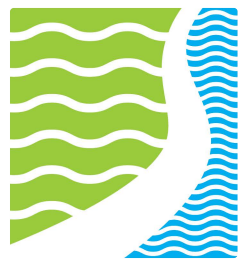


RULES AND REGULATIONS

The Metropolitan Sewer District of
Greater Cincinnati

*Governing the Design, Construction, Maintenance,
Operation and Use of Sanitary and Combined Sewers*



**METROPOLITAN
SEWER DISTRICT**
OF GREATER CINCINNATI

Issued by the Board of County Commissioners
Hamilton County, Ohio

EFFECTIVE MARCH 1, 2001

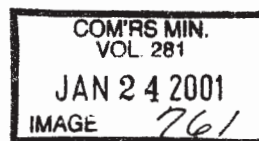
**Including Amendments from 2002, 2003,
2004, 2005, 2006, 2007, 2010, 2011, 2014,
2016, 2018, and 2026**

Table of Contents

2001 Enabling Legislation	<i>i - iv</i>
Introduction	1
Article I – Definitions	2
Article II – Control of Sewers	16
Article III – Combined Sewers	19
Article IV – Use of the Wastewater Treatment System	23
Article V – Approval of Plans for Wastewater Treatment Works	28
Article VI – Design of Sanitary Sewers	48
Article VII – Wastewater Lift Stations	55
Article VIII – Wastewater Treatment Plants	57
Article IX – Construction Materials	58
Article X – Construction Procedure	59
Article XI – Assurance of Completion	65
Article XII – Building Sewers: Connections and Permits	67
Article XIII – Individual Private Sewage Disposal	80
Article XIV – Disposal of Holding Tank Wastes	81
Article XV – Pretreatment	83
Article XVI – Application of the Wastewater Treatment System (WTS) Service Charge	121
Article XVII – Application of the Wastewater Treatment System (WTS) Surcharge	125
Article XVIII – Miscellaneous	129
Article XIX – Inspection of Construction	141
Article XX – Maintenance of the Wastewater Treatment System	142
Article XXI – Powers and Authority	144
Article XXII – Penalties	148
Article XXIII – Administrative Enforcement, Practices and Procedures	150
Article XXIV – Administrative Rules	155
Article XXV – Fees, Charges, Penalties, Credits	219
Article XXVI – Validity	222
Article XXVII – Right Reserved	223
Article XXVIII – Rules and Regulations In Force	224

On motion of Mr. Dowlin, seconded by Mr. Neyer, the following Resolution was adopted...

MSD Fact Sheet
Patrick T. Karney, P.E., DEE



MSD Rules and Regulations

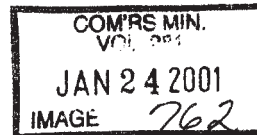
Legislative Request: Resolution adopting the ²⁰⁰¹2000 Revisions to the Rules and Regulations of the Metropolitan Sewer District. Many changes incorporated in this publication have already been adopted by the Board of Hamilton County Commissioners and have been actively in use. Changes include updates to regulations to conform to mandates, policies affecting the District's operations, and various general improvements to the manual. This update reflects the incorporation of all changes since the previously adopted 1991 publication.

Highlights of the revisions:

SECTION

REVISION

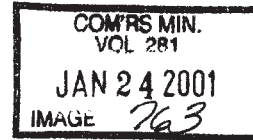
206	Policy for Construction of Structures over Sewers or Sewers under Structures
303	Policy inclusion of MSD Detention Requirements for stormwater tributary to Combined Sewers
304	Policy for consideration of cost sharing between the Board and a local jurisdiction to alleviate chronic basement flooding in a combined service area
401	Stormwater Removal Plan — Policy adopted by the Board in 1992 for District-funded Elimination of Improper Stormwater Inflows.
512	Easements for Future Sewers to accommodate future public sewer construction added to address existing MSD procedure.
513	Policy concerning Sewage Holding Tank Discharge
514	Policy for the Purchase by Hamilton County of Excess Sewer Capacity made available by private sewer development
601	MSD's Design Standards for determining the amount of sewage for existing Sanitary Sewer and Pump Station Upgrades based on flow monitoring and modeling in accordance with MSD guidelines
604	Manholes on pipes 24" and larger require flat slab tops for maintenance
606	Drop Manholes - Special conditions listed where a drop manhole will be approved
611	Environmental Compliance requirements for sewer construction in or near creeks
614	Requirement for installation of backwater preventer
701	Requirement for economic analysis prior to approval of Lift Stations
801	Requirement for economic analysis for Wastewater Treatments Plants
1003	Leakage Tests for Conduit — Air Test limits changed to be compatible with OEPA Procedure; Six months after the effective date, 1) infiltration tests will only be allowed for conduits larger than 36", and 2) the contractor will be required to perform air tests at his expense in accordance with the applicable testing standard
1003B	Vacuum Testing of manhole added to address existing MSD procedure
1007	As-Built Plans — At developer's option, MSD will provide "as built" for a fee
1010	Sewer Grade Variance Policy — Addition of an in-use District Policy for sewers constructed below minimum grades requiring relaying of pipe at the required grade
1212	Sewer Tappers — License Bond increased from \$5,000 to \$10,000.
1215	Sewer Tap-in-Fees — Increase adopted by the Board in 1995, Determination of fee changed to be based on meter size in place of the branch size to accommodate 3" rate; Conditions, exceptions and additional information to incorporate District procedures added; Inflationary increases to be determined by the Board.
1216	Policy addition for Levying Sewer Assessments for Local Collector Sewers; \$5,000 credit increased to \$5,400 and indexed to inflation; credit extended to owners switching from private sewer to public sewer
Article 14	Waste Haulers —New procedures for testing and receiving of septage
Article 15	Various Revisions dealing with Industrial Waste
Article 16	Various Revisions dealing with the Application of the Wastewater Treatment System Service Charge



-
- 1610 Sewer Service Charges — Phasing out (over five years) of deductions given to Commercial customers for cooling water discharged to the combined sewer system; Standardization of auxiliary sewerage meter requirements.
- 1805 Policy addition on Management of Requests for Local Sewer Assessment Projects
- 1806 Policy addition Regarding Acceptance of Private and Public Sewers by the Board For Public Control, Use, Operation, and Maintenance.
- 1807 Policy on Sewer Improvement Easement Acquisitions
- 1808 Policy Regarding Repairs to Private Sewers Under Circumstances of a Public Health Emergency
- 1809 Engineering Plan Review Fee and Sewer Construction Inspection Fees
- 1810 Mutual Aid Policy for Using MSD Personnel and Equipment
- 2008&2009 Maintenance of building sewer laterals and private sewers — responsibility for Maintenance clarified.
- Article 23 Revisions to article dealing with Administrative Enforcement, Practices, and Procedures
- Article 24 Revisions to article dealing with Administrative Rules
- Article 25 Fees, charges, penalties, credits — listing of the fees collected for various customer Services as determined by the Board; method of incrementing selected fees and credits in accordance with an index of inflation
- General Clean Water — Increased emphasis on preventing and dealing with clean water in the Sanitary Sewer System. (Sections 207, 208, 401, 402, 1201A, 1204, 1208A)

The Ohio Revised Code authorizes the Board of County Commissioners to adopt rules and regulations for the Sewer District. If the Board approves of these proposed revisions, MSD will schedule a public hearing before the Board to consider any comments on the final draft.

RESOLUTION



ADOPTING THE 2001 REVISIONS TO THE RULES AND
REGULATIONS GOVERNING THE DESIGN, CONSTRUCTION,
MAINTENANCE, OPERATION AND USE OF SANITARY AND
COMBINED SEWERS IN THE METROPOLITAN SEWER DISTRICT
OF GREATER CINCINNATI, HAMILTON COUNTY, OHIO

WHEREAS, Section 6117.01 of the Ohio Revised Code provides that the Board of County Commissioners in any County make, modify, publish and enforce Rules and Regulations for the construction, maintenance, protection and use of sewers and sewer improvements in its County outside of municipal corporations and of sewers and sewer improvements within municipal corporations in its County, wherever such sewers are constructed or operated by such Board, or discharge into sewers or sewage treatment plants constructed or operated by such Board, including the establishment and use of connections, and

WHEREAS, the Board of County Commissioners of Hamilton County, Ohio, did on December 20, 2000, conduct a public hearing for the purpose of hearing all objections and remonstrances to the aforesaid revisions to the Rules and Regulations, and did continue the said public hearing, on January 17, 2001 and January 24, 2001, and

WHEREAS, on January 24, 2001, the Board adopted a Resolution concluding the public hearing.

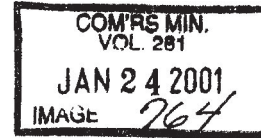
NOW, THEREFORE, BE IT RESOLVED, that these 2001 Revisions to the Rules and Regulations be and they hereby are adopted, to be effective March 1, 2001.

BE IT FURTHER RESOLVED, that this Board of County Commissioners hereby finds and determines that all formal actions relative to the adoption of this Resolution were taken in an open meeting of the Board of County Commissioners and that all deliberations of this Board of County Commissioners and of its committees, if any, which resulted in formal action were taken in meetings open to the public, in full compliance with applicable legal requirements, including Section 121.22 of the Ohio Revised Code.

ADOPTED at a regularly adjourned meeting of the Board of County Commissioners of Hamilton County, Ohio, this 24th day of January, 2001.

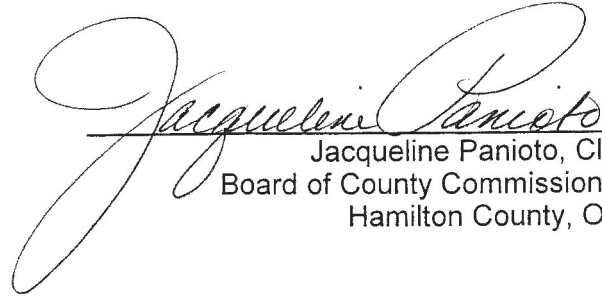
Mr. Dowlin AYE Mr. Neyer AYE Mr. Portune AYE

CERTIFICATE OF CLERK

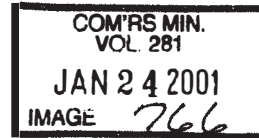


IT IS HEREBY CERTIFIED that the foregoing is a true and correct transcript of a resolution adopted by the Board of County Commissioners in session the 24th day of January, 2001.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the Office of the Board of County Commissioners of Hamilton County, Ohio, this 24th day of January, 2001.


Jacqueline Panioto, Clerk
Board of County Commissioners
Hamilton County, Ohio

INTRODUCTION

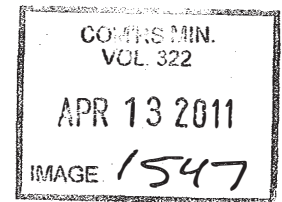


The public mandate for national clean waters resulted in the passage by Congress of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500), the Clean Water Act of 1977 (PL 95-217), the Water Quality Act of 1987, and subsequent provisions that do not amend. The first act set into motion a vast federal endeavor to improve the sewer systems and wastewater treatment plants of the nation's municipalities through a construction grant program. The District, in order to do its part in achieving the national clean water goals, has by necessity elected to participate in the grant program. The second Act resulted in additional Federal Regulations comprising 40 CFR-Part 35 and 40 CFR-Part 403, the latter of which set forth requirements for the regulation of industrial wastes discharged to Publicly Owned Treatment Works. Subsequent legislation expanded and built on these fountainhead laws.

In an attempt to achieve the goals of these acts and regulations, the District will require that the wastes that are discharged to the public wastewater treatment system be compatible with the same. Non-compatible pollutants can physically damage the wastewater treatment system or degrade the quality of effluents therefrom below acceptable level.

In order to implement the above requirements, these rules and regulations provide the District with the legal authority to control and monitor the wastewaters discharged to the public wastewater treatment system under its management.

This control, along with other controls affected by these rules and regulations herewith presented, is necessary to provide for the consistent, reliable, and efficient functioning of the District's wastewater treatment system, and also to conform to federal and state laws and regulations.



ARTICLE I

DEFINITIONS

Unless the context specifically indicates otherwise, the meaning of terms in these Rules and Regulations shall be as follows:

"Acreage Charge - (associated with Trunk Sewers)" shall mean a charge established by resolution of the Board pertaining to sewer assessment projects. These charges are on file at the District's office.

"Act" or "the Act" The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. section 1251 et seq.

"Analytical Testing" shall mean all methods of sample collection, preservation, and analysis as prescribed in 40 CFR -136, "Test Procedures for the Analysis of Pollutants."

"Approval Authority" For the Pretreatment Program is the Ohio EPA

"Authorized" or "Duly Authorized Representative" of the User.

(1) If the User is a corporation:

- a. The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- b. The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater or general discharge permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

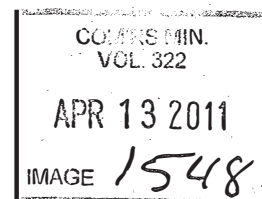
(2) If the User is a partnership or sole proprietorship: a general partner or proprietor, respectively.

(3) If the User is a Federal, State, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

(4) The individuals described in paragraphs 1 through 3, above, may designate a Duly Authorized Representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the District.

"Auxiliary Sewage Meter" shall mean a meter used by commercial and industrial customers to measure water that reduces and/or increases the consumption on which to base sewer and effluent charges using a combination of measurements. Customers must receive approval to install meters through an application and review process by the Metropolitan Sewer District.

"Base Flood" shall mean that flood having a one (1) percent chance of being equaled or exceeded in any given year.



"Base Flood Level" shall mean the elevation in feet above mean sea level (NGVD) of the base flood discharge.

"Batch Discharge" shall mean a discrete quantifiable discharge of a quantity of wastewater that is a homogeneous mixture, such that a grab sample taken at any time during discharge shall be representative, that is it has all the same characteristics of any other portion of the batch. The Director shall have approval of the allowable volumetric flow rate. To satisfy the MSD monitoring requirements, the discharge shall be made in accordance with a schedule approved by MSD or with a 48 hour prior notice to the Division of Industrial Waste.

"Beneficial Uses" shall mean uses of the waters of the State that may be protected against quality degradation, including but not limited to, domestic, municipal, agricultural and industrial water supply, power generation, recreation, aesthetic enjoyment, navigation and the preservation and enhancement of fish, wildlife and other aquatic resources or reserves, and other uses, both tangible or intangible as specified by Federal or State Law.

"Best Management Practices" (BMPs) shall mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in MSD R&R Section 1502. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

"Biochemical Oxygen Demand (BOD)" shall mean oxygen utilized in the biochemical oxidation of organic matter in five days at 20 deg. C., expressed in milligrams per liter. The values shall be as determined by the methods of Analytical Testing, except that when the BOD value is to be used in determining wastewater treatment system charges, and the BOD test does not produce an accurate measure of the oxygen demand actually exerted by the waste when undergoing treatment, then for use in determining said charges the BOD shall be calculated by whichever of the following formulae gives the more accurate measure of oxygen demand actually exerted.

$$\text{BOD} = (\text{F1}) (\text{COD})$$

or

$$\text{BOD} = (\text{F2}) (\text{TVR})$$

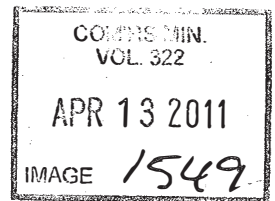
Wherein F1 and F2 are constants to be determined for each wastewater treatment plant and TVR is the Total Volatile Residue in milligrams per liter as determined by the methods of Analytical Testing.

"Board" shall mean the Board of County Commissioners of Hamilton County, Ohio.

"Building Drain" shall mean that part of the lowest horizontal piping of a drainage system which receives the discharge from soil, waste and other drainage pipes inside the walls of a building and conveys it to the building sewer. The building drain shall extend to three (3) feet outside the building wall.

"Building Drain - Combined." A building drain which conveys both sewage and storm water or other drainage.

"Building Drain - Sanitary." A building drain which conveys sewage only.



"Building Drain - Storm." A building drain which conveys storm water or other drainage, but no sewage.

"Building Sewer" shall mean the extension from the building drain to the public sewer or other place of disposal.

"Building Sewer - Combined." A building sewer which conveys both sewage and storm water, or other drainage.

"Building Sewer - Sanitary." A building sewer which conveys sewage only.

"Building Sewer - Storm." A building sewer which conveys storm water or other drainage, but no sewage.

"Bypass" means the intentional diversion of a waste stream from any portion of an Industrial User's treatment facility.

"Categorical Pretreatment Standards"-Any regulation containing pollutant discharge limits promulgated by EPA in accordance with sections 307(b) and (c) of the Act (33 U.S.C. section 1317) that apply to a specific category of Users and that appear in 40 CFR Chapter I, Subchapter N, Parts 405-471.

"Categorical Industrial User" (CIU) any Industrial User subject to a Categorical Pretreatment Standard or Categorical Standard.

"CFR" shall mean the Code of Federal Regulations.

"Chemical Oxygen Demand - COD" shall mean the oxygen equivalent of that portion of the organic matter that is susceptible to oxidation by a strong chemical oxidant. The values shall be as determined by the methods of Analytical Testing.

"City" shall mean the City of Cincinnati, Ohio.

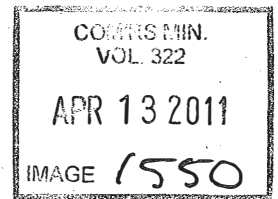
"City Manager" shall mean the City Manager of Cincinnati, Ohio.

"Cleaned Waste Waters" shall mean those liquid wastes which meet the criteria established by the NPDES Permit issued by the Ohio Environmental Protection Agency for effluents discharged to the particular watercourse receiving the discharge.

"Combined Sewer" shall mean a sewer that is intended to serve as a storm sewer and a sanitary sewer.

"Commercial User" shall mean any and all users of the wastewater treatment system not otherwise classified.

"Compatible Pollutant" shall mean: biochemical oxygen demand, suspended solids, pH, and fecal coliform bacteria plus additional pollutants identified by the Director if the treatment works, in fact, does remove such pollutants to a substantial degree. The term substantial degree is not subject to precise definition, but generally contemplates removals in the order of 80 percent or greater. Minor incidental removals in the order of 10 to 30 percent are not considered substantial. Examples of the additional



pollutants that may be considered compatible include:

- ▶ Chemical oxygen demand
- ▶ Total organic carbon
- ▶ Phosphorus and phosphorus compounds
- ▶ Nitrogen and nitrogen compounds
- ▶ Fats, oils and greases of animal or vegetable origin (except as prohibited where these materials would interfere with the operation of the wastewater treatment works.)

"Connection Charge - (Also referred to as tap-in charge)" shall mean a charge established by resolution of the Board pertaining to sewer assessment projects. These charges are on file at the District's office.

"Contamination" shall mean an impairment of the quality of the Waters of the State by waste to a degree that creates a hazard to the public health, e.g., through poisoning or through the spread of disease. Contamination shall include any equivalent effect resulting from the disposal of wastewater, whether or not Waters of the State are affected.

"Control Authority" shall mean the Board.

"Cooling Water" shall mean the cleaned wastewater discharged from any system of heat transfer such as condensation, air conditioning, cooling or refrigeration.

"County" shall mean Hamilton County, Ohio.

"Days" shall mean calendar days in reference to time period requirements.

"Daily Maximum" The arithmetic average of all effluent samples for a pollutant collected during a calendar day.

"Daily Maximum Limit" The maximum allowable discharge limit of a pollutant during a calendar day. Where Daily Maximum Limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where Daily Maximum Limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

"Degree of Protection from Flooding" shall mean the extent of protection from flooding designed and achieved.

"Department" shall mean the District established by the City of Cincinnati for the purpose of managing and operating The Metropolitan Sewer District of Greater Cincinnati for the Board of County Commissioners of Hamilton County, Ohio, and its authorized employees.

"Department of Water Works" shall mean the Department of Water Works of the City of Cincinnati.

"Development" shall mean any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operations.



"Director" shall mean the Director of the District, or his authorized agent.

"District" shall mean The Metropolitan Sewer District of Greater Cincinnati.

"EPA" shall mean The United States Environmental Protection Agency (Distinguished from the Ohio EPA).

"Existing Source" Any source of discharge that is not a "New Source."

"Family Units" shall mean the number of single-family residential equivalent units served as one customer. Such equivalents are determined and are to be as assigned by the District. One single-family residential unit equals 400 g.p.d. of sanitary sewage.

"Federal Act" shall mean The Federal Water Pollution Control Act (PL 92-500), the Clean Water Act of 1977 (PL 95-217), the Water Quality Act of 1987, and any amendments thereto; as well as the guidelines, limitations, and standards promulgated by the Environmental Protection Agency pursuant to the Act.

"Flood" or "Flooding" shall mean a general or temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters; and the usual and rapid accumulations or runoff of surface waters from any source.

"Flood Plain" shall mean any land susceptible to being inundated by water from any source.

"Floodway" shall mean that portion of any flood plain area which is needed to carry the flow of water during a base (100 year) flood without causing an increase in the base flood level of more than one (1) foot NGVD (mean sea level).

"Floodway Fringe" shall mean that part of any flood plain that is outside of the floodway area.

"Foundation Drain" shall mean any subsurface drain used to collect subsurface water from a footer or substructure of a building.

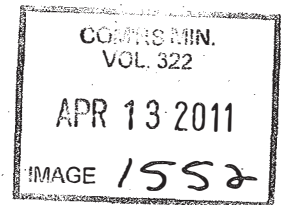
"Garbage" shall mean solid wastes from the domestic and commercial preparation, cooking, or dispensing of food, or from the handling, storage, or sale of produce. (Distinguished from Shredded Garbage).

"General Wastewater Discharge Permit" shall mean a single Wastewater Discharge Permit that covers facilities with similar and types of discharge. Categorical Industrial Users are not eligible for a General Wastewater Discharge Permit.

"Grab Sample" A sample that is taken from a wastestream without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.

"Holding Tank Waste" shall mean any sanitary waste from holding tanks or chambers such as are used in connection with boats, chemical toilets, campers, trailers, or other isolated facilities from which sanitary wastes emanate. This definition includes sanitary wastes from septic tanks.

"Incompatible Pollutant" shall mean any pollutant that is not a compatible pollutant as defined in this



section.

"Indirect Discharge or Discharge" The introduction of pollutants into the POTW from any nondomestic source.

"Industrial Plant" shall mean any facility that discharges industrial wastes.

"Industrial User" ("IU") shall be any user that discharges industrial wastes.

"Industrial Wastes" shall mean the wastes admissible to the wastewater treatment system from industrial manufacturing processes, trade or business; or from the development, recovery, or processing of natural resources, as distinct from sanitary sewage.

"Instantaneous Limit" The maximum concentration of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

"Interference" A discharge that, alone or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of the District's NPDES permits or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder, or any more stringent State or local regulations: section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.

"Kjeldahl Nitrogen" shall mean the sum of free-ammonia and organic nitrogen compounds that are converted to ammonium sulfate $(\text{NH}_4)_2\text{SO}_4$, under test conditions. The values shall be as determined by the methods of Analytical Testing.

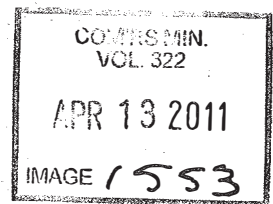
"Local Limits" specific discharge limits developed and enforced by the District upon industrial or commercial facilities to implement the general and specific discharge prohibitions listed in 40 CFR 403.5 (a)(1) and (b).

"Long Term Discharge" shall mean the discharge of industrial waste or contaminated stormwater/groundwater for a continuous, non-discrete period.

"Maintenance" shall mean keeping the wastewater treatment works in a state of repair and shall include expenditures necessary during the service life of the treatment works to maintain the capacity (capability) for which said works were designed and constructed.

"Mass Emission Rate" shall mean the weight of material discharged to the sewer system during a given time interval. Unless otherwise specified, the mass emission rate shall mean kilograms per day of a particular constituent or combination of constituents.

"Medical Waste" Isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.



“Mid-Tier Categorical Industrial User” is a significant Industrial User subject to categorical pretreatment standards under 40 C.F.R. 403.6 and 40 C.F.R. chapter I, subchapter N that the Director has determined is subject to a reduction in the user’s reporting requirements and the District’s monitoring and inspection requirements, upon satisfaction of the conditions as provided in paragraphs 1 to 4 of this definition:

- (1) The Industrial User’s total categorical wastewater flow does not exceed any of the following:
 - a. Zero point zero one per cent of the design dry weather hydraulic capacity of the POTW, or five thousand gallons per day, whichever is smaller, as measured by a continuous effluent flow monitoring device unless the Industrial User discharges in batches;
 - b. Zero point zero one per cent of the design dry weather organic treatment capacity of the POTW; and
 - c. Zero point zero one per cent of the maximum allowable headworks loading for any pollutant regulated by the applicable categorical pretreatment standards for which approved local limits were developed by the District in accordance with paragraph (C)(4) of rule 3745-3-03 of the Ohio Administrative Code;
- (2) The Industrial User has not been in significant noncompliance, as defined in Section 1509 of these Rules and Regulations, for any time in the past two years;
- (3) The Industrial User does not have daily flow rates, production levels, or pollutant levels that vary so significantly that decreasing the reporting requirement would result in data that are not representative of conditions occurring during the reporting period pursuant to Sections 1506.1 and 1506.3 of these Rules and Regulations;
- (4) The Industrial User is not located upstream of a combined sewer overflow or sanitary sewer overflow, unless the procedures for the categorization of such a user as a mid-tier categorical Industrial User and issues related to combined sewer overflows or sanitary sewer overflows are specifically addressed in:
 - a. The District’s approved long term control plan;
 - b. The District’s approved combined sewer system operation plan implementing the nine minimum controls; or
 - c. The District’s program modification request submitted to the director.

"mg/l" shall mean milligrams per liter.

“Monitoring Waiver” shall mean a statement certifying that there has been no increase in a pollutant concentration in a wastestream due to the activities of an Industrial User. Where granted by the Director, a monitoring waiver shall fulfill the requirements of monitoring for the approved pollutants.

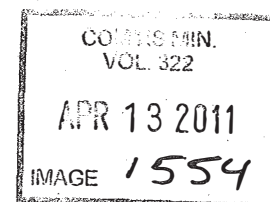
“Monthly Average” The sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

“Monthly Average Limit” The highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

"MSD" shall mean the Metropolitan Sewer District of Greater Cincinnati.

"MSD R & R" shall mean these Rules and Regulations where cited as such.

"Natural Outlet" shall mean any outlet into a watercourse, pond, ditch, lake or other body of surface or groundwater.



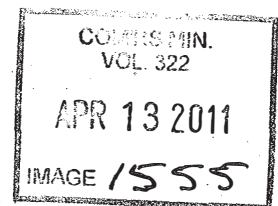
"New Source"

- (1) Any building, structure, facility, or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under section 307(c) of the Act that will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:
 - a. The building, structure, facility, or installation is constructed at a site at which no other source is located; or
 - b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an Existing Source; or
 - c. The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an Existing Source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the Existing Source, should be considered.
- (2) Construction on a site at which an Existing Source is located results in a modification rather than a New Source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.
- (3) Construction of a New Source as defined under this paragraph has commenced if the owner or operator has:
 - a. Begun, or caused to begin, as part of a continuous onsite construction program
- (4) any placement, assembly, or installation of facilities or equipment; or
- (5) significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 - a. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph

"Non-contact Cooling Water" Water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

"Non-Significant Categorical Industrial User" (NSCIU) is an Industrial User subject to 40 C.F.R. chapter I, subchapter N that the District may determine is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User does not discharge more than one hundred gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the categorical pretreatment standard) and the conditions in paragraphs (1) to (4) of this definition are met:

- (1) The Industrial User, prior to the District's finding, has consistently complied with all applicable categorical pretreatment standards and requirements;
- (2) The Industrial User annually submits the certification statement required in Section 1506.14.B of these Rules and Regulations [See 40 CFR 403.12(q)] together with any additional information necessary to support the certification statement;
- (3) The Industrial User never discharges any untreated concentrated wastewater; and
- (4) The Industrial User is not located upstream of a combined sewer overflow or a sanitary sewer overflow, unless the following conditions are met:



- a. The Industrial User does not discharge wastewater regulated by categorical pretreatment standards at any time; or
- b. The Industrial User has not been in significant noncompliance, as defined in Section 1509 of these Rules and Regulations, for any time in the past two years; and
- c. The procedures for the categorization of such a user as a non-significant categorical Industrial User and issues related to combined sewer overflows or sanitary sewer overflows are specifically addressed in:
 - i. The control authority's approved long term control plan;
 - ii. The control authority's approved combined sewer system operation plan implementing the nine minimum controls; or
 - iii. The control authority's program modification request submitted to the director.

"Non Significant Industrial User" ("NIU") An Industrial User that discharges LESS THAN an average of twenty-five thousand (25,000) gallons per day (gpd) of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); AND/OR is designated as such by the District on the basis that it does NOT have a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or Requirement.

"Normal Strength Sewage" shall mean sewage having average concentration values of not more than the following in the pollutant categories indicated:

Biochemical Oxygen Demand	240 mg/l
Suspended Solids	300 mg/l
Total Phosphorus as P	20 mg/l
Total Kjeldahl Nitrogen as N	25 mg/l
Biodegradable oils and greases in less than floating amounts.	

"NPDES Permit" shall mean National Pollutant Discharge Elimination System Permit.

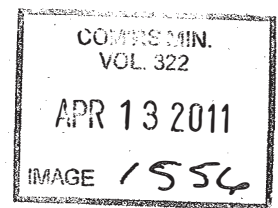
"Nuisance" shall mean anything which is injurious to health, or is indecent or offensive to the senses, or is an obstruction to the free use of property so as to interfere with human comfort or enjoyment of life or property, whether affecting individual interests per se or affecting at the same time an entire community or neighborhood of any considerable number of persons; although the extent of the annoyance, interference or damage may not be inflicted equally upon the persons therein.

"OEPA" shall mean The Ohio Environmental Protection Agency.

"Operation" shall mean causing the wastewater treatment works to function for its intended purposes and shall include expenditures necessary during the service life of the wastewater treatment works to maintain the performance for which said works were designed and constructed.

"Pass Through" shall mean a discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of a District permit, including an increase in the magnitude or duration of a violation.

"Person" Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all Federal, State, and local governmental entities.



"pH" A measure of the acidity or alkalinity of a solution, expressed in standard units.

"Phosphorus" shall mean total phosphorus content in wastewater as determined by the methods of Analytical Testing.

"Pollutant" Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, Medical Wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater (e.g., pH, temperature, TSS, turbidity, color, BOD, COD, toxicity, or odor).

"Pollution" shall mean an alteration of the quality of the Water of the State by waste to a degree that affects such waters for beneficial use or facilities that serve such beneficial uses. Pollution may include contamination.

