Prevention Control and Countermeasures (SPCC) requirements. There are two primary fueling facilities located across campuses; one is located on the Health Science

Campus at the Facilities Support Building and on the Main campus at the Plant Operations Building. To assure that fuel dispensing activities do not impact storm water runoff quality, structural precautions were instituted to stop runoff from passing through fueling areas including no storm drains in the immediate area of the fueling station and dispensing hoses are equipped with automatic shutoff valves. University workers are trained in the proper fueling procedures and how to respond quickly to spills, in case of an accident. In case of a spill, the EHRS Spill Contingency Plan has information on the name(s) of clean-up coordinators, the location of clean-up materials, and whom to contact in case of a spill.

9) Storm Water Pollution Prevention Plan (SWPPP)

- a) In accordance with OHQ000003, UT will develop and implement SWPPP for all municipal fleet maintenance and storage yards/facilities that are not regulated as industrial activities. The SWPPP will be developed and included as an Appendix to the Permit and will be implemented prior to the end of the current permit cycle. The following fleet maintenance and storage yards have been identified at UT and do not currently have SWPPPs developed:

- Main Campus, Plant Operation Building
- Health Science Campus, Facilities Operation Building
- Scott Park Campus, Grounds Maintenance
 - Measurable Goal: Develop SWPPP for Main Campus, Plant Operations Building, Health Science Campus, Facilities Operations Building and Scott Park, Grounds Maintenance by end of permit term.

Goal	Timeframe	Recordkeeping
Develop SWP3 Plan for identified locations	Jan 1, 2017 – Jan 1, 2018	Include SWP3 plans as an appendix to this Storm Water Management Plan.

10) Storm Sewer Labeling

- a) As of January 1, 2013, any outfall structure that the UT constructs or installs that discharges storm water directly to waters of the State will provide permanent identification (e.g. label, color coding, or other identifying characteristic). The storm drains placed on campus come with the message "Dump No Waste - Drains to Waterways" engraved or painted on it. Storm drain grates already in place will be marked with a curb marker or stenciled with the message "Dump No Waste -Flows to River" or similar.

- Measurable Goal: All UT storm drains will be marked with the message "Dump No Waste - Drains to Waterways" or " Dump No Waste - Flows to River" (or similar message) during the permit cycle. The number of storm drains marked will be tracked annually for subsequent reporting.

Goal	Timeframe	Recordkeeping
Develop storm drain stencil/curb marking design.	Jan 1, 2015 – Jan 1, 2016	Include copy or example of stencil in progress reporting.
Stencil all storm drains on campus.	Jan 1, 2016 – Jan 1, 2017	Include number of stenciled drains in progress reporting.

11) Wastewater Associated with Concrete

- a) Per OHQ000003, UT, ". . .shall not discharge to the surface waters of the state any wastewater generated from cutting, grinding, drilling, or hydrodemolition of concrete..." UT will educate staff and contractors involved in construction or renovation projects of these requirements through plan review comments which are incorporated into project

specifications and/or drawings. This topic will also be included in any new educational brochures directed at construction projects on campus.

12) Pesticides and Fertilizers

- a) The application of pesticides and fertilizers is controlled by two departments including Facilities and Construction and Athletics, depending on the location. The University employs Integrated Pest Management (IPM) methodology, an ecological approach to pest management, in University buildings. All available techniques are used to reduce pest populations to acceptable levels while minimizing the potential impact of pesticides upon humans and the environment. UT uses slow release fertilizers twice per year (on average) on grass areas. A broad leaf herbicide is applied annually and is only done selectively. Dormant oil and some insect control agents are also used, as needed. The University employs State of Ohio certified commercial pesticide applicators. Facilities and Construction is examining alternative landscaping measures for low maintenance vegetation along in public areas. One such measure is by using a "Rough-mow" or "no-mow" approach in several areas so that the grass will develop an extensive root system. This practice is used in select, low visibility areas and areas which are environmentally sensitive including:

- Main Campus Law Center, near the Ottawa River;
- Health Science Campus Technology Park
- Scott Park Campus

This measure allows grass roots to grow deeper, which creates a greater plant mass to increase the ability of the vegetation to retain water. In the areas identified as "low-mow" or "no-mow", pesticides and fertilizers are used very sparingly.

13) Employee Training

- a. The University employs pesticide applicators certified by the State of Ohio. Employees have been trained and are licensed applicators, where appropriate. Employees are trained in proper storage, handling and use of pesticides, herbicides, and fertilizers across UT campuses prior to use.

