By Helly armic

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5/6/2022

Ohio EPA Permit No.: 4PI00000*DD Application No.: OH0106267 Issue Date: May 6, 2022 Effective Date: June 1, 2022 May 31, 2027 Expiration Date:

Ohio Environmental Protection Agency Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. Seg., hereinafter referred to as the "Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

City of Columbus

(Hereinafter referred to as "The City" or "Permittee") is authorized by the Ohio Environmental Protection Agency, hereinafter referred to as "Ohio EPA," to discharge from all portions of the City of Columbus municipal separate storm sewer system (MS4), to waters of the State in accordance with the approved Stormwater Management Program, monitoring requirements, and other conditions specified in Parts I, II, III, IV, V and VI of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Administrative Code.

This permit and the authorization to discharge will expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee will submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.

Laurie A. Stevenson Director

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PART I. DISCHARGES AUTHORIZED UNDER THIS PERMIT

- A. **PERMIT AREA**. This permit covers all areas within the corporate boundary of the City of Columbus served by the Permittee's Municipal Separate Storm Sewer System (MS4).
- B. **AUTHORIZED DISCHARGES.** This permit authorizes the following discharges from the point sources on the Permittee's MS4 to waters of the State.
 - 1. All existing or new stormwater point source discharges.
 - 2. Process wastewater, non-process wastewater, or stormwater associated with industrial activity from all point source discharges covered by a separate NPDES permit.
 - 3. Non-stormwater discharges identified in Part III. D.2., unless identified as significant sources of pollutants to waters of the State.
- C. **LIMITATIONS ON COVERAGE.** This permit does not authorize:
 - 1. Discharges of stormwater that are mixed with sources of non-storm water unless such non-stormwater discharges are:
 - a. In compliance with a separate NPDES permit or
 - b. Determined by Ohio EPA not to be a significant source of pollutants to surface waters of the State.
 - 2. Stormwater discharges associated with industrial activity, as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi), that are not in compliance with a separate in force NPDES permit.
 - 3. Stormwater discharges associated with construction activity, as defined in 40 CFR 122.26(b)(14)(x) or 40 CFR 122.26(b)(15) that are not in compliance with a separate in force NPDES permit.
 - 4. Stormwater discharges currently covered under another NPDES permit.
 - 5. Discharges that would cause or contribute to in-stream exceedances of water quality standards. Ohio EPA may require additional actions if your MS4 is determined to cause an in-stream exceedance of water quality standards.
 - 6. Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been approved by U.S. EPA (this information can be obtained from Ohio EPA) unless your discharge is consistent with that TMDL. This eligibility condition applies at the time you submit your NPDES permit application.

PART II. STORM WATER MANAGEMENT PROGRAM

The Permittee shall continue to implement a stormwater management program (SWMP) and revise its

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SWMP in accordance with the requirements set forth in this permit. The SWMP, defined in Part III of this permit, will be considered as an ongoing effort to reduce the pollutant discharges from the MS4 to the maximum extent practicable (MEP) and to reduce the impacts on receiving water quality from the MS4 discharges. The Permittee may implement SWMP elements and/or the requirements of this permit in cooperative efforts through participation with other public agencies or private entities.

A. **LEGAL AUTHORITY**

The Permittee will maintain and, if necessary, revise legal authority to control discharges to and from those portions of the MS4 the Permittee owns or operates. Establishment and exercise of this legal authority may be implemented singly or through a combination of statute, ordinance, permit, contract, or an order to:

- 1. Prohibit illicit discharges to the MS4.
- 2. Prohibit spills and the dumping or disposal of materials other than stormwater into the MS4.
- 3. Require compliance with conditions in ordinances, permits, contracts or orders.
- 4. Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance with the MS4 permit and implement the SWMP in accordance with 3745-39-04.
- 5. Receive and collect information.
 - a. The Permittee shall have the authority to request from operators of construction sites, and industrial and commercial facilities information such as stormwater plans, operating procedures which can impact compliance with stormwater standards, inspection reports, monitoring results, and other information deemed necessary to assess compliance with this permit. The Permittee shall also have the authority to review designs and proposals for construction activity to determine whether adequate storm water controls measures will be installed, implemented, and maintained.
- 6. Authority to inspect.
 - a. The Permittee shall have the authority to inspect the facilities of any stormwater discharger to determine compliance with the requirements of the Permittee's codified ordinances. The ordinance must, to the extent permitted by law, allow the Permittee to, upon presentation of credentials of identification, enter upon the premises of the storm water discharger for the purpose of inspection, sampling, observation, measurement, testing, records examination, or evaluation of the performance of any stormwater discharger's duties.
- 7. Respond to violations.

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- a. The Permittee shall have the ability to promptly require that violators cease illicit discharges or discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such discharges, including the ability to:
 - (1) Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within a reasonable period of time determined by the Permittee or as soon as practicable.
 - (2) Require abatement for uncontrolled sources of pollutant that could pose an environmental threat as soon as practicable.
 - (3) Perform the cleanup and abatement work and bill the responsible party, if necessary; and
 - (4) Order the cessation of activities until such problems are adequately addressed for situations where illicit discharge activities are not abated.

B. STORMWATER MANAGEMENT PROGRAM REVIEW AND MODIFICATION

- 1. **Program Review**: If requested by the Ohio EPA, the Permittee shall participate in an Ohio EPA annual review of the current SWMP in conjunction with the Permittee's Annual Report required under Part II.C. This annual review shall include the following:
 - a. A review of the status of program implementation and compliance or noncompliance with all schedules in this permit;
 - b. An assessment of the effectiveness of the current SWMP; and
 - c. A review of Part IV monitoring data to evaluate the effectiveness of BMPs and determine the source of pollutants in stormwater runoff.
 - 2. **Program Modification**: The Permittee may modify the SWMP during the life of the permit in accordance with the following procedures:
 - a. Modifications adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to the Director. All modifications shall be noted in the Annual Report.
 - b. Modifications replacing an ineffective or infeasible BMP specifically identified in the SWMP with an alternate BMP may be requested at any time. The modification shall not be deemed approved until the Permittee receives written approval from the Director. Such requests shall include the following:
 - (1) An analysis of why the BMP is ineffective or infeasible (including cost prohibitive);
 - (2) Expectations on the effectiveness of the replacement BMP;

- (3) An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.
- c. Modifications subtracting without replacing BMPs in the SWMP cannot be made by the Permittee unless:
 - (1) It can be demonstrated that there is no feasible alternative to the BMP.
 - (2) It can be demonstrated through analysis that the BMP is ineffective or infeasible; and
 - (3) It can be demonstrated though analysis that the SWMP will continue to achieve reduction of pollutants from the MS4 discharges to the MEP.

Modifications subtracting without replacing a BMP shall not be deemed approved until the Permittee receives written approval from the Director.

d. Modification requests and/or notifications shall be made in writing, (signed in accordance with Part VI.L and Part VI.M), include the above-mentioned information, and be emailed at any time to the Ohio EPA Central Office Stormwater Program Supervisor and District Office Stormwater Coordinator or submitted via Ohio EPA's eBusiness Center once available.

3. **Program Updates**:

- a. Ohio EPA may require changes to the SWMP as needed to:
 - (1) Address impacts on receiving surface water quality caused, or contributed to, by discharges from the MS4;
 - (2) Include more stringent requirements necessary to comply with new Federal Statutory or regulatory requirements; or
 - (3) Include such other conditions deemed necessary by Ohio EPA to comply with the goals and requirements of ORC 6111 and the Clean Water Act.

Changes requested by Ohio EPA will be made in writing, set forth the time schedule for the Permittee to develop the changes, and offer the opportunity to propose alternative changes to meet the objective of the requested modifications. Any unilateral modification by Ohio EPA of the SWMP will be made in accordance with OAC 3745-47.

b. Transfer of Ownership, Operational Authority, or Responsibility for SWMP implementation: The Permittee shall implement the SWMP on all new areas added to their portion of the MS4 (or for which they become responsible for implementation of storm water quality controls) as expeditiously as practicable, but no later than one year from the addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.