"Publicly Owned Treatment Works" (POTW) shall mean the same as "Wastewater Treatment System" ("WTS"). A treatment works, as defined by section 212 of the Act (33 U.S.C. section 1292), which is owned by the Control Authority. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances, which convey wastewater to a treatment plant.

"Pretreatment" The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable Pretreatment Standard.

"Pretreatment Requirements" Any substantive or procedural requirement related to pretreatment imposed on a User, other than a Pretreatment Standard.

"Pretreatment Standards or Standards" Pretreatment Standards shall mean prohibited discharge standards, categorical Pretreatment Standards, and Local Limits.

"Premises" shall mean a parcel of real estate including any improvements thereon that is determined by the District to be a single user for purposes of using the services of the wastewater treatment system.

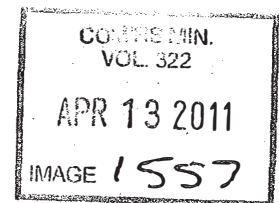
"Private Sewer" shall mean a sewer that is owned, operated, and maintained by a person other than a public authority.

"Prohibited Discharge Standards or Prohibited Discharges" Absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 1502.1 of this ordinance.

"Public Authority" shall mean any government entity having jurisdiction.

"Public Sewer" shall mean a sewer that is controlled, owned, operated, and maintained by a public authority.

"Regional Administrator" shall mean the Regional Administrator of the United States Environmental



Protection Agency for Region V.

"Replacement" shall mean expenditures for obtaining and installing equipment, accessories, or appurtenances which are necessary during the service life of the treatment works to maintain the capacity and performance for which said works were designed and constructed. Operation and maintenance includes replacement.

"Residential User" shall mean any single- or two-family housing unit.

"Sanitary Sewage" shall mean sewage containing water-carried wastes contributed from premises by reason of human occupancy.

"Sanitary Sewer" shall mean a sewer that carries sanitary sewage and industrial wastes and to which storm, surface and groundwaters are not intentionally admitted.

"Scheduled Monitoring" shall mean monitoring performed by MSD.

"Self-monitoring" shall mean monitoring performed by the User.

"Septic Tank Waste" Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks, and household sewage treatment systems or small flow on-site sewage treatment systems (as defined in ORC 3718.01).

"Service Area" shall mean the local jurisdictions designated by the Board to which the services of the wastewater treatment system are provided by MSD.

"Severe Property Damage" in connection with a bypass means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"Sewage" shall mean a combination of the liquid and water-carried waste discharged from premises.

"Sewer" shall mean any pipe or conduit for conveying wastewater or drainage water.

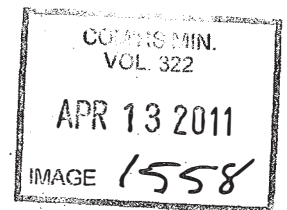
"Sewer System" shall mean all facilities for collecting, pumping, and transporting wastewater to the treatment facilities.

"Shall" is mandatory; **"May"** is permissive.

"Shredded Garbage" shall mean garbage that has been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than 2 inch in dimension (Distinguished from "Garbage").

"Significant Industrial User" (SIU) Except as provided in paragraph (3) of this definition a Significant Industrial User is:

- (1) Industrial Users subject to categorical pretreatment standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N, except the Industrial Users considered Non-Significant Categorical Industrial Users (NSCIU), as defined in these Rules and Regulations; and



(2) Any other Industrial User that:

- a. Discharges an average of twenty-five thousand gallons per day or more of process wastewater to the POTW (process wastewater excludes sanitary, non-contact cooling and boiler blowdown wastewaters);
- b. Contributes a process wastestream that makes up five per cent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
- c. Is designated as such by the District on the basis that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

(3) Upon a finding that an Industrial User meeting the criteria in paragraph (2) of this definition has no reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standard or Requirement, the District may at any time, on its own initiative or in response to a petition received from an Industrial User or POTW, and in accordance with paragraph (C)(6) of rule 3745-3-03 of the Administrative Code or 40 CFR 403.8(f)(6), determine that such Industrial User is not a Significant Industrial User.

"Significant Non Compliance" (SNC) see Article XV, Section 1509, Publication of Users in Significant Non Compliance.

"Single-family Residence" shall mean one room, or a suite of two or more rooms, with sanitary facilities in a dwelling, designed for or used by a family for living and sleeping purposes. "Family" is defined as an individual or any number of individuals who live together in a single household unit.

"Slug Load" or "Slug Discharge" Any discharge at a flow rate or concentration, which could cause a violation of the prohibited discharge standards in Article XV, Section 1502.1 of this ordinance. A Slug Discharge is any Discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch Discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, Local Limits or Permit conditions.

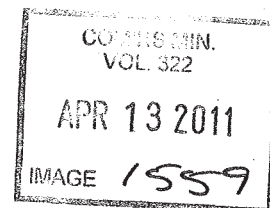
"Special Flood Hazard Areas" shall mean all that area within Zones A1-30 and unnumbered A Zones on the Flood Insurance Rate Maps of any community within the jurisdiction of the Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio; and all that area within said jurisdiction which is designated as being within the flood plain of various streams in Appendix A of the Storm Drainage and Open Space Master Plan for Hamilton County, Ohio.

"Special Permit" shall mean a permit issued for special conditions as directed by the District.

"Standard Industrial Classification" shall mean the classification of users based on the 1972 Standard Industrial Classification Manual (SIC), Office of Manpower and Budget of the United States of America.

"Standard Methods" shall mean the publication: STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, latest edition, American Public Health Association, American Water Works Association, Water Pollution Control Federation.

"Storm Sewer" or "Storm Drain" shall mean a sewer which carries storm waters, surface runoff, street wash waters and drainage, foundation drains, ground water, roof runoff, subsoil drains, subsurface drainage, swimming pool water, but which excludes sanitary sewage and industrial wastes, other than unpolluted cooling water and unpolluted industrial process water.



"Storm Water" Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

"Tap-in-Fee" shall mean a fee established by the Board for the benefit of connecting to the sewage treatment system operated by the District. The fee is the proportionate share of the capitalized cost of the facilities (refer to Section 1215 of these Rules and Regulations).

"Total Solids" shall mean solids that remain after all liquid has been evaporated, expressed in milligrams per liter. The values shall be as determined by the methods of Analytical Testing.

"Total Suspended Solids or Suspended Solids" The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and that is removable by laboratory filtering.

"Toxic Pollutant" shall mean any pollutant which is identified as such by the U.S. EPA or which is designated as toxic by the Director.

"Unpolluted Water" shall mean water to which no constituent has been added either intentionally or accidentally or which is designated as unpolluted by the Director.

"User" shall mean any person that discharges, causes, or permits the discharge of wastewater into a public sewer.

"User Charge" shall mean the amount levied on users of a treatment works for the cost of operation, maintenance and interim replacement of such works. Expenditures for obtaining and installing replacement equipment, accessories or appurtenances which are necessary during the service life of the treatment works to maintain the capacity and performance of such works for their normal life expectancy may be termed as interim replacements and are items to be included in the user charge.

"User Classification" shall mean the identification of a user as to the type of premises from which wastewater is discharged. Such classification shall be assigned by the District and shall include residential, industrial, public and commercial user.

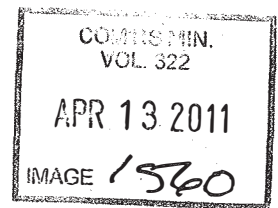
"Viscous" shall mean the characterization of a physical property of a fluid or semi-fluid which can result in detrimental resistance to wastewater flow from the fluid or semi-fluid itself or in combination with other substances.

"Waste" shall mean sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation; or of human or animal origin; or from any production, manufacturing, or processing operation of whatever nature, including such wastes placed within containers of whatever nature prior to, and for purposes of disposal.

"Wastewater" shall mean a combination of the liquid and water-carried wastes from premises together with any groundwater, surface water, or storm water that may be present.

"Wastewater Constituents and Characteristics" shall mean the individual chemical, physical, bacteriological and radiological parameters including volume and flow rate; and such other parameters that serve to define, classify or measure the contents, quality, quantity and strength of wastewater.

"Wastewater Treatment Plant" (WWTP) shall mean any arrangement of devices and structures used



for treatment of wastewater.

"Wastewater Treatment System" (WTS) shall mean the same as "POTW," and shall mean all of the connected treatment works necessary to meet the requirements of Title III of the Federal Act and involved in: (a) the transport of wastewater from premises to a plant or facility wherein treatment of the wastewater is accomplished; (b) the treatment of the wastewater to remove pollutants; and (c) the ultimate disposal, including recycling or reuse, of the treated wastewater and residues resulting from the treatment process. One wastewater treatment system normally would include one wastewater treatment plant or facility, but in instances where two or more wastewater treatment plants are interconnected, all of the interconnected wastewater treatment works thereof shall be considered as one wastewater treatment system.

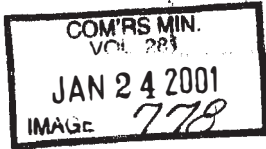
"Wastewater Treatment System (WTS) Service Charge" shall mean the charge levied against users to recover the costs of rendering wastewater treatment system service for normal strength sewage. This charge is a combination of the user charge and a charge for the local share of the capital cost of rendering such service.

"Wastewater Treatment System (WTS) Surcharge" shall mean the charge, over and above the WTS Service Charge, levied against users to recover the costs of rendering wastewater treatment system service for discharges whose strength is in excess of that of normal strength.

"Wastewater Treatment Works" shall mean any devices and systems used to develop and implement wastewater treatment management plans and practices which will achieve the goals of the Federal Act and the Board of County Commissioners of Hamilton County, Ohio. Wastewater Treatment Works include intercepting sewers, or outfall sewers; sewage collection systems; pumping, power, and other equipment and their appurtenances; and any other works which will be an integral part of the wastewater treatment process or treatment residue disposal system.

"Waterway or Watercourse" shall mean a channel in which Waters of the State flow either continuously or intermittently.

"Waters of the State" shall mean any water, surface or underground, including saline waters within the boundaries of the State, except those private waters which do not combine or effect a junction with natural surface or underground waters.



ARTICLE II

CONTROL OF SEWERS

Section 201 Control

All public and private sanitary and combined sewers, and all private sanitary and combined sewers which discharge into public sewers, in the Metropolitan Sewer District service area shall be controlled by the Director.

Section 202 Ownership

All public or private sanitary and combined sewers shall continue to be owned by the respective public or private owners now owning same until such time as the owner and the Board mutually agree to a transfer of ownership to the Board.

Section 203 Approval of Construction

No public or private sanitary or combined sewer shall be constructed within the jurisdiction of the District without the prior written approval of the Director.

Section 204 Connection to WTS

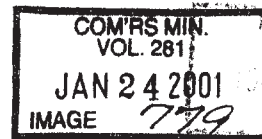
Any connection to a public or private sanitary or combined sewer within the jurisdiction of the District shall be subject to these Rules and Regulations and to any charges, rates, fees and assessments which are or may be established by the Board as being applicable, and shall be made under permits issued by the Director.

Section 205 Extension or Modification

No extension or modification shall be made to any sanitary or combined sewer, controlled by the District, without the prior written approval of the Director.

Section 206 Construction of Structures Over Sewers

The policy of the Board of County Commissioners of Hamilton County (BOCC) regarding the construction of structures over public sewers and appurtenances and regarding the construction of public sewers and appurtenances beneath structures within the jurisdiction of MSD is as follows:



MSD will permit no structure of any kind which can interfere with access to a public sewer or exert loading upon a public sewer to be placed in or upon a permanent sewer easement, excepting items such as recreational surfaces, paved areas for parking lots, driveways, or other surfaces used for ingress or egress, plants, trees, shrubbery, fences, landscaping or other similar items, being natural or artificial.

MSD will permit no public sewer to be constructed beneath a structure of any kind which can interfere with access to the said public sewer or exert loading upon the said public sewer, excepting items such as recreational surfaces, paved areas for parking lots, driveways, or other surfaces used for ingress or egress, plants, trees, shrubbery, fences, landscaping or other similar items, being natural or artificial.

Any deviation from the aforesaid restrictions may be allowed only by BOCC. An owner may petition for an exception by written request to BOCC. Each such request shall be considered on an individual basis, and BOCC will grant any such exceptions by resolution.

Section 207 Sewer Easement Restrictions

All easements for public sanitary and combined sewers obtained or granted after September 13, 1978, shall be subject to the following restrictions:

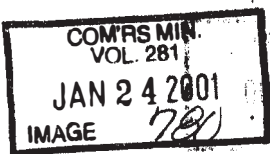
No structure of any kind which can interfere with access to said public sewer shall be placed in or upon a permanent sewer easement, excepting items such as recreational surfaces, paved areas for parking lots, driveways, or other surfaces used for ingress and egress, plants, trees, shrubbery, fences, landscaping or other similar items, being natural or artificial. Any of the aforesaid surfaces, paved areas, plants, trees, shrubbery, fences, landscaping or other similar items which may be placed upon such said permanent easement shall be so placed at the sole expense of the property owner, and the grantees or assigns of any permanent easement henceforth shall not be responsible to any present owners of the property, nor to their heirs, executors, administrators or assigns, for the condition, damage to, or replacement of any such aforesaid items, or any other items placed upon the easement, resulting from the existence or use of the said permanent easement by the grantees or assigns.

Any structure constructed on said property in which said permanent sewer easement exists shall be kept not less than three (3) feet outside the permanent sewer easement line nearest the site of the proposed structure.

Any deviation from the aforesaid restrictions shall be petitioned by written request to the Board or their assigns. Each such request shall be considered on an individual basis.

Section 208 Infiltration/Inflow to Private Sewers

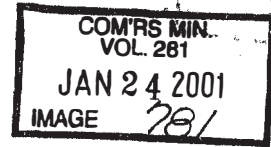
The owner of a private sanitary sewer shall be responsible for any future updates necessary to prevent excessive infiltration and/or inflow from entering the private sewer system.



Section 209 Degree of Protection from Flooding

MSD does not guarantee protection from flooding to those consumers who connect to the public sewer system. Potential for flooding varies with the geographic location and elevation of the property served. Varying conditions may affect the operation and maintenance of the sewer mains, building connections, pump stations and other sewer system appurtenances. It is recommended that consumers and their representatives investigate and become aware of local sewer conditions and topography, laws, rules and regulations so that the desired degree of protection for new construction can be designed and achieved.

ARTICLE III
COMBINED SEWERS



Section 301 Construction; Extension of Sewers

The construction of and/or extension to combined sewers are hereby prohibited, unless approved by the District.

Section 302 Connections to Combined Sewers

Except as may be modified by the Codes of the State of Ohio and the City of Cincinnati, Ohio, Basic building Code-Plumbing Code Section 1151-69, individual properties shall install a separation manhole at the junction of the building sewer-storm and building sewer-sanitary at the public right-of-way for the purpose of discharging combined wastes to a public combined sewer in accordance with Standard Drawing Acc. No. 49063.

In selected areas designated by the Director, separation for residential properties shall be provided for all new connections to the combined sewer systems. For residential properties, a "Y" connection and cleanout in accordance with Standard Drawing Acc. No. 49047 may be used in lieu of a separation manhole.

Section 303 Detention Requirements for Stormwater Connections or Modifications

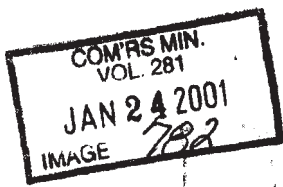
Stormwater connections or modifications which involve stormwater ultimately tributary to the combined sewer system shall be subject to the District's Policy for Stormwater Detention Facilities, as specified below:

POLICY FOR STORMWATER DETENTION FACILITIES

- A. The volume of stormwater detained shall be the difference in runoff volume from the predeveloped site over a ten-year event of one hour duration and the postdeveloped site under a twenty-five year event of one hour duration. The peak rate of runoff from the site after development for a twenty-five year storm event of one hour duration shall not exceed the predevelopment site peak runoff for a ten-year event of one hour duration.
- B. Peak flow rates shall be determined by the Rational Method which is appropriate for small drainage areas.

The basic formula for the Rational Method is $Q = CiA$

Where Q is the peak rate of runoff in cubic feet per second, C is the runoff coefficient, and i is the



average intensity of a storm of given frequency for a selected duration in inches per hour, and A is the area in acres.

- C. The required storage volume, S, in cubic feet, for the detention facility shall be computed by the following:

$$S = V*(1-Q1/Q2)*1.15$$

where $V = Q2*3600$ is the volume of runoff and 1.15 represents a 15 percent safety factor which may be applied at the discretion of the District.

Q2 is the post development peak flow for a twenty-five year storm of one hour duration and Q1 is the predevelopment peak flow for a ten-year storm of one hour duration. Q1 is also the maximum allowable release rate at storage volume S.

The above equation reduces to the simplified form:

$$S = 4140(Q2 - Q1)$$

or $S = 3630 (Q2 - Q1)$ without the safety factor.

- D. The applicable rainfall intensities for these storm events are provided below:

$i = 2.03$ inches/hour (ten-year)

$i = 2.42$ inches/hour (twenty-five year)

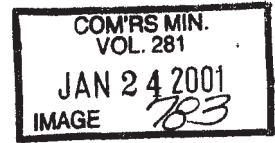
These rainfall intensities have been developed for Cincinnati from the latest precipitation data contained in the U.S. Department of Commerce Technical Memorandum NWS HYDRO-35 and Technical Paper No. 40, and supersede all previous work.

- E. Runoff coefficients (C-values) adopted for use in the Rational stormwater drainage in Cincinnati are provided below:

Runoff Coefficients
for the Rational Method

Land Use	Runoff Coefficient
Residential	0.5
Multi-family	0.6
Commercial and Business Districts	0.8
Industrial Districts	0.7

Open Space (parks, golf courses, cemeteries meadows, grass, woods, lawns, etc.)	0.3
Impervious Areas (parking lots, roads, rooftops)	0.9
Steep wooded hillside slope > 10 percent	0.5



Composite Runoff Coefficients- If the runoff coefficient varies over a subarea, a composite coefficient can be calculated as an average, weighted by the area of the various runoff coefficients.

- F. All detention facilities shall provide a passive emergency discharge outlet which shall be used only when the required storage volume is exceeded.
- G. Stormwater detention facilities shall be private with operation, maintenance and associated liability thereof being the responsibility of the owner.

A stormwater detention pond or lake location must have its private storm drainage limits prepared by the Developer or his Engineer on a record plat by the metes and bounds description. The record plat is to be submitted to MSD for review and approval. The District shall have the plat recorded.

The said limit area and all improvements in it shall be maintained continuously by the Owner. No structures, planting or other material, shall be placed or permitted to remain which may obstruct, retard or change the direction of the flow of water through the drainage channel in the said limits.

Similar requirements shall apply for private storm basin easement limits when multiple owners are involved.

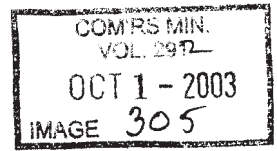
- H. Any waiver of or exception to these requirements shall be determined by the Director on a case-by-case basis.

For protection of the environment and downstream property, the District's detention requirements may be more restrictive in sensitive areas.

Responsibility for proper maintenance of detention facilities and appurtenances shall be with the property owner granted permission to make connection with the District's combined sewer system. It shall be the responsibility of any current or subsequent owner to transfer and record this responsibility should property ownership change.

Under no circumstances shall alterations affecting the volume, operation, or release rate be made without first obtaining written permission from the District.

Other governmental agencies may impose their own jurisdictional detention requirements providing the release rates and storage volumes meet or exceed those satisfactory to the District as determined by the Director



ARTICLE III COMBINED SEWERS

Section 304 Basement Flooding Problems In Areas Served By Combined Sewers

~~The policy of the Board allows for consideration of cost sharing between the Board and a local jurisdiction for improvements made in an area served by a combined sewer system to alleviate chronic basement flooding, as provided below:~~

The Director of the Metropolitan Sewer District shall identify to the Board of County Commissioners each project proposed for the reduction of combined sewer basement flooding, and he shall describe the project scope, its estimated total cost, and his recommendation for apportionment of costs among participating agencies. The Board shall approve in advance of any such project being undertaken.

The Director shall recommend only those projects where he has determined that the combined sewer contributes to chronic basement flooding.

The Director shall determine that the combined sewer does not presently have the capacity to convey the flow from a 10-year, 24-hour storm.

The basement flooding must be localized to a small area.

The improvement must significantly reduce the incidence of basement flooding.

The proposed project shall be the most cost effective alternative for the resolution of the chronic basement flooding problem.

~~The MSD share of the proposed improvement shall be less than 50%.~~



ARTICLE IV

USE OF THE WASTEWATER TREATMENT SYSTEM

Section 401 Unauthorized Discharge/Connection

No person shall discharge or cause to be discharged, either directly or indirectly, to the sanitary sewer system, surface water, foundation drains, groundwater, roof runoff, subsoil drains, subsurface drainage, cooling water, swimming pool water or unpolluted industrial process water as determined by the Director.

No water resulting from basement waterproofing solution methods shall be discharged to the sanitary sewer system directly or indirectly.

Should the owner of such an unauthorized connected premise fail to remove the unauthorized connection within ninety (90) days of being notified by the Director, the Director will issue a second violation notice giving the owner of the premises an additional 90 days to correct the violation and advising the owner that fines may be incurred commencing after thirty (30) days beyond the 90 day second violation period. After 30 days, third violation notices are sent advising the property owner that they may be incurring fines of up to \$100 per day accumulative until the violation is corrected.

Any such connection shall be considered unauthorized, and shall be subject to immediate removal by the owner of the premises so connected.

All removal costs shall be at the owner's expense, except as follows in specified areas: As authorized by the Ohio Revised Code Section 6117.012 and in accordance with the funded program for "District Funded Elimination of Improper Stormwater Inflows" as adopted by the Board of County Commissioners by Resolution dated January 2, 1992, the District may reimburse the participating owner of a premises up to a maximum of \$3,000 for corrective work to remove improper stormwater inflows which were in existence prior to April 12, 1968 or prior to the date such premises became under MSD jurisdiction.

Section 401-A Program for District-funded Elimination of Improper Stormwater Inflows

1. Purpose. The purpose of this Program is to reduce significantly improper stormwater inflows in the most cost-effective manner, in order to eliminate or reduce instances of surcharged sanitary sewers due to improper inflows, which are inimical to public health and welfare; and to maximize efficient operation of the District's wastewater treatment plants. "Improper stormwater inflows" as used in this Program include any kind of stormwater connection or inflow into the sanitary sewer system prohibited by MSD Rules and Regulations.
2. Eligible Participants. This Program may be utilized only for: (a) Improper stormwater inflows which were in existence prior to April 12, 1968 (the date of the agreement establishing MSD);



or, (b) for premises in areas which were included in the MSD at a later date, improper stormwater inflows which were in existence prior to the date of such inclusion. The reason for this limitation is to preclude implementation of this Program as to improper stormwater inflows established under MSD jurisdiction.

This Program may be implemented only in political subdivisions within the District in which building, health, or other codes prohibit future improper stormwater inflows.

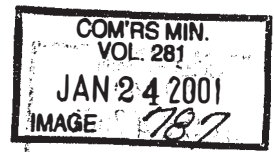
3. Target Areas; Orders. The Director of MSD (the "Director") may implement and make available this Program throughout the District, or instead only in target areas within the District determined by the Director as having the highest priority for reduction of stormwater inflows based on surcharging problems. When the Director issues orders for removal of improper stormwater inflows in an area where the Program is being implemented, the Director shall inform the owner of the availability of the Program. Participation in the Program shall be voluntary; owners declining to participate shall be required to proceed with removal of the improper inflow at the owner's expense.
4. Scope of Work. The Director shall determine for each participating premises the scope of work for reduction of improper stormwater inflows which may be paid for with Program funds, with the goal of achieving the most cost-efficient and timely reductions. If work paid for under this Program does not eliminate every improper stormwater inflow for a participating premises, the Director is not precluded from issuing supplemental orders concerning such premises under Section 401 of the Rules and Regulations of MSD.

For each participating premises the maximum cost which may be paid with MSD funds shall be \$3,000. If additional work is required it shall be performed at owner expense.

5. Approved Contractors. The Director may establish a list of private contractors approved for performing work under this Program based on qualifications including experience, quality of work and insurance. Participating owners may propose additional contractors for inclusion in the approved list.
6. Contractor Selection. Participating owners shall select an approved contractor in accordance with a competitive process established by the Director. After MSD review and approval of the contractor selection and contract price, the owner shall contract with the selected contractor for performance of the approved scope of work. Neither the District nor the Board of County Commissioners shall be a party to such contract. The owner's contract shall specify that the owner's final payment to the contractor shall not be made until the work is inspected and approved by MSD and approved by the owner, and shall require the contractor to secure any building permits as may be necessary.

The Director may establish rules authorizing reimbursement or partial reimbursement for owner-performed work.

7. Release. As a condition to participation in the program the owner shall release the Board of County Commissioners, the City of Cincinnati, and their officers and employees from all liability relating to the work.



8. Payment. After the work is inspected and approved by MSD and approved by the owner the Director shall authorize payment for 100% of the cost of the approved work (subject to the \$3,000 maximum) from District funds appropriated to Capital Improvement Project No. 91-18. partial payments may be made. Payment may be made to the owner or jointly to the owner and contractor. No payments under this Program are subject to reimbursement by owners.
9. Maintenance. Participating owners shall be responsible for maintaining any improvements constructed under this Program.
10. Director Rules. The Director may establish such further criteria and rules as are required to implement this Program. In implementing this Program the Director is authorized to waive strict application of the requirement in section 401 of the Rules and Regulations of MSD whereby removal of unauthorized connections to the sanitary sewer system is to be performed at the owner's expense.

Section 402 Municipalities

No sanitary sewer or sanitary sewer system shall be constructed within any municipality, which connects either directly or indirectly to a wastewater treatment works controlled by the District, until such municipality has adopted an ordinance prohibiting any unpolluted waters therefrom and meeting the standards of these Rules and Regulations. It shall be the responsibility of each municipality to enforce the provisions of said ordinance. The Director may refuse to permit a connection, either directly or indirectly, to the wastewater treatment system by or within any municipality until that municipality adopts such an ordinance.

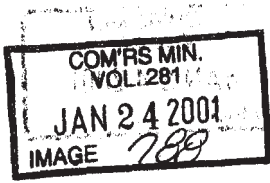
Section 403* Discharge of Polluted Waters

No person shall discharge or cause to be discharged to any natural outlet or storm sewer any sanitary sewage or other polluted waters. Effluent from privately owned individual household disposal devices, shall not be discharged to storm sewers.

- * Enforcement of this regulation is the responsibility of the several Boards of Health. Its appearance here is for informational purposes only.

Section 404 Discharge of Stormwater

Storm water and all other unpolluted drainage shall be discharged into such sewers as are specifically designed and designated as storm sewers or to a natural outlet where either is available in accordance with the requirements of the public jurisdictional authority. Said unpolluted drainage shall only be discharged to a combined sewer when a storm sewer or natural drainage course does not exist or is unavailable as determined by the District.



Section 405 Open Sewer

No person constructing a sanitary sewer or sanitary building sewer, shall leave same open, unsealed or incomplete in such fashion as to permit storm or subsurface water to enter such sewers.

Section 406 Excavation/Fill Permit

Any person owning or having possession, charge or management of any lot or parcel of real estate in which there exist public or private wastewater treatment works and on which an excavation/fill is to be made, shall, before making such, apply to the Director for a permit authorizing the same to be made. This application shall consist of submitting drawings to the appropriate agency showing plan and profile of the existing and proposed work to be performed over the existing sewer. These plans shall be sealed and signed by a Registered Engineer or Surveyor.

Prior to any work commencing, the owner/applicant shall engage an approved engineering firm to inspect the existing sewer system and submit to the District a written report with a video tape and/or photographs of the existing conditions of said sewer. In addition, above ground shots showing the area from manhole to manhole will be required. This report shall also include items such as T-Locations, voids, distortions from original shape, cracks in invert, crown, etc., sediment buildup, active or inactive slide conditions and the station or distance from existing manholes concerning each item or other pertinent information. This report shall be signed and sealed by a registered engineer and will be reviewed by the District to determine if replacement or rehabilitation of the sewer system is necessary.

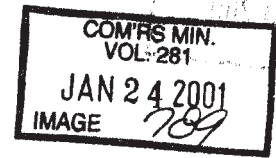
The owner/applicant shall also submit a letter of intent from the engineering firm stating that they will submit to the District a final report, including the items listed above, no sooner than one year after the work has been completed.

Prior to any inspection work commencing, said engineering firm shall be required to sign a waiver of liability holding the District (City of Cincinnati/Hamilton County Board of Commissioners) harmless from all claims, action, damages or injuries to persons, etc., which may occur while inspecting the existing and/or new sewers.

If the Director is satisfied that the proposed excavation/fill will not obstruct, damage or interfere with any lawfully existing public or private wastewater treatment works, under his management, he shall issue a permit authorizing the fill.

In the event it becomes necessary to adjust, relocate or otherwise modify any existing public or private wastewater treatment works as a result of the excavation/fill, the applicant authorized to make the excavation/fill shall, at his expense, make such adjustments, relocations or modifications, as required by the Director, before or during the excavating/filling operation. The applicant shall post a bond, in an amount to be determined by the Director, covering the replacement cost of the existing or modified public or private wastewater treatment works and guaranteeing that the aforementioned excavation/fill will not damage the public or private wastewater treatment works either existing or modified. The bond shall be in force for a period of one (1) year after the work is completed. It will be the owner's/applicant's responsibility to contact the District when all work has been completed to commence the one year waiting

period prior to the final inspection taking place.

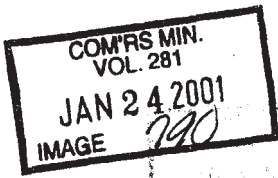


Section 407 Tampering; Damaging

No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, deface, cover, or tamper with any wastewater treatment works which is a part of the wastewater treatment system under the Director's management. Any person violating this provision shall be subject to immediate arrest under charge of disorderly conduct.

Section 409 Retention of Records

All Users subject to these Rules and Regulations shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or in behalf of a User in connection with its discharge. All records that pertain to matters which are the subject of enforcement or litigation activities brought by the District shall be retained and preserved by the User until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired. Any or all of the aforementioned shall be made available to the District, OEPA and USEPA for inspection and photocopying at reasonable times and places.



ARTICLE V

APPROVAL OF PLANS FOR WASTEWATER TREATMENT WORKS

Section 501 Approval of Plans and Specifications

No sanitary or combined sewers which discharge either directly or indirectly into the wastewater treatment system, wastewater lift stations, or wastewater treatment plants under the management of the Director, shall be constructed without prior written approval of the Director of the plans and specifications for the sewer improvement as to (a) Concept and (b) Detail.