Source: Safety & Health Committee

Effective Date: 10/8/2016

Review/Revision Date: 3/29/17
3/29/18
3/28/19

Appendix A

University of Toledo Main Campus Swimming Pool Drainage Guidelines (SWP3)

The University of Toledo Recreation Center is permitted to discharge swimming pool water to the Ottawa river provided that the following conditions are met:

- Discharges to the storm water system are permitted in July and August only.
- The swimming pool water must be de-chlorinated.
- Discharge rate may not exceed 400 gallons per minute
- Pool water temperature may not exceed 99 °F
- When possible, discharges should be increased and decreased slowly to permit wildlife adaptation
- EHRS must be notified of discharge to allow for river/wildlife monitoring.
- Discharges of any solutions containing acids or surfactants to the river, in any amount, are prohibited.

EHRS River/Wildlife Monitoring Procedure

The following information must be retained during each pool-draining event. Inspection of the process is required 3 times during each discharge event (beginning, middle and following).

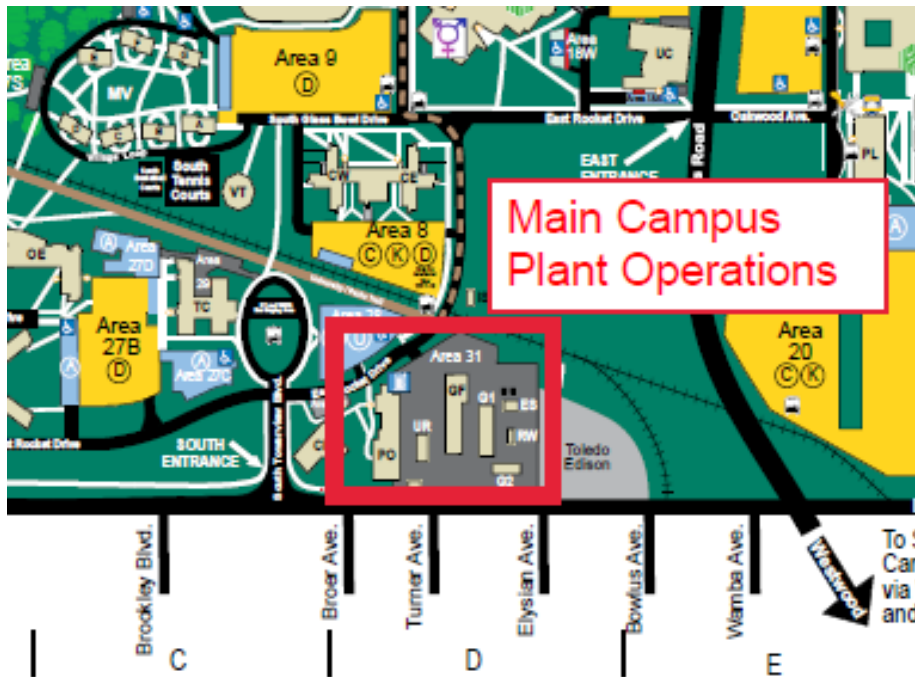
Date	Pool Temperature	Effluent Temperature	Effluent Clarity/Pollutants Noted	River Temperature	Stressed wildlife downstream? Explain if yes.
07/31/17 – 10:30am	81 f	81f	Clear	72f	no
07/31/17 – 4:00pm	81f	81f	Clear	73f	no
08/01/17 – 9:15am	Empty	No discharge	N/A	72f	No

Appendix B

University of Toledo Stormwater Pollution Prevention Plan for Maintenance Operations

The University of Toledo has one grounds and/or vehicle maintenance operation on each campus.

Main Campus



Narrative of Operations:

Main Campus Plant Operations serves as the vehicle and grounds equipment maintenance hub for all of UT's campuses. Motor vehicle repairs take place in an indoor 6-bay motor vehicle maintenance shop with some repairs occasionally taking place outdoors. Oils and used antifreeze are collected and recycled. Wastewater from motor vehicle operations taking place within the GF building is managed via a sanitary drain connected to an oil separator on the south side of the GF facility. Approximately 40-60 vehicles, including 15 buses and 2-4 pieces of heavy equipment are also located within this complex. Motor vehicle fueling takes place on the southern end of building GF. Motor vehicle and bus washing takes place outdoors near GF and G1 buildings with effluent running to nearby storm sewers. Salt for deicing operations is stored in a covered shed near the southern end of the UR building and two brine tanks are located near the southern end of the G1 building. Dirt, mulch and sand for grounds operations are stored north of the GF building in separate open-air bays. Brush from grounds operations is stored on the asphalt pad north of the GF building.