- (1) Within one year of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the Permittee must have a plan for implementing the SWMP in all affected areas; whereas, the Permittee's stormwater ordinances and/or regulations shall be enforced immediately. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the Annual Report.
- C. **ANNUAL REPORT**: The Permittee shall prepare an annual system-wide report to be submitted by March 31st of each year. Except for the first report submitted under this permit, the reporting year is the prior twelve-month calendar year. The first report submitted under this permit shall include all months of the prior calendar year(s) that were not included in the previous Annual Report. The report shall include the following separate sections, with an overview for the entire MS4:
 - 1. A narrative summary of the overall program describing the evaluation process, major findings of the evaluation, areas of accomplishments, areas needing improvement and future direction of the program.
 - 2. Compliance status of any schedules established under this permit.
 - 3. An assessment of the appropriateness of identified BMPs, and the measurable goals for each of the SWMP elements identified in Part III.B through Part III.H. A description of the evaluation process shall be listed in the Annual Report.
 - 4. The results of information collected and analyzed during the reporting period, including monitoring data, shall include the following:
 - a. Characterize the discharges from the MS4. The Permittee shall identify water quality improvements or degradation and describe the potential contributing causes and sources.
 - b. Describe any action already taken or planned in response to this information. The Permittee shall include an explanation of what (if any) program changes the Permittee intends to implement.
 - 5. Revisions, if necessary, to the assessments of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(v) and (d)(2)(vi).
 - 6. A summary describing the status, number and nature of enforcement actions (Notices of Violation, Administrative Actions), number and type (construction and industrial) of inspections.
 - 7. The report shall include a summary of the specific annual reporting requirements identified in Part III.B.11, Part III.C.5, Part III.D.10, Part III.E.8, Part III.F.9, Part III.G.11 and Part III.H.8.
 - 8. A summary of the stormwater activities the Permittee plans to undertake during the next reporting cycle (including an implementation schedule).

9. A most recent Table of Organization for program development and implementation, including a primary point of contact, which identifies how implementation across multiple positions, agencies and departments will occur.

D. **CERTIFICATION AND SIGNATURE OF REPORTS**

All reports required by the permit and other information requested by the Director shall be signed and certified in accordance with Part V.K and Part V.L of the permit.

E. REPORTING: WHERE AND WHEN TO SUBMIT

- 1. Monitoring results obtained during the reporting period shall be submitted along with the Annual Report required by Part II.C.
- Copies of the discharge monitoring reports shall be retained as required under Part IV.B in the Annual Report. Requests for SWMP modification, requests for changes in monitoring locations, and all other reports required herein, shall be submitted via email to the Ohio EPA Central Office Stormwater Program Supervisor and District Office Stormwater Coordinator or submitted via Ohio EPA's eBusiness Center once available.
- 3. The Permittee shall email quarterly inspection reports to the Ohio EPA Central Office Stormwater Program Supervisor and District Office Stormwater Coordinator, or submitted via Ohio EPA's eBusiness Center once available, for stormwater inspections performed on construction sites and industrial facilities. The quarterly reports shall be in a spreadsheet format and include the following information for each site/facility inspection performed:

Quarterly Stormwa	ter Construction an	d Industrial Inspect	ions (Timeframe this	s report covers)
Ohio EPA Facility Permit Number (if applicable) or Name and address of Site/Facility	If construction, enter "Small" (1- 4.99 acres) or enter "Large" (greater than 5 acres). If industrial, enter facility's primary SIC code	Date of Inspection	Violation(s) Cited (Yes or No)	Number of Violations Cited (if none cited enter 0)

The quarterly reporting periods and due dates to email the reports include:

Quarterly Period	Due Date
January 1 – March 31	April 15
April 1 – June 30	July 15
July 1 – September 30	October 15
October 1- December 31	January 15

PART III. STORMWATER MANAGEMENT PROGRAM REQUIREMENTS AND SCHEDULE OF COMPLIANCE

- A. **SWMP Requirements:** The Permittee shall develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants to the maximum extent practicable, to protect water quality, and to satisfy the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. The SWMP shall include management practices; control techniques, system design, and engineering methods; and shall be modified to include provisions Ohio EPA determines appropriate after its annual review of the program for control of such pollutants. The SWMP shall include the following information:
 - 1. The BMPs that are already or will be implemented for each of the stormwater programs identified in Part III.B through Part III.H. Where applicable, BMPs shall be selected, including a rationale, to address U.S. EPA approved TMDL recommendations for identified water quality problems associated with MS4 discharges within your MS4's watersheds.
 - 2. The measurable goals for each BMP identified, as well as the months and years in which the Permittee will undertake the required actions, including interim milestones and the frequency of the action.
 - 3. A Table of Organization, including a primary point of contact, which identifies how implementation across multiple positions agencies and departments will occur. The Table of Organization shall include the position title(s) responsible for implementing or coordinating the BMPs for the SWMP.
 - 4. The following table identifies USEPA approved TMDLs and the TMDL pollutant(s) for the Permittee's MS4.

TMDL Project	TMDL Pollutant(s)
Big Darby Creek	TP, E. coli
Big Walnut Creek	TP, E. coli,
Olentangy River	TP, E. coli, TSS,
Walnut Creek	E. coli

- B. PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS: The Permittee shall continue to implement a program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps the community can take to reduce pollutants in stormwater runoff.
 - 1. The Permittee shall document its public education and outreach program. Your description shall address the overall program, the individual BMPs, measurable goals, and persons responsible for aspects of the program. The description shall include the following information at a minimum:

- a. How the program will inform individuals and households on how to become involved in the public involvement program described in Part III.C.
- b. How the Permittee plans to inform individuals and households about the steps they can take to reduce stormwater pollution.
- c. How the Permittee will distribute information listing various household hazardous wastes and other toxic materials and including guidelines for their proper use.
- d. The Permittee shall identify the target audiences for its education programs and explain why each is selected as a source of significant stormwater impacts. Alternatively, the Permittee may direct its educational efforts to all of the community.
- 2. The Permittee shall publicize Ohio EPA and/or other information and/or databases relating to the proper management and disposal or recycling of used oils, household hazardous wastes, tires, and other toxic materials. See Table in Part III.B.7.a.
- 3. The Permittee may develop and implement this program in conjunction with other agencies, environmental groups or interested parties.
- 4. In developing, publicizing and/or distributing appropriate educational information, the Permittee may rely upon direct mailings, inserts in existing mailings (e.g., utility billings), web page postings, signage at select locations, radio advertisement, and/or similar forms of communication.
 - a. During the term of the permit, the Permittee shall distribute the educational materials, using any of the selected methods it deems appropriate, to reach at least 20% of individuals or households each year.
- 5. The Permittee shall assess changes in public awareness and behavior resulting from implementation of the program using mechanisms such as surveys, direct evaluations, interviews, or other mechanisms the Permittee determines appropriate.
- 6. The Permittee shall assess the Public education component annually and adjust its educational materials and the delivery of such materials to adjust any shortcomings found as a result of this assessment.
- 7. Table for consolidated requirements related to Public Education and Public Involvement.

Permit Part	Objective	Requirement Text	Target Audience	Frequency
Part III.B.7.a	Increase awareness of the impacts of stormwater discharges	The Permittee shall publicize Ohio EPA and/or other information and/or databases	Community	Annually

Permit Part	Objective	Requirement Text	Target Audience	Frequency
	on water bodies and reduce pollution from oils, household hazardous wastes, tires, and other toxic materials	relating to the proper management and disposal or recycling of used oil, household hazardous wastes, tires, and other toxic materials		
Part III.B.7.b	Increase awareness of the impacts of stormwater discharges on water bodies and reduce pollutants in runoff	The Permittee shall create and publicize appropriate messages based on at least three targeted residential issues and three targeted/industrial/commercia I issues. Themes or messages shall target each TMDL pollutant identified in Part III.A.4 at least once. Lawn chemicals must be one of the residential themes. Single themes or messages may target multiple pollutants.	3 messages residential 3 messages targeted/indu strial/comme rcial	Each theme shall be addressed once per permit term
Part III.B.7.c	Increase awareness of the impact of stormwater discharges on water bodies by involving the public in pollution reduction activities	The Permittee shall provide a minimum of five public involvement opportunities by the end of this permit term. Public involvement activities shall target each TMDL pollutant identified in Part III.A.4 at least once. Single public involvement activities may target multiple pollutants.	City Residents	Five times per permit term
Part III.B.7.d	Provide education on current Ohio EPA NPDES Construction Stormwater General Permit's Table 4b practices or other green infrastructure practices	To address TMDL requirements for Total Suspended Solids (TSS) and Total Phosphorus (TP), the Permittee's post- construction program shall provide one educational opportunity to contractors, SWP3 designers, and/or City employees on the current Ohio EPA NPDES Construction Stormwater General Permit's Table 4b	Contractors, SWPPP designers, and/or City employees	Once per permit term

Permit Part	Objective	Requirement Text	Target Audience	Frequency
		practices and/or other green infrastructure practices.		