Approval of wastewater lift stations and wastewater treatment plants will be limited to providing service only to those areas where a gravity sanitary sewer system is not feasible as determined by the Director. The Director will consider the following factors in determining feasibility:

1. 50-year economic analysis;
2. Interest rate;
3. Offsetting environmental concerns;
4. Availability of necessary easements;
5. Other items or factors applicable to the specific situation.

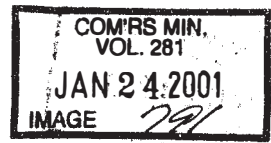
Section 502 Plan Submission Requirements

Plans submission requirements for Review shall be as follows:

CONCEPT REVIEW

A. LETTER: (To contain the following):

1. A request for plan review and approval.
2. Type of development, e.g., residential, commercial, industrial, etc. Include information as to size of development, number of units, etc.
3. An estimate of sanitary flow generated by the proposed development.
4. An estimate of cost for the wastewater treatment works, including a separate item for any wastewater treatment plant or wastewater lift station proposed in the design.
5. A time schedule for construction of the development in terms of dwelling units per year or proportion of the estimated flow to be added to the wastewater treatment system.



B. PLANS:

1. Three (3) prints showing proposed development on a 200 scale Hamilton County Topographic Map. (Submit five (5) prints if a Lift Station or Treatment Plant is proposed). This plan should show street layouts, existing sanitary, combined, and storm sewers, including sewer numbers, sizes, grades, locations and invert elevations. All existing work should be shown with dashed line work. With solid line work, engineer should show proposed sanitary and storm sewer locations, sizes, grades and flow arrows (or invert elevations).
2. In lieu of the above, the engineer may elect to submit detailed construction drawings for concept reviews. In such cases, the same number of sets as outlined above will be needed. The letter containing the information requested above will be necessary in either case.
3. Grading Plan.

C. FIFTY (50) YEAR ECONOMIC ANALYSIS FOR WASTEWATER LIFT STATIONS AND TREATMENT PLANTS

A 50-year economic analysis for proposed lift stations or wastewater treatment plants must be submitted with the request for concept approval in accordance with Articles VII and VIII. Guidelines for the preparation of the 50-year economic analysis are available upon request.

DETAIL REVIEW

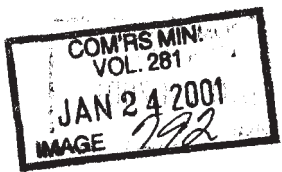
1. Prior Concept Approval.
2. Four (4) sets of Detailed Plans.
3. Drainage Area Map.
4. Drainage Computations.

CONCURRENT CONCEPT AND DETAIL REVIEW

If the nature or simplicity of the proposed wastewater treatment works is such that concept and detail reviews can, in the opinion of the District, be effectively and efficiently accomplished concurrently, the District may elect to do so.

Section 503 Municipal Approval

Plans for wastewater treatment works, which are to be constructed in municipalities, must be approved by the municipality's engineer before approval by the District.



Section 504 Plan Scales

Construction plans shall be drawn on 24" x 36" sheets to a minimum scale of one (1) inch equals fifty (50) feet. Area plans shall be drawn to a scale of one (1) inch equals two hundred (200) feet. Reduced prints will not be accepted.

Section 505 Plan Elevation Reference

All elevations proposed and shown shall be referenced to sea level datum and each set of plans shall show the description and elevation of the public bench mark (or marks) used in the development survey.

Section 506 Numbering System

All wastewater treatment works shall be numbered in accordance with the system of the District.

Section 507 Signature and Seal

All plans shall bear the signature and seal of the registered professional engineer who has prepared them and shall provide space for the approval of the Director.

Section 508 OEPA Approval

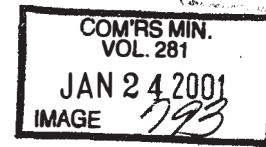
Plans requiring the approval of the State of Ohio Environmental Protection Agency will be transmitted by the Director following his approval.

(Section 509 DELETED)

Section 510 Expiration of Plan Approvals

Concept approval of proposed Wastewater Treatment Works shall become void if plans for detailed review have not been submitted within twelve (12) months and if detailed plans have not been approved within Eighteen (18) months from the date of the concept approval letter.

Detailed approval of proposed Wastewater Treatment Works shall become void if construction has not commenced within twelve (12) months (and completed within thirty-six (36) months) from the date of the approval of construction letter. Concept and detailed approval may be extended by the Director for a period not to exceed 12 months.



Section 511 Easement Requirements

In cases where the public sewer is located outside the public Right-of-Way, the developer's engineer/surveyor will be responsible for providing the District with the appropriate easement plat. The easement plat provided shall be in approved format, shall bear the signature of a registered surveyor and shall provide space for approval by MSD and the County Administrator.

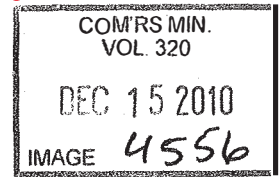
Section 512 Easements for Future Sewers

Developers shall provide permanent and temporary construction easements for future sewer access for the unsewered properties and/streets bordering proposed developments. The location of these easements will be determined during the detail review process.

Section 513 Policy Concerning Sewage Holding Tank Discharge

The policy of the Board pertaining to discharge of sewage holding tank wastes permits installation and operation of sewage holding tanks for buildings located in areas where public sewers do not exist or where sewers are planned to be installed in the near future, as follows:

- A. The Director of the Metropolitan Sewer District shall permit sewage holding tank wastes to be discharged only to a facility which has sufficient capacity to receive the said wastes.
- B. The Director of MSD shall NOT permit any discharge of sewage holding tank wastes which will create conditions of sewer overloading, surcharging, or overflowing, or which will result in inconvenience, unpleasant or potentially unhealthful conditions, property damage and/or violation of Federal and/or State regulations pertaining to water quality and the environment.



Section 514 Development Provisions

I. Acquisition by Hamilton County of Sanitary Facilities or Connection Credit Storm Water Facilities Constructed or Made Available by Private Sewer Development

A. General Provisions – Definitions.

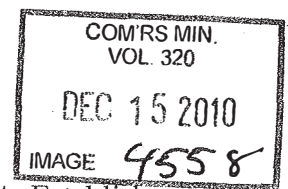
For the purposes of this Section 514:

1. Connection Credit Stormwater Facilities means permanent storm water infrastructure constructed for the development of commercial or residential property in order to establish connection credits under Subsection VI of this Section 514, such as sewers, manholes, pervious pavement, or other appurtenances that promote the removal of storm water from the combined sewer system and are determined by the Board to be cost effective measures to comply with binding orders issued by the Federal Court in Civil Action No. I C1-02-107, including orders concerning Combined Sewer Overflows, Wastewater Treatment Plants and Implementation of Capacity Assurance Program Plan for Sanitary Sewer Overflows approved by the Court, as the same may be amended.
2. Sanitary Facilities means sanitary sewers; force mains; lift or pumping stations; facilities for the treatment, disposal, impoundment, or storage of wastes; and excess capacity in any of the above Sanitary Facilities.
3. Limited Sanitary Facilities means:
 - a. Sanitary sewer main extensions from the down-stream boundary of a participating new development to the point of connection with the existing public sewer main that the District has determined is the appropriate connection point;
 - b. If needed for the development, sanitary sewer main installation along a new development's boundary and across the frontage of other properties not included in the new development;
 - c. Sanitary Facility Improvements (such as manhole or pipe rehabilitation) constructed in order to create connections credits under Subsection V of this Section 514; or
 - d. Wastewater treatment plants.
4. “Tap-in Fee Reimbursement Agreement” means an agreement to reimburse a person or entity for eligible costs for the construction of certain Limited Sanitary Facilities and/or the construction of certain

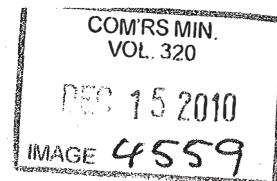
Connection Credit Stormwater Facilities with available tap-in fees.

B. Acquisition of Sanitary Facilities.

1. Whenever Sanitary Facilities have been acquired or constructed by and at the expense of a person or entity for the purpose of providing sewer service to territory within the District, and the Board deems it appropriate to acquire by negotiation (including by purchase, gift, public dedication and acceptance, or other means of transfer) and under such terms the Board finds to be reasonable, the County Sanitary Engineer through the Director shall examine said Sanitary Facilities.
2. If the County Sanitary Engineer finds such Sanitary Facilities properly designed and constructed, he shall certify such findings to the Board through the Director and the Board may accept and acquire the Sanitary Facilities under terms it finds are reasonable.
3. In all cases of the acquisition of Sanitary Facilities (including the purchase of excess capacity or extra work) by the Board, an agreement shall be entered into between the Board and the person or entity requesting the Board to acquire the Sanitary Facilities.
4. An agreement under this Subsection B shall include:
 - a. a description of the Sanitary Facilities requested to be acquired;
 - b. the basis for the acquisition;
 - c. the purchase price (if any);
 - d. applicable construction standards;
 - e. inspection requirements;
 - f. time table for construction and transfer of ownership, easement or other property rights, warranty assignments;
 - g. conditions for payment or reimbursement (if any)
 - h. other terms and conditions the Board deems reasonable.
5. The agreement shall not become effective unless and until accepted by the Board in a Resolution adopted at a regular public session and entered into the Minutes of the Board.



- C. Acquisition of Connection Credit Stormwater Facilities Constructed to Establish Connection Credits.
1. Whenever Connection Credit Stormwater Facilities have been constructed by and at the expense of a person or entity in order to establish connection credits under Subsections VI of this Section, and the Board deems it appropriate to acquire the Connection Credit Stormwater Facilities by negotiation (including by purchase, gift, public dedication and acceptance, or other means of transfer) under such terms the Board finds to be reasonable, the County Sanitary Engineer through the Director of the Metropolitan Sewer District shall examine said Connection Credit Stormwater Facilities.
 2. If the County Sanitary Engineer finds such Connection Credit Stormwater Facilities have been properly designed and constructed, he shall certify such findings to the Board and the Board may accept and acquire the Connection Credit Stormwater Facilities under terms it finds are reasonable.
 3. In all cases involving the acquisition of Connection Credit Stormwater Facilities by the Board under this subsection C, (including the purchase of excess capacity or extra work), an agreement shall be entered into between the Board and the person or entity requesting the Board to acquire the Connection Credit Stormwater Facilities.
 4. An agreement under this Subsection C shall be subject to the requirements of these Rules, and shall, at a minimum, include:
 - a. a description of the Connection Credit Stormwater Facilities requested to be acquired;
 - b. the basis for the acquisition cost of the Connection Credit Stormwater Facilities;
 - c. applicable construction standards;
 - d. inspection requirements;
 - e. time-table for construction and transfer of ownership and dedication ;
 - f. easement or other property rights;
 - g. warranty assignments;
 - h. conditions for payment;



- i. such other terms and conditions the Board deems reasonable and appropriate.

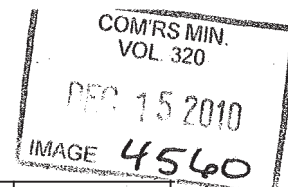
- 7. The agreement shall not become effective unless and until accepted by the Board in a Resolution adopted at a regular public session finding that the terms of the Agreement are in the best interest of the ratepayers and the public served by the District, and entered into the Minutes of the Board.

II. Purchase of Excess Capacity due to Requested Over-sized Gravity Sewer Mains or Extra Work.

- A. If a person or entity contemplates the purchase of excess sewer capacity by Hamilton County, an agreement between the Board and person or entity must be executed and the District's Capital Improvement Plan must be amended to include the project. This agreement must include the timetable for construction, basis for determining the purchase price, easement rights, and conditions of payment. This will then be the basis upon which the District's Capital Improvement Plan is amended, with Board approval, to include the project in the Plan. The District may also request and pay for extra work related to a sewer main (e.g., the District requests the sewer main be deeper, the sewer main be extended along the frontage of a development, or other modification to the design of the project beyond the District's standard engineering requirements), in which case a project agreement shall specify the details and payment for the extra work.
- B. The minimum size of gravity sanitary sewers shall be eight inches (8") in diameter. Costs for manholes shall not be included in the purchase price as manholes are not affected by upsizing of the main sewer line, unless additional manholes are required by the District, in which case such costs shall be included.
- C. The determination of the purchase price of excess sewer capacity in a gravity sewer line that has been constructed to serve territory outside of the development for which it was originally constructed shall be in accordance with the tables below and shall be determined by using the actual documented cost of installing the upsized sewer, less engineering, easement acquisition and financing costs.

Relative Sewer Costs¹

	<u>Size Required by MSD</u>					
<u>Size Necessary for Development</u>	8"	12"	15" & 16"	18"	20" & 21"	24"
8" as Base	0.0%	13.0%	21.9%	29.1%	37.1%	43.2%



12" as Base		0.0%	9.9%	18.0%	27.0%	34.6%
15" & 16" as Base			0.0%	9.1%	19.4%	27.5%
18" as Base				0.0%	11.5%	20.0%
20" & 21" as Base					0.0%	9.9%

As an example, the cost of upsizing a sewer or section of sewer from 8" to 18" would be equal to:

$$1 - (1.00/1.41) \times \text{Cost of 18" sewer}$$

where 1.41 is the relevant MSD Required Size Factor; or 29.1% of the cost of the 18" sewer.

Relative Jack & Boring Costs¹

	<u>Size Required by MSD</u>					
<u>Size Necessary for Development</u>	8"	12"	15" & 16"	18"	20" & 21"	24"
8" as Base	0.0%	24.8%	38.7%	50.0%	55.6%	62.0%
12" as Base		0.0%	18.7%	33.8%	41.2%	49.5%
15" & 16" as Base			0.0%	18.7%	27.5%	38.3%
18" as Base				0.0%	11.5%	23.7%
20" & 21" as Base					0.0%	14.5%

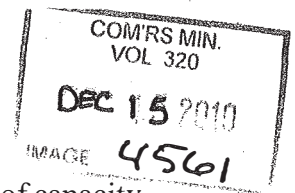
¹(These tables are not intended to include extraordinary circumstances, such as an alignment change or extreme soil conditions. Refer to Sections D and F for such circumstances.)

As an example, the cost of upsizing a sewer or section of sewer from 12" to 24" requiring the jack and boring procedure would be equal to:

$$1 - (1.00/1.98) \times \text{Cost of 24" sewer}$$

where 1.98 is the relevant District Required Size Factor; or 49.5% of the cost of the 24" sewer.

- D. In extenuating circumstances, such as (but not limited to) the discovery of an extraordinary benefit to the District, the Director (or his designee) shall have the authority to increase the purchase cost of the excess sewer capacity, sewer main extension, or extra work by up to, but not to exceed, 10% of the total project cost as it appears in the project agreement or the Capital Improvement Plan, subject to the limitations described in Sections E, F, and G.



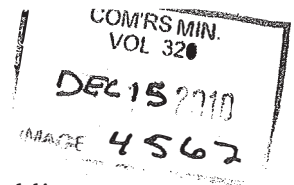
- E. The Board's share of the costs in no case shall exceed the proportion of capacity serving the territory outside the development compared with the capacity serving inside the development. For example, if 60% of the capacity will serve territory inside the development, then the Board's share is limited to a maximum of 40% of costs or if 40% of the capacity will serve territory inside the development, then the Board's share is limited to 60%.
- F. Change orders may be approved by the Director (or his designee) up to a cumulative amount of 10% of the total project cost as set forth in the project agreement and Capital Improvement Plan. Change orders greater than this total must be formalized as an amendment to the project agreement and Capital Improvement Plan.
- G. Payment may only be made after the sewer or segment of sewer has been installed, contractor's invoices and other such proof of installation, cost and payment have been submitted to the Director (or his designee) to substantiate the purchase price, and the sewer or segment of sewer has been examined by the County Sanitary Engineer and is accepted as properly designed and constructed, in accordance with the project agreement. Payment may be made only upon the submission of the proper forms and documentation.

III. Purchase of Excess Capacity due to Requested Over-sized Pump Station, Wastewater Treatment Plan, Force Main or Application of Pipe Bursting.

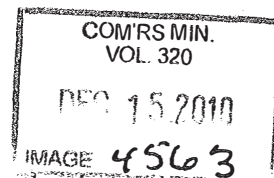
In the event that a pump station, waste water treatment plant, force main or pipe bursting application is required by the District to be upsized or constructed to provide capacity for territory outside of the development for which it was originally constructed, the purchase price of the excess capacity shall be determined on a case-by-case basis as agreed to in an agreement due to the large variance in scope and costs between such projects, subject to the limitations described in Sections F and G, above. The method for determining the purchase price shall consist of a comparison of the developer's costs of construction required to serve the development for which it was constructed versus the developer's costs of construction to serve territory outside the development.

IV. Tap-in Fee Reimbursement Program for the Acquisition of Limited Sanitary Facilities by Public Dedication and Acceptance, and for the Reimbursement of Connection Credit Stormwater Facilities or Sanitary Facility Improvements

- A. Purpose. In order to promote economic development and enhance through cost effective means compliance with Federal Court Global Consent Decree (Civil Action No. I C1-02-107) on Combined Sewer Overflows, Wastewater Treatment Plants and Implementation of Capacity Assurance Program Plan for Sanitary Sewer Overflows approved by the Court on June 9, 2004, as may be amended, and in order to attract new customers within Hamilton County and the District, Tap-in Fee Reimbursement Agreements may, where deemed appropriate by the Board, be negotiated for approval by the Board with a party that:

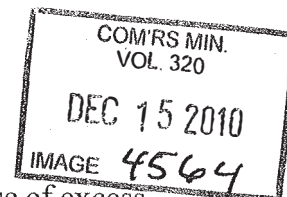


1. Requests reimbursement from tap-in fees for construction and public dedication of certain new or upgraded Limited Sanitary Facilities constructed by the party that the Board determines are necessary and appropriate for the collection, transportation and treatment of sewage from new development; and/or
 2. Requests reimbursement from tap-in fees for the eligible costs to construct Connection Credit Stormwater Facilities or Sanitary Facility Improvements.
- B. The use of Tap-in Fee Reimbursement Agreements to implement this Part IV of Section 514 shall be limited to the construction of Limited Sanitary Facilities, Connection Credit Stormwater Facilities and Sanitary Facility Improvements within Hamilton County.
- C. If connection credits are issued for Connection Credit Stormwater Facilities which are not to be acquired by the Board, the Board may contribute towards the costs of construction of such Connection Credit Stormwater Facilities a maximum amount per affected parcel not to exceed available tap-in fees generated by such Connection Credit Stormwater Facilities under terms and conditions which the Board finds are reasonable and are in accordance with the requirements and limitations of Section 6117.012 of the Ohio Revised Code.
- D. Payments under a Tap-in Fee Reimbursement Agreement will be based on:
1. Tap-in fees from the new users who connect to and will be served by the new or upgraded Limited Sanitary Facilities where only Limited Sanitary Facilities are constructed; OR
 2. Tap-in fees from the new users who connect to and will be served by the new or upgraded Limited Sanitary Facilities and from new users who are now able to and in fact connect to an existing sewer as a result of the construction of Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements where both Limited Sanitary Facilities and Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements are constructed; OR
 3. Tap-in fees from the new users who are now able to and in fact connect to an existing sewer as a result of the construction of Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements where only Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements are constructed.
- E. The Limited Sanitary Facilities, Connection Credit Stormwater Facilities and Sanitary Facility Improvements shall be constructed at the cost and risk of the party requesting the Tap-in Fee Reimbursement Agreement and at no cost to the



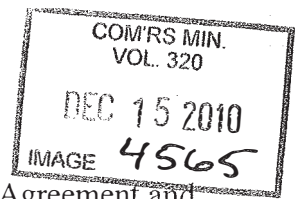
Board with the exception of that part of the Limited Sanitary Facilities that is excess sewer capacity due to over-sizing requested and purchased by the Board in accordance with the excess capacity purchase provisions of this Section 514.

- F. Sanitary flows from a new development shall be consistent with the District's Wet Weather Improvement Plan, including the CSO Long-term Control Plan.
- G. Sanitary flows from a new development shall not interfere or delay compliance with the Federal Court Global Consent Decree (Civil Action No. I C1-02-107) on Combined Sewer Overflows, Wastewater Treatment Plants and Implementation of Capacity Assurance Program Plan for Sanitary Sewer Overflows approved by the Court on June 9, 2004, as may be amended.
- H. An application by a party requesting a Tap-in Fee Reimbursement Agreement shall be submitted to the District at the earliest possible stage of the development, along with information the District may require to properly review the request. The terms and conditions in each Tap-in Fee Reimbursement Agreement may vary from development to development. The District shall review the application and prepare the Tap-in Fee Reimbursement Agreement for approval by the Board.
- I. Tap-in Fee Reimbursement Agreements shall include, at a minimum, the following provisions:
 - 1. The amount of tap-in fees eligible for reimbursement shall be limited to fees from additional sewer taps permitted and made as a result of available capacity created by the new Limited Sanitary Facilities, Connection Credit Stormwater Facilities or Sanitary Facility Improvements, and shall be the standard system-wide tap fee charged by the District to new users connecting to the District system in effect at the time the new user pays the tap-in fee to the District. Nothing in this Subsection III prohibits the Board from increasing the standard system-wide tap-in fee at any time.
 - 2. Reimbursement of tap-in fees shall terminate either 1) twelve (12) years from the date of: acceptance of the Limited Sanitary Facilities by the County and/or acceptance of the Connection Credit Stormwater Facilities by the appropriate governmental entity, and/or acceptance by MSD of the Sanitary Facility Improvements, whichever occurs first; or 2) when 100% of the eligible construction costs for the Limited Sanitary Facilities and/or Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements have been reimbursed, whichever occurs first.
 - 3. Eligible construction costs shall include contractor construction material and labor costs, engineering costs, fair market land and easement acquisition costs, legal costs, permit fees, inspection fees, site preparation, site restoration, and other incidental construction costs if properly



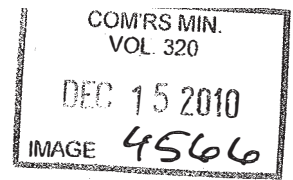
documented, less any costs paid by the County for the purchase of excess capacity, or extra work requested.

4. Tap-in fees shall be reimbursed on a quarterly basis. The amount reimbursed shall be based on the number of tap permits that have been issued by the District for the previous quarter and the actual tap-in fee amount paid by the new user. The tap-in fees shall be reimbursed to the party requesting the Tap Fee Reimbursement Agreement upon submission of the proper form and confirmation that 100% of the eligible construction costs have not been exceeded or that 12 year time limit set out in H.2. (above) has not elapsed.
 5. Tap-in fees paid by new users to connect to the new or upgraded Limited Sanitary Facilities or eligible to connect to an existing sewer as a result of the Connection Credit Stormwater Facilities and/or Sanitary Facility Improvements in the quarter preceding the expiration date of 12 years from date of acceptance may be reimbursed even if the submission of the proper form and evidence for reimbursement is submitted past the 12-year cut off.
- J. Neither the Board nor the District shall be responsible for acquiring land, easements, permits, license agreements, utility crossings, or any other approvals or rights or interests in real or personal property or otherwise for construction of the Limited Sanitary Facilities or Connection Credit Stormwater Facilities.
- K. Tap-in Fee Reimbursement Agreements shall not be assigned or transferred to any other party without the prior written approval of the Board. Conditional assignment of the right of reimbursement to the party financing the development may be included in the Tap-in Fee Reimbursement Agreement.
- L. All Limited Sanitary Facilities shall be constructed in compliance with the Rules and Regulations of the District. The Tap-in Fee Reimbursement Agreement shall include charges for the inspection and certification of the Limited Sanitary Facilities and/or the Sanitary Facility Improvements by the County Sanitary Engineer and the District to the Board that the Limited Sanitary Facilities and/or Sanitary Facility Improvements have been designed and constructed properly. The Connection Credit Stormwater Facilities shall be constructed in compliance with the rules of the appropriate jurisdiction. Proof that the Connection Credit Stormwater Facilities have been so constructed shall be provided to the District prior to the initial request for reimbursement.
- M. All documents to effect the transfer of the Limited Sanitary Facilities to the Board, such as deeds, bills of sales, public dedication and acceptance agreement, and proof that all contractors and subcontractors have been paid in full, shall be



prepared by the party requesting a Tap-in Fee Reimbursement Agreement and submitted to the District for approval.

- N. The timing and conditions for the transfer of the Limited Sanitary Facilities to the Board shall be specified in the Tap-in Fee Reimbursement Agreement. The Board shall not accept any Limited Sanitary Facilities unless and until the County Sanitary Engineer has examined the Limited Sanitary Facilities and certified to the Board that the Limited Sanitary Facilities have been properly designed and constructed and the Board is reasonably satisfied with such construction and certification.
 - O. Bonding requirements, warranties, financial assurance mechanisms, and other terms and conditions to establish that latent defects and construction flaws shall remain the sole responsibility of the person or entity for a reasonable time shall be included in the Tap-in Fee Reimbursement Agreement.
 - P. The Tap-in Fee Reimbursement Agreement shall not become effective unless and until accepted by the Board in a Resolution adopted at a regular public session and entered into the Minutes of the Board.
- V. Sewer System Connection Credits
- A. Connection credits are required for new sewers, sewer extensions or an increase in flow associated with new development or from a change in use when:
 - 1. The proposed connection is upstream of an SSO; or
 - 2. The proposed connection is into a sanitary sewer which flows to a combined sewer system upstream of a CSO.
 - B. Connection credits are established by making water quality improvements that will remove inflow and/or infiltration to the sewer system upstream of the SSO or CSO. Typically, such water quality improvements are manhole and sewer rehabilitation. The approved ratio is five (5) gallons of storm water removed for every one (1) gallon of sewerage to be added to the system.
 - C. If MSD does not have available connection credits for a new development upstream of the SSO or the above-described CSO, the developer has the option to:
 - 1. Establish the connection credits for his development by making water quality improvements at its own expense; or
 - 2. Request placement on a waiting list for the connection credits when they are established at some future date by the District.



- D. If the developer chooses to make the water quality improvements and not wait for the District to establish the connection credits, the procedure to be followed is:
1. The developer will notify the District of its intention to make water quality improvements and request the assistance of the District in identifying the specific manholes and pipe where credits can be established that will permit their development.
 2. The District will evaluate the specific manholes or sewer pipes identified for water quality improvements, assign a connection credit value in accordance with the guide lines set forth in the Short Term Adequate Capacity Plan, and provide this information to the developer.
 3. The developer will notify the District as to which improvement it chooses to make.
- E. A developer choosing to perform the work to obtain the credits shall follow these guide lines:
1. Work shall be performed by a contractor currently approved by the District for the specified work. The District shall provide a list of such contractors to the developer
 2. Work shall be performed using the District's standards and specifications for sewer improvements and/or rehabilitation. The District will provide field inspection at no cost to the contractor.
 3. The developer will contract privately and, except as otherwise provided in Subsections I and IV of this Section 514, pay for all improvement work. The District will not be a party to any such contract. The developer must provide the District with proof that the contractor has been paid in full.
 4. The sewer improvements and/or sewer rehabilitation must meet the District's standards and specifications before acceptance by the District and the subsequent issuance of connection credits.
 5. Only sewer improvements/sewer rehabilitation for an entire unit or stretch of sewer will be considered as a means of obtaining construction credits, even if excess credits are generated. For example, pipe lining or rehabilitation from manhole to manhole will be required.
 6. In the event that the scope of work for a sewer improvement and/or sewer rehabilitation project will provide more connection credits than is needed for the proposed new development, the excess connection credits will be reserved for the developer for a period of three years from the time of the

acceptance of the sewer improvement/rehabilitation unless the developer can demonstrate that said developer is working from a master plan for areas under the developer's control and the master plan cannot be accomplished in the three-year term. Under these circumstances, the sewer credits will extend through the term of the master plan. After the three-year period the excess connection credits will be utilized by the District for other connections to the sewer system. There will be no reimbursement for excess credits. Excess credits can be used only in the basin upstream of the SSO.

7. CREDITS ARE NOT ASSIGNABLE OR TRANSFERABLE.

VI. Combined Sewer System Connection Credits

- A. Connection credits are required for new sewers, sewer extensions or an increase in flow associated with new development or from a change in use when:
 - 1. The proposed connection is upstream of a CSO; or
 - 2. The proposed connection is into a sanitary sewer that flows to a combined sewer system upstream of a CSO.
- B. This section will apply for all projects that will introduce a net increase in flow to the system upstream of a CSO and would be triggered if any project necessitated a permitting action with an associated increase in flow or requires an increase in the water meter size (or number) because of a need for increased flow through a given facility. If the connection is upstream of a CSO and an SSO, then the overflow that is the closest to the point of connection determines whether Subsection V of this Section 514 or this Subsection VI prevails.
- C. Connection credits are established by making water quality improvements that will remove inflow and/or infiltration or, in some circumstances, a controlled release detention of flow (as approved by OEPA), to the sewer system upstream of the CSO and must be used in the same sewer system upstream of the CSO.

The developer must remove 1-gallon of average daily storm water flow for each gallon of proposed new sanitary flow to the combined sewer system. The number of sewer credits generated by storm water separation is based on the 10-year storm event and calculated using the Rational Method as follows:

- a. Calculate the instantaneous flow rate for stormwater removed from the combined sewer system:

$$Q_{10} = C_i A, \text{ where}$$

$$Q_{10} = \text{Instantaneous Flow Rate for the 10-year Storm (ft}^3\text{/second)}$$

C =Runoff Coefficient (dimensionless) – See Section 303(E) for
Runoff Coefficients

i = 10-year Storm Rainfall Intensity (2.03 inches/hour)

A = Drainage Area Being Separated from the Combined Sewer
System (Acres)

b. Convert Q10 from cubic feet per second to gallons per day.

c. Divide the Instantaneous Flow Rate by the Peak Flow Factor to
obtain the average daily flow rate for stormwater removed from the
combined sewer system:

Peak Flow Factor = 4.0 (dimensionless)

Average Daily Stormwater Flow = $Q_{10}/4.0$ (gallons per day)

d. Calculate the number of sewer credits generated by dividing the
Average Daily Stormwater Flow by 400 gallons per day per credit:

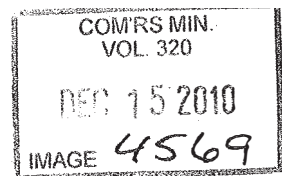
CSO Credits = Average Daily Stormwater Flow / 400 gallons per day per credit

D. If the District does not have available connection credits for a new development
upstream of the CSO described above, the developer has the option to:

1. Establish the connection credits for his development by making water
quality improvements approved by the District at his own expense; or
2. Request placement on a waiting list for the connection credits when they
are established at some future date by the District.