Identified Stormwater Impacts, Proposed Controls and Completion Timeline

- Outdoor vehicle washing operations near GF and G1 building
 - *Methods to reduce quantity of water into sanitary drains*
 - *Investigate collaboration with TARTA to wash buses off-site (FY19)*
 - *Wash 50-60 vehicles two times (2x) a year at off-site location: Russ Carwash*
 - *Absorb cost in Flat-Rate Fee FY19*
 - *Work with UT Environmental Specialist to establish scope of work for wash pad drainage into sanitary system.*

- *Ensure placement of wash pad aligns with UT Master Plan*
- *Inspection reporting: Jeff Gajdostik / Steve Wise*
- *Completion timeline: June 30, 2023*

- *Open storage of mulch, sand and dirt and yard waste near GF and G1 building*
 - *Installation and weekly maintenance of dandy bags in affected storm drains*
 - *Completion timeline: Dec. 1, 2017*
 - *Inspection timeline: (Ongoing Maintenance) Weekly*
 - *Reporting: Jeff Gajdostik*

 - *Covering storage with tarps or roof*
 - *Reduce bins from 9 to 4.*
 - *Cover remaining 4 bins with tarp.*
 - *Completion timeline: June 30, 2018*
 - *Inspection timeline: (Ongoing Maintenance) Monthly*
 - *Reporting: Jeff Gajdostik*

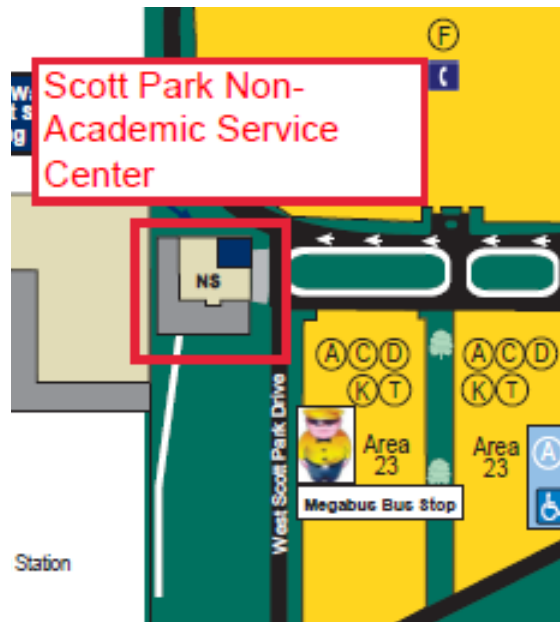
- *Intermittent leaks from vehicles onto concrete surfaces throughout complex*
 - *Monthly inspection and cleanup using oil-dri*
 - *PM to be established: Jan. 2018*
 - *Completion timeline: (Ongoing Maintenance)*
 - *Inspection reporting: Jeff Gajdostik*

- *Intermittent leaks from uncovered dumpsters near UR building*
 - *Monthly PM to have dumpsters checked for leaks (and repaired if necessary and clean area*
 - *Completion timeline: Jan. 1, 2018*
 - *Inspection reporting: Jeff Gajdostik*

- *Cleaning of grounds equipment resulting in dirt/debris on ground between GF and G1*
 - *Installation and weekly maintenance of dandy bags in affected storm drains*
 - *Completion timeline: Dec. 1, 2017*
 - *Inspection reporting: Jeff Gajdostik*

- *Clean grounds equipment at Carter field (blow-off) when needed clean/hose in shop yard:*
 - *Completion timeline: Sept. 1, 2018*
 - *Inspection reporting: Jeff Gajdostik*

Scott Park Campus



Narrative of Operations

Limited storage and use of vehicles and grounds equipment. Minor maintenance activities including washing and blowing off grounds equipment. Equipment washing (using water only) is conducted in the grass (sometimes pavement) using water only. Blowing off grounds equipment using compressed air occurs near the roll-up doors.

Identified Stormwater Impacts, Proposed Controls and Completion Timeline

- Cleaning of grounds equipment resulting in dirt/debris on ground near roll-up doors
 - *Completion timeline: (Ongoing Maintenance) Dec. 1, 2017*
 - *Inspection reporting: Mike Link/Jeff Gajdostik*
 - *Continue best practice of cleaning equipment in grass area at SP.*

Health Science Campus



Narrative of Operations

UT Health Science Campus Facilities Support Building serves as the maintenance and grounds location for UT's HSC operations – although smaller than UT's Main Campus operations. Dirt, mulch and sand for grounds operations are stored to the south of the FSG building in separate open-air bays. Gasoline and diesel refueling takes place on the East side of FSB. Minor maintenance activities including washing and blowing off grounds equipment which takes place on the East side of FSG.

- Open storage of mulch, sand and dirt and yard waste near GF and G1 building
 - *Covering storage with tarps or roof*
 - *Completion timeline: **June 30, 2018***
 - *Inspection reporting: **Brian Foley***

- Cleaning of grounds equipment resulting in dirt/debris on ground near roll-up doors
 - *Completion timeline: (Ongoing Maintenance) **Dec. 1, 2017***
 - *Inspection reporting: **Brian Foley***
 - *Continue best practice of cleaning equipment and sweeping up debris.*