- 8. The Annual Report shall include an evaluation of the success of the public education and outreach program by identifying each mechanism used, the target pollutant(s), and the target audience for each stormwater theme. In addition, an estimate of how many people were reached by each mechanism or for each theme over the permit term to date shall be included in the Annual Report.
- C. **PUBLIC INVOLVEMENT/PARTICIPATION:** To the extent applicable, the Permittee shall comply with local public notice requirements when maintaining or enhancing its established public involvement/participation program:
 - 1. The Permittee shall continue to implement a public involvement/participation program. The program shall include the following at a minimum:
 - a. Opportunities for the involvement of the community in the development and implementation of the program.
 - b. A list of target audiences for the public involvement program and continue to develop appropriate methods to reach these audiences. The Permittee shall provide an opportunity to involve all potentially affected stakeholder groups known to the Permittee, which shall include at a minimum: commercial and industrial businesses, trade associations, environmental groups, homeowners' associations, and educational organizations.
 - 2. The Permittee shall continue to create opportunities for the community to participate in the implementation of stormwater activities (e.g., stream cleanups, storm drain stenciling). Consider the following types of public involvement activities:
 - a. Community representatives on a stormwater management panel comprised of all affected parties, including residents, business owners and environmental groups. The group must consist of a balanced representation of all parties in the MS4 area and/or affected watershed.
 - (1). To the extent that a stormwater management panel is implemented, the Permittee shall invite the panel to participate in the development and implementation of all parts of the SWMP.
 - b. Public hearings.
 - c. Working with community volunteers willing to educate others about the program.

- d. Volunteer monitoring or stream cleanup activities.
- e. Storm drain stenciling or placement of catch basin markers.
- f. Ensure the public can easily find information about the Permittee's SWMP.
- 3. The Permittee shall continue to publicize a hotline or have a mechanism in place to be used for reporting illicit connections, improper disposal of waste and water quality impacts due to MS4 pollutant discharges.
- 4. The Annual Report shall include an evaluation of the success of the public involvement/participation program. The report shall identify each public involvement/participation activity conducted and include for each a brief description of the activity, the target pollutant(s), and an estimate of how many community members participated in each activity.
- D. **ILLICIT DISCHARGE PROGRAM:** The Permittee shall maintain and enforce its program to detect and eliminate illicit discharges into its MS4. For illicit discharges to the Permittee's MS4 via an adjacent or interconnected MS4, outside the Permittee's jurisdiction, the Permittee is only required to promptly inform the neighboring MS4 and notify the Ohio EPA in the next Annual Report.
 - 1. The Permittee shall prohibit non-stormwater discharges to the MS4, except those identified in Part III.D.2 or authorized by a separate NPDES permit.
 - 2. Unless identified by either the Permittee or the Director as significant sources of pollutants to surface waters of the State, the following non-stormwater discharges are authorized to discharge into the MS4. As necessary, the Permittee may incorporate appropriate control measures in the SWMP to ensure these discharges are not significant sources of pollutants to surface waters of the State:
 - a. Waterline flushing
 - b. Landscape irrigation
 - c. Diverted stream flows
 - d. Rising ground waters
 - e. Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including sewer service connections and foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)
 - f. Uncontaminated pumped ground water
 - g. Discharges from potable water sources
 - h. Foundation drains
 - I. Air-conditioning condensate
 - i. Irrigation water
 - k. Springs

- I. Water from crawl space pumps
- m. Footing drains
- n. Lawn watering
- o. Individual residential car washing
- p. Flows from riparian habitats and wetlands
- q. Dechlorinated/debrominated/desalinated swimming pool discharges
- r. Street wash water
- s. Discharges or flows from firefighting activities, not planned training exercises, and emergency response activities
- t. Dye testing
- u. Discharges approved by the MS4 for research and testing of stormwater control practices
- 3. The Permittee may also develop a list of other similar occasional incidental non-stormwater discharges (e.g., non-commercial or charity car washes, etc.) that will not be addressed as illicit discharges. These non-stormwater discharges must not be reasonably expected (based on information available by Permittee) to be significant sources of pollutants to the MS4, because of either the nature of the discharges or conditions the Permittee have established for allowing these discharges to the MS4 (e.g., a charity car wash with appropriate controls on frequency, proximity to sensitive water bodies, BMPs on the wash water, etc.). The Permittee must document in the SWMP any local controls or conditions placed on the discharges.
- 4. The Permittee shall maintain a storm sewer map (e.g., assemblage of geospatial data layers), showing the location of known outfalls from the MS4 and the names and locations of surface waters of the State that receive discharges from those outfalls. The storm sewer map shall include known elements of the storm sewer network which constitute the MS4, including catch basins, pipes, ditches, flood control facilities (retention/detention ponds), post-construction water quality BMPs and private post-construction water quality BMPs which have been installed to satisfy Ohio EPA's NPDES Construction Stormwater general permit and/or your local post-construction water quality BMP requirements. The following information shall be submitted:
 - a. The outfalls may be located using a geographic positioning system (GPS) and photographs may be taken to provide baseline information and track operation & maintenance over time.
 - b. The Permittee's storm sewer map shall include the locations of known home sewage treatment systems (HSTSs) that discharge (including failing on-lot, and off-lot discharging systems) into its MS4. It shall include details on the type and size of conduits/ditches in its MS4 that receive discharges from the known discharging systems. The addresses for all discharging HSTSs that are identified on the map shall be included in the Annual Report.

- c. The Annual Report shall describe the sources of information used to fully develop the map, how outfall locations are verified, and how the map is regularly updated.
- d. The storm sewer map shall be available for review by the permitting authority subject to the Permittee's restrictions on the sharing of sensitive information on critical infrastructure.
- 5. The Permittee shall continue to implement a program to detect, investigate and eliminate non-stormwater discharges, including illegal dumping into its system. The program shall include the following:
 - a. Illicit Discharge Detection Plan.
 - (1) The plan shall provide procedures for locating priority areas with the higher likelihood of illicit connections.
 - (2) The plan shall develop written procedures for tracing the source of an illicit discharge, including the specific techniques that will be used to detect the location of the source.
 - (3) The plan shall develop written procedures to detect and address illegal spills and dumping. The plan shall include dry-weather field screening for non-stormwater discharges which consists of, at a minimum, the following:
 - (a) By the end of the permit term, perform dry-weather screening of the stormwater outfalls that were not dry-weather screened during the term of the previous permit with a goal of screening 20% of these outfalls per year. Specific analyses will be needed to identify the characteristics of local inappropriate entries and uncontaminated water sources.
 - (b) Include the following parameters during dry-weather screening floatables, deposits, stains, odor, vegetation damage, excessive vegetation, damage to sewer and outfall structure and flow estimate. Additionally, when flow is present also include turbidity, oil sheen, color, temperature, and an estimate of the flow. The Permittee shall include a summary of the field screening as part of the Annual Report submittal.
 - (c) If a sample is obtained for laboratory analysis, the sample shall be analyzed for the following constituents: pH, surfactants, fluoride, hardness, ammonia, phosphorous, and

total residual chlorine. If the industrial activities in an outfall's watershed are known, then the Permittee should analyze the sample for specific chemicals to identify which industrial activity may be responsible for the dry weather flow. However, sampling may be waived if the source of the dry weather flow can be documented.