E. If the developer chooses to make the water quality improvements and not wait for
the District to establish the connection credits, the procedure to be followed is:

1. The developer will work with the District to identify the specific
improvements for which he/she believes that connection credits can be
established that will permit their development.
2. The improvements may use an existing sewer or new sewer connection.
3. The ratio of flow removed to new flow added to the system is 1-to-1
(gallons).
4. The District will notify the developer of the number of connection credits
available if the work is completed.



5. A developer choosing to perform the work to obtain the credits shall:
 - a. Perform the work by a contractor currently approved by the District for the specified work. The developer will contract privately and, except as otherwise provided in Subsections I and IV of this Section 514, pay for all improvement work. The District will not be a party to any such contract.
 - b. Use the District's standards and specifications for sewer improvements and/or rehabilitation. The sewer improvements and/or sewer rehabilitation must meet the District's standards and specifications before acceptance by the District and the subsequent issuance of connection credits.
 - c. Where appropriate and approved by the District, the developer together with the local storm sewer authority may redirect storm water out of the combined sewer into a public storm sewer, upstream of the CSO in which additional wastewater will be added, as a means to obtain these credits.
 - d. Obtain field inspection by the District of the completed improvement.
- F. In the event that the scope of work for a sewer improvement and/or sewer rehabilitation project will provide more connection credits than is needed for the proposed new development, the excess connection credits will be reserved for the developer for a three-year period unless the developer can demonstrate that he is working off of a master plan for areas under his control and that the master plan cannot be accomplished in the three-year term. Under the preceding circumstances, credits will extend through the term of the master plan. After the three-year period, the excess connection credits will be utilized by MSD for other connections to the sewer system. There will be no reimbursement for excess credits.
- G. CREDITS ARE NOT ASSIGNABLE OR TRANSFERABLE.

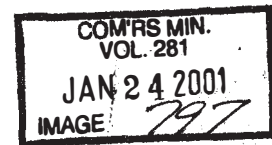
Section 515

***REPEALED** on December 15, 2010 (Comm'rs Min. Vol. 320, Images 4549 - 4569)*

Section 516

***REPEALED** on December 15, 2010 (Comm'rs Min. Vol. 320, Images 4549 - 4569)*

ARTICLE VI
DESIGN OF SANITARY SEWERS



Section 601 Determination of the Amount of Sewage for Sanitary Sewers

A. MSD Design Standards for estimating sanitary sewage flow from new developments

1. Residential Sanitary Sewage

The average flow of sanitary sewage shall be computed on the basis of 100 gallons per capita. The peak flow for various situations shall be in accordance with the following table:

<u>POPULATION</u>	<u>PEAK FLOW</u>
Under 750	4 times the average
Under 1,000	3.9 times the average
Under 1,750	3.8 times the average
Under 2,500	3.6 times the average
Under 5,000	3.3 times the average
Over 5,000	Consult the Director

2. Industrial and/or Commercial Sewage

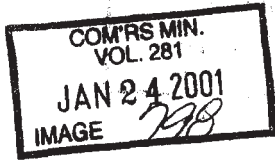
The amount of sewage shall be fixed after consultation with the Director.

3. Infiltration/Inflow

An allowance of 1000 gallons per acre per day for the gross tributary area of the drainage basin shall be added to the above peak sanitary flows.

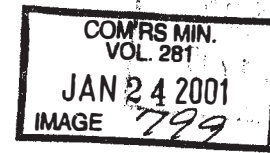
B. Determination of the Amount of Sanitary Sewage for Existing Sanitary Sewer Upgrades

1. The design capacity of sanitary sewers and pump stations shall be based on the result of current flow monitoring and modeling in accordance with MSD Guidelines for Sanitary Sewage Flow Estimation (listed below). If these results produce a design flow rate less than that determined under Section 601 (A.), then the amount determined using the method in Section 601 (A.) shall be used.



MSD Guidelines for Sanitary Sewage Flow Estimation:

- a. The design flow will be based on the model-projected peak sewer flow rate from a design storm with an applicable recurrence interval. The design flow will be comprised of three components:
 - i. Base wastewater flow (BWF);
 - ii. Groundwater infiltration (GWI);
 - iii. Rainfall-derived inflow/infiltration (RDII).
- b. The design flow components will be determined using the following criteria:
 - i. BWF will be established using either
 - (1) MSD guidelines for peak diurnal flow (per Section 601A. and B.), or
 - (2) Peak diurnal flow observed during flow monitoring, whichever is greater.
 - ii. GWI will be set at the maximum rate observed during a one-year flow monitoring period, or that projected to be the typical annual peak GWI rate (i.e. peak rate expected once per year) if flow monitoring results are considered to be not representative of typical conditions.
 - iii. RDII will be established using the following conditions:
 - (1) The Soil Conservation Service (SCS) Type II rainfall distribution;
 - (2) Antecedent soil moisture conditions that correspond to the maximum observed wet-weather flow during a one-year flow monitoring period shall be assumed in estimating the design RDII flow rate. If flow monitoring results are not considered to be representative of typical conditions for this purpose, then the flow monitoring data shall be used to project to the maximum antecedent soil moisture conditions expected to occur once per year, which will be used for establishing the design RDII flow rate.
2. Flow from any undeveloped portions of the service area of the upgrade sewer/pumping facility will be accounted for using the full build out conditions for those areas and the MSD Design Standards for estimating sanitary sewage flow from new developments (per Section 601 (A.)).



C. Special Conditions

Where special conditions are identified, determination of the amount of sewage shall be fixed after consultation with the Director.

Section 602 Determination of Conduit Size

The minimum conduit diameter for sewer purposes (except building sewers) shall be eight (8) inches. For sewers up to and including twenty-four (24) inches in diameter, design for the above volumes of sewage with the sewer flowing half full. For sewers twenty-seven (27) inches in diameter, design for the above volumes of sewage with the sewer flowing at 0.6 depth and for sewers thirty (30) inches in diameter and larger, design for the above volumes of sewage with the sewer flowing at 0.7 depth.

Use Manning's Formula with an "n" factor of 0.013 in design.

Section 603 Determination of Minimum Allowable Conduit Slope (Manning's Formula)

The Minimum Allowable Slope shall be that which results in a velocity of two (2) feet per second when the conduit flows at 1/4 of full depth.

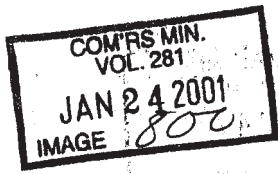
SIZE	SLOPE (PERCENT)
8" Conduit	0.70
12" Conduit	0.40
15" Conduit	0.30
18" Conduit	0.24
21" Conduit	0.19
24" Conduit	0.16
27" Conduit	0.14
30" Conduit	0.12

Section 604 Placement of Manholes

Manholes shall be placed at intersections of two or more sewers; at changes of size of pipe, alignment, or grade; at the head end of the sewer; at curves on sewers 30" in diameter and larger (preferably on the upstream side of the curve); and at intermediate intervals as follows:

8" to 18"	400 ft. maximum
21" to 27"	500 ft. maximum
30" to 42"	600 ft. maximum

Manholes on pipes 24" and larger shall have flat slab tops in accordance with Standard Drawing Accession Number 49049.



Section 605 Location of the Sanitary Sewer

The sanitary sewer shall normally be within the confines of the street right-of-way or the utility easement adjacent to the street right-of-way or a combination of both where there is a conflict with other utilities:

A. Within the street right-of-way:

The location of the sanitary sewer shall be within the confines of the street pavement with manholes located five (5) feet off the centerline of the street. This will allow the other utilities to be located in their traditional location as follows:

1. Storm sewers should be within the confines of the street pavement with manholes located five (5) feet off the centerline of the proposed street.
2. Gas mains should be between the curb line and right-of-way line on the south or west side of the proposed street.
3. Water mains should be between the curb line and the right-of-way line on the north or east side of the proposed street.
4. -- Electric and Telephone Conduits will be within easements adjacent to the street right-of-way.

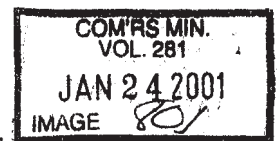
B. Within the utility easement adjacent to the street right-of-way as per the Hamilton County Engineer's Subdivision Standard Drawing #2A:

The location of the sanitary sewer shall be within the confines of the utility easement (minimum ten feet in width), the centerline of sanitary sewer shall be a minimum of ten (10) feet from the centerline of the storm sewer and maximum of 13.5 feet from the curb-line of the pavement. No other utilities except storm sewer shall be installed in this side of the street right-of-way and utility easement where sanitary sewers are installed.

If the above locations are not to be used, the special approval of location shall be obtained from the Director.

Section 606 Drop Connections into Manhole

When branch sewer connections are made to a manhole, the branch line must be connected in such a manner that its crown elevation at the centerline of the manhole matches that of the outlet pipe. The manhole bench shall be channeled in such a manner as to direct the incoming flow to the outlet pipe.



Drop connections into manholes in accordance with Standard Drawing Acc. No. 49003 shall only be used where approved by the District. For new sewer systems, drop connections shall be avoided when the difference in elevation between the outgoing and incoming pipes is less than four (4) feet by increasing the slope of the incoming sewer such that the crown elevation equals the crown elevation of the outgoing pipe. For sewer replacements, existing sidelines may continue to enter the replacement sewer at their present elevation. However, if the invert of the main sewer is two (2) feet or more below the invert of the incoming branch sewer, the branch sewer connection shall be made with a drop connection.

For special conditions, the Director will review written requests for approval of a variance to this section on a case-by-case basis. Examples of such special conditions include:

- A. Unavoidable utility conflicts;
- B. Severe ground conditions;
- C. Inside drop connections for existing manholes;
- D. Unforeseen construction conditions.

Section 607 Joints for Sanitary Sewers

All sanitary sewers, including sanitary building sewers and manholes, shall be built with resilient and flexible compression joints, or an approved equal, as determined by the Director, in accordance with the District's Specifications and Standards.

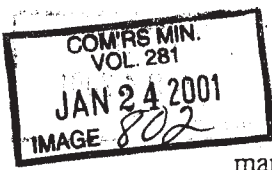
Section 608 Suitable Ground for Sewer Construction

Sewers and appurtenances shall be constructed in original ground, wherever possible. However, when they must be constructed in fill, said fill shall be controlled, compacted and inspected by an approved testing laboratory or an inspector from the appropriate public authority. Minimum compaction requirements, subject to rules or specifications of the public authority, shall be those spelled out in the latest edition of the "STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, CONSTRUCTION AND MATERIALS SPECIFICATIONS," for Embankment Soil Compaction Requirements.

Section 609 Steep Sewer Sections

- A. Conduit Sizes 8" through 24"

For sewer slopes twenty percent (20%) or greater, pipe shall be PVC-SDR35 or material approved by MSD and be anchored with concrete keyblocks as shown on Standard Drawing Accession No. 49039 spaced as follows at joints only. For slopes between 20 percent and 35 percent, keyblocks shall be installed at intervals not more than 36 feet center to center. For slopes 35 percent to 50 percent, keyblocks shall be installed at intervals not more than 24 feet center to center. For slopes over 50 percent, keyblocks shall be installed at every joint of the installed pipe. Such steep sewer sections shall be terminated at the bottom of the steep slope with a special



manhole designed and constructed to dissipate the thrust and downward force of the sewer system at the manhole.

B. Conduit Sizes 27" and Larger

For sewer slopes fifteen percent (15%) or greater, pipe shall be ductile cast iron or material approved by MSD. For sewer slopes between fifteen percent (15%) and twenty-five percent (25%), keyblocks shall be provided at every joint. Keyblocks shall be installed as shown on Standard Drawing Accession No. 49039. Such steep sewer sections shall be terminated at the bottom of the steep slope with a special manhole designed and constructed to dissipate the thrust and downward force of the sewer system at the manhole.

Section 610 Concrete Cradles

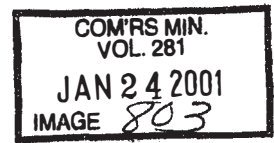
When it is considered advisable in the judgment of the Director, the sewer pipe shall be laid in a concrete cradle, Type "A" or Type "B," as shown on Standard Drawing Accession No. 49044.

Section 611 Sewer Pipe in Creek Beds and Shallow Installations

Sewer pipe in creek beds and in shallow installations shall be encased in concrete when the cover is less than four feet (4') or when it is considered advisable in the judgment of the Director. Type "B" encasement as shown on Standard Drawing Accession No. 49044 shall be used. When the cover on such pipe is two feet (2') or less, the pipe, from manhole to manhole, shall be Ductile Cast Iron, or an approved equal as determined by the Director, encased as noted above.

Special mitigative measures shall apply for all sewer crossings and sewer construction in creek riparian areas:

- A. Sewers crossing streams shall be designed to cross the stream as nearly perpendicular to the stream as possible.
- B. Sewer systems shall be designed to minimize the number of stream crossings, and to be located as far from streams and riparian areas as possible.
- C. Sewer construction easement widths should be minimized.
- D. Unnecessary damage to trees for sewer construction shall be avoided.
- E. Controls to minimize both erosion and sedimentation shall be implemented.



Section 612 Sewer Construction within Special Flood Hazard Areas

No public or private sewer, or system of sewers, shall be constructed or located within any Special Flood Hazard Area unless the Director certifies that the sewer or system of sewers is proposed to be located and constructed in such a manner as to minimize or eliminate flood damage to them and:

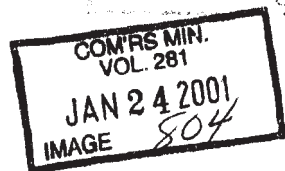
- A. Minimize or eliminate the flow or infiltration of flood waters into or out of such systems during and after the base flood discharge, OR
- B. Have all parts elevated at least one (1) foot above the base flood level.

Section 613 Low Pressure Sewer Systems

When the construction of a gravity sewer system is not reasonably possible as determined by the Director, an alternative low-pressure sewer system will be considered for approval. Where approved, the design and construction shall be in accordance with the District's latest specifications, standards, policies and procedures.

Section 614 Backwater Preventer

The District requires that a sewage backwater valve be installed in accordance with the requirements of any local jurisdiction's plumbing code for plumbing fixtures where the elevation of the overflow rim of the lowest plumbing fixture is below the elevation of the rim of the next upstream manhole in the sewer system that the building is connected to.



ARTICLE VII

WASTEWATER LIFT STATIONS

Section 701 Approval of Wastewater Lift Stations

Approval of wastewater lift stations will be limited to providing service only to those areas where a gravity sanitary sewer system is not feasible as determined by the Director. The Director will consider the following factors in determining feasibility:

- A. 50-year economic analysis;
- B. Interest rate;
- C. Offsetting environmental concerns;
- D. Availability of necessary easements;
- E. Other items or factors applicable to the specific situation.

Prior to approval, a 50-year economic analysis must be submitted by the developer to the District with the request for concept approval.

The District will not approve a wastewater lift station for less than 20 single-family units, or equivalent.

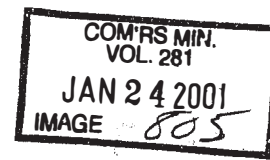
Flow shall be calculated using the MSD Design Standards for estimating sanitary sewage flow from new developments (per Section 601 (A.)).

Prefabricated wastewater lift stations shall be a product of a manufacturer who has demonstrated its abilities in the field. Such stations must comply in all respects with the requirements of the State of Ohio Environmental Protection Agency in effect at the time detailed plans are approved. Additionally, such stations shall be subject to such requirements as the District may indicate based upon safety, layout, access, and auxiliary equipment required for proper operation and maintenance, or any other item peculiar to that station, which may be required in the judgment of the Director.

Section 702 Policy on Privately Constructed Wastewater Lift Stations in Areas Served by the Metropolitan Sewer District of Greater Cincinnati

The Board shall periodically approve the technical requirements for wastewater lift stations within the Metropolitan Sewer District. The Director shall maintain on file and make available to the public upon request the current technical requirements for wastewater lift stations within MSD.

The provisions of this rule are not intended to limit the appropriate use of materials, appliances, equipment or methods of design or construction not specifically prescribed by the Board-approved technical requirements provided that the Board or the Director determines that the proposed alternative materials, appliances, equipment or methods of design or construction are at least equivalent to that prescribed in the approved technical requirements.



The Director is authorized to make such determinations only where sufficient evidence or proof is submitted to substantiate any claims that may be made regarding the proposed alternate. Such evidence or proof of equivalency shall be based on detailed drawings and specifications, product installation and contact list, operation and maintenance manuals, and other items which may be required in the judgement of the Director.

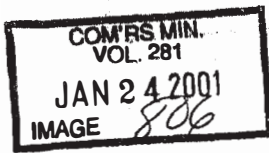
MSD will review private developers' plans for proposed wastewater lift stations at two design stages: concept and detail. The MSD technical requirements in place at the time of concept approval shall be the final technical requirements for the duration of the project, subject to the time limits on concept and detail approvals specified in the MSD Rules and Regulations. Any revisions which may be made to the MSD technical requirements for the duration of the project shall not be applied retrospectively.

If new requirements for lift station approval are implemented after MSD has issued concept approval but before the construction is completed, the Director will make a recommendation to the Board on whether to apply the new requirements to the lift station project at MSD's expense.

Section 703 Extended Maintenance Bond Requirements for New Wastewater Lift Stations

Whenever possible, wastewater lift stations shall be designed so that the purge time of the wet well and force main of the wastewater lift station will be less than 30 minutes based on the OEPA peaking factor.

A two-year, \$5,000 maintenance bond, which includes both odor control and maintenance of the lift station, shall be provided by the developer for a wastewater lift station.



ARTICLE VIII

WASTEWATER TREATMENT PLANTS

Section 801 Approval

Approval of wastewater treatment plants will be limited to providing service only to those areas where a gravity sanitary sewer system is not feasible as determined by the Director. The Director will consider the following factors in determining feasibility:

- A. 50-year economic analysis;
- B. Interest rate;
- C. Offsetting environmental concerns;
- D. Availability of necessary easements;
- E. Other items or factors applicable to the specific situation.

Wastewater treatment plants shall be designed to meet effluent standards and all other applicable regulations as established by the Ohio Environmental Protection Agency for the particular receiving stream.

Each plant shall be subject to such requirements as the District may indicate based upon locale, degree of treatment, safety, layout, auxiliary equipment required for proper operation and maintenance, access, or any other item peculiar to that plant which may be required in the judgment of the Director.

The District will not approve a wastewater treatment plant for less than 20 single-family units, or equivalent.

ARTICLE IX
CONSTRUCTION MATERIALS



Section 901 Material Requirements

All materials shall comply with the requirements of the latest editions of the "State of Ohio, Department of Transportation, Construction and Material Specifications," and/or the "City of Cincinnati, Supplement to the State of Ohio, Department of Transportation, Construction and Material Specifications" and the "Rules and Regulations of the Office of the County Engineer". The said Specifications and Supplement are, by this reference incorporated herein, made a part of these Rules and Regulations. In particular, conduit to be used for construction of sanitary or combined sewers and building sewers shall be Type B, C, G, or I as specified in the latest edition of the City of Cincinnati Supplement to the State of Ohio Department of Transportation, Construction and Material Specifications and as specified on the plans.

Certification of all material shall be presented to the District. The District will determine what additional inspection and testing is required at the option of the Director.

Section 902 Inspection and Testing

All material shall be inspected and tested as required by the District in accordance with Section 901 of these Rules and Regulations at the developer's expense.



ARTICLE X

CONSTRUCTION PROCEDURE

Section 1001 General Construction Specifications

Sewers shall be constructed in accordance with the requirements of the latest editions of the "State of Ohio, Department of Transportation, Construction and Materials Specifications" and the "City of Cincinnati, Supplement to the State of Ohio, Department of Transportation, Construction and Materials Specifications."

Section 1002 Typical Trench for Sewer Pipe

The trenches in which sewer pipe is laid shall conform to the "control dimensions" for Typical Trenches for Conduits, Standard Drawing Accession No. 49032, and the sewer pipe shall be bedded as indicated on that drawing. The trenches shall be backfilled in accordance with the requirements of 603 of the State of Ohio, Department of Transportation, Construction, and Material Specifications.

Excavation around manholes in streets that are paved or are to be paved shall be backfilled in accordance with the requirements of the appropriate public authority. Restoration of existing pavement is to be made in accordance with the requirements of the appropriate public authority.

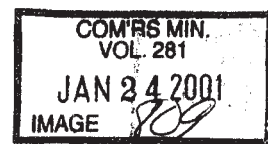
Section 1003 Leakage Tests

All conduits shall be subjected to a leakage check either by an infiltration or exfiltration test with water or by an air test.

- A. The infiltration test allowance, on conduits twenty-seven (27) inches and larger, shall be 0.079 gallon per inch of the internal diameter per 100 feet of conduit per hour. The exfiltration test allowance shall be the same as for infiltration except that an additional allowance of ten (10) percent over the basic allowance shall be allowed for each two (2) feet of head over a basic two foot minimum head.

This test, including furnishing of all appurtenances therefor, shall be performed at the Contractor's expense.

The above infiltration test requirements will continue to be allowed for conduits twenty-seven (27) inches and larger during the first six months these Rules and Regulations are in force, starting with the effective date. After six months from the effective date, infiltration tests will only be allowed for conduits larger than thirty-six (36) inches. All other conduits must be tested by the air test method as required under Item B of this Section.



- B. Air tests on the following sizes of sewers will continue to be performed by the District for the six months after the effective date of these Rules and Regulations. After six months from the effective date, the District will no longer perform air tests, and all air test requirements under Item B of this Section will become obsolete.

The air test, for conduits twenty-four (24) inches and under, consists of inserting plugs in the line, thus isolating test sections between manholes. Air is then admitted to the isolated test section until it is under pressure of 3.5 pounds per square inch. All valves leading to or from the test section are then closed and the air supply line disconnected. The time elapsing before the pressure in the test section drops to 2.5 pounds per square inch is noted and recorded.

The test section shall be considered as having passed the air test if the elapsed time as noted above is equal to or greater than the following times:

For 8" Conduit 4 Minutes
For 12" Conduit 5-1/2 Minutes
For 15" Conduit 7-1/2 Minutes
For 18" Conduit 8-1/2 Minutes
For 21" Conduit 10 Minutes
For 24" Conduit 11-1/2 Minutes

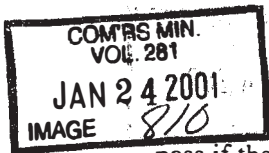
- C. All air tests starting in six months from the effective date of these Rules and Regulations shall be performed in accordance with the latest applicable ASTM or UNI-BELL PVC Pipe Association requirements for each unique pipe material for leakage test requirements and shall be performed at the contractor's expense. An air pressure adjustment shall be made if the groundwater is above the top of the pipe as outlined in the applicable ASTM or UNI-BELL PVC Pipe air test method.

Section 1003-A Deflection Test

Deflection tests shall be performed on all flexible conduits as described in the latest edition of the City of Cincinnati Supplement to the State of Ohio Construction and Materials Specifications.

Section 1003-B Vacuum Testing

The Contractor shall test all manholes leakage by means of vacuum testing. The vacuum testing cannot be done until after the manholes are set to final grade and the manhole castings are bolted down. All lift holes shall be plugged. Any other openings, such as for pressure relief valves, shall be temporarily plugged to allow the vacuum test. All pipes entering the manhole shall be plugged and care shall be taken to securely brace the plugs from being drawn into the manhole. The vacuum equipment test head shall be placed in the opening of the top slab or cone section and the seal inflated in accordance with the manufacturer's recommendations. Vacuum testing shall be in accordance with ASTM C1244. A vacuum of 10 inches mercury (10" Hg) shall be drawn and the vacuum pump shut off. With the valves closed, the time shall be measured for the vacuum to drop to nine inches mercury (9" Hg). The manhole shall



pass if the time meets or exceeds the allowable times as calculated from ASTM C1244, or as approved by the Engineer.

Section 1004 Temporary Manhole Covers

In the construction of subdivisions or housing developments, the Contractor shall place a temporary manhole cover, Standard Drawing Accession No. 49045, on all sanitary manholes. This temporary cover is to remain in place from the time the manhole is constructed until a permanent casting, Standard Drawing Accession No. 49005, No. 49050, or No. 49051 is placed on the sanitary manhole.

Section 1005 Plug Subdivision Sewer at Point of Connection

Sanitary sewers in subdivisions under construction shall be sealed where they connect to the existing sewers. This work shall be done only in the presence of a District Inspector.

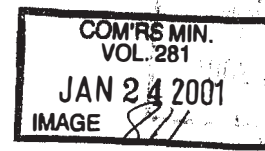
After construction has been completed and the sewers in the subdivision have been inspected, tested and found to be substantially completed and operational by the District, the seal(s) shall be removed by the developer. Again, this work may be performed only in the presence of a District Inspector.

Section 1006 Sewer Tap Permits for Substantially Complete and Operational Sewers

No sewer tap permits shall be issued until (1) the sewer or sewers to be tapped and the wastewater treatment plant, and/or lift station, have been inspected, tested and found to be substantially completed and operational by the District; (2) the engineer for the Developer has furnished to the District a mylar copy of the Development Plan showing all information as required in Section 1007 of these Rules and Regulations; and (3) all applicable requirements of the agreement between the Developer and the Board have been met.

Section 1007 "As Built" Plans

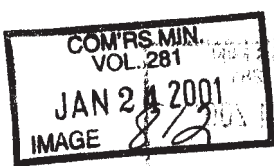
- A. After completion of construction of a wastewater treatment works and before acceptance of the wastewater treatment works by the Board, the Developer's engineer shall furnish to the District complete "as built" plans of these wastewater treatment works; drawn on 24" x 36" Mylar and containing the following information:
1. Elevations are to be referenced to U.S. Coast and Geodetic Survey Triangulation Stations and Bench Marks.



2. A tie-in to the invert of the existing sewer system (except in cases where a temporary wastewater treatment plant or lift station serve to isolate the new sewer system from the existing system). The existing sewer shall be identified by its number.
3. Rim elevation and invert elevation(s) taken at the center of the manhole to the one-hundredth of a foot.
4. Depth of manhole shown shall be the difference between the rim elevation and the mid-point of the trough between influent and effluent inverts.
5. In the case of a drop manhole or a manhole with a pipe entering on a steep grade, elevations should be taken at the center of the manhole, and at a point on the invert that will be most representative of the true grade of the existing pipe. Sketch showing location of elevations and distances should be included with the plans.
6. Distances between manholes to the one-hundredth of a foot taken at the center of the casting.
7. Angles to the nearest minute.
8. Angular ties between existing and new sewers shall be shown on the plans.
9. New distances and angle of a new installed manhole on an existing sewer.
10. Grade of the conduit.
11. Size of the conduit.
12. Pipe material.
13. Lateral locations shall be shown by dimensioning from the downstream manhole at the main sewer and an offset distance to the end of the lateral at the right-of-way or property line.
14. All major changes in location.

This information shall be shown in red ink on the approved plan and profile tracing.

- B. In lieu of the Developer providing the "as built" plans, the Developer may opt to have Metropolitan Sewer District survey personnel provide sanitary sewer "as built" for a fee, as specified in Section 2501. The following procedure will apply:
1. Once a sewer project passes a final inspection, an "as built" survey will be scheduled and completed within ten working days. All revisions to the improvement plans are to be submitted and approved prior to scheduling.



2. If the survey information proves satisfactory, the "as built" can be processed for approval.
 3. MSD engineering personnel will add the "as built" data to the project mylars.
 4. Immediate notification will be sent in instances where the sewer does not meet the District's minimum grade requirements, as defined in the Rules and Regulations. Additional tap permits will be withheld until this issue is resolved. Disputes that may arise will be resolved through a joint meeting at the job site between MSD engineering personnel and the developer's professional surveyor.
- C. An option must be selected at the time detail plans for a sewer project are submitted. Payment for MSD-provided "as built" is required prior to the issuance of tap permits beyond the allowable 10%.

Section 1008 Prefabricated Wastewater Lift Stations and Treatment Plants

Prefabricated Wastewater Lift Stations and/or Treatment Plants shall be placed on and anchored to reinforced concrete slabs.

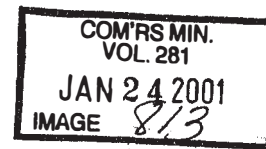
Metal tanks shall be thoroughly protected against corrosion by special corrosion resistant paints and cathodic protection.

Section 1009 Contractor License

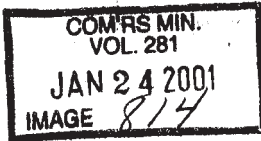
All work done on sanitary and/or combined sewers within the jurisdiction of the District must be done by a contractor who is an approved sewer tapper properly licensed and bonded by the District.

Section 1010 Sewer Grade Variance Policy

- A. **GENERAL.** The Metropolitan Sewer District will review and approve all plans for the extension of the public, and private sewer system, prior to issuing authorization to construct. Public and private sewers shall be constructed in strict accordance with the approved plans, to the extent possible. All variations from approved alignments or grades must be identified and submitted to the Director for review, consideration and approval or disapproval prior to acceptance of the sewer extension as part of the public sewer system.
- B. **MINIMUM SEWER GRADES.** The Metropolitan Sewer District has established in its Rules & Regulations minimum sewer grades for each sewer size and for limited service sewer sections based on the required grades to keep solids flowing (minimum cleaning velocities). Sewers installed at less than these minimum grades increase the risk of sewer stoppages and necessitate more frequent cleaning schedules.



- C. REQUIRED SEWER CAPACITY. The Metropolitan Sewer District requires that the sewers be sized and placed on a grade that will provide adequate carrying capacity to serve the total upstream watershed, at full development and at peak flow conditions.
- D. VARIATIONS FROM APPROVED GRADES. Should a sewer be installed at less than the approved minimum grade or critical grade, as defined above, the Metropolitan Sewer District may require the sewer to be relayed at the required grade or increased in size.



ARTICLE XI

ASSURANCE OF COMPLETION

Section 1101 Completion

Sewer tap permits shall not be issued until the Director has determined that the sewer or sewers to be tapped, and any lift station and/or treatment plant to be constructed are substantially completed, operational, and meet the requirements of Section 1006.

When the above mentioned wastewater treatment works in a subdivision have been determined to be substantially completed and operational, surety bonds, or other security guaranteeing completion will be accepted. The amount of the completion bond shall be determined by the Director.

Section 1102 Substantially Completed and Operational

"Substantially completed and operational" shall mean that all elements of a system are operational and will perform at the levels upon which design and approvals were granted; that the system will in no way become a public nuisance; that the system will in no way adversely affect the public health, welfare or safety; that the operation of the system may be conducted in a safe and efficient manner; and that safe, all-weather access be assured in order that any equipment necessary for the normal activities associated with operation of the system may have free continual ingress and egress.

Section 1103 Tap Permits Issued Under Substantially Completed Designation

The number of sewer tap permits issued will not exceed ten percent (10%) of the total for which the system was designed while operating under the substantially completed concept as defined in Section 1102.

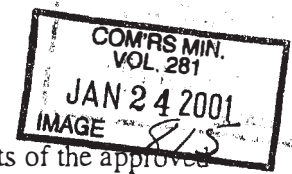
Section 1104 Time Requirements

Full completion of any lift station and/or treatment plant, operated pursuant to Section 1101, shall be made within 120 calendar days from the date that the Director determines that the system is substantially completed as outlined in Section 1102. No additional tap permits will be issued unless the above mentioned treatment works have been fully completed.

Section 1105 Full Completion

"Full completion" shall mean that the system is complete and meets all criteria of the District.

Section 1106 Workmanship and Materials



All workmanship and all materials furnished shall comply fully with the requirements of the approved Plans and Specifications. If at any time within one year after the date of the final inspection, any defect should appear, which in the reasonable opinion of the Director is due to inferior materials or workmanship, the Developer guarantees that he will do immediately, without cost to the District, whatever is necessary to remedy the defects. The District will notify the Developer in writing of the defects and the repairs to be made, and the Developer agrees to begin the repairs within ten days from the receipt of notice. If the Developer fails to begin repairs within ten days, the District may forthwith cause the defects to be remedied and charge the cost and expense thereof to the Developer or his Surety.

The Developer's Surety shall not be relieved until the above guarantee is fulfilled and written release furnished the Surety by the District.



ARTICLE XII

BUILDING SEWERS: CONNECTIONS AND PERMITS

Section 1201 Authorization to Connect

No unauthorized person shall uncover, make any connection with an opening into, use, alter or disturb a public or private sanitary or combined sewer or appurtenance thereof. No person, authorized to do the above type of work, shall do so without first obtaining a permit therefor from the Director.

Section 1201a Unauthorized Discharge/Connection

In accordance with Section 401, no person shall discharge or cause to be discharged, either directly or indirectly, to a sanitary sewer system building connection or appurtenance thereof, surface water, foundation drains, groundwater, roof runoff, subsoil drains, subsurface drainage, cooling water, swimming pool water or unpolluted industrial process water.

The owner whose property is sewered by the building connection shall be responsible for any such unauthorized connection and its immediate removal and shall be subject to penalties in accordance with Section 2207, Article XXII.

Section 1202 Building Sewer

A separate and independent building sewer shall be provided for every building that is to be occupied. The minimum size shall be six (6) inches.

Section 1202-A Building Sewer Extension

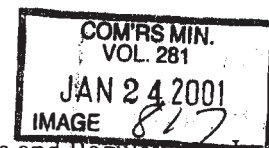
Where one building stands in the rear of another on an interior lot and no "building sewer-sanitary" connection to a sewer is available, or can be made through an adjoining alley, courtyard, side yard, or driveway, as determined by the Director, the "building sewer-sanitary" from the building on the front of the lot may be extended to the building on the rear of the lot and will be considered as one "building sewer-sanitary" with a 6" diameter minimum cleanout installed at the property line or right-of-way.

Section 1203 Building Sewer Connection to Manhole

A building sewer, six-inch (6"), connection to a public sanitary or combined sewer manhole is prohibited, except where special approval is granted by the Director.

Section 1204 Building Sewer Requirements

The building sewer, six-inch (6"), shall be constructed of materials meeting the standards of the District. It shall be laid at a minimum grade of one-fourth inch per lineal foot (2%) from the building to the public or private sewer; except that the Director may authorize the grade to be as little as one-eighth inch per lineal foot (1%) if he determines such to be desirable or necessary. The building sewers, larger than



six-inch (6"), shall be installed in accordance with Section 603 of these Rules and Regulations. In no case shall a floor level being served by the building sewer be less than thirty-six inches (36") above the crown of the receiving sewer at the point of connection of the building sewer thereto. It shall be the owner's responsibility to whom the permit is issued to take the necessary precautions in order to provide adequate protection from flooding for any new connection.

Section 1205 Building Sewer Connection

Building sewers shall be constructed as part of the improvement to the property line of the premises served. The connection of the building sewer to the main sewer shall be made in front of the premises served, unless otherwise approved by the Director.

Section 1206 Residential Subdivisions

In the development of residential subdivisions with sanitary sewers, all lots shall be served by connections to the sanitary sewer system either by gravity or by means of a pump or ejector. No individual disposal devices will be permitted.

In all buildings in which any sanitary building drain is too low to permit gravity flow to the sanitary sewer system, any sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer.

Section 1207 Maintenance

For maintenance of building sewers, see Section 2008 of these regulations.

Section 1208 Sewer Tapping

Permits to connect building sewers, to open, or alter any public/ private sanitary or combined sewer or appurtenance will be issued only to a person engaged in the business of sewer construction or tapping and possessing a valid license and bond from the District.

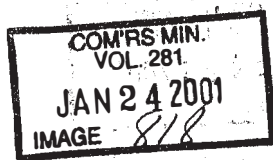
Section 1208-A Verification of No Clean Water Connections

Prior to the issuance of a sewer permit allowing for a new connection, opening, or alteration, to a sanitary sewer or appurtenance, on-site verification is necessary to insure that no clean water will enter the sanitary sewer system should a connection or alteration be permitted.

The owner of a property shall be responsible for complying with the District's current policies and procedures relative to protecting the sanitary sewer from clean water sources.

Section 1209 Responsibility of Permit Holder

The person to whom a connection permit is issued will be held responsible for the proper installation of the building sewer in accordance with these Rules and Regulations subject to the condition that the person holds the District harmless from any loss or damage.



Section 1210 Additional Permits

The person to whom a connection permit is issued shall be responsible for obtaining any additional required permits to open cut any street, road or highway, from the appropriate public authority having jurisdiction over such street, road or highway, and shall comply with all conditions required by such additional permits.

Section 1211 Building Sewer Connection Permits (Tap Permit)

There shall be two types of permits for building sewer connection (tap permit): (1) for residential and commercial service, and (2) for service to establishments discharging industrial wastes. In either case, the owner or his agent shall make application on a special form to be obtained from the District. The application for permit shall be supplemented by a copy of the Building Permit, documentation stating the domestic water meter size, detailed site plan showing elevations at the sewer main and the lowest floor elevation of the building, applicable street opening permits, a schematic plan of the footing and foundation drainage system showing the point of discharge and any plans, specifications or other information considered pertinent in the judgment of the Director. A separate tap permit must be obtained for each building sewer connection. A tap-in-fee in accordance with Section 1215 for each tap permit requested shall be paid to the District at the time the application is filed. This fee is specified in Sections 1215 and 2501 of these Rules and Regulations.

Section 1212 Licenses and Bonds

Sewer tappers performing building sewer connections to the District's sewer system shall be licensed by the District. The annual license fee is specified in Section 2501. The license shall be in effect from January 1 to December 31 of each year. Failure to renew this license within a two-year period, after the expiration date, shall result in a new examination being required.

Each license application shall be accompanied by a sewer tapper's bond in the amount of ten thousand dollars (\$10,000.00).

All licensed and bonded sewer tappers are responsible for controlling erosion and sediment.

The District reserves the right to revoke or suspend the license of any holder whose work, or misconduct as a sewer tapper is not in the District's and/or public's best interest. The Director will investigate and review the instance(s), notify the license holder of the time and place for a hearing at which the licensee shall have the right to appear and produce evidence and witnesses for his/her own defense, and make a final decision as to the revocation or suspension of a license.

Section 1213 Inspection of Building Sewers

Inspection of building sewer connections will be provided by appointment, arranged through the Field Section, during normal working hours that are 7:30 a.m. to 4:00 p.m., Monday through Friday. Special Services will be provided when requested. Typical Special Services are (1) return trips due to lack of

expected progress; (2) emergency conditions necessitating immediate response; and (3) abnormal working hours. The permit holder will be billed for Special Services of inspection time at a rate per hour, established and published from time to time by the Board.

Section 1214 Method of Connecting Building Sewers

Building sewers shall be connected to 33-inch or smaller diameter sanitary or combined sewers by one of the following methods:

1. By utilizing an existing T or Y branch.
2. By the use of an approved tapping saddle.
3. By removing a full pipe-length of the existing sewer and "rolling-in" a new length of pipe with a T or Y branch made an integral part thereof.
4. By the use of other methods as may be approved by the Director.

If a new length of pipe is "rolled-in," a concrete collar in accordance with Standard Acc. No. 49031 shall be constructed or an approved coupling installed at each end where the new pipe meets the existing pipe.

Building sewers shall be connected to 36-inch or larger diameter sanitary or combined sewers in a manner as approved by the Director.

"Break-in" connections shall not be permitted unless approved by the Director.

Section 1215 Tap-in-Fee

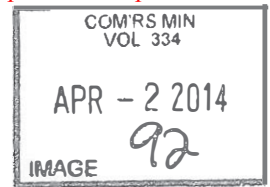
Amended on April 2, 2014 (Comm'rs Min. Vol. 334, Images 88 - 105)

~~The tap-in fee shall apply to all new direct or indirect connections to both public or private sanitary and combined sewer systems under the jurisdiction of the District.~~

~~A. Every person (meaning natural persons, firms, associations, corporations and public bodies) whose premises will be served by a direct or indirect connection to a sanitary or combined sewer of the Metropolitan Sewer District of Greater Cincinnati shall be charged a Tap-in Fee in accordance with Table 1215-1 and subject to the applicable provisions in Section 1215-B of these Rules and Regulations. The Tap-in Fee is due and payable when a sewer tap permit is issued by the Metropolitan Sewer District or its designee. It will be the responsibility of the applicant to supply to MSD a record of the relevant water works application of water service in order to verify the size of the water meter at the time the permit application is submitted.~~

~~Table 1215-1.~~

		Tap-in Fee
Water Meter Size	up to 3/4"	\$2,500.00
	1"	\$4,530.00



ARTICLE XII

BUILDING SEWERS: CONNECTIONS AND PERMITS

Section 1215 Tap-in-Fee

The tap-in-fee shall apply to all new direct or indirect connections to both public or private sanitary and combined sewer systems under the jurisdiction of the District.

- A. Every person (meaning natural persons, firms, associations, corporations and public bodies) whose premises will be served by a direct or indirect connection to a sanitary or combined sewer of the Metropolitan Sewer District of Greater Cincinnati shall be charged a Tap-in Fee in accordance with Table 1215-1 and subject to the applicable provisions in Section 1215 B of these Rules and Regulations. The Tap-in Fee is due and payable when a sewer tap permit is issued by the Metropolitan Sewer District or its designee. It will be the responsibility of the applicant to supply to MSD a record of the relevant water works application of water service in order to verify the size of the water meter at the time the permit application is submitted.

Table 1215-1

Water Meter Size	2014 Tap-in Fee	
	up to ¾"	\$3,620.00
	1"	\$6,560.00
	1-½"	\$15,010.00
	2"	\$27,020.00
	3"	\$61,280.00
	4"	\$109,430.00
	6"	\$247,530.00
	8"	\$440,740.00
	10"	\$688,280.00
	12"	\$990,130.00

1. The tap-in-fee will be adjusted annually as follows, in accordance with Section 2501:
 - a. Based on the September Engineering News Record Construction Cost Index (ENR CCI) for Cincinnati, Ohio, the fees in Table 1215-1 shall be multiplied by the ratio of the current year September ENR CCI to the ENR CCI for September, 2000 (5907.06), rounded to the nearest \$10.



- b. The Tap-in fees determined in a., above, shall become effective on January 1 of each year.

B. Conditions, exceptions, and additional information:

1. For single-family residences existing as of July 1, 1996, the Tap-in Fee shall be \$480. For purposes of this section, a single-family residence shall be considered to be "existing" if a final plumbing inspection was completed and approval granted by the appropriate local authority on or before July 1, 1996. It shall be the responsibility of the applicant to furnish a record of the final plumbing inspection in order to verify the date of final plumbing approval.
2. For single-family residences constructed after July 1, 1996 that are converting from private to publicly-owned, operated, and maintained sanitary sewers, the Tap-in Fee for up to ¾" water meter branch size shall be \$480, in accordance with Table 1215-3
3. For residential condominium properties, in accordance with Chapter 5311 of the Ohio Revised Code, the Tap-in Fee shall be calculated based upon number of units, and the Tap-in Fee shall be \$480 per unit.
4. In areas where a connection charge or local benefit charge greater than the applicable Tap-in Fee set forth in Table 1215-1 was established by a prior resolution of this Board or by another political subdivision which has since joined the Metropolitan Sewer District, only the applicable Tap-in Fee set forth in the prior resolution shall be collected.
5. In areas where a connection charge or local benefit charge less than the applicable Tap-in Fee set forth in Table 1215-1 was established by a prior resolution of this Board or by another political subdivision which has since joined the Metropolitan Sewer District, only the applicable Tap-in Fee set forth in Table 1215-1 shall be collected.
6. Properties located outside of Hamilton County and served by the sewer facilities of the Metropolitan Sewer District are subject to the Tap-in Fees in this Section. The agency issuing that tap permit shall collect the appropriate Fee and shall forward this Fee to the Metropolitan Sewer District.
7. When a premises is supplied either in whole or in part with water from wells or any other source other than a public water supply, MSD will contact the local water district to determine the comparable water meter size which would be needed to serve the premises. In the event there is no local water district, the Director of the Metropolitan Sewer District will determine comparable water meter size.
8. Where a combination service line and water meter for both domestic and fire service is provided MSD will contact the local water district to determine the domestic water demand and appropriate water meter size for that demand in



order to determine the Tap-in Fee. The Director of the Metropolitan Sewer District shall have the authority to determine the proper Tap-in Fee.

9. When a person can show to the satisfaction of the Director of the Metropolitan Sewer District that a portion of the water used on the premises will not enter the sewer system, The Director of the Metropolitan Sewer District shall have the authority to reduce the Tap-in Fee.
10. An owner of a single family residence with a water meter larger than 3/4-inch may pay a Tap-in Fee equal to the rate set for buildings with up to a 3/4" water meter, provided the owner furnishes an affidavit stating the reason for the increased size of the water meter and a statement confirming that no non-residential activities will occur at the premises which will allow additional water to enter the sewer system.
11. Applicants for sewer tap permits under the following circumstances will be charged Tap-in Fees as follows:
 - a. No additional tap-in fee will be charged for an existing building with a permitted sewer tap which is demolished or destroyed, is replaced with a new building on the same site, and for which the water meter size for the replacement building is the same as the water meter size for the demolished or destroyed building. Where records do not exist on water meter size, the minimum water meter size, as indicated in Table 1215-2, will be assumed.
 - b. For an existing building with a permitted sewer tap which is demolished or destroyed, is replaced with a new building on the same site, and for which the water meter size for the replacement building is increased from the water meter size for the demolished or destroyed building, or in the case where water meter size records do not exist and the minimum size meter is assumed, the Tap-in Fee will be calculated based on the current rates for Tap-in Fees, less the Tap-in Fee previously paid. If no record of prior Tap-in fee payment exists, the Tap-in Fee amount previously paid will be assumed to be in accordance with Table 1215 -2, below, as applicable. Plumbers who fail to pay this fee are subject to being removed from the MSD approved sewer tapper list and have their sewer tapper license revoked.
 - c. For an existing building with a permitted sewer tap for which the water meter is replaced with a new, larger water meter, the Tap-in Fee will be calculated based on the current rates for Tap-in Fees, less the Tap-in fee previously paid. If no record of prior Tap-in fee payment exists, the Tap-in Fee amount previously paid will be assumed to be in accordance with Table 1215 -2, below, as applicable. Plumbers who fail to pay this fee are subject to being removed from the MSD approved sewer tapper list and have their sewer tapper license revoked.

Table 1215-2. For single-family residences:



Water Meter Size	Tap-in Fee
up to $\frac{3}{4}$ "	\$480.00
1"	\$870.00
1- $\frac{1}{2}$ "	\$1,990.00
2"	\$3,580.00
3"	\$8,120.00
4"	\$14,500.00
6"	\$32,800.00
8"	\$58,400.00

Table 1215-3. For buildings constructed on or after July 2, 1996:
(eff. 1/1/2014)

Water Meter Size	Tap-in Fee
up to $\frac{3}{4}$ "	\$480 for properties in accordance with Section 1215(B)(2)
	\$3,620.00 for properties in accordance with Section 1215(A)
1"	\$6,560.00
1- $\frac{1}{2}$ "	\$15,010.00
2"	\$27,020.00
3"	\$61,280.00
4"	\$109,430.00
6"	\$247,530.00
8"	\$440,740.00
10"	\$688,280.00
12"	\$990,130.00

12. Policy Concerning Tap-in-Fees associated with Residential and Non-Residential Redevelopment.

It is the policy of the Board of County Commissioners to encourage redevelopment throughout Hamilton County. Redevelopment is defined as the removal of one or more buildings of any type from one or more parcels of any zoning, and the replacement of that structure or structures with any number of new structures.

MSD will calculate the tap-in-fees for the new structure(s) within residential or

non-residential redevelopments based on the current rates for tap-in-fees (Table 1215-1 et. seq.), less the tap-in-fee amount for the old structure. The tap-in-fee equivalent for the redevelopment will be the sum of the various size meters times the rate for that meter minus the sum of the pre-redevelopment meter sizes times the present rate for that size meter.

Rates to be used are the rates in effect at the time the development plans are approved for construction.

The redevelopment tap-in-fees balance shall be collected based on building meter size prior to the credit balance being issued. In the event the predevelopment amount is greater than the redevelopment amount, there will be no refund of the difference.

Only those taps within the specific recorded land parcel limits of the original development, whose bounds have been defined by a development plans that has been reviewed and approved by a County or Municipal Zoning or Planning Board or Commission sanctioned by the Ohio Revised Code and Ohio Administrative Code, are transferable.

Each redevelopment that occurs will be based on the most recent previous development. No credits will be given for past redevelopment activity.

To receive the credit for pre-existing taps, the developer must submit satisfactory proof to establish the number and size of pre-existing water meters available for the new development units during the concept or detail plan review process defined under Section V of the MSD Rules and Regulations. The following shall be used to determine "satisfactory proof":

1. Clear written description describing the source of the pre-existing information.
2. A plan clearly showing the location of the pre-existing buildings and water meters in relation to the current parcels lines for which credit is requested.

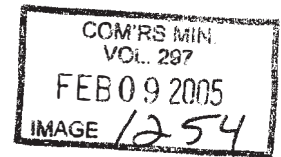
Approval shall be void if construction has not commenced within twelve (12) months and completed within thirty-six (36) months from the date of the approval of construction letter consistent with Section 510 of these Rules and Regulations. The Director may extend approval for a period not be exceed twelve months.

Credit for pre-existing taps approved during Concept of Detail Plan Review will be granted after Tap Permits have been applied for and granted. No credits for the planned demolition of structure(s) will be granted until the demolition of such structure(s) is complete.

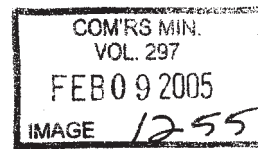
AMENDMENT: MSD RULES & REGULATIONS

Section 1216

Policy for Levying Sewer Assessments for Local Collector Sewers - Assessment Credit



- A. **Single Family or "Primary" Assessment Credit.** It is the policy of the Board to encourage public sewers and to finance sewer improvements, which provide local sewer service, by levying special assessments on the properties receiving benefit from the sewer improvement as provided in Ohio Revised Code Chapter 6117. For single family residences existing as of September 20, 1995, MSD will pay, in the form of a single-family or primary assessment credit, the special assessment for a local sewer, up to \$5,000, provided that:
- 1.) The local sewer eliminates the need for on-site sewage disposal systems and connects to the public sewer system of the Metropolitan Sewer District; or
 - 2.) The local sewer is a replacement or repair of a privately owned local sewer which connects to the public sewer system of the Metropolitan Sewer District, and the private sewer meets MSD standards and is dedicated by its owners to public use in accordance with MSD *Rules and Regulations*.
- B. **"Secondary" Assessment Credit.** It is the policy of the Board to encourage public sewers and to finance sewer improvements, which provide local sewer service, by levying special assessments on the properties receiving benefit from the sewer improvement, as provided in Ohio Revised Code Chapter 6117. For all properties so specially assessed, it is the policy of this Board that MSD will pay, in the form of a secondary assessment credit, all public improvement project costs exceeding \$12,000. **It is the policy of the Board that total actual per-benefit costs of the local public sewer improvement which remains in excess of \$12,000 per benefited property, once the single-family assessment credit has been applied, shall be funded from Metropolitan Sewer District unappropriated funds as a secondary credit.** This secondary credit is applicable to all property types as defined by the Hamilton County Auditor and subject to special assessment under the Revised Code.
- C. **Annual Credit Adjustment.** The single-family assessment credit of Section 1216 (A) will be adjusted annually in accordance with Article 25, as follows:
- 1.) Based on the September Engineering News Record Construction Cost Index (ENR CCI) for Cincinnati, Ohio, the \$5,000 credit shall be multiplied by the ratio of the current year September ENR CCI to the ENR CCI for September 2000 (5907.06), rounded to the nearest \$100.
 - 2.) The Assessment Credit determined in Section 1216 (A) shall become effective on January 1 of each year.
 - 3.) The Assessment Credit in effect at the time of adoption of the Resolution Confirming Revised Assessment shall be applied. For each single family residence, existing as of the September 20, 1995, served by a local collector sewer whose construction costs are assessed under this policy, a sewer tap-in-fee in the amount of \$480.00 will be charged by the Metropolitan Sewer District at the time of connection of the property to the public sewer.



2/2/2005
Exhibit A

MSD IMPLEMENTATION – 1216. Per Chapter 6117 ORC, MSD will report to the Board all costs of a local public sewer improvement project. Also per Chapter 6117, the Board must assess the actual costs of a local public sewer improvement project. However, statute permits the Board to fund a portion of these actual costs from “other available funds” (§6117.06(E)). It is Board policy that the cost of special assessments for local public sewer improvements shall not exceed \$12,000 per benefited property. To this end, MSD will apply the single-family or “primary” assessment credit to the actual per-benefit cost in order to determine if the amount exceeds, is at or below \$12,000. If the amount is at or below \$12,000, this is the amount applied as a final assessment when the Board confirms special assessments (see Section 1805 (D), above). If the amount still exceeds \$12,000, MSD will apply a “secondary” assessment credit to bring the per-benefit amount to be equal to \$12,000. Sections 1805 (E) and 2502 are applicable as well in this implementation.

Costs associated with “private-side” improvements, i.e., connection to the public sewer and abandonment of the existing on-site household wastewater disposal system, are ***not*** a part of the local public sewer improvement costs.



Section 1216 Policy for Levying Sewer Assessments for Local Public Sewer Assessment Project - Assessment Credit

D. Home Septic Treatment System Reimbursement Credit. It shall be a policy of the Board if a benefited single-family property is currently served by a Home Sewage Treatment System (HSTS), it will qualify for an HSTS reimbursement credit based upon the conditions stipulated in this rule and regulation. This policy is designed to reimburse property owners who have made purchases of HSTS systems deemed to have the capability of effectively treating household wastewater discharges where those systems have been effectively maintained to ensure proper operation and compliance. Nothing in this policy is meant to imply that HSTS are technically or environmentally equivalent to public sanitary sewer systems as it relates to the treatment of household sewage.

Compliant HSTS systems include:

- 1.) Discharging systems, with NPDES permit(s) in effect at the time the credit is approved, and,
- 2.) On-site absorption systems, whereby wastewater is treated on-site and is not discharged to an adjacent property, waterway, or aquifer. Compliant HSTS systems do not include any on-site absorption system operating over an aquifer (otherwise termed by Hamilton County Public Health as a "dry well").

The HSTS reimbursement credit will apply only to those HSTS systems which:

- 1) As indicated by Hamilton County Public Health, were installed in accordance with the provisions of Hamilton County Public Health regulations enacted on December 10, 2004; and
- 2) As indicated by Hamilton County Public Health, are in compliance with applicable laws and regulations governing the operation of HSTS systems at the time of the order to connect to the sewer system; and
- 3) Possess a discharging system NPDES permit(s) in effect at the time the credit is approved; or
 - a. (Non-NPDES Discharging systems are not eligible for reimbursement under this program.)
- 4) Possess a compliant absorption system.

The County, through MSD, will provide eligible property owners with an HSTS reimbursement credit at the following levels for abandoning their eligible system:

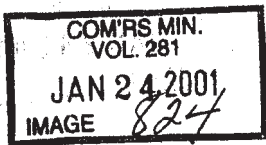
Type of HSTS System	Eligible Reimbursement Amount*
Absorption	\$5,800
Discharge (NPDES Compliant)	\$3,600

*Eligible HSTS reimbursement credit is calculated using the five year annual average cost of local systems as compiled by Hamilton County Public Health, and multiplied by a factor of .20.

Eligible HSTS reimbursement credit amounts, detailed above, will be applied on a parcel-



by-parcel basis to eligible benefited properties required to tap into the public sewer system due to the proximity of a local sewer. The net impact for eligible benefited properties will be to increase the applicable assessment credit by reducing the \$12,000 cost cap, as currently set by Board policy, commensurate with the eligible HSTS reimbursement credit amount.



ARTICLE XIII

INDIVIDUAL PRIVATE SEWAGE DISPOSAL

Section 1301*

Where a public sanitary or combined sewer is not available to a premise, the building sewer shall be connected to an individual private sewage disposal system complying with the requirements of the appropriate public authority.

Section 1302*

The owner shall, at his own expense, operate and maintain the individual private sewage disposal facility to the satisfaction of the appropriate public authority.

Section 1303*

No individual private residential sewage disposal facility shall be connected to any public or private sanitary, storm, or combined sewer under the District's jurisdiction.

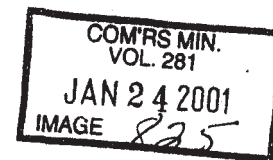
Section 1304*

At such time as a public sanitary or combined sewer becomes available for use by property served by an individual private sewage disposal system, a direct connection shall be made to the public wastewater treatment system by and at the expense of the owner. Any septic tanks, cesspools, or similar individual private sewage disposal facility shall be abandoned to the satisfaction of the appropriate public authority. All necessary permits shall be obtained prior to any actual work.

* Enforcement of these regulations is the responsibility of the several Boards of Health and their appearance here is for informational purposes only.

ARTICLE XIV

DISPOSAL OF HOLDING TANK WASTES



Section 1401 General Rule

Holding tank wastes originating within the District Service Area may be hauled to and discharged into the District's wastewater treatment system only at those locations, by such methods, and at such times and days as are designated by the Director.

Section 1402 Geographic Restrictions

Holding tank wastes originating outside the boundaries of the District Service Area are prohibited from being discharged into the District's wastewater treatment system without prior written approval from the Director.

Section 1403 Permits

Permits for discharge of holding tank wastes shall be obtained on application forms furnished by the Director. A separate permit shall be obtained for each tank vehicle upon payment of a fee as specified in Section 2501. Each permit shall be displayed at all times on the vehicle for which purchased. Permits are transferable only when the tank vehicle for which the permit was purchased is to be replaced, and then only with the approval of the Director. The term of the permit shall extend from January 1 through December 31 of a calendar year. The permit fee shall not be prorated.

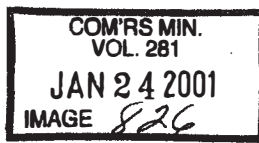
Section 1404 Fees

The costs of the disposal of holding tank wastes are to be paid by the discharger. The Board will set the specified rate to reflect costs of program elements, including but not limited to, administration, treatment at rates established by resolution of the Board, laboratory and enforcement. Any person discharging holding tank or grease trap wastes into the wastewater treatment system of the District shall pay the District at the rate specified in Section 2501 as a sewage disposal charge.

Section 1405 Discharge Restrictions

No person discharging holding tank wastes into the wastewater treatment system of the District, shall discharge or cause to be discharged, either directly or indirectly, industrial wastes without the prior approval of the Director. In any case, wastes are prohibited which cause the wastewater treatment plant to fail to meet effluent limitations set by State or Federal regulatory agencies. The District may inspect any vehicle disposing holding tank wastes at any time. The District will sample the contents of each disposal. Any costs incurred by such sampling and analysis shall be charged to the permittee unless otherwise determined by the Director.

Under no circumstances shall any person cause Resource Conservation and Recovery Act defined hazardous waste to be received from off-site by tanker truck, trailer/roll-off bins, drums, or other forms of portable holding tanks.



Section 1406 Liabilities

No person discharging holding tank wastes shall discharge so as to interfere with the operation of, or cause damage to, a wastewater treatment works, or engage in disorderly or unlawful conduct. Each discharger shall be responsible for the costs of any damages to property or personal injury caused by reason of the discharger's operations. Damages shall include fines or other penalties imposed on the District as a result of the discharger's operations.

Section 1407 Indemnity

The discharger covenants and agrees to indemnify and hold the County, City, and District and all their officers, agents, and employees harmless from any liability whatsoever for any injuries to persons or property arising out of the discharger's operations and defend any suit or legal proceeding brought against the County, City, or District or any of their officers, principals, agents or employees on account of loss or damage sustained by any person or property as a result of the discharger's operations, whether or not such injuries or damage be caused by the inherent nature of work performed by the discharger or by the negligence of the discharger or his employees.

Section 1408 Bonding

Each permit application shall be accompanied by a bond, payable to the City and County upon default, in an amount depending on the septic hauling capacity of the tank vehicle, or where multiple tank vehicles are operated by a single applicant, in an aggregate amount based upon the fleet capacity, of \$10,000 per 1000 gallons or any part thereof. The full face value of the fleet operator's bond shall apply to each incident.

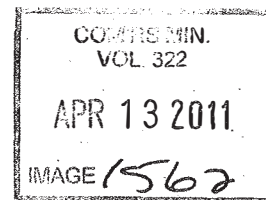
Said bond is intended to insure the performance of the permittee in complying with each and every applicable section of these MSD Rules and Regulations.

Section 1409 Statutory Obligations

Each and every permit issued to a permittee is subject to revocation by the Director upon a finding that the permittee has been convicted of a violation of any Federal, State, or local law or regulation whose subject matter is water quality and/or water pollution control.

Section 1410 Failure to Comply

Failure to comply with any of the above provisions shall be grounds for permit suspension or revocation, fines, and/or forfeiture of bond, such as is determined to be appropriate by the Director in accordance with these Rules and Regulations and other applicable law.