- (4) When sanitary wastewater is discovered in the MS4 during routine sampling, the Permittee shall:
 - (a) Investigate the adjacent sanitary sewer whenever the infiltration of sanitary sewage to the MS4 is suspected.
 - (b) Identify the source of the seepage and the condition of the pipes of the sanitary sewer.
 - (c) Develop expeditious schedules to remove exfiltration from sanitary sewers into the separate storm sewer system whenever detected.
 - (d) Unless the source is determined to be from HSTSs, notify Ohio EPA and include the location, general description, date, and approximate time the illicit discharge was discovered. Such notification shall be made to Ohio EPA Central District Office at cdo24hournpdes@epa.ohio.gov within twentyfour (24) hours of discovery of the source.
- (5) At a minimum, for household sewage treatment systems (HSTSs), the Permittee's plan shall address or include provisions for:
 - (a) Working with the appropriate local public health officials and any other appropriate entity, to proactively identify residences with existing individual HSTSs that can be legally, feasibly and economically connected to central sewers. At a minimum, this activity should require connection to central sewers for any HSTS that is not operating as designed and intended if feasible;
 - (b) Working with the appropriate local public health officials to develop a proactive operation and maintenance program or implement/enhance an existing operation and maintenance program which determines if existing discharging HSTSs are operating as designed and, for those not meeting this criteria, require elimination, upgrade or replacement of the systems as appropriate;
 - (c) Actively investigating the source(s) of contamination in

outfalls identified during dry weather screening process. When the contamination source has been identified as an HSTS that is not operating as designed, work with the appropriate local public health officials and any other appropriate entity to determine proper course of action in resolving the mal-functioning HSTS with connection to central sewers being the preferred alternative, followed by replacing system with a soil absorption system that does not discharge and only allowing a replacement discharging HSTS when no other option is available. For replacement HSTSs that cannot be eliminated through connection to central sewers or installation of soil absorption systems, the property owner must be notified of the requirement to pursue coverage under an appropriate Ohio EPA general NPDES permit; and

- (d) Working with local public health officials and any other appropriate entity to evaluate the planned or possible future installation of sewers for areas which contain high densities of HSTSs.
- 6. Illicit Discharge Training Program:
 - a. See Table in Part III.G.10.a.
- 7. Illicit Discharge Elimination Plan:
 - (1) The Permittee shall require the elimination of illicit connections as expeditiously as possible and the immediate cessation of illicit discharges upon identification of responsible parties.
 - (2) The plan shall have written procedures for eliminating the source of the illicit discharge. The Permittee shall take appropriate enforcement procedures and/or actions under its illicit discharge program (ordinance or other regulatory mechanism) upon the discovery of an illicit discharge.
 - (3) The Permittee shall take steps to reduce exfiltration from sanitary sewers to the MS4.
- 8. Tracking Plan:
 - a. The Permittee shall develop a method or mechanism for tracking, inspecting and controlling sanitary sewage from illicit connections or exfiltration from sanitary sewers into the MS4 based on the following information:

- (1) Observations of sewage in stormwater outfalls, stormwater conveyance systems, rivers, streams and other water bodies by sewer maintenance crews.
- b. The Permittee shall also develop a tracking mechanism for other sources of illicit discharges. Include the following information: date of initial complaint and observation, source and type of discharge, notice of violation (NOV) date, and verification of elimination.
- 9. The program shall include procedures for program evaluation and assessment. The Permittee shall evaluate and describe the success of this program, including how measurable goals for each BMP were selected.
- 10. The Annual Report shall document the following: (1) total number of MS4 outfalls, (2) number of outfalls which had dry-weather screening, (3) number of outfalls where dry-weather flows were identified, (4) number of outfalls where illicit discharges were eliminated, (5) number of outfalls where illicit discharges were eliminated, (6) number of illicit discharges identified through other methods and the number eliminated, (7) provide schedules for elimination of illicit connections that have been identified but have yet to be eliminated where such schedules can be developed by the Annual Report due date, including details on the location, an estimate of volume (gpd), the source and type (continuous/intermittent/one-time), and types of pollutants believed to be present and the receiving surface water.
- E. <u>CONSTRUCTION PROGRAM</u>: The Permittee shall continue to implement and enforce a program to reduce pollutants in any stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre shall be included if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program shall, at a minimum, include the following:
 - 1. The Permittee's stormwater ordinances and/or regulations shall be at least as stringent as Ohio EPA's current NPDES construction stormwater general permit. The Permittee shall require, at a minimum, the applicable requirements of this Ohio EPA NPDES construction stormwater general permit.
 - 2. Requirements for construction site operators to implement appropriate sediment and erosion controls.
 - 3. Requirements for construction site operators to design, install, and maintain effective pollution prevention methods to minimize the discharge of pollutants. At a minimum, such measures shall be designed, installed, maintained, and implemented to:
 - a. Control waste such as discarded building materials, concrete truck

- washout, chemicals, litter, and sanitary wastewater at the construction site that may cause adverse impacts to water quality.
- b. Minimize the exposure of building materials, building products, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to the elements.
- 4. Include review of all construction stormwater pollution prevention plans (SWP3s) for construction activities that result in a land disturbance of greater than or equal to one acre. The program shall include the following, at a minimum:
 - a. Determine that the applicant has filed with the Ohio EPA a NOI.
 - b. Maintain an inventory of applicable construction activities and update as new projects are authorized and completed. The inventory shall contain the following information, at a minimum: applicant name, mailing address, phone number, project name and location, estimated land disturbance as provided by the applicant; and SWP3 approval date. This information shall be made available to Ohio EPA upon request.
 - c. Ensure SWP3s meet minimum NPDES Construction Stormwater General Permit requirements before approval.
 - d. Use qualified individuals, who are knowledgeable in the technical review of construction practices to perform SWP3 reviews.
 - e. Document review of SWP3s using a checklist or similar process.
- 5. The Permittee shall identify the sanctions it will use to ensure implementation of construction storm water control requirements. The Permittee shall describe the procedures for when the various sanctions will be used. Possible sanctions include verbal warnings, notice of violations (NOVs), non-monetary penalties (stop work orders), fines, bonding requirements, or permit denials for the non-compliance.
 - a. The Permittee should employ any combination of the enforcement actions above and shall escalate enforcement responses where necessary to address persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.
 - b. The Permittee shall track instances of non-compliance either in hard copy or electronically. This documentation shall include, at a minimum, the following:
 - (1) Name of owner or operator of facility or site in violation;

- (2) Location of infraction;
- (3) Type of violation;
- (4) Required schedule for returning to compliance;
- (5) Enforcement remedies used;
- (6) Any referrals to different departments or agencies; and
- (7) Date violation was resolved.
- The Permittee shall continue to implement priorities and frequencies for construction site inspections. The Permittee shall furnish each inspector with a checklist of common construction site pollution sources and the management practices (both structural and non-structural) normally used to control such sources.
 - a. The Permittee shall adequately inspect all phases of construction.
 - (1) Prior to land disturbance. The Permittee shall require that plans and provisions for all necessary erosion and sediment controls are or will be in place.
 - (2) During active construction. To ensure compliance with construction requirements, the Permittee shall conduct inspections on a monthly basis unless you document your procedures for prioritizing inspections such as location to a waterway, amount of disturbed area, compliance of site, etc. Applicable construction sites which have the following compliance issues shall be inspected once every 14 calendar days instead of on a monthly basis:
 - Construction activities have started at the site with no SWP3 reviewed and approved by the Permittee;
 - Failure to install sediment basin(s) when the SWP3 and/or site drainage clearly indicate as a first step (within 7 days prior to grading and within 7 days of grubbing);
 - Construction activities taking place with no sediment/erosion controls; or
 - Dewatering activities resulting in turbid discharges.

The Permittee inspections can be returned to a monthly basis for the construction site once compliance with the above issues have been addressed and verified.

- (3) Following active construction. At the conclusion of the project the Permittee must advise the applicant/developer that all graded areas must have reached final stabilization, that all temporary control measures must be removed, and that a Notice of Termination (NOT) must be sent to the Ohio EPA.
- 7. The Permittee shall provide an annual review with current staff who perform SWP3 reviews and inspections to update them on preferred controls, regulation changes, permit updates and policy or standard updates.
- 8. The Annual Report shall describe the procedures for program evaluation and assessment of the Construction Program. The report shall document the following: (1) number and list of sites inventoried, (2) number of pre-construction SWP3 reviews performed, (3) number and frequency of site inspections, (4) number of enforcement actions taken and resolved, and (5) number of complaints received regarding active construction sites and number addressed.
- F. POST-CONSTRUCTION/REDEVELOPMENT PROGRAM: The Permittee shall continue to implement and enforce a program to address post-construction stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale. The program shall ensure that controls are in place that will prevent or minimize potential water quality impacts.
 - 1. The Permittee shall develop and implement strategies which include a combination of structural and/or nonstructural BMPs appropriate for the City. Nonstructural BMPs can include but are not limited to the policies and ordinances that provide requirements and standards to direct smart growth to identified areas, protect sensitive areas such as wetland and riparian areas, maintain or increase open space, provide buffers along sensitive water bodies, minimize impervious surfaces and minimize disturbance of soils and vegetation.
 - 2. The Permittee shall use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The Permittee's ordinance or other regulatory mechanism shall be equivalent with the technical requirements set forth in the current Ohio EPA NPDES General Construction Stormwater general permit.
 - 3. The Permittee shall conduct SWP3 reviews that specifically address how projects satisfy, at a minimum, the post-construction requirements of the current Ohio EPA NPDES Construction Stormwater General Permit.
 - 4. The Permittee shall require adequate long-term operation and maintenance of BMPs. The Permittee shall require that structural post-construction BMPs are properly installed and maintained.
 - a. The Permittee shall require the owner or operator of any new development or

redeveloped site to submit and implement an approved maintenance plan addressing requirements for any stormwater structural control measures installed.