ARTICLE XV

PRETREATMENT

Section 1501 General Provisions

.1501.1 Purpose and Policy

This Article sets forth uniform requirements for Users of the Publicly Owned Treatment Works for the Metropolitan Sewer District of Greater Cincinnati and enables the District to comply with all applicable State and Federal laws, including the Clean Water Act (33 United States Code [U.S.C.] Section 1251 et seq.) and the General Pretreatment Regulations (Title 40 of the Code of Federal Regulations [CFR] Part 403). The objectives of this Article are:

- A. To prevent the introduction of pollutants into the POTW that will interfere with its operation;
- B. To prevent the introduction of pollutants into the POTW that will pass through the POTW, inadequately treated, into receiving waters, or otherwise be incompatible with the POTW;
- C. To protect both POTW personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
- D. To promote reuse and recycling of industrial wastewater and sludge from the POTW; and
- E. To enable the District to comply with its National Pollutant Discharge Elimination System permit conditions, sludge use and disposal requirements, and any other Federal or State laws to which the POTW is subject.

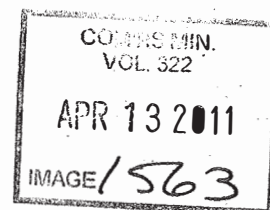
This Article shall apply to all Users that are not Residential Users of the POTW. The Article authorizes the issuance of individual wastewater discharge permits or General Wastewater Discharge Permits; provides for monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires User reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

.1501.2 Administration

Except as otherwise provided herein, the Director shall administer, implement, and enforce the provisions of this Article. Any powers granted to or duties imposed upon the Director may be delegated by the Director to a duly authorized employee of the District.

.1501.3 Abbreviations

The following abbreviations, when used in this Article, shall have the designated meanings:



BOD – Biochemical Oxygen Demand
BMP – Best Management Practice
BMR – Baseline Monitoring Report
CFR – Code of Federal Regulations
CIU – Categorical Industrial User
COD – Chemical Oxygen Demand
EPA – U.S. Environmental Protection Agency
gpd – gallons per day
IU – Industrial User
mg/L – milligrams per liter
NPDES – National Pollutant Discharge Elimination System
NSCIU – Non-Significant Categorical Industrial User
O&M – Operation and Maintenance
O.A.C. – Ohio Administrative Code
OEPA – Ohio Environmental Protection Agency
O.R.C. – Ohio Revised Code
POTW – Publicly Owned Treatment Works
RCRA – Resource Conservation and Recovery Act
SIU – Significant Industrial User
SNC – Significant Noncompliance
TSS – Total Suspended Solids
U.S.C. – United States Code

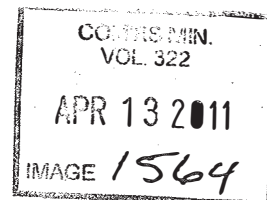
1501.4 Definitions

Definitions pertinent to this Article XV are included in Article I of these MSD Rules and Regulations.

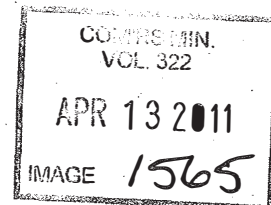
Section 1502 General Sewer Use Requirements

1502.1 Prohibited Discharge Standards

- A. General Prohibitions. No User shall introduce or cause to be introduced into the POTW any pollutant or wastewater that causes Pass Through or Interference. These general prohibitions apply to all Users of the POTW whether or not they are subject to Categorical Pretreatment Standards or any other Federal, State, or local Pretreatment Standards or Requirements.
- B. Specific Prohibitions. No User shall introduce or cause to be introduced into the POTW the following pollutants, substances, or wastewater:
 - 1. Pollutants that create a fire or explosive hazard in the POTW, including, but not limited to, waste streams with a closed-cup flashpoint of less than 140 degrees F (60 degrees C) using the test methods specified in 40 CFR 261.21;



2. Wastewater having a pH less than 5.0 or more than 12.5 standard units, or otherwise causing corrosive structural damage or any other adverse impact to the POTW or equipment; but in no case wastewater that causes the pH at the introduction into the wastewater treatment plant to be outside the range of 6 to 10 standard units; if there is a pH BMP approved by the Director, only occurrences exceeding the pH criteria of Table 3 and Table 4 of the Enforcement Response Plan will be considered in violation.
3. Solid or viscous substances in amounts that will cause obstruction of the flow in the POTW resulting in Interference, but in no case solids greater than 1/4 inch (0.25") or 0.6 centimeter (0.6 cm) in any dimension;
4. Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration that, either singly or by interaction with other pollutants, will cause Interference with the POTW;
5. Wastewater having a temperature greater than 150 degrees F (65 degrees C), or that will inhibit biological activity in the treatment plant resulting in Interference, but in no case wastewater that causes the temperature at the introduction into the treatment plant to exceed 104 degrees F (40 degrees C);
6. Floating oils, fat, or grease; petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through or containing more than 50 milligrams per liter of silica gel treated n-hexane extractable material (total petroleum hydrocarbons) as determined by analysis of a grab sample;
7. Pollutants that result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
8. Trucked or hauled pollutants, except at discharge points designated by the Director in accordance with Section 1503.4 of this Article;
9. Noxious or malodorous liquids, gases, solids, or other wastewater that, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
10. Wastewater which imparts color that cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating the District's NPDES permit;
11. Wastewater containing any radioactive wastes or isotopes, except in compliance with applicable State or Federal regulations;



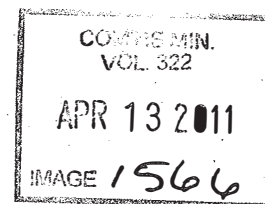
12. Storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the Director;
13. Sludges, screenings, or other residues from the pretreatment of industrial wastes, except as specifically authorized by the Director;
14. Medical wastes, except as specifically authorized by the Director in an individual wastewater discharge permit or a General Wastewater Discharge Permit;
15. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;
16. Detergents, surface-active agents, or other substances that might cause excessive foaming in the POTW;
17. Wastes from garbage grinders except: wastes generated in preparation of food normally consumed on the premises, or wastes of a specific character whose discharge after grinding is authorized by a written permit signed by the Director. All garbage grinders shall shred the waste such that all particles will be carried freely under normal prevailing flow conditions in the public sewer. Wastes from garbage grinders used for grinding plastic, paper products, inert materials, or garden refuse shall not be discharged to the wastewater treatment system; and
18. Direct discharge of any substances into a manhole or other opening in the wastewater treatment system other than an approved building sewer, unless, upon written application to the Director and payment of the applicable User charges and fees, the Director issues a permit for such direct discharges.

Pollutants, substances, or wastewater prohibited by this Section shall not be processed or stored in such a manner that they could be discharged to the POTW.

1502.2 National Categorical Pretreatment Standards

Users must comply with the Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405 to 471.

- A. Where a Categorical Pretreatment Standard is expressed only in terms of either the mass or the concentration of a pollutant in wastewater, the District may impose equivalent concentration or mass limits in accordance with Sections 1502.2D and 1502.2E of this Section.
- B. When the limits in a Categorical Pretreatment Standard are expressed only in terms of mass of pollutant per unit of production, the District may convert the limits to equivalent



limitations expressed either as mass of pollutant discharged per day or effluent concentration for purposes of calculating effluent limitations applicable to individual IUs.

- C. When wastewater subject to a Categorical Pretreatment Standard is mixed with wastewater not regulated by the same Standard, the District shall impose an alternate limit in accordance with 40 CFR 403.6(e).
- D. The District may convert the mass limits of the Categorical Pretreatment Standards of 40 CFR Parts 414, 419, and 455 to concentration limits for purposes of calculating limitations applicable to individual IUs. The conversion is at the discretion of the Director.
- E. Once included in its permit, the IU must comply with the equivalent limitations developed in this Section in lieu of the promulgated Categorical Standards from which the equivalent limitations were derived.
- F. Many Categorical Pretreatment Standards specify one limit for calculating Daily Maximum Limits and a second limit for calculating maximum Monthly Average, or 4-day average, limitations. Where such Standards are being applied, the same production or flow figure shall be used in calculating both the average and the maximum equivalent limitations.
- G. Any IU operating under a permit incorporating equivalent mass or concentration limits calculated from a production-based Standard shall notify the District within two (2) business days after the User has a reasonable basis to know that the production level will significantly change within the next calendar month. Any User not notifying the District of such anticipated change will be required to meet the mass or concentration limits in its permit that were based on the original estimate of the long-term average production rate.

1502.3 State Pretreatment Standards

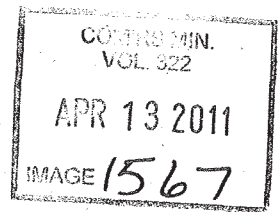
Users must comply with OEPA pretreatment standards codified in O.A.C. Rule 3745-3-03 *et sequens* ("State Pretreatment Standards"), incorporated herein by reference.

1502.4 Local Limits

Amended on March 14, 2018 (Comm'rs Min. Vol. 349, Images 7080 - 7087)

- ~~A. The Director is authorized to establish Local Limits pursuant to 40 CFR 403.5(e).~~
- ~~B. The following pollutant limits are established to protect against Pass Through and Interference. Wastewater containing pollutants in excess of the limits listed below shall not be discharged. Local Limits are determined as required for each NPDES permit and are applicable to the sewer drainage into that treatment plant. MIA - Little Miami WWTP, MIL - Mill Creek WWTP, MUD - Muddy Creek WWTP, SYC - Sycamore Creek WWTP, LOV - Polk Run WWTP.~~

Pollutant	MIA	MIL	MUD	SYC	LOV
-----------	-----	-----	-----	-----	-----



Cadmium (Total) mg/L	0.2	6.0	6.0	6.0	6.0
Chromium (Total) mg/L	10.0	10.0	10.0	10.0	10.0
Chromium (VI) mg/L	0.9	NA	NA	NA	NA
Copper (Total) mg/L	2.2	10.0	10.0	1.53	1.53
Lead (Total) mg/L	5.7	6.0	6.0	6.0	6.0
Mercury (Total) mg/L	0.02	0.02	0.02	0.0005	0.0005
Nickel (Total) mg/L	10.0	10.0	10.0	10.0	10.0
Silver (Total) mg/L	1.0	NA	NA	NA	NA
Zinc (Total) mg/L	10.0	10.0	10.0	2.0	2.0
Cyanide (Total) mg/L	15.0	15.0	15.0	15.0	15.0
Cyanide (Free) mg/L	3.0	3.0	3.0	3.0	3.0
Cyanide (Amenable) mg/L	3.0	NA	NA	3.0	3.0

~~The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for total metal unless indicated otherwise. The Director may impose mass limitations in addition to the concentration based limitations above.~~

~~C. The Director may develop Best Management Practices (BMPs), by MSD R & R or in individual wastewater discharge permits or in General Wastewater Discharge Permits, to implement Local Limits and the requirements of Article XV.~~

.1502.5 The District's Right of Revision

The District reserves the right to establish, by MSD R & R or in individual wastewater discharge permits or in General Wastewater Discharge Permits, more stringent Standards or Requirements on discharges to the POTW consistent with the purpose of this Article.

.1502.6 Dilution

No User shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable Pretreatment Standard or Requirement. The Director may impose mass limitations on Users who are using dilution to meet applicable Pretreatment Standards or Requirements, or in other cases when the imposition of mass limitations is appropriate.

.Section 1503 Pretreatment of Wastewater

.1503.1 Pretreatment Facilities

Users shall provide wastewater treatment as necessary to comply with this Article and shall achieve compliance with all Categorical Pretreatment Standards, Local Limits, and the prohibitions set out in Section 1502.1 of this Article within the time limitations specified by

ARTICLE XV
PRETREATMENT



1502.4 Local Limits (Modified 2018)

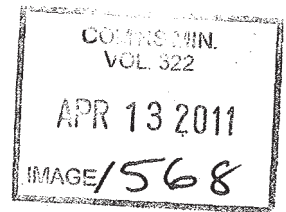
- A. The Director is authorized to establish Local Limits pursuant to 40 CFR 403.5(c).
- B. The following pollutant limits are established to protect against Pass Through and Interference. Wastewater containing pollutants in excess of the limits listed below shall not be discharged. Local Limits are determined as required for each NPDES permit and are applicable to the sewer drainage into that treatment plant. IND = Indian Creek WWTP; LIT = Little Miami WWTP; MIL = Mill Creek WWTP; MUD = Muddy Creek WWTP; POL = Polk Run WWTP; SYC = Sycamore Creek WWTP; TAY = Taylor Creek WWTP.

Pollutant	IND	LIT	MIL	MUD	POL	SYC	TAY
Cadmium (Total) mg/L	0.52	0.3	6.0	6.0	6.0	6.0	0.52
Chromium (Total) mg/L	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chromium (+6) mg/L	NA	0.9	NA	NA	NA	NA	NA
Copper (Total) mg/L	1.53	2.2	10.0	10.0	1.53	1.53	4.6
Lead (Total) mg/L	6.0	5.7	6.0	6.0	6.0	6.0	5.4
Mercury (Total) mg/L	0.001	0.02	0.02	0.02	0.0005	0.0005	0.001
Nickel (Total) mg/L	7.8	10.0	10.0	10.0	10.0	10.0	10.0
Selenium (Total) mg/L	NA	NA	NA	NA	40.0	NA	0.31
Silver (Total) mg/L	NA	1.0	NA	NA	NA	NA	NA
Zinc (Total) mg/L	3.8	10.0	10.0	10.0	2.0	2.0	3.8
Cyanide (Total) mg/L	15.0	15.0	15.0	15.0	15.0	15.0	15.0
Cyanide (Free) mg/L	3.0	3.0	3.0	3.0	3.0	3.0	3.0

The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for total metal unless indicated otherwise. The Director may impose mass limitations in addition to the concentration-based limitations above.

- C. The Director may develop Best Management Practices (BMPs), by MSD R & R or in individual wastewater discharge permits or in General Wastewater Discharge Permits, to implement Local Limits and the requirements of Article XV.

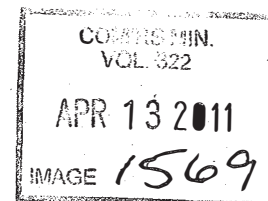
1/2/2018; Eff. March 14, 2018



EPA, the State, or the Director, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the User's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Director for review, and shall be acceptable to the Director before such facilities are constructed. Approval of proposed facilities or equipment by the Director does not, in any way, guarantee that these facilities or equipment will function in the manner described by the User, its owner, designer, constructor, or manufacturer; nor shall it relieve a User of the responsibility to enlarge or otherwise modify such facilities to accomplish the intended purpose. The review of such plans and operating procedures shall in no way relieve the User from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the District under the provisions of this Article. The User shall maintain operating records as required by the Director and, upon request, shall submit to the District reports of the character of influent and effluent to show the performance of the pretreatment or control facilities.

1503.2 Additional Pretreatment Measures

- A. Whenever deemed necessary, the Director may require Users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage waste streams from industrial waste streams, and such other conditions as may be necessary to protect the POTW and determine the User's compliance with the requirements of this Article.
- B. The Director may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. An individual wastewater discharge permit or a General Wastewater Discharge Permit may be issued solely for flow equalization.
- C. Grease, oil, and sand interceptors shall be provided when, in the opinion of the Director, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil or sand; except that such interceptors shall not be required for Residential Users. All interception units shall be of a type and capacity approved by the Director and shall be located so as to be easily accessible for cleaning and inspection. Such interceptors shall be inspected, cleaned, and repaired by the User at their expense. The owner, or User, shall have on site and available for inspection maintenance and cleaning records for each interception device. Notwithstanding the above, these devices shall be installed in all food service establishments such as restaurants, cafeterias, etc.
- D. Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.
- E. Monitoring Facilities. The Director may require any IU to construct, at the User's own expense, monitoring facilities to allow inspection, sampling, and flow measurement of the building sewer or internal drainage systems, and may also require sampling or metering equipment to be provided, installed, and operated at the User's expense. The District shall also have the right to set up monitoring devices at the facilities.



Whether constructed on public or private property, the sampling and monitoring facilities shall be provided in accordance with the District's requirements and all applicable local agency construction standards and specifications. Construction of the monitoring facility shall not begin until plans have been submitted to and approved by the District. Unless a time extension is granted in writing by the Director, construction shall be completed within ninety (90) days following the issuance of written approval by the District.

The monitoring facility shall be situated on the User's premises and located so that it will not be obstructed by landscaping or parked vehicles. There shall be ample room in or near such monitoring facilities to allow accurate sampling and compositing of samples for analysis. The monitoring facilities and sampling and measuring equipment shall be maintained at all times in a safe and proper operating condition at the expense of the User.

The personnel of the District shall have unimpeded access to the monitoring facilities at all times for inspection and sample collection. If the facilities are locked, special arrangements shall be made to allow access.

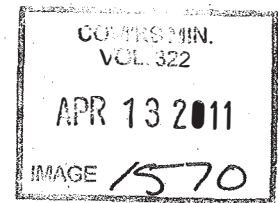
1503.3 Accidental Discharge/Slug Discharge Control Plans

The Director shall evaluate whether each SIU needs an Accidental Discharge/Slug Discharge Control Plan or other action to control Slug Discharges. The Director may require any User to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control Slug Discharges. Alternatively, the Director may develop such a plan for any User. An accidental discharge/slug discharge control plan shall address, at a minimum, the following:

- A. Description of discharge practices, including nonroutine batch discharges;
- B. Description of stored chemicals;
- C. Procedures for immediately notifying the Director of any Accidental or Slug Discharge, as required by Section 1506.6 of this Article; and
- D. Procedures to prevent adverse impact from any Accidental or Slug Discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

1503.4 Hauled Wastewater

- A. For general rules on hauled waste see Article XIV of these MSD R & R.



- B. The Director may require haulers of industrial waste to obtain individual wastewater discharge permits or General Wastewater Discharge Permits. The Director may require generators of hauled industrial waste to obtain individual wastewater discharge permits or General Wastewater Discharge Permits. The Director also may prohibit the disposal of hauled industrial waste. The discharge of hauled industrial waste is subject to all other requirements of this Article.
- C. Industrial waste haulers may discharge loads only at locations designated by the Director. No load may be discharged without prior consent of the Director. The Director may collect samples of each hauled load to ensure compliance with applicable Standards. The Director may require the industrial waste hauler to provide a waste analysis of any load prior to discharge.
- D. Industrial waste haulers must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes.

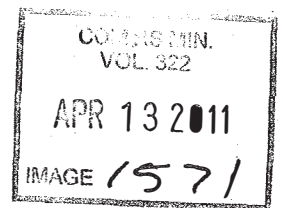
Section 1504 Individual Wastewater Discharge Permits and General Wastewater Discharge Permits

1504.1 Wastewater Analysis

When requested by the Director, a User must submit information on the nature and characteristics of its wastewater within ninety (90) days of the request. The Director is authorized to prepare a form for this purpose and may periodically require Users to update this information.

1504.2 Requirement for Individual Wastewater Discharge Permit or General Wastewater Discharge Permit

- A. No SIU shall discharge wastewater into the POTW without first obtaining an individual wastewater discharge permit or a General Wastewater Discharge Permit from the Director, except that an SIU that has filed a timely application pursuant to Section 1504.3 of this Article may continue to discharge for the time period specified therein.
- B. The Director may require other Users to obtain individual wastewater discharge permits or General Wastewater Discharge Permits as necessary to carry out the purposes of this Article.
- C. Any violation of the terms and conditions of an individual wastewater discharge permit or a General Wastewater Discharge Permit shall be deemed a violation of this Article and subjects the wastewater discharge permittee to the sanctions set out in Sections 1510 through 1512 of this Article. Obtaining an individual wastewater discharge permit or a



General Wastewater Discharge Permit does not relieve a permittee of its obligation to comply with all Federal and State Pretreatment Standards or Requirements or with any other requirements of Federal, State, and local law.

1504.3 Individual Wastewater Discharge and General Wastewater Discharge Permitting: Existing Connections

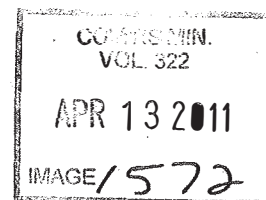
Any User required to obtain an individual wastewater discharge permit or a General Wastewater Discharge Permit who was discharging wastewater into the POTW prior to the effective date of this Article and who wishes to continue such discharges in the future shall, within ninety (90) days after said date, apply to the Director for an individual wastewater discharge permit or a General Wastewater Discharge Permit in accordance with Section 1504.5 of this Article, and shall not cause or allow discharges to the POTW to continue after one hundred eighty (180) days of the effective date of this Article, except in accordance with an individual wastewater discharge permit or a General Wastewater Discharge Permit issued by the Director.

1504.4 Individual Wastewater Discharge and General Wastewater Discharge Permitting: New Connections

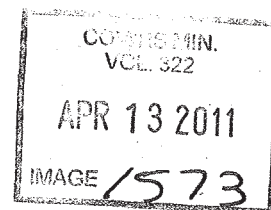
Any User required to obtain an individual wastewater discharge permit or a General Wastewater Discharge Permit who proposes to begin or recommence discharging into the POTW must obtain such permit prior to the beginning or recommencing of such discharge. An application for this individual wastewater discharge permit or General Wastewater Discharge Permit, in accordance with Section 1504.5 of this Article, must be filed at least ninety (90) days prior to the date upon which any discharge will begin or recommence.

1504.5 Individual Wastewater Discharge and General Wastewater Discharge Permit Application Contents

- A. All Users required to obtain an individual wastewater discharge permit or a General Wastewater Discharge Permit must submit a permit application. Users that are eligible may request a General Wastewater Discharge Permit under Section 1504.6. The Director may require Users to submit all or some of the following information as part of a permit application:
 - 1. Identifying information, including the following:
 - a. The name and address of the facility, including the name of the operator and owner;
 - b. Contact information; and
 - c. Description of activities, facilities, and plant production processes on the premises;
 - 2. A list of any environmental control permits held by or for the facility;
 - 3. Description of operations, including the following:



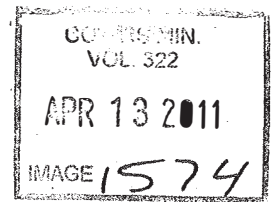
- a. A brief description of the nature, average rate of production (including each product produced by type, amount, processes, and rate of production), and standard industrial classifications of the operation(s) carried out by such User. This description should include a schematic process diagram that indicates points of discharge to the POTW from the regulated processes;
 - b. Types of wastes generated and a list of all raw materials and chemicals used or stored at the facility that are, or could accidentally or intentionally be, discharged to the POTW;
 - c. Number and type of employees, hours of operation, and proposed or actual hours of operation;
 - d. Type and amount of raw materials processed (average and maximum per day); and
 - e. Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;
4. Time and duration of discharges;
5. The location for monitoring all wastes covered by the permit;
6. Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined waste stream formula set out in Section 1502.2C [40 CFR 403.6(e)];
7. Measurement of Pollutants.
 - a. The Categorical Pretreatment Standards applicable to each regulated process and any new categorically regulated processes for Existing Sources.
 - b. The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the Standard or by the Director, of regulated pollutants in the discharge from each regulated process.
 - c. Instantaneous, Daily Maximum, and long-term average concentrations, or mass, where required, shall be reported.
 - d. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Section 1506.10 of this Article. Where the Standard requires compliance with a BMP or pollution prevention alternative, the User shall submit documentation as required by the Director or the applicable Standards to determine compliance with the Standard.
 - e. Sampling must be performed in accordance with procedures set out in Section 1506.11 of this Article.



8. Any requests for a Monitoring Waiver (or a renewal of an approved Monitoring Waiver) for a pollutant neither present nor expected to be present in the discharge based on Section 1506.4B [40 CFR 403.12(e)(2)];
 9. Any request to be covered by a General Wastewater Discharge Permit based on Section 1504.6; and
 10. Any other information as may be deemed necessary by the Director to evaluate the permit application.
- B. Incomplete or inaccurate applications will not be processed and will be returned to the User for revision.

.1504.6 Wastewater Discharge Permitting: General Wastewater Discharge Permits

- A. At the discretion of the Director, the Director may use General Wastewater Discharge Permits to control SIU discharges to the POTW if the conditions listed in paragraphs B through D, below, are met. All facilities to be covered by a General Wastewater Discharge Permit must:
1. Involve the same or substantially similar types of operations;
 2. Discharge the same types of wastes;
 3. Require the same effluent limitations;
 4. Require the same or similar monitoring; and
 5. In the opinion of the Director, are more appropriately controlled under a General Wastewater Discharge Permit than under individual wastewater discharge permits.
- B. To be covered by the General Wastewater Discharge Permit, the SIU must file a written request for coverage that identifies its contact information, production processes, the types of wastes generated, the location for monitoring all wastes covered by the General Wastewater Discharge Permit, any requests in accordance with Section 1506.4B for a Monitoring Waiver for a pollutant neither present nor expected to be present in the discharge, and any other information the POTW deems appropriate. A Monitoring Waiver for a pollutant neither present nor expected to be present in the discharge is not effective in the General Wastewater Discharge Permit until after the Director has provided written notice to the SIU that such a waiver request has been granted in accordance with Section 1506.4B.
- C. The Director will retain a copy of the General Wastewater Discharge Permit, documentation to support the POTW's determination that a specific SIU meets the criteria in Section 1504.6A(1) to (5) and applicable State regulations, and a copy of the



User's written request for coverage for three (3) years after the expiration of the General Wastewater Discharge Permit.

- D. The Director may not control an SIU through a General Wastewater Discharge Permit where the facility is subject to production-based Categorical Pretreatment Standards or Categorical Pretreatment Standards expressed as mass of pollutant discharged per day, or for IUs whose limits are based on the combined waste stream formula (Section 1502.2C) or net/gross calculations (Section 1502.2D).

1504.7 Application Signatories and Certifications

Amended on August 27, 2026 (Comm'rs Min. Vol. 384, Images 5806 - 5810)

- ~~A. All wastewater discharge permit applications, User reports, and certification statements must be signed by an Authorized Representative of the User and contain the certification statement in Section 1506.14A.~~
- ~~B. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this Section must be submitted to the Director prior to or together with any reports to be signed by an Authorized Representative.~~
- ~~C. A facility determined to be a Non-Significant Categorical Industrial User (NSCIU) by the Director must annually submit the signed certification statement in Section 1506.14B.~~

1504.8 Individual Wastewater Discharge Permit and General Wastewater Discharge Permit Decisions

The Director will evaluate the data furnished by the User and may require additional information. Within ninety (90) days of receipt of a complete permit application, the Director will determine whether to issue an individual wastewater discharge permit or a General Wastewater Discharge Permit. The Director may deny any application for an individual wastewater discharge permit or a General Wastewater Discharge Permit.

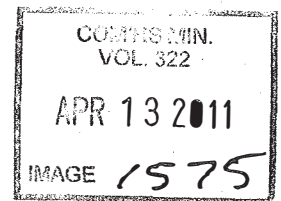
Section 1505 Individual Wastewater Discharge and General Wastewater Discharge Permit Issuance

1505.1 Individual Wastewater Discharge and General Wastewater Discharge Permit Duration

An individual wastewater discharge permit or a General Wastewater Discharge Permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. An individual wastewater discharge permit or a General Wastewater Discharge Permit may be issued for a period less than five (5) years, at the discretion of the Director. Each

Exhibit A**1504.7 Application Signatories and Certifications**

- A. All wastewater discharge permit applications, User reports, and certification statements must be signed by an Authorized Representative of the User and contain the certification statement in Section 1506.14A. Any such required application, report, or certification shall be submitted either electronically, in a method approved by the Director, or in writing.
- B. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this Section must be submitted to the Director prior to or together with any reports to be signed by an Authorized Representative.
- C. A facility determined to be an Non-Significant Categorical Industrial User (NSCIU) by the Director must annually submit the signed certification statement in Section 1506.14B.

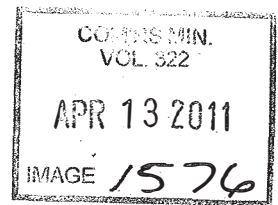


individual wastewater discharge permit or General Wastewater Discharge Permit will indicate a specific date upon which it will expire.

1505.2 Individual Wastewater Discharge Permit and General Wastewater Discharge Permit Contents

An individual wastewater discharge permit or a General Wastewater Discharge Permit shall include such conditions as deemed reasonably necessary by the Director to prevent Pass Through or Interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW.

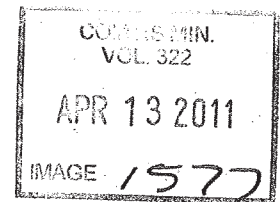
- A. Individual wastewater discharge permits and General Wastewater Discharge Permits may contain:
1. A statement that indicates the wastewater discharge permit issuance date, expiration date, and effective date;
 2. A statement that the wastewater discharge permit is nontransferable without prior notification to the District in accordance with Section 1505.5 of this Article, and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit;
 3. Effluent limits, including BMPs, based on applicable Pretreatment Standards;
 4. Self-monitoring, sampling, reporting, notification, and recordkeeping requirements. These requirements shall include an identification of pollutants (or BMPs) to be monitored, sampling location, sampling frequency, and sample type based on Federal, State, and local law;
 5. The process for seeking a waiver from monitoring for a pollutant neither present nor expected to be present in the discharge in accordance with Section 1506.4B;
 6. A statement of applicable civil and criminal penalties for violation of Pretreatment Standards and Requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable Federal, State, or local law;
 7. Requirements to control Slug Discharge, if determined by the Director to be necessary; and
 8. Any grant of the Monitoring Waiver by the Director (Section 1506.4B).
- B. Individual wastewater discharge permits or General Wastewater Discharge Permits may contain, but need not be limited to, the following conditions:



1. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization;
2. Requirements for the installation or construction of pretreatment technology, pollution control, or appropriate containment devices designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works;
3. Requirements for the development and implementation of spill control plans or other special conditions, including management practices necessary to adequately prevent accidental, unanticipated, or nonroutine discharges;
4. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;
5. The unit charge or schedule of User charges and fees for the management of the wastewater discharged to the POTW;
6. Requirements for installation and maintenance of inspection and sampling facilities and equipment, including flow measurement devices;
7. A statement that compliance with the individual wastewater discharge permit or the General Wastewater Discharge Permit does not relieve the permittee of responsibility for compliance with all applicable Federal and State Pretreatment Standards, including those which become effective during the term of the individual wastewater discharge permit or the General Wastewater Discharge Permit; and
8. Other conditions as deemed appropriate by the Director to ensure compliance with this Article and State and Federal laws, rules, and regulations.