- b. The Permittee shall have authority to conduct inspections of the stormwater structural control measures. The Permittee shall require property owners, their successors and assigns, and/or other responsible parties to implement the maintenance plan and to adequately operate and maintain stormwater structural control measures.
- c. Where appropriate the Permittee may seek an administrative and/or judicial order authorizing the Permittee to perform any necessary maintenance on stormwater structural control measures or to conduct other corrective actions and to recover the cost thereof from the property owner and/or other responsible parties.
- 5. The Permittee shall require that property owners or operators provide verification of maintenance for the approved stormwater structural control measures. Verification may include one or more of the following as applicable:
 - a. The owner or operator's signed statement accepting responsibility for maintenance with a provision for transferring maintenance responsibility if the property is legally transferred to another party;
 - b. Written conditions in the sales or lease agreement that the recipient is to assume responsibility for maintenance; and
 - c. Written conditions in project requirements, covenants and restrictions for residential properties assigning maintenance responsibility to a homeowner's association, or group for maintenance of structural control stormwater management practices.
- 6. The Permittee shall continue to maintain an inventory of all structural postconstruction BMPs installed and implemented at sites. The inventory should be searchable (either on paper or electronically) and should include the following information:
 - a. Operator's name and mailing address;
 - b. Project name and location;
 - c. Drainage area associated with the structural post-construction BMP;
 - d. Project approval date;
 - e. A description of each post-construction control measure (type, number, design or performance specifications);

- f. Latitude and longitude coordinates of each control measure; and
- g. Inspection information (date, findings, follow-up activities).
- 7. The Permittee shall conduct inspections of each applicable site. The purpose of the inspections are to ensure control measures are installed correctly, operating as intended, and are being maintained pursuant to applicable maintenance agreements. At a minimum, one on-site inspection by the Permittee or a third party shall be performed and documented of each post-construction runoff control during this permit term.
 - a. The Permittee shall conduct a post-construction inspection to verify that BMPs have been installed per approved plans.
 - b. The Permittee shall document its inspection findings in an inspection report. Each inspection report should include at a minimum:
 - (1) Inspection date
 - (2) Name and signature of inspector
 - (3) Project location (street address, latitude/longitude, etc.)
 - (4) Current ownership information (name, address, phone number fax or e-mail).
 - (5) A description of the condition of the structural control measure, including the quality of: vegetation and soils; inlet and outlet channels, embankment, slopes, structural control measures, and/or photographic documentation.
- 8. To address TMDL requirements for Total Suspended Solids (TSS) and Total Phosphorus (TP), the Permittee's post-construction program shall implement the following:
 - a. See Table in Part III.B.7.d.
 - b. For the following two (2) TMDL Project watersheds from Part III.A.4 (Big Walnut Creek and Olentangy River) implement one (1) of the following within each of these two (2) watersheds during the permit term:
 - (1) Install green infrastructure for water quality treatment that exceeds the requirements of the Ohio EPA General Construction Permit as part of Blueprint projects with the goal of reducing TSS by 20% as specified in 2015 Integrated Plan; or
 - (2) Promote the installation of rain gardens and rain barrels on residential

properties; or

- (3) Continue with the City's Detention Basin Modification program of retrofitting existing water quantity basins to meet water quality objectives.
- c. For the following one (1) TMDL Project watershed from Part III.A.4 (Big Darby Creek) implement the following within this watershed during the permit term:
 - (1) Review development plans for adherence to the tenants of the Big Darby Accord Watershed Master Plan as codified in the Columbus Stormwater Drainage Manual; and
 - (2) Review annually site level monitoring data that is submitted by applicants.
- 9. The Annual Report shall document the following: (1) number of sites or structural post-construction BMPs inventoried for the reporting year, (2) number of SWP3s reviewed, (3) number of inspections performed to verify structural post-construction runoff BMPs were built per requirements, (4) number of maintenance inspections performed on structural post-construction BMPs, and (5) the number of enforcement actions taken and resolved.
- G. POLLUTION PREVENTION/GOOD HOUSEKEEPING PROGRAM: The Permittee shall continue to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. See Part III.G.10.b for training requirement._The SWMP shall include, at a minimum, the following:
 - 1. The Permittee shall list the municipal facilities that are impacted by the operation and maintenance program. The Permittee shall include a list of industrial facilities it operates that are subject to 40 CFR 122.26 (b)(14)(i-ix) and (xi). The list shall either show the NPDES facility permit number or indicate the date the No Exposure Certification form was submitted. The Permittee, shall continue to update and maintain an inventory of municipally operated facilities that have a stormwater pollution potential similar to an industrial facility, not limited to the following:
 - Composting facilities and leaf collection yards
 - Storage and maintenance facilities
 - Incinerators
 - Landfills
 - Landscape maintenance on municipal property
 - Materials storage yards
 - Municipally operated maintenance facilities
 - Recycling facilities
 - Salt storage facilities
 - Solid waste handling and transfer facilities
 - Street repair and maintenance sites

- Vehicle storage, fueling areas, and maintenance yards
- Municipal maintained structural stormwater controls
- Municipally operated golf courses
- 2. The Permittee shall continue to implement or develop BMPs and/or a stormwater pollution prevention plan (SWPPP) for all municipal facilities subject to this program. Where a plan must be developed for a facility subject to this program, the plan shall be written and implemented within two years of the effective date of this permit or acquisition of the facility.
 - a. The SWPPP for a facility subject to 40 CFR 122.26(b)(14)(i-ix) and (xi) shall be written and implemented within two years of the effective date of this permit or acquisition of the facility. For any other facility subject to the Good Housekeeping program the BMPs, or where applicable a SWPPP, shall be implemented within two years of the effective date of this permit or acquisition of the facility.
 - b. A hard copy or electronic copy of the SWPPP shall be available for reference at those facilities where one is required.
- 3. The Permittee shall keep all municipally operated facilities neat and orderly, minimizing pollutant sources through good housekeeping procedures and proper storage of materials.
 - a. The Permittee shall institute procedures for pollution prevention (P2) to minimize stormwater pollution discharge from streets, roads, highways, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the Permittee. These practices may include effective street sweeping practices, leaf collection and anti-litter programs to reduce the discharge of pollutants.
 - b. Stored materials exposed to stormwater shall be covered where feasible.
 - c. The Permittee shall store deicing materials (salt, sand, cinders, etc.) under cover or with use of other control measures (e.g., dikes) at all of its storage facilities. If a permanent structure is required, but does not exist, one shall be built, and seasonal tarping shall be used as an interim control measure. All permanent tanks of brine or other liquid road treatments shall have secondary containment or alternatively bollard or barrier protection no later than two (2) years after the effective date of this permit.
 - d. The Permittee shall implement standard operating procedures for vehicle fueling and receiving bulk fuel deliveries at municipally owned facilities with the goal of reducing the likelihood of spills and providing spill controls in the event a spill occurs. Spill kits shall be maintained and accessible in a highly visible location at appropriate facilities.

- e. The discharge of equipment wash water to the MS4 or to receiving waters is prohibited. The Permittee may meet this requirement by installing a water reclamation/recycling system, capturing and hauling the wastewater for proper disposal, connecting to a sanitary sewer, or ceasing the activity.
- 4. The Permittee shall perform maintenance activities for catch basins and inlets with proper debris management and disposal. The Permittee shall document debris collected to prioritize areas to clean. At a minimum, catch basins shall be scheduled to be cleaned once every five years.
 - a. The Permittee should use information compiled from citizen complaints, previous reports, and high value waters to help in assigning the appropriate priority level.
- 5. The Permittee shall visually monitor drainage structures for problem areas such as those with recurring illegal dumping. Trash and debris shall be removed from open channels and other drainage structures.
- 6. The Permittee shall dewater and dispose of materials extracted from catch basins and street sweepings. Water removed during the catch basin cleaning process and the waste material shall not re-enter the MS4 or receiving waters.
- 7. The Permittee shall continue to evaluate and rate the sweeping frequency, timing, and efficiency of its street sweeping programs. The Permittee shall document debris collected to prioritize areas to sweep and/or document lane miles swept. At a minimum, sweeping shall occur on curbed streets two (2) times per year.
- 8. The Permittee shall inspect City owned detention ponds for sediment, mow, and remove accumulated litter and debris as necessary. The Permittee shall regularly remove litter and debris from the open ditches and trash racks located on the upstream end of culverts.
- 9. For areas of soil disturbance associated with ditch/MS4 maintenance caused by the Permittee, soil stabilization shall, at a minimum, be initiated in accordance with the time frames specified in the following table:

Ditch/MS4 Maintenance Areas	Time Frame to Initiate Soil Stabilization
Not within 50 feet of a surface water of the State	Within 7 days of reaching final grade or within the first 7 days if a disturbed area will remain inactive for over 14 days.
Within 50 feet of a surface water of the State	Within 2 days of reaching final grade or within 2 days if the area is to remain inactive for over 14 days.

Implementation of this standard shall commence no later than two (2) years after the effective date of this permit.

10. Table for consolidated items related to training of employees.

Permit Part	Objective	Requirement Text	Target Audience	Frequency
Part III.G.10.a	Conduct training with maintenance crews to reduce pollution from illicit discharges	The Permittee shall continue to implement a pollution reduction training program on the identification of and reporting procedures for illicit discharges and connections.	City employees who perform maintenance and who may observe an illicit discharge	Annually
Part III.G.10.b	Conduct training to reduce pollutant runoff from municipal operations	The Permittee shall continue to implement a pollution reduction training program that includes a focus on maintenance of parks and open spaces, vehicles, buildings, and storm sewer. The program shall also include information on land disturbance.	City employees who work in park, vehicle fleet, building, and sewer maintenance, and employees who are involved with land disturbance.	Annually
Part III.G.10.c	Conduct training to reduce pollutant runoff from de-icing operations	The Permittee shall continue to implement a pollution reduction training program for de-icing operations that focuses on the proper maintenance of spreading equipment, proper spreading practices, and optimal applications rates.	City employees performing de-icing operations	Annually

Permit Part	Objective	Requirement Text	Target Audience	Frequency
Part III.G.10.d	Conduct training on pollution prevention and good housekeeping	The Permittee shall continue to implement a pollution reduction training program for employees involved in implementing pollution prevention/good housekeeping practices at City facilities.	City employees involved in implementing pollution prevention and good housekeeping measures, and all new City employees	Annually for existing employees; within one year of hire date for new employees
Part III.G.10.e	Conduct training for employees responsible for implementing the industrial stormwater program	The Permittee shall provide training for personnel responsible for implementing the industrial stormwater program. At a minimum, training shall cover stormwater regulations, pollution prevention plans and site evaluation procedures.	Those employees with responsibilities at industrial sites	Annually

11. The Permittee's Annual Report shall document the following: (1) summary of the employee training programs and the number of employees attending, (2) the number of street miles swept and/or the amount of material collected, (3) types of street sweepers used, (4) list of municipal facilities that are permitted, (5) document tons of road salt used, gallons of brine used (and concentration) lane miles treated, (6) document the gallons used of pesticides and herbicides, (7) document the pounds of used fertilizer, (8) document the amount of catch basin cleaning material collected and properly disposed, including disposal location.

H. INDUSTRIAL AND RELATED FACILITIES PROGRAM:

- 1. The Permittee shall maintain an inventory of industrial sites/sources facilities meeting the definition of industrial facility contained in 40 CFR 122.26(b)(14)(i) through (ix) and (xi), that have been identified by Ohio EPA as requiring a Multi-Sector General Permit, and that are located within the Permittee's MS4 and that discharge to it.
- 2. The Permittee will continue to prioritize industries for inspection.
- 3. For facilities subject to NPDES industrial stormwater requirements, the Permittee shall conduct industrial facility inspections that, at a minimum, consist of the following criteria:
 - a. Determine whether facility has coverage under an NPDES permit for stormwater

- discharges or a No Exposure Certification.
- b. Determine whether a SWPPP has been developed.
- c. Determine whether facility has developed a site map as required by the NPDES stormwater permit.
- d. Determine whether BMPs identified within SWPPP have been installed and maintained.
- e. If required by a facility's NPDES permit, determine whether the operator has performed analytical monitoring and maintained records.
- f. Use an inspection form for each industrial inspection that documents these criteria and includes the following.
 - (1) Inspection date, time, names of inspector(s) and signature(s).
 - (2) Weather information and description of any discharges occurring at the site at the time of inspection.
 - (3) Any potentially needed control measures or existing control measures needing repair.
 - (4) Any NPDES permit non-compliance issues observed.
- 4. If the Permittee determines that an industry's pollution prevention activities to reduce the stormwater pollution discharge to the MS4 is inadequate and violates conditions of Ohio EPA's NPDES stormwater permits, the Permittee will notify Ohio EPA.
- 5. If the inspection reveals a violation of any city code or regulation pertaining to stormwater quality management and pollution prevention activities, the Permittee shall initiate formal enforcement activities as appropriate per City code.
- 6. The Permittee shall monitor suspect industries within a particular watershed and if evidence of unpermitted discharges of stormwater pollution is present, the Permittee shall conduct sampling of the suspect industry or require the industry to perform such sampling.
 - a. When sampling is done, the following parameters will be considered at a minimum:
 - (1) Any pollutant listed in the effluent limitations guidelines for the subcategory of the industry.
 - (2) Any pollutant that is controlled in an NPDES permit for the process discharge from the industrial site.

- (3) Oil and grease, COD, pH, BOD₅, TSS, total phosphorous, total kjeldahl nitrogen, nitrate plus nitrite, nitrogen and ammonia.
- (4) Any pollutant known or suspected to be in the discharge from the industrial site.
- 7. The Permittee's Annual Report shall document the following: (1) number of industries inspected that are located within the Permittee's MS4 and that discharge to it that meet the definition of 40 CFR 122.26 (b)(14)(i) through (ix) and (xi), (2) the names of those industries that cannot provide proof of NPDES permit coverage or a No Exposure Certification response letter from the Ohio EPA, (3) number of SWPPPs reviewed, and (4) number of staff trained on the industrial stormwater program procedures.

PART IV. MONITORING AND REPORTING REQUIREMENTS

- A. The Permittee shall implement a monitoring program for discharges from the MS4 in accordance with the following requirements:
 - 1. Wet Weather Monitoring Program
 - a. Through the end of 2022, the Permittee shall continue to implement a wet weather monitoring program which considers the following objectives:
 - i. Characterize the discharges;
 - ii. Identify sources of pollutants;
 - iii. Assess the effectiveness of best management practices (BMPs);
 - iv. Identify, investigate, and address areas that may be contributing to excessive levels of pollutants; and
 - v. Identify water quality improvements or degradation.

The impact of the BMPs on the quality of the stormwater within the identified watershed(s) shall be quantified. Stormwater discharge events shall be sampled for the parameters in Table 1 at least once per calendar quarter.

Table 1 – List of Sampling Parameters and Abbreviations

Fecal Coliform	-
E. Coli	-
Nitrite	NO ₂
Total Phosphorous	-
Orthophosphate	-
Carbonaceous Biochemical Oxygen Demand	CBOD ₅
Biochemical Oxygen Demand	BOD ₅
Total Suspended Solids	TSS
Ammonia	NH ₃

Alkalinity	-
Oil and Grease	-
Hardness (as CaCO₃)	-
Total Recoverable Cadmium	Cd
Total Recoverable Chromium	Cr
Total Recoverable Copper	Cu
Total Recoverable Lead	Pb
Total Recoverable Nickel	Ni
Total Recoverable Zinc	Zn

The Permittee has identified the Olentangy River watershed for evaluation. Assessment of stormwater discharge events will be made at the locations listed in Table 2.