1505.3 Permit Issuance Process

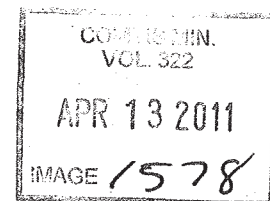
- A. The Director shall publish the list of permitted Users on the District website.
- B. The District shall provide a copy of a proposed individual or general wastewater discharge permit, whether a new permit or renewal permit, to the User at least fifteen (15) days prior to its effective date. The User shall have the right to petition the Director for a modified permit or meet with the Director's designee at any time prior to the effective date of the permit. Within fifteen (15) days after meeting with the Director, the Director will issue a final permit. Until the Director issues a final permit, all previous conditions regarding wastewater discharge, before the new or renewal permit was proposed, shall remain in effect.
- C. The User shall have the right to appeal the terms and conditions of a final permit to the Hamilton County Court of Common Pleas pursuant to O.R.C. Chapter 2506 and any other remedy of appeal provided by law. Wastewater discharge limits contained in any



renewal permit shall take effect upon the effective date of the renewal permit; all other new terms and conditions of any renewal permit that is appealed shall be stayed, and the remaining terms and conditions of the existing permit shall continue in full force and effect, provided that the District or User may seek relief from such stay or lack thereof in accordance with law from the Hamilton County Court of Common Pleas pending adjudication of any appeal. The terms and conditions of a new permit to a new User that is appealed shall take effect upon the effective date of the new permit, subject to modification by the Hamilton County Court of Common Pleas pending adjudication of any appeal.

1505.4 Permit Modification

- A. The Director may modify an individual wastewater discharge permit for good cause, including, but not limited to, the following reasons:
1. To incorporate any new or revised Federal, State, or local Pretreatment Standards or Requirements;
 2. To address significant alterations or additions to the User's operation, processes, or wastewater volume or character since the time of the individual wastewater discharge permit issuance;
 3. In response to a change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
 4. Information indicating that the permitted discharge poses a threat to the POTW, operating personnel, or the receiving waters;
 5. Violation of any terms or conditions of the individual wastewater discharge permit;
 6. Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
 7. Revision of or a grant of variance from Categorical Pretreatment Standards pursuant to 40 CFR 403.13;
 8. To correct typographical or other errors in the individual wastewater discharge permit; or
 9. To reflect a transfer of the facility ownership or operation to a new owner or operator where requested in accordance with Section 1505.5.
- B. The Director may modify a General Wastewater Discharge Permit for good cause, including, but not limited to, the following reasons:



1. To incorporate any new or revised Federal, State, or local Pretreatment Standards or Requirements;
2. In response to a change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
3. To correct typographical or other errors in the General Wastewater Discharge Permit; or
4. To reflect a transfer of the facility ownership or operation to a new owner or operator where requested in accordance with Section 1505.5.

1505.5 Individual Wastewater Discharge Permit and General Wastewater Discharge Permit Transfer

Individual wastewater discharge permits or coverage under General Wastewater Discharge Permits may be transferred to a new owner or operator only if the permittee gives at least ninety (90) days advance notice to the Director and the Director approves the individual wastewater discharge permit or the General Wastewater Discharge Permit coverage transfer. The notice to the Director must include a written certification by the new owner or operator which:

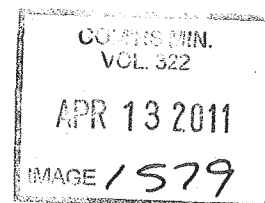
- A. States that the new owner and/or operator has no immediate intent to change the facility's operations and processes;
- B. Identifies the specific date on which the transfer is to occur; and
- C. Acknowledges full responsibility for complying with the existing individual wastewater discharge permit or General Wastewater Discharge Permit.

Failure to provide advance notice of a transfer renders the individual wastewater discharge permit or coverage under the General Wastewater Discharge Permit void as of the date of facility transfer.

1505.6 Individual Wastewater Discharge Permit and General Wastewater Discharge Permit Revocation

The Director may revoke an individual wastewater discharge permit or coverage under a General Wastewater Discharge Permit for good cause, including, but not limited to, the following reasons:

- A. Failure to notify the Director of significant changes to the wastewater prior to the changed discharge;
- B. Failure to provide prior notification to the Director of changed conditions pursuant to Section 1506.5 of this Article;



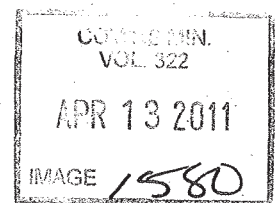
- C. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
- D. Falsifying self-monitoring reports and certification statements;
- E. Tampering with monitoring equipment;
- F. Refusing to allow the District representatives timely access to the facility premises and records;
- G. Failure to meet effluent limitations;
- H. Failure to pay fines;
- I. Failure to pay sewer charges, including permit fees, monitoring fees, and any other fee derived from activities authorized by these Rules and Regulations;
- J. Failure to meet compliance schedules;
- K. Failure to complete a wastewater survey or the wastewater discharge permit application;
- L. Failure to provide advance notice of the transfer of business ownership of a permitted facility; or
- M. Violation of any Pretreatment Standard or Requirement, or any terms of the individual wastewater discharge permit or the General Wastewater Discharge Permit or this Article.

Individual wastewater discharge permits or coverage under General Wastewater Discharge Permits shall be voidable upon cessation of operations or transfer of business ownership. All individual wastewater discharge permits or General Wastewater Discharge Permits issued to a User are void upon the issuance of a new individual wastewater discharge permit or a General Wastewater Discharge Permit to that User.

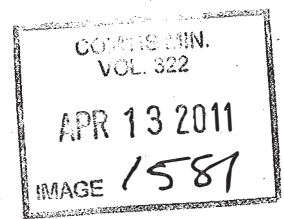
.1505.7 Individual Wastewater Discharge Permit and General Wastewater Discharge Permit Reissuance

A User with an expiring individual wastewater discharge permit or General Wastewater Discharge Permit shall apply for individual wastewater discharge permit or General Wastewater Discharge Permit reissuance by submitting a complete permit application, in accordance with Section 1504.5 of this Article, a minimum of sixty (60) days prior to the expiration of the User's existing individual wastewater discharge permit or General Wastewater Discharge Permit.

.1505.8 Regulation of Waste Received from Other Jurisdictions



- A. If another municipality, or User located within another municipality, contributes wastewater to the POTW, the Control Authority shall enter into an intermunicipal agreement with the contributing municipality.
- B. Prior to entering into an agreement required by paragraph A, above, the Director shall request the following information from the contributing municipality:
 - 1. A description of the quality and volume of wastewater discharged to the POTW by the contributing municipality;
 - 2. An inventory of all Users located within the contributing municipality that are discharging to the POTW; and
 - 3. Such other information as the Director may deem necessary.
- C. An intermunicipal agreement, as required by paragraph A, above, shall contain the following conditions:
 - 1. A requirement for the contributing municipality to adopt a sewer use ordinance that is at least as stringent as this Article and Local Limits, including required BMPs that are at least as stringent as those set out in Section 1502.4 of this Article. The requirement shall specify that such ordinance and limits must be revised as necessary to reflect changes made to the District's Article or Local Limits;
 - 2. A requirement for the contributing municipality to submit a revised User inventory on at least an annual basis;
 - 3. A provision specifying which pretreatment implementation activities, including individual wastewater discharge permit or General Wastewater Discharge Permit issuance, inspection and sampling, and enforcement, will be conducted by the contributing municipality; which of these activities will be conducted by the Director; and which of these activities will be conducted jointly by the contributing municipality and the Director;
 - 4. A requirement for the contributing municipality to provide the Director with access to all information that the contributing municipality obtains as part of its pretreatment activities;
 - 5. Limits on the nature, quality, and volume of the contributing municipality's wastewater at the point where it discharges to the POTW;
 - 6. Requirements for monitoring the contributing municipality's discharge;

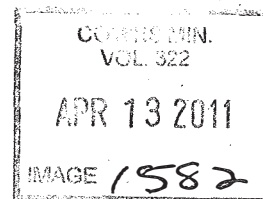


7. A provision ensuring the Director access to the facilities of Users located within the contributing municipality's jurisdictional boundaries for the purpose of inspection, sampling, and any other duties deemed necessary by the Director; and
8. A provision specifying remedies available for breach of the terms of the intermunicipal agreement.

Section 1506 Reporting Requirements

1506.1 Baseline Monitoring Reports

- A. Within either one hundred eighty (180) days after the effective date of a Categorical Pretreatment Standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4), whichever is later, existing CIUs currently discharging to or scheduled to discharge to the POTW shall submit to the Director a report that contains the information listed in paragraph B, below. At least ninety (90) days prior to commencement of their discharge, New Sources, and sources that become CIUs subsequent to the promulgation of an applicable Categorical Standard, shall submit to the Director a report that contains the information listed in paragraph B, below. A New Source shall report the method of pretreatment it intends to use to meet applicable Categorical Standards. A New Source also shall give estimates of its anticipated flow and quantity of pollutants to be discharged.
- B. Users described above shall submit the information set forth below.
 1. All information required in Section 1504.5A(1)(a), Section 1504.5A(2), Section 1504.5A(3)(a), and Section 1504.5A(6).
 2. Measurement of Pollutants.
 - a. The User shall provide the information required in Section 1504.5A(7)(a) through (d);
 - b. The User shall take a minimum of one representative sample to compile that data necessary to comply with the requirements of this paragraph;
 - c. Samples should be taken immediately downstream from pretreatment facilities, if such exist, or immediately downstream from the regulated process, if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment, the User should measure the flows and concentrations necessary to allow use of the combined waste stream formula in 40 CFR 403.6(e) to evaluate compliance with the Pretreatment Standards. Where an alternate concentration or mass limit has been calculated in accordance with 40 CFR 403.6(e), this adjusted limit, along with supporting data, shall be submitted to the Control Authority;
 - d. Sampling and analysis shall be performed in accordance with Section 1506.10;

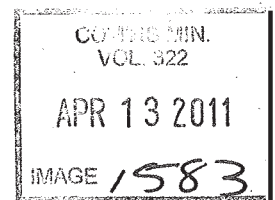


- e. The Director may allow the submission of a baseline report that utilizes only historical data so long as the data provide information sufficient to determine the need for industrial pretreatment measures; and
 - f. The baseline report shall indicate the time, date, and place of sampling and the methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the POTW.
3. Compliance Certification. A statement, reviewed by the User's Authorized Representative as defined in Article I and certified by a qualified professional, indicating whether Pretreatment Standards are being met on a consistent basis, and, if not, whether additional O&M and/or additional pretreatment is required to meet the Pretreatment Standards and Requirements.
4. Compliance Schedule. If additional pretreatment and/or O&M will be required to meet the Pretreatment Standards, the shortest schedule by which the User will provide such additional pretreatment and/or O&M must be provided. The completion date in this schedule shall not be later than the compliance date established for the applicable Pretreatment Standard. A compliance schedule pursuant to this Section must meet the requirements set out in Section 1506.2 of this Article.
5. Signature and Report Certification. All BMRs must be certified in accordance with Section 1506.14A of this Article and signed by an Authorized Representative as defined in Article I.

1506.2 Compliance Schedule Progress Reports

The following conditions shall apply to the compliance schedule required by Section 1506.1B(4) of this Article:

- A. The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the User to meet the applicable Pretreatment Standards. Such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, and beginning and conducting routine operation;
- B. No increment referred to above shall exceed nine (9) months;
- C. The User shall submit a progress report to the Director no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the User to return to the established schedule; and



- D. In no event shall more than nine (9) months elapse between such progress reports to the Director.

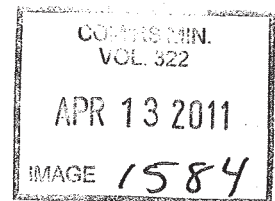
1506.3 Reports on Compliance with Categorical Pretreatment Standard Deadline

Within ninety (90) days following the date for final compliance with applicable Categorical Pretreatment Standards, or in the case of a New Source following commencement of the introduction of wastewater into the POTW, any User subject to such Pretreatment Standards and Requirements shall submit to the Director a report containing the information described in Sections 1504.5A(6) and (7) and 1506.1B(2) of this Article. For Users subject to equivalent mass or concentration limits established in accordance with the procedures in Section 1502.2, this report shall contain a reasonable measure of the User's long-term production rate. For all other Users subject to Categorical Pretreatment Standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the User's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 1506.14A of this Article. All sampling will be done in conformance with Section 1506.11.

1506.4 Periodic Compliance Reports

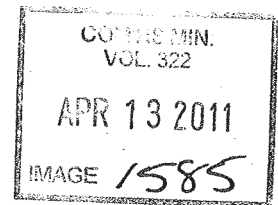
[Note: All SIUs are required to submit periodic compliance reports even if they have been designated an NSCIU under the provisions of Section 1506.4C.]

- A. Except as specified in Section 1506.4C, all SIUs must, at a frequency determined by the Director, submit no less than twice per year (June and December or on dates specified) reports indicating the nature and concentration of pollutants in the discharge that are limited by Pretreatment Standards and the measured or estimated average and maximum daily flows for the reporting period. In cases where the Pretreatment Standard requires compliance with a BMP or pollution prevention alternative, the User must submit documentation required by the Director or the Pretreatment Standard necessary to determine the compliance status of the User.
- B. The District may authorize an IU subject to a Categorical Pretreatment Standard to forego sampling of a pollutant regulated by a Categorical Pretreatment Standard if the IU has demonstrated, through sampling and other technical factors, that the pollutant is neither present nor expected to be present in the discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the IU [see 40 CFR 403.12(e)(2)]. This authorization is subject to the following conditions:
1. The Monitoring Waiver may be authorized where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable Categorical Standard and otherwise includes no process wastewater.
 2. The Monitoring Waiver is valid only for the duration of the effective period of the individual wastewater discharge permit, but in no case longer than five (5) years.



The User must submit a new request for the waiver before the waiver can be granted for each subsequent individual wastewater discharge permit [see Section 1504.5A(8)].

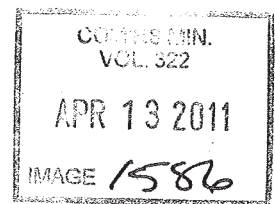
3. In making a demonstration that a pollutant is not present, the IU must provide data from at least one sampling of the facility's process wastewater prior to any treatment present at the facility that is representative of all wastewater from all processes.
 4. The request for a Monitoring Waiver must be signed in accordance with Article I and include the certification statement in 1506.14A [see 40 CFR 403.6(a)(2)(ii)].
 5. Non-detectable sample results may be used only as a demonstration that a pollutant is not present if the EPA-approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.
 6. Any grant of the Monitoring Waiver by the Director must be included as a condition in the User's permit. The reasons supporting the waiver and any information submitted by the User in its request for the waiver must be maintained by the Director for three (3) years after expiration of the waiver.
 7. Upon approval of the Monitoring Waiver and revision of the User's permit by the Director, the IU must certify on each report, with the statement in Section 1506.14C below, that there has been no increase in the pollutant in its waste stream due to activities of the IU.
 8. In the event that a waived pollutant is found to be present or is expected to be present because of changes that occur in the User's operations, the User must immediately comply with the monitoring requirements of Section 1506.4A, or other more frequent monitoring requirements imposed by the Director, and notify the Director.
 9. This provision does not supersede certification processes and requirements established in Categorical Pretreatment Standards, except as otherwise specified in the Categorical Pretreatment Standard.
- C. The District may reduce the requirement for periodic compliance reports (see Section 1506.4A [40 CFR 403.12(e)(1)]) to a requirement to report no less frequently than once a year for Mid-Tier Categorical Industrial Users, unless required more frequently in the Pretreatment Standard or by the OEPA, where the IU's total categorical wastewater flow does not exceed any of the following:
- (1) The Industrial User's total categorical wastewater flow does not exceed any of the following:
 - a. Zero point zero one per cent of the design dry weather hydraulic capacity of the POTW, or five thousand gallons per day, whichever is smaller, as measured by a



- continuous effluent flow monitoring device unless the Industrial User discharges in batches;
- b. Zero point zero one per cent of the design dry weather organic treatment capacity of the POTW; and
 - c. Zero point zero one per cent of the maximum allowable headworks loading for any pollutant regulated by the applicable categorical pretreatment standards for which approved local limits were developed by the District in accordance with paragraph (C)(4) of rule 3745-3-03 of the Ohio Administrative Code;
- (2) The Industrial User has not been in significant noncompliance, as defined in Section 1509 of these Rules and Regulations, for any time in the past two years;
 - (3) The Industrial User does not have daily flow rates, production levels, or pollutant levels that vary so significantly that decreasing the reporting requirement would result in data that are not representative of conditions occurring during the reporting period pursuant to Sections 1506.1 and 1506.3 of these Rules and Regulations;
 - (4) The Industrial User is not located upstream of a combined sewer overflow or sanitary sewer overflow, unless the procedures for the categorization of such a user as a Mid-Tier Categorical Industrial User and issues related to combined sewer overflows or sanitary sewer overflows are specifically addressed in:
 - a. The District's approved long term control plan;
 - b. The District's approved combined sewer system operation plan implementing the nine minimum controls; or
 - c. The District's program modification request submitted to the director.
- D. All periodic compliance reports must be signed and certified in accordance with Section 1506.14A of this Article.
- E. All wastewater samples must be representative of the User's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a User to keep its monitoring facility in good working order shall not be grounds for the User to claim that sample results are unrepresentative of its discharge.
- F. If a User subject to the reporting requirement in this Section monitors any regulated pollutant at the appropriate sampling location more frequently than required by the Director, using the procedures prescribed in Section 1506.11 of this Article, the results of this monitoring shall be included in the report.
- G. Users that send electronic (digital) documents to the District to satisfy the requirements of this Section must meet the criteria of the District's electronic reporting protocol applicable on the date the report is submitted.

1506.5 Reports of Changed Conditions

Each User must notify the Director of any significant changes to the User's operations or system that might alter the nature, quality, or volume of its wastewater at least thirty (30) days before the change.



- A. The Director may require the User to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 1504.5 of this Article.
- B. The Director may issue an individual wastewater discharge permit or a General Wastewater Discharge Permit under Section 1505.7 of this Article or modify an existing wastewater discharge permit or a General Wastewater Discharge Permit under Section 1505.4 of this Article in response to changed conditions or anticipated changed conditions.

1506.6 Reports of Potential Problems

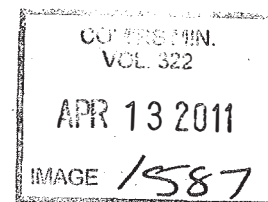
- A. In the case of any discharge, including, but not limited to, Accidental Discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a Slug Discharge or Slug Load, that might cause potential problems for the POTW, the User shall immediately telephone and notify the Director of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume, if known, and corrective actions taken by the User.
- B. Within five (5) days following such discharge, the User shall, unless waived by the Director, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the User to prevent similar future occurrences. Such notification shall not relieve the User of any expense, loss, damage, or other liability that might be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the User of any fines, penalties, or other liability that may be imposed pursuant to this Article.
- C. A notice shall be permanently posted on the User's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph A, above. Employers shall ensure that all employees who could cause such a discharge to occur are advised of the emergency notification procedure.
- D. SIUs are required to notify the Director immediately of any changes at its facility affecting the potential for a Slug Discharge.

1506.7 Reports from Unpermitted Users

All Users not required to obtain an individual wastewater discharge permit or a General Wastewater Discharge Permit shall provide appropriate reports to the Director as the Director may require.

1506.8 Notice of Violation/Repeat Sampling and Reporting

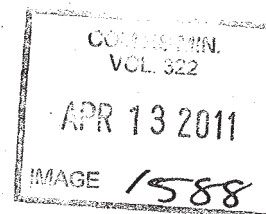
If sampling performed by a User indicates a violation, the User must notify the Director within twenty-four (24) hours of becoming aware of the violation. The User shall also repeat the



sampling and analysis and submit the results of the repeat analysis to the Director within thirty (30) days after becoming aware of the violation. Resampling by the IU is not required if the District performs sampling at the User's facility at least once a month, or if the District performs sampling at the User between the time when the initial sampling was conducted and the time when the User or the District receives the results of this sampling, or if the District has performed the sampling and analysis in lieu of the IU.

1506.9 Notification of the Discharge of Hazardous Waste

- A. Any User who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director, and State hazardous waste authorities, in writing, of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the User discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW, the notification also shall contain the following information to the extent such information is known and readily available to the User: 1) an identification of the hazardous constituents contained in the wastes; 2) an estimation of the mass and concentration of such constituents in the waste stream discharged during that calendar month; and 3) an estimation of the mass of constituents in the waste stream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred eighty (180) days after the discharge commences. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Section 1506.5 of this Article. The notification requirement in this Section does not apply to pollutants already reported by Users subject to Categorical Pretreatment Standards under the self-monitoring requirements of Sections 1506.1, 1506.3, and 1506.4 of this Article.
- B. Dischargers are exempt from the requirements of paragraph A, above, during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of nonacute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the User discharges more than such quantities of any hazardous waste do not require additional notification.
- C. In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the User must notify the Director, the EPA Regional Waste Management Waste Division Director, and State hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.



- D. In the case of any notification made under this Section, the User shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.
- E. This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this Article, a permit issued thereunder, or any applicable Federal or State law.

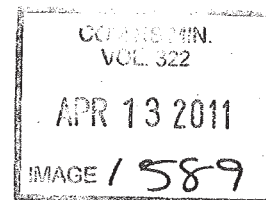
1506.10 Analytical Requirements

All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136 and amendments thereto, unless otherwise specified in an applicable Categorical Pretreatment Standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that the Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the Director or other parties approved by EPA.

1506.11 Sample Collection

Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that are representative of conditions occurring during the reporting period.

- A. Except as indicated in paragraphs B and C, below, the User must collect wastewater samples using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is authorized by the Director. Where time-proportional composite sampling or grab sampling is authorized by the Director, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides, the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples may be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the District, as appropriate. In addition, grab samples may be required to show compliance with Instantaneous Limits.
- B. Samples for oil and grease, temperature, pH, cyanide, hexavalent chrome, total phenols, sulfides, and volatile organic compounds must be obtained using grab collection techniques.
- C. For sampling required in support of BMRs and 90-day compliance reports required in Sections 1506.1 and 1506.3 [40 CFR 403.12(b) and (d)], a minimum of four (4) grab



samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the Director may authorize a lower minimum. For the reports required by Section 1506.4 [40 CFR 403.12(e) and (h)], the IU is required to collect the number of grab samples necessary to assess and assure compliance with applicable Pretreatment Standards and Requirements.

.1506.12 Date of Receipt of Reports

Written reports will be deemed to have been submitted on the date postmarked. For reports that are not mailed, postage prepaid, into a mail facility serviced by the U.S. Postal Service, the date of receipt of the report shall govern.

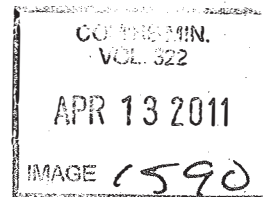
.1506.13 Recordkeeping

Users subject to the reporting requirements of this Article shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this Article, any additional records of information obtained pursuant to monitoring activities undertaken by the User independent of such requirements, and documentation associated with BMPs established under Section 1502.4C. Records shall include the date, exact place, method, and time of sampling and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the User or the District, or where the User has been specifically notified of a longer retention period by the Director.

.1506.14 Certification Statements

- A. Certification of Permit Applications, User Reports, and Initial Monitoring Waivers. The following certification statement is required to be signed and submitted by Users submitting permit applications in accordance with Section 1504.7; Users submitting BMRs under Section 1506.1B(5); Users submitting reports on compliance with the Categorical Pretreatment Standard deadlines under Section 1506.3; Users submitting periodic compliance reports required by Sections 1506.4A through D; and Users submitting an initial request to forego sampling of a pollutant on the basis of Section 1506.4B(4). The following certification statement must be signed by an Authorized Representative as defined in Article I:

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there



are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- B. Annual Certification for Non-Significant Categorical Industrial Users. A facility determined to be a Non-Significant Categorical Industrial User by the Director pursuant to Article I and 1504.7C must annually submit the following certification statement signed in accordance with the signatory requirements in 1501.4C. This certification must accompany an alternative report required by the Director:

Based on my inquiry of the person or persons directly responsible for managing compliance with the Categorical Pretreatment Standards under 40 CFR ____, I certify that, to the best of my knowledge and belief, during the period from _____, _____ to _____, _____ [months, days, year]:

- (a) The facility described as _____ [facility name] met the definition of a Non-Significant Categorical Industrial User as described in Article I;
- (b) The facility complied with all applicable Pretreatment Standards and Requirements during this reporting period; and
- (c) The facility never discharged more than one hundred (100) gallons of total categorical wastewater on any given day during this reporting period.

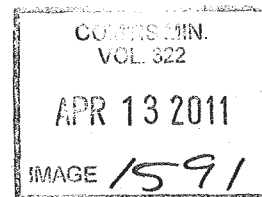
This compliance certification is based on the following information.
_____ [specify information]

- C. Certification of Pollutants Not Present. Users that have an approved Monitoring Waiver based on Section 1506.4B must certify on each report with the following statement that there has been no increase in the pollutant in its waste stream due to activities of the User.

Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR _____ [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of _____ [list pollutant(s)] in the wastewaters due to the activities at the facility since filing of the last periodic report under Section 1506.4A.

Section 1507 Compliance Monitoring

1507.1 Right of Entry: Inspection and Sampling



The Director shall have the right to enter the premises of any User to determine whether the User is complying with all requirements of this Article and any individual wastewater discharge permit, General Wastewater Discharge Permit, or order issued hereunder. Users shall allow the Director ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

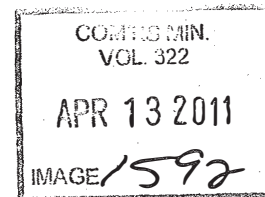
- A. Where a User has security measures in force that require proper identification and clearance before entry into its premises, the User shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director shall be permitted to enter without delay for the purposes of performing specific responsibilities.
- B. The Director shall have the right to set up on the User's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the User's operations.
- C. The Director may require the User to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the User at its own expense. All devices used to measure wastewater flow and quality shall be calibrated to ensure their accuracy.
- D. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the User at the written or verbal request of the Director and shall not be replaced. The costs of clearing such access shall be born by the User.
- E. Unreasonable delays in allowing the Director access to the User's premises shall be a violation of this Article.

.1507.2 Search Warrants

If the Director has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this Article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the District designed to verify compliance with this Article or any permit or order issued hereunder, or to protect the overall public health, safety, and welfare of the community, the Director may seek issuance of a search warrant from the appropriate Court.

Section 1508 Confidential Information

Information and data on a User obtained from reports, surveys, wastewater discharge permit applications, individual wastewater discharge permits, General Wastewater Discharge Permits, and monitoring programs, and from the Director's inspection and sampling activities, shall be available to the public without restriction, unless the User specifically requests, and is able to demonstrate to the satisfaction of the Director, that the release of such information would divulge

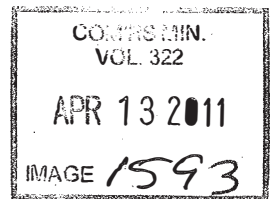


information, processes, or methods of production entitled to protection as trade secrets under applicable State law. Any such request must be asserted at the time of submission of the information or data. When requested and demonstrated by the User furnishing a report that such information should be held confidential, the portions of a report that might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other effluent data, as defined at 40 CFR 2.302, shall not be recognized as confidential information and shall be available to the public without restriction.

Section 1509 Publication of Users in Significant Noncompliance

The Director shall publish annually, in The Cincinnati Enquirer, a list of the Users that, at any time during the previous twelve (12) months, were in Significant Noncompliance with applicable Pretreatment Standards and Requirements. The term Significant Noncompliance shall be applicable to all SIUs (or any other IU that violates paragraphs C, D, or H of this Section) and shall mean:

- A. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent (66%) or more of all the measurements taken for the same pollutant parameter taken during a six- (6-) month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including Instantaneous Limits, as defined in Section 1502;
- B. Technical Review Criteria violations, defined here as those in which thirty-three percent (33%) or more of wastewater measurements taken for each pollutant parameter during a six- (6-) month period equals or exceeds the product of the numeric Pretreatment Standard or Requirement, including Instantaneous Limits, as defined by Section 1502 multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);
- C. Any other violation of a Pretreatment Standard or Requirement as defined by Section 1502 (Daily Maximum, long-term average, Instantaneous Limit, or narrative standard) that the Director determines has caused, alone or in combination with other discharges, Interference or Pass Through, including endangering the health of POTW personnel or the general public;
- D. Any discharge of a pollutant that has caused imminent endangerment to the public or to the environment, or has resulted in the Director's exercise of its emergency authority to halt or prevent such a discharge;
- E. Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in an individual wastewater discharge permit, General Wastewater



Discharge Permit, or enforcement order for starting construction, completing construction, or attaining final compliance;

- F. Failure to provide, within forty-five (45) days after the due date, any required reports, including BMRs, reports on compliance with Categorical Pretreatment Standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- G. Failure to accurately report noncompliance; or
- H. Any other violation(s), including a violation of BMPs, that the Director determines will adversely affect the operation or implementation of the local pretreatment program.

Section 1510 Administrative Enforcement Remedies

1510.1 Notification of Violation

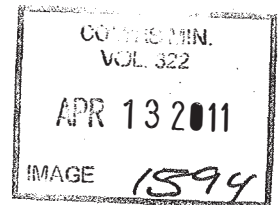
When the Director finds that a User has violated, or continues to violate, any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, the Director may serve upon that User a written Notice of Violation. Within thirty (30) days of the receipt of such notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the User to the Director. Submission of such a plan in no way relieves the User of liability for any violations occurring before or after receipt of the Notice of Violation. Nothing in this Section shall limit the authority of the Director to take any action, including emergency actions or any other enforcement action, without first issuing a Notice of Violation.

1510.2 Consent Orders

The Director may enter into Consent Orders, assurances of compliance, or other similar documents establishing an agreement with any User responsible for noncompliance. Such documents shall include specific action to be taken by the User to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to Sections 1510.4 and 1510.5 of this Article and shall be judicially enforceable.

1510.3 Show Cause Hearing

The Director may order a User that has violated, or continues to violate, any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, to appear before the Director and show cause why the proposed enforcement action should not be taken. Notice shall be served on the User specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action, and a request that the User show cause why the



proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least fourteen (14) days prior to the hearing. Such notice may be served on any Authorized Representative of the User as defined in Article I and required by Section 1504.7A. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the User.

1510.4 Compliance Orders

When the Director finds that a User has violated, or continues to violate, any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, the Director may issue an order to the User responsible for the discharge directing that the User come into compliance within a specified time. If the User does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a Pretreatment Standard or Requirement, nor does a compliance order relieve the User of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the User.

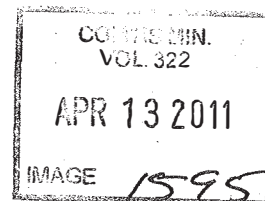
1510.5 Cease and Desist Orders

When the Director finds that a User has violated, or continues to violate, any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, or that the User's past violations are likely to recur, the Director may issue an order to the User directing it to cease and desist all such violations and directing the User to:

- A. Immediately comply with all requirements; and
- B. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge. Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the User.

1510.6 Administrative Fines

- A. When the Director finds that a User has violated, or continues to violate, any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, the Director may fine such User in an amount not to exceed \$10,000. Such fines shall be assessed on a per-violation, per-day basis.