Site ID Location Outfall Receiving Watershed Size Stream Status High Street and Blenheim 0232T0837 3-ft x 3-ft Adena Brook treated Road High Street and Indian 0232T0049 42-in-dia Adena Brook treated Springs Overbrook Drive and 0233T0395 21-in-dia Adena Brook treated Canyon Drive Olentangy 0297T0494 Rustic Bridge Road 54-in-dia control River

Table 2 – List of Sampling Locations

b. Monitoring locations may be substituted during the term of the permit. Request for approval of alternate monitoring locations shall be made to the Director in writing and include the rationale for the requested monitoring station relocation. The Director will provide a written response with approval or denial of requested monitoring station relocations. The Ohio EPA may request alternate monitoring locations at any time during the term of the permit.

Storm Event Data

- a. For Part IV.A.1, quantitative data shall be collected for each parameter sampled. The Permittee shall maintain records of the date and duration (in hours) of the storm event(s) sampled; rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff; the duration (in hours) between the storm event sampled and the end of the previous measurable storm event; and an estimate of the total volume (in gallons) of the sampled discharge.
 - i. Sample Type, Collection, and Analysis. The following requirements apply only to samples collected for Part IV.A.1.

- ii. For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, a minimum of one grab sample may be taken.
- iii. Grab samples shall be taken during the first two hours of discharge if sampling for dissolved oxygen, pH, temperature and oil & grease. For all other parameters, data shall be reported for flow-weighted composite samples of the entire event or, at a minimum, the first three hours of discharge, whichever occurs first.
- iv. All such samples shall be collected to reflect the discharge resulting from a wide range of storm event producing adequate sampling volume for analysis with the time lag between the sampled storm event and the immediately prior storm event being reported. Flow-weighted composite samples may be taken with an automated sampler or as a combination of a minimum of three sample aliquots taken in each hour of the discharge, with each aliquot being separated by a minimum period of fifteen minutes.
- v. Analysis and collection of samples shall be done in accordance with the methods specified at 40 CFR Part 136 unless approved otherwise by this permit. Where an approved Part 136 method does not exist, any suitable method may be used, but the Permittee shall describe the analysis methods and document the reference.
 - (1) Filtering of orthophosphate may be performed on a composite sample.
- vi. Sampling Waiver. When the Permittee is unable to collect a sample within the calendar quarter as required by Part IV.A.1 due to adverse conditions or failure of equipment, the Permittee shall submit in lieu of sampling data a description of why the sample could not be collected, including available documentation of the event. Adverse climatic conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (local flooding, high winds, hurricane, tornadoes, or electrical storms, etc.) or otherwise make the collection of a sample impracticable (vandalism, equipment failure, local drought, extended frozen conditions, etc.).

3. HSTS Monitoring Program

- a. The Permittee shall implement a monitoring program for each watershed identified as impaired by E. Coli in Part III.A.4 which considers the following objectives:
 - i. Use the Permittee's storm sewer system mapping information to identify subwatersheds in which off-lot discharging HSTS are in operation and identify potential locations of Capital Improvement planning for HSTS elimination.

- Use the Permittee's storm sewer system mapping information to identify the outfall to the waters of the state for each sub-watershed identified in "a" above.
- iii. Starting in 2023, collect samples from outfalls per the following schedule that are to be analyzed for the constituents listed in Table 3 List of HSTS Sampling Parameters and Abbreviations.
 - a. At least one quarter of the total outfalls identified "ii" above shall be sampled each year, with all identified outfalls sampled prior to the end of the permit term.
 - b. Sampling may occur in the months of May through October.
 - c. For each identified outfall, sampling will be conducted by collecting two samples each week over a period of four weeks. The four weeks are to be consecutive when practical. There shall be a total of at least eight samples for each identified outfall before the end of the permit term.
 - d. Analysis of samples may be conducted by a combination of measuring meters, test kits, and laboratory procedures as appropriate for each parameter listed.
- iv. Each year a sample will be collected at two of the identified outfalls and analyzed for Total Dissolved Solids (TDS). One sample will be collected in the early season and one in the late season. There shall be a total of at least eight samples analyzed for TDS before the end of the permit term.
- v. Investigate using conventional methods for determining the source of illicit discharges any samples that exceed previously characterized "baseline" levels of stormwater discharged from the Permittee's MS4.
- vi. For sources attributed to off-lot discharging systems, pursue correction of system deficiencies.

Table 3 – List of HSTS Sampling Parameters and Abbreviations

рН	-
Temperature	-
Chlorine	Cl ₂
E. Coli	-
Carbonaceous Biochemical Oxygen	CBOD₅

Demand	
Ammonia	NH ₃
Nitrate	NO ₃
Total Kjeldahl Nitrogen	TKN
Total Phosphorous	TP
Orthophosphate	-
Total Suspended Solids	TSS

PART V. STANDARD PERMIT CONDITIONS

- A. <u>RECORDS RETENTION</u>. The Permittee shall retain the following records for the municipal separate storm sewer system for a period of at least three years, or for the term of this permit, whichever is longer:
 - 1. All sampling and analytical records (including internal sampling data not reported);
 - 2. All original recordings for any continuous monitoring instrumentation;
 - 3. All instrumentation, calibration and maintenance records;
 - 4. All system operation and maintenance records;
 - 5. All reports required by this permit;
 - 6. Records of all data used to complete the application for this permit for a period of at least three years from the date of the sample, measurement, report, or application; and
 - 7. These periods will be extended during the course of any unresolved litigation, or when requested by the U.S. EPA Administrator or the Ohio EPA. The three-year period for retention of records shall start from the date of sample, measurement, report, or application.

B. **NOTIFICATION REQUIREMENTS**

- 1. The Permittee shall notify by telephone (1-800-282-9378) within 24 hours of knowing or having reason to believe that the discharges from the Permittee's municipal separate storm sewer system may adversely impact the receiving stream and/or may be a threat to public health due to:
 - a. An NPDES permitted discharge,
 - b. An illicit discharge
 - c. Any other discharge beyond reasonable control of the Permittee.
- 2. For the telephone reports required by Part V.B.1, the following information must be included:
 - a. The times at which the discharge occurred (if known), and was discovered;
 - b. The approximate volume and the characteristics of the discharge (if known);
 - c. The location of the discharge into the municipal separate storm sewer system and the location of the municipal outfall from which discharge enters waters of the state;
 - d. The stream(s) affected by the discharge;

- e. The circumstances which created the discharge (if known);
- f. The names and telephone numbers of the persons who have knowledge of these circumstances;
- g. What remedial steps are being taken; and
- h. The names and telephone numbers of the persons responsible for such remedial steps.
- 3. Compliance Schedule Events:

If the Permittee is unable to meet any date for achieving an event, as specified in the schedule of compliance, the Permittee shall submit a written report and include it in the Annual Report. The report shall include the following:

- a. The compliance event which has been or will be violated;
- b. The cause of the violation;
- c. The remedial action being taken;
- d. The probable date by which compliance will occur; and
- e. The probability of complying with subsequent and final events as scheduled.
- 4. The Permittee shall report all instances not reported under paragraphs 1 or 2 of Part V.B with the annual report required in Part II.D. The reports shall contain information on the extent, duration, and cause of the discharge; steps taken to reduce, eliminate, and/or prevent recurrence of the discharge; and if the discharge has not been abated, the anticipated time the discharge is expected to continue.
- 5. Where the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or in any report to the director, it shall promptly submit such facts or information.
- B. **TRANSFER OF OWNERSHIP OR CONTROL**. This permit cannot be transferred or assigned nor shall a new owner or successor be authorized to discharge from this facility until the following requirements are met:
 - 1. The Permittee shall notify the succeeding owner or successor of the existence of this permit by a letter, a copy of which shall be forwarded to the appropriate Ohio EPA district office. The copy of that letter will serve as the Permittee's notice to the Director of the proposed transfer. The copy of that letter shall be received by the appropriate Ohio EPA district office sixty days prior to the proposed date of transfer;
 - A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new Permittee (including acknowledgment that the existing Permittee is liable for violations up to that date, and that the new Permittee is liable for violations from that date on) shall be submitted to the appropriate Ohio EPA district office within sixty days after receipt by the district office of the copy of the letter from the Permittee to the succeeding owner;

- 3. The Director does not exercise his right within thirty days after receipt of the written agreement to notify the current Permittee and the new Permittee of his or her intent to modify or revoke the permit and to require that a new application be filed; and
- 4. The new owner or successor receives written confirmation and approval of the transfer from the Director of the Ohio EPA. At any time during the sixty (60) day period between notification of the proposed transfer and the effective date of the transfer, the Director may prevent the transfer if they conclude that such transfer will jeopardize compliance with the terms and conditions of the permit.
- C. <u>DUTY TO COMPLY</u>. The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

D. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

- 1. ORC Section 6111.07 prohibits any person from knowingly submitting false information or records or failing to submit information or records pertaining to discharges required as a condition of a permit.
- 2. ORC Section 6111.99 establishes that whoever violates the provisions of ORC Section 6111.07 Division (C), shall be fined not more than \$ 25,000 per violation.
- 3. ORC 6111.99 provides that any person who violates Sections 6111.042, 6111.04., 6111.05, or Division (A) of Section 6111.07 of the Revised Code shall be fined not more than \$25,000 or imprisoned not more than one year, or both.
- E. <u>DUTY TO REAPPLY</u>. If the Permittee wishes to continue an activity regulated by this permit after the permit expiration date, the Permittee must apply for and obtain a new permit. The application shall be submitted at least 180 days prior to expiration of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated at 40 CFR 122.6 and any subsequent amendments.
- F. **NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE**. 40CFR 122.41(c) states that it shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- G. **<u>DUTY TO MITIGATE</u>**. The Permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit.
- H. <u>AUTHORIZED DISCHARGES</u>. All discharges authorized herein shall be consistent with the terms and conditions of this permit. Any discharge violation may result in the imposition of civil and/or criminal penalties as provided for in Section 309 of the Act and Ohio Revised Code Sections 6111.09 and 6111.99.

- I. <u>DUTY TO PROVIDE INFORMATION</u>. The Permittee shall furnish to the Director, within a time specified by the Director, any information which the Director may request to determine compliance with this permit. The Permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.
- J. <u>OTHER INFORMATION</u>. When the Permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in any report to the Director, he or she shall promptly submit such facts or information.
- K. <u>SIGNATORY REQUIREMENTS</u>. All applications, reports or information submitted to the Director shall be signed and certified by:
 - 1. For a municipality, State, or other public agency: by either a principal executive officer or ranking elected official; or
 - 2. A duly authorized representative of that person. A person is a duly authorized representative only if, the authorization is made in writing by a person described above and submitted to the Director.
 - a. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
 - b. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written authorization satisfying the requirements of this paragraph must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.
- L. **CERTIFICATION**. Any person signing documents under this section shall make the following certification:

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

M. <u>OIL AND HAZARDOUS SUBSTANCE LIABILITY</u>. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities,

liabilities, or penalties to which the Permittee is or may be subject under section 311 of the CWA or section 106 of CERCLA.

- N. **SOLID DISPOSAL**. Collected screening, slurry, sludge, and other solids shall be disposed of in such a legal manner as to prevent entry of those wastes into waters of the state.
- O. <u>CONSTRUCTION AFFECTING NAVIGABLE WATERS</u>. This permit does not authorize or approve the construction of any on-shore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.
- P. **PROPERTY RIGHTS**. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- Q. **SEVERABILITY**. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- R. **STATE/ENVIRONMENTAL LAWS**. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by section 510 of the Act. No condition of this permit shall release the Permittee from any responsibility or requirements under other environmental statutes or regulations.
- S. <u>OPERATION AND MAINTENANCE</u>. The Permittee shall at all times operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit and with the requirements of storm water management programs. Operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

T. MONITORING METHODS

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

U. PERMIT MODIFICATION OR REVOCATION

- 1. After notice and opportunity for hearing, the permit may be modified or revoked, by the Ohio EPA, in whole or in part during its term, for cause including, but not limited to the following:
 - a. changes in State or Federal statutes or regulations or standards.

- b. other modifications deemed necessary by the Director to meet the requirements of the Clean Water Act.
- c. violation of any terms or conditions of the permit.
- d. all modification to the permit will be made in accordance with 40 CFR 122.62, 122.63, and 124.5.
- e. Changes in any conditions that require either a temporary or permanent reduction or elimination of the permitted discharge.
- f. Obtaining this permit by misrepresentation or failure to disclose all relevant facts.
- g. Impacts on receiving water quality caused, or contributed to, by discharges from municipal separate storm sewer system.
- 2. Pursuant to rule 3745-33-06, Ohio Administrative Code, the Permittee may at any time apply to the Ohio EPA for modification of any part of this permit. The request by the Permittee for a permit modification or revocation does not stay any permit condition. The application for modification should be received by the Ohio EPA at least ninety days before the date on which it is desired that the modification becomes effective.
- V. **INSPECTION AND ENTRY**. The Permittee shall allow the Director or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
 - 1. Enter upon the Permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - 4. Sample or monitor at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.
- W. AVAILABILITY OF REPORTS. Except for data determined by the Ohio EPA to have been titled to confidential status, all reports prepared in accordance with the terms of this permit shall be available for public inspection at Ohio EPA. Both the Clean Water Act and Section 6111.05 Ohio Revised Code state that effluent data and receiving water quality data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Ohio Revised Code Section 6111.99.
- X. **APPLICABLE FEDERAL RULES**. All references to 40 CFR in this permit mean the version of 40 CFR which is effective as of the effective date of this permit.

PART VI. DEFINITIONS

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Publ. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.)

"Director" means the director of Ohio EPA or an authorized representative.

"<u>Discharge</u>" for the purpose of this permit, unless indicated otherwise, refers to discharges from the Municipal Separate Storm Sewer System (MS4).

"Illicit connection" means any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

"Illicit discharge" means any discharge to a municipal separate storm sewer that is not composed entirely of stormwater except discharges pursuant to an NPDES permit. Illicit discharge include improper disposal. Improper disposal is defined as the placement of motor vehicle fluids, household hazardous wastes, grass clipping, leaf litter, animal wastes, sewage (as defined in ORC 6111.01 (B)), industrial waste (as defined in ORC 6111.01 (C))or any other waste (as defined in 6111.01 (D)) into an MS4. Sources identified and in compliance with Part III.D.2 of the permit are not considered illicit discharges.

"Landfill" means an area of land or an excavation in which wastes are placed for permanent disposal, and which is not a land application unit, surface impoundment, injection well, or waste pile.

"Land application unit" means an area where wastes are applied onto or incorporated into the soil surface (excluding manure spreading operations) for treatment or disposal.

"Large or medium municipal separate storm sewer system" means all municipal separate storm sewers that are either: (i) located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or (ii) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or (iii) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"MEP" is an abbreviation for "Maximum Extent Practicable," the discharge standard for Municipal Separate Storm Sewer Systems established by CWA '402(p). MEP may be achieved in phases

by using management practices, control techniques and system design and engineering methods which are designed to reduce stormwater pollutant discharges from the MS4 and are technically and economically feasible.

"MS4" is an acronym for "municipal separate storm sewer system" and is used to refer to a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) owned or operated by the City of Columbus; (ii) designed or used for collecting or conveying stormwater; (iii) which is not a combined sewer; and (iv) which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

"Outfall" means a point source where a municipal separate storm sewer system discharges to water of the states and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the state.

"Permittee" refers to any "person," as defined at 40 CFR 122.2, authorized by this NPDES permit to discharge to Waters of the State.

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

"<u>Structural Controls</u>" refers to structures and conveyances used to collect, convey or store stormwater or to remove pollutants from stormwater (e.g., infiltration device, constructed wetland, bio-filter, extended detention basin, vegetated swales, water quality inlet, catch basin, etc.).

<u>"Toxic materials"</u>, means any material which can cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological or reproductive malfunction or physical deformities in any organism or its offspring, or which can become poisonous after concentration in the food chain or in combination with other substances.

"Storm sewer", unless otherwise indicated, refers to a municipal separate storm sewer.

"Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater Associated with Industrial Activity" means as defined in 40CFR 122.26 b (14).

"SWMP" is an acronym for "Stormwater Management Program."

"Types of Samples"

- 1. Grab samples are individual samples collected instantaneously.
- 2. Composite Sample: a composite sample shall mean:

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- a. A flow-weighted composite sample, which is a mixture of aliquots collected at a constant time interval, where the volume of each aliquot is proportional to the flow rate of the discharge at the time the sample is collected; or
- b. a time-weighted sample, which is a mixture of equal volume aliquots collected at a constant interval of time.
- c. mixture of equal volume aliquots collected at equal increments of flow volume.

"<u>Waters of the State</u>" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, regardless of the depth of the strata in which underground water is located, which are situated wholly or partly within, or border upon, this state, or are within its jurisdiction, except those private waters which do not combine or effect a junction with natural surface or underground waters.