- B. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the User.

1510.7 Emergency Suspensions

The Director may immediately suspend a User's discharge, after informal notice to the User, whenever such suspension is necessary to stop an actual or threatened discharge that reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The Director may also immediately suspend a User's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW or that presents, or may present, an endangerment to the environment.

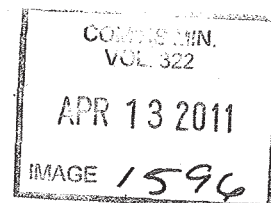
- A. Any User notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a User's failure to immediately comply voluntarily with the suspension order, the Director may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The Director may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the Director that the period of endangerment has passed, unless the termination proceedings in Section 1510.8 of this Article are initiated against the User.
- B. A User that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement describing the causes of the harmful contribution and the measures taken to prevent any future occurrence to the Director prior to the date of any show cause or termination hearing under Sections 1510.3 or 1510.8 of this Article.

Nothing in this Section shall be interpreted as requiring a hearing prior to any Emergency Suspension under this Section.

1510.8 Termination of Discharge

In addition to the provisions in Section 1505.6 of this Article, any User who violates the following conditions is subject to discharge termination:

- A. Violation of individual wastewater discharge permit or General Wastewater Discharge Permit conditions;
- B. Failure to accurately report the wastewater constituents and characteristics of its discharge;
- C. Failure to report significant changes in operations or wastewater volume, constituents, and characteristics prior to discharge;
- D. Refusal of reasonable access to the User's premises for the purpose of inspection, monitoring, or sampling; or



E. Violation of the Pretreatment Standards in Section 1502 of this Article.

Such User will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under Section 1510.3 of this Article why the proposed action should not be taken. Exercise of this option by the Director shall not be a bar to, or a prerequisite for, taking any other action against the User.

Section 1511 Judicial Enforcement Remedies

.1511.1 Injunctive Relief

See Section 2109 of these Rules and Regulations

.1511.2 Civil Penalties

See Section 2203 of these Rule and Regulations

.1511.3 Criminal Prosecution

See Section 2205 of these Rules and Regulations

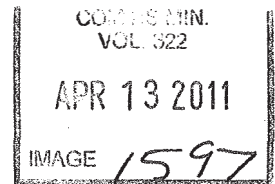
.1511.4 Remedies Nonexclusive

The remedies provided for in this Article are not exclusive. The Director may take any, all, or a combination of these actions against a noncompliant User. Enforcement of pretreatment violations will generally be in accordance with the District's Enforcement Response Plan. However, the Director may take other action against any User when the circumstances warrant. Further, the Director is empowered to take more than one enforcement action against any noncompliant User.

Section 1512 Supplemental Enforcement Action

.1512.1 Penalties for Late Reports

A penalty of \$100 shall be assessed to any User for each day that a report required by this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder is late, beginning five (5) days after the date the report is due [higher penalties may also be assessed where reports are more than thirty (30) to forty-five (45) days late]. Actions taken by the Director to collect late reporting penalties shall not limit the Director's authority to initiate other enforcement actions that may include penalties for late reporting violations.

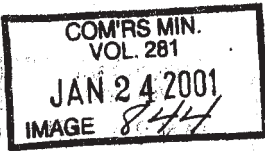


.1512.2 Payment of Outstanding Fees and Penalties

The Director may decline to issue or reissue an individual wastewater discharge permit or General Wastewater Discharge Permit to any User who has failed to pay any outstanding fees, fines, or penalties incurred as a result of any provision of this Article, a previous individual wastewater discharge permit, a previous General Wastewater Discharge Permit, or an order issued hereunder.

.1512.3 Public Nuisances

Upon a violation of any provision of this Article, an individual wastewater discharge permit, a General Wastewater Discharge Permit, or an order issued hereunder, or any other Pretreatment Standard or Requirement, the Director may determine that the violation is a public nuisance and shall take all actions necessary to obtain a judicial order for the abatement of such nuisance.



ARTICLE XVI

APPLICATION OF THE WASTEWATER TREATMENT SYSTEM (WTS) SERVICE CHARGE

Section 1601 General Rule

Every person whose premises are served by a sewer connection that discharges wastewater either directly or indirectly into the wastewater treatment system under the management of the District shall be charged for the use of said system.

Section 1602 WTS Service Charge

The WTS service charge shall consist of a minimum charge and a commodity charge based on the size of the water meter(s) and the quantity of water used, as measured by the water meter(s). No other method of measurement of the quantity of water used/wastewater discharged shall be acceptable, unless pre-approved by the Director.

Where the agency supplying the water makes an adjustment in the metered usage, an adjustment in the WTS service charges/WTS surcharges shall automatically be made and in the same proportion as the adjustment made by the agency supplying the water.

Section 1603 Minimum Charges where Multiple Meters Occur

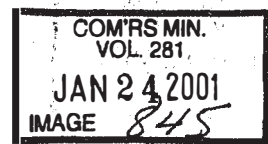
When a premise is served by more than one water meter, a minimum charge shall be made for each meter. The commodity charge shall be applied to the consolidated flow, above the minimums, for all meters, except as otherwise provided in Section 1604 & 1605. If, per Section 1602, a method of measurement other than a meter is pre-approved, a minimum charge shall be assessed.

Section 1604 Private Water Sources - Add Purposes

When a premise is supplied either in whole or in part with water from wells, groundwater, or any source other than a public water supply, the owner must submit a written application to the District for the installation of an auxiliary sewage meter. The Director shall have the authority to approve, deny, or adjust any such request.

If approved, the owner shall install meters on all such supplies, and maintain them at owner's expense. Homeowners may be exempted from installing a meter, but shall be billed the minimum charge based on the rate structure in effect at that time.

Except as noted above, the quantity of water used to determine the WTS service charge/WTS surcharge shall be the quantity of water actually entering the wastewater treatment system as metered.



If a premise is determined to be discharging unregistered water into the system from any source, such as from an unmetered well, previously exempted metered flow or stormwater, back-billing for the estimated duration of the discharge will be issued. Back-billing of the WTS service charge/WTS surcharge will be estimated from data provided by the property owner and investigative findings of the District. The District may certify unpaid WTS service charges to the County Auditor for collection in accordance with Section 6117.02 of the Ohio Revised Code.

All meters shall be installed in accordance with the standards, rules and regulations of the applicable public water works. Auxiliary meters must register in the same units as those used for billing purposes by the local water utility.

When the auxiliary meter is so located that it is not read by the Water Meter Reader, it shall be the responsibility of the User to make reports of meter readings for each billing period on or before the due day established by the District. If "Add" auxiliary meter readings have not been reported for three consecutive billing periods, and the User has been notified of two consecutive delinquencies, the Director may assess and add to the User's bill a penalty, calculated by multiplying ten dollars by the number of days elapsed from the due date of the report last due to its date of receipt.

Approved auxiliary meters, for "ADD" purposes, shall not be relocated, taken out of service, or put into a different service. These actions shall only be taken with prior written approval from the District. Failure to gain prior approval may result in enforcement action.

Replacement of broken or faulty meters previously approved by MSD must register in the same units as those used for billing purposes by the local water utility.

Section 1605 Auxiliary Sewage Meter(s) - Deduction Purposes

When a person can show to the satisfaction of the Director that a portion of the water as measured by the water meter(s) does not enter the wastewater treatment system, said person may submit a written application to the Director for the installation of an auxiliary sewage meter. The Director shall have the authority to approve, deny, or adjust any such request.

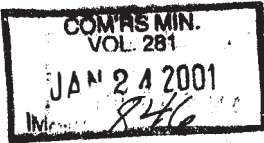
If approved, the owner shall install meters on all such supplies, and maintain them at owner's expense.

The quantity of water used to determine the WTS service charge/WTS surcharge shall be the quantity of water actually entering the wastewater treatment system as metered.

No refunds, credits, or allowances shall be given covering any period prior to the date an exemption from the WTS service charge/WTS surcharge is authorized in writing by the Director.

All meters shall be installed in accordance with the standards, rules and regulations of the applicable public water works. Auxiliary meters must register in the same units as those used for billing purposes by the local water utility.

When the auxiliary meter is so located that it is not read by the Water Meter Reader, it shall be the responsibility of the User to make reports of meter readings for each billing period on or before the due day established by the District. In the event a User fails to make timely reports of deduct meter readings



for three consecutive billing periods, and has been notified of two consecutive delinquencies, the Director may cancel the deduct auxiliary meter(s). For the billing period that no readings were received by the District, no billing adjustments will be made without a complete review of the account. The User may submit a written request, to the Director, for a complete review.

Approved auxiliary meters, for "DEDUCT" purposes, shall not be relocated, taken out of service, or put into a different service. These actions shall only be taken upon notification to the District. Failure to immediately report such changes may result in the cancellation of the Director's approval.

Replacement of broken or faulty meters previously approved by the District must register in the same units as those used for billing purposes by the local water utility.

Section 1606 Leaks

When a person has reason to believe that a reduction in or an exemption from the WTS service charge/WTS surcharge, due to a one-time event, is justified, that person shall submit a written request to the District and shall furnish such information as required in support of the request. The Director shall have the authority to approve, deny or adjust any such request.

Section 1607 Temporary Add Meters

When a well or wells are used as a "supplementary" water supply and are used for a period not exceeding six months in any calendar year, the minimum portion of the WTS service charge may be waived by the Director for the period of non-usage subject to such requirements as he may deem necessary.

Section 1608 Exemptions for Unused Service Branches

Exemptions from the WTS service minimum charges for unused service branches, standby service branches and new service branches for new construction shall be made upon evidence of meeting the following criteria.

If no water is consumed in a billing period then no wastewater treatment services shall be billed for the following:

- A. Unused service branches installed for vacant unimproved property in connection with highway improvements, which have not been extended for service and are properly plugged to prevent flow from entering the sewer system.
- B. New service connections installed for new construction, prior to the installation and inspection of a new water meter.

Section 1609 Fire Protection Service Branches

Properly used fire protection service branches shall be exempt from all WTS service charges/WTS surcharges.

Section 1610 Clean Water Deductions - Separate Sanitary & Storm Water Sewer System

During the first four (4) years of these regulations, commencing with the effective date, any users that have been allowed deductions based on standard deductions or once through cooling water deductions will continue to be allowed a pro-rated portion of the deduction. The pro-rating will be as follows:

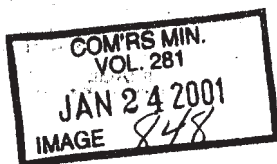
Billing period	Percentage of the deduction allowed
1 st Year	80%
2 nd Year	60%
3 rd Year	40%
4 th Year	20%
Commencing with the 5 th Year from the effective date.	0%

Section 1611 Rate

The Board will set the specified rate to reflect costs of program elements, including but not limited to administration, inspection, and enforcement. From time to time as the Board deems necessary, the Board shall revise the specified rate to reflect conditions then current.

Section 1612 Compatibility Requirement

The Director shall have the authority to require changes to or replacement of auxiliary meters in order for the device to be compatible with the billing agency at that time. This may include, but is not limited to: automatic meters, telemetering, remote access meters, etc.



ARTICLE XVII

APPLICATION OF THE WASTEWATER TREATMENT SYSTEM (WTS) SURCHARGE

Section 1701 Determination of WTS Surcharge

Every person whose premises are served by a sewer connection and which discharge sanitary sewage, industrial wastes, water or other liquids--other than "normal strength sewage"--either directly or indirectly into the wastewater treatment system under the management of the District shall be charged and shall pay a wastewater treatment system Surcharge in addition to the wastewater treatment system Service Charge.

The surcharge shall be determined on the basis of any combination of three constituents of the wastewater.

- A. Total Suspended Solids
- B. BOD
- C. Kjeldahl Nitrogen

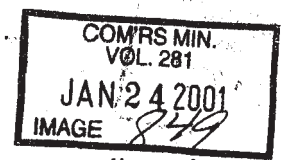
When the concentrations, expressed in mg/l, of any one, any combination, or all, of these three constituents exceed the values for "normal strength sewage", the excess concentrations shall be subject to charges at a rate calculated from the following formula:

$$R = A(SS-300) + B(BOD-240) + C(TKN-25)$$

Wherein

- R = Surcharge rate in dollars per hundred cubic feet of wastewater flow.
- SS = Suspended Solids in mg/l.
- BOD = Biochemical Oxygen Demand in mg/l.
- TKN = Total Kjeldahl Nitrogen in mg/l.
- 300 = Maximum Suspended Solids in normal strength sewage.
- 240 = Maximum BOD in normal strength sewage.
- 25 = Maximum Kjeldahl Nitrogen in normal strength sewage.

A, B, & C are numerical factors related to unit costs of providing primary and secondary treatment for the indicated pollutants. The values shall be those set forth in the currently applicable rate resolution adopted by the Board.



To the extent that the strength of a pollutant is less than eighty percent (80%) of the corresponding value for normal strength sewage, a credit shall be allowed as an offset against surcharge otherwise due.

Section 1702 Industrial Waste Questionnaire

Persons proposing to discharge other than normal strength sewage shall complete and file with the Director an industrial waste questionnaire containing pertinent information on the quantity of flow and a chemical analysis of the wastes to be discharged before said discharge begins.

Section 1703 Sampling Chambers

When required by the Director, the owner or User of any property discharging or capable of discharging wastes other than normal strength sewage shall install a suitable chamber or chambers in the building sewer to permit observation, sampling and measurement of the wastewater from their premises. Such chamber shall be constructed in accordance with plans approved by the Director, shall be installed by the owner or User at their own expense and shall be maintained by the owner or User so as to be safe and accessible to personnel of the District at all times.

Section 1704 Analytical Methods

Except as modified to reflect impact on the wastewater treatment plant and processes, measurements, test and analyses of the characteristics of such wastewaters shall be determined in accordance with "Standard Methods."

Section 1705 Discharge Strength

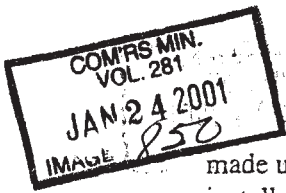
The strength of the wastewaters shall be determined from samples taken at the aforementioned chamber at such time(s) and of such duration(s) and in such manner as the District may elect, or at any place mutually agreed upon between the owner and the District. The results of routine sampling and analysis by the owner may also be used, in determining the amount of the surcharge, after verification by the District.

The strength so found by analysis shall be used in determining the amount of the surcharge. The surcharge shall be applied to the total water consumption, less that portion exempted by the District and shall be based on the average strength of all wastewater discharged to the wastewater treatment system.

Section 1706 Cost of Monitoring

The District shall assume the cost of operation of not more than two (2) gauging and sampling manholes or points of discharge and the necessary analytical work involved. In the event more than two (2) gauging and sampling manholes or points of discharge are necessary, the additional cost of the installation of measurement devices to be used and the costs of the personnel required for operation of the manholes or sampling points and the subsequent laboratory work involved, shall be borne by the User or the owners of the property.

Where a plant or premise discharges its effluent to a manhole or manholes, used as gauging and sampling points, and the effluent is of such volume and duration that installation of hydraulic equipment cannot be



made until the plant or premise ceases its operations, by weekend closedown, the costs of making the installations, involving overtime pay, shall be borne by the User or owner. If the User or owner elects to make the hydraulic installations with his own personnel, the installations shall be made in a manner approved by the Director.

In the event that a period in excess of a standard five (5) day week is required for District personnel to properly gauge, sample and analyze the discharged effluent, the extra costs shall be borne by the User or owner of the property.

Section 1707 Access to Chambers

The District shall have the right without advance notice to enter and set up on the premises, such devices as are necessary to conduct a gauging and sampling operation and to begin such operation. While performing the work, the District personnel will observe all safety rules applicable to the premises and established by the owner or User.

In case a User or owner has security measures in force which require proper identification and clearance before entry into the premises is granted, said User or owner shall either make the necessary arrangements with the security guards that upon showing proper identification, personnel from the District will be permitted to enter, without delays, for the purpose of obtaining samples of wastes being discharged at the various sampling points; or User or owner shall install suitable gauging and sampling manholes outside the security limits which manholes will at all times be immediately accessible to District personnel.

Section 1708 Additional Sampling and Analysis

If a person disagrees with the analysis on which the WTS surcharge is based, he may request, in writing, an additional sampling and analysis that shall be conducted in a manner acceptable to the Director. The cost of such additional sampling and analysis shall be borne in full by the requester.

Section 1709 Default Analysis

In the event an analysis of the wastes is not furnished to the District when requested, or as a practical matter cannot be determined by a wastewater study conducted by the District, the WTS surcharge shall be based on a chemical analysis of a similar process or other data acceptable to the District and shall continue in effect until such time as an analysis of the waste is submitted by the Company and confirmed by the District.

Section 1710 Exemption

In case certain types of business and industrial Users discharge clear water, not contaminated as the usual wastewater entering the wastewater treatment system, and if such User shall install and have in operation equipment to prevent said water from entering the wastewater treatment system, the User may be exempt from payment of WTS surcharges for the water so eliminated. For implementation of this section, see Article XVI.

Section 1711 Flow Determination



If the Director finds that it is not practical to measure the quantity of wastewater by meters, he shall determine the quantity of wastewater entering the wastewater treatment system in any manner or by any method he may find reasonable and practical. The quantity so determined shall be the quantity of wastewater to which the WTS surcharge shall be applied.



ARTICLE XVIII

MISCELLANEOUS

Section 1801 Design and Construction Standards

The design and construction of all sanitary sewers connected, either directly or indirectly to the wastewater treatment system managed by the District shall meet all published standards and specifications as established by the District.

Section 1802 Municipalities' Rights

No statement contained herein shall preclude any municipality from its rights under law to construct a sanitary sewer, subject to these Rules and Regulations.

Section 1803 Expansion of District

No statement contained herein shall prevent the Director from negotiating with any other public authority in regard to expanding the District subject to the approval of the Board and the City.

Section 1804 Special Permits

A special permit will be issued when the following conditions occur:

- A. When an existing private sanitary or combined building sewer is proposed to be replaced, relocated or extended.
- B. When an investigation/TV is requested by private companies or contractors for existing public or private sanitary or combined sewers.
- C. When an existing manhole must be adjusted to grade because of excavation/fill over the public or private sanitary or combined sewer.
- D. When a sanitary building sewer dry line is installed. However, the District does not guarantee the sewer availability of this dry line for future connection until such time as the appropriate plans and flow data have been approved.
- E. Installation of a manhole on an existing building sewer.

- F. Other construction, modifications, or repair to an existing sewer not covered under a standard sewer permit as determined by the District.

All construction must be performed by a licensed and bonded sewer tapper registered with the District.

Section 1805 Policy on Management of Requests for Local Sewer Assessment Projects

Amended on April 2, 2014 (Comm'rs Min. Vol. 334, Images 88 - 105)

~~It is the policy of the Board to encourage public sewers and to finance sewer improvements which provide local sewer service by levying special assessments on the properties receiving benefit from the sewer improvement, as provided in Ohio Revised Code Chapter 6117.~~

~~A. Citizen petition. The Board, upon receipt of a written petition initiated by a citizen of Hamilton County for the construction, operation and maintenance of sewer improvements to provide local sewer service to property within the jurisdiction of MSD, will decide whether a sewer improvement shall be designed. In making its decision, the Board will consider the level of interest in a sewer improvement among the owners of properties to be served by the proposed sewer improvement, and it will consider the current condition of the private sewage systems in the project area. The Board will determine the level of interest based upon the number of promises whose owners have signed the petition as compared with the number of promises which could be served by the proposed sewer improvement.~~

~~If the Board decides that a sewer improvement shall be designed based upon the level of interest and whether the sewer improvement is necessary for the preservation and promotion of public health and welfare, it will direct MSD to prepare plans, specifications, estimate of cost, and tentative assessments for a sewer improvement to serve the premises. If the Board decides that a sewer improvement shall not be designed, it will dismiss the petition. Property owners may have appeal rights as provided in Chapter 6117 of the Ohio Revised Code and other applicable law. Owners should be advised to consult an attorney.~~

~~If the owners of all the lots and lands to be benefitted by and to be assessed for a local sewer improvement petition the Board to provide for the construction, maintenance, and operation of any such improvement, consenting that their said lots and lands may be assessed to pay the cost of such improvements, and waive notice and the publication of all resolutions and legal notices, the Board shall prepare the necessary plans, specifications, and estimates of cost of construction, and a tentative assessment. When all the owners of the lots and lands to be benefitted by and assessed for the proposed improvements state in writing that they have examined the estimated cost and tentative assessment and that they have no objection thereto, then the Board shall proceed to cause such improvements to be constructed and provision to be made for the payment of the cost of construction, maintenance, and operation of the local sewer improvement.~~

~~B. Notice from Board of Health. If the Board receives written notice from a Board of Health of a jurisdiction within the Metropolitan Sewer District that a public health nuisance exists in a specified location in the sewer district and that the public health nuisance may be remedied by the construction of a sewer improvement, the Board will decide whether a sewer improvement shall be designed. In making its decision, the Board will consider the notice of public health nuisance, whether the sewer improvement is necessary for the preservation and promotion of public health and welfare, and the level of interest in a sewer improvement among the owners of properties to be served by the proposed sewer improvement. The Board will determine the level of interest by polling the premises owners. The determination will be based upon the number of promises~~



ARTICLE XVIII

MISCELLANEOUS

Section 1805 Policy on Management of Requests for Local Sewer Assessment Projects

- A. General.** It is the policy of the Board of County Commissioners of Hamilton County, Ohio to encourage public sewers and to finance sewer improvements which provide local sewer service by levying special assessments on the properties receiving benefit from a public sewer improvement, as determined by MSD and as provided in Ohio Revised Code ("ORC") Chapter 6117. Sewer Lateral petitions are included in this policy only if the request for sewer lateral is for a property containing a single-family dwelling and the property utilizes a household sewage treatment system (HSTS) that will be eliminated by construction of the lateral.
- B. Types of Requests.** The Board will categorize requests it receives for local sewer service according to the following classifications:
- 1) **Citizen Petition for Local Sewer.** A petition may be requested by an owner of property within the district if the property has a dwelling or structure that utilizes a household sewage treatment system that would be abandoned as a result of construction of a new local sewer. Requests for petitions shall be in writing.
 - 2) **Petition for Acceptance of Private Sewer.** An owner of a sanitary sewer which is owned, controlled, operated, and/or maintained by a person other than the Board of County Commissioners of Hamilton County (BoCC) through the MSD may petition BoCC to accept dedication of the said sewer for public use, control, operation, and maintenance. See Section 1806 for procedures.
 - 3) **Declaration of Public Health Nuisance.** A Board of Health of a jurisdiction within the MSD may issue a declaration that a public health nuisance exists in a specified location in the sewer district and that the public health nuisance may be remedied by the construction of a sewer improvement.
 - 4) **Order of the Director of the Ohio Environmental Protection Agency (EPA).** Director of the Ohio EPA may issue orders that it is necessary for the public health and welfare that sewer improvements or sewage treatment or disposal works be constructed.
- C. Legislation.**
- 1) For petitions that are supported by property owners representing 100% of the benefited properties, MSD will request property owners to endorse a waiver of process, per Ohio Revised Code, to expedite Board proceedings. Per ORC 6117.28, if the owners of all the lots and lands to be benefited by and to be assessed for a local sewer improvement petition the Board to provide for the construction, maintenance, and operation of any such improvement, consenting that their said lots and lands may be assessed to pay the cost of such improvements, and waive notice and the publication of all resolutions and legal notices, the Board may direct MSD to prepare the necessary plans, specifications, and estimates of cost of construction, and a tentative assessment. When all the owners of all the lots and lands to be benefited by and assessed for the proposed improvements state in writing that they have examined the estimated cost and tentative assessment and that they have no objection thereto, then the Board may proceed to cause such improvements to be constructed and provision to be made for the payment of the cost of construction,



- maintenance, and operation of the local sewer improvement.
- 2) If the Board decides that a local sewer improvement shall be designed, upon completion of the design MSD will certify final plans, specifications, estimate of cost, and tentative assessments to the Board for its consideration per ORC 6117.06(C).
 - 3) After plans, specifications, estimates of costs and tentative assessments have been accepted by the Board, MSD will notify benefited property owners of tentative assessments and the date of the project's public hearing as per ORC 6117.06(D).
 - 4) MSD will assist the Board in conducting a public hearing on the local public sewer improvement project. The public hearing provides benefited property owners the opportunity to endorse or oppose the local public sewer improvement per ORC 6117.06(E).
 - 5) After the adoption of the tentative assessments and the conclusion of the public hearing, project property owners have five days in which to file any objections per ORC 6117.06(E). MSD will present any objections to the Board for their disposal of the same.
 - 6) MSD will prepare a Resolution to Proceed for the Board's consideration. Objectors who filed objections under ORC 6117.06 will be notified as to this legislation's date of proposed adoption pursuant to ORC 6117.07.
 - 7) MSD or the Board may amend the plans, specifications, estimate and tentative assessments. Any amendments must follow the procedures laid out in ORC 6117.07.
 - 8) The Board, pursuant to ORC 6117.07, will decide whether to proceed with construction of the local public sewer improvement. In making its decision, the Board may consider: whether the sewer improvement is necessary for the preservation and promotion of public health and welfare, any notice of unsanitary conditions or public health hazard from a Board of Health, the cost of the improvement, the boundaries of the assessment district, the tentative apportionment of the district, the recommendations of MSD, and concerns of property owners served by the proposed improvement.
 - 9) Property owners have appeal rights as provided in ORC 6117.09. Appeals must be effected within ten days of the passage of the resolution. Appeals are limited to the following three issues by statute:
 - a. The necessity of the improvement, including the question whether the cost of the improvement will exceed the benefits resulting therefrom;
 - b. The boundaries of the assessment district;
 - c. The tentative apportionment of the assessment.
 - 10) After waiting ten days following the adoption of the Resolution to Proceed, MSD will present resolutions to appropriate funds and advertise and bid the local public sewer improvement pursuant to ORC 6117.08.
 - 11) After the acceptance and use of the local public sewer improvement, MSD will present to the Board legislation to confirm the original or revised tentative assessments and benefits.

D. Procedure for Citizen Petitions for Local Sewer

- 1.) Citizen Petition. MSD will mail sewer petitions to those property owners who request a petition for the planning and design of a sewer improvement. Petitions will include the following items as a minimum:
 - i) Description of the assessment area as determined by MSD.
 - ii) Names and addresses of properties to be served by the proposed local sewer.
 - iii) A signature line and "vote" checkboxes for indicating support for or opposition of the sewer project.

- iv) A statement that it is Board policy that the actual cost to the property owner will not exceed \$12,000 for the public improvement.
 - v) A statement that costs associated with "private-side" improvements, i.e., connection to the public sewer and abandonment of the existing household sewage treatment system, are not a part of the local public sewer improvement costs.
 - vi) A statement that it is incumbent upon the petitioner to circulate the petition.
 - vii) A statement describing the purpose and benefit of the proposed public improvement.
- 2.) MSD Polling. When a petitioner submits a petition with absolute majority support for the planning and design of a sewer improvement, MSD will poll all project area property owners inquiring as to their support or opposition. The polling will be distributed by MSD and will inform all property owners of a potential local public sewer improvement and afford comment to all. The polling letter will contain the following statements:
- i. It is Board policy that the actual cost to the property owner will not exceed \$12,000 for the public improvement.
 - ii. Costs associated with "private-side" improvements, i.e., connection to the public sewer and abandonment of the existing household sewage treatment system, are not a part of the local public sewer improvement costs.
- 3.) Submittals to Board.
- i. MSD will present all petition and polling results to the Board for its record.
 - ii. MSD will request project funding based upon the establishment of absolute majority support.
 - iii. Should an outfall sewer not exist, MSD will present options to the Board for provision of trunk sewers.
 - iv. MSD will present declarations of public health nuisance received from a Board of Health within Hamilton County, or Orders received from the Ohio EPA to the County Commissioners for review, along with the data available from the Board of Health and/or the Ohio EPA.
 - v. For projects involving declaration of public health nuisance or Ohio EPA orders, MSD will do the following:
 - (a) request the Board of Health to conduct a public informational meeting concerning the nuisance for the residents of the identified area;
 - (b) forego any petition or polling efforts unless directed otherwise by the Board.
- 4.) Actions by the Board on Citizen Petitions after Submittals.
- i) The Board will enter into its official record all citizen petitions received for a local public sewer improvement. Returned petitions that are not supported by property owners representing an absolute majority of properties are not valid under Board policy.
 - ii) The Board will decide whether a local public sewer improvement shall be designed upon receipt of a written petition, initiated by a citizen or citizens of Hamilton County, to provide local sewer service to property within the MSD service area and jurisdiction. The petition will request the construction, operation and maintenance of a local public sewer improvement. In making its decision, the Board may consider one or more of the following factors as significant:
 - (a) Level of Interest: It is the policy of the Board of County Commissioners that to be considered as valid, a citizen petition for the planning and

APR - 2 2014

IMAGE

102

design of a sewer improvement shall have affirmative endorsement from property owners representing an absolute majority of the properties that benefit from the local public sewer improvement as determined per Section 1805 (H);

- (b) Whether or not a public sewer outfall presently exists to serve the local public sewer improvement project;
 - (c) The necessity of the improvement, including the question whether the cost of the improvement will exceed the benefits resulting therefrom;
 - (d) The boundaries of the assessment district;
 - (e) The tentative apportionment of the assessment.
- iii) If the Board determines that a sewer improvement shall not be designed, it will direct MSD to dismiss the petition and it will notify the Board of Health of its decision.
 - iv) If the Board decides that a local public sewer improvement shall be designed based upon the level of interest, or if the Board decides a local public sewer improvement is necessary for the preservation and promotion of public health and welfare, or if the Board decides a local public sewer improvement is necessary as a result of a Notice of Public Health Nuisance from a local Board of Health, it will direct MSD to prepare plans, specifications, estimate of cost, and tentative assessments for a local public sewer improvement which serves the properties on the petition or the specified location to remedy the public health nuisance.
 - v) Pursuant to ORC 6117.34, if the Board receives notice from the director of the Ohio EPA that it is necessary for the public health and welfare that sewer improvements or sewage treatment or disposal works be constructed, the Board shall obey such order and proceed to construct such sewers or treatment works, or maintain, repair, or operate the same, as are required by such order and in such manner as is satisfactory to the Director.

E. Notification of Tentative Assessment. MSD will provide to property owners in an assessment district notice of the maximum assessment cost of \$12,000 for a proposed local public sewer improvement. Actual costs and final credit amount are based on construction costs. MSD will provide this information during the following points in the assessment project process:

- 1.) With the petition.
- 2.) With the "polling" of all property owners in a proposed assessment district.
- 3.) With the notice of tentative assessments included in the announcement of the public hearing required by statute.

F. Determination of Benefited Properties. All properties, regardless of type and size, that abut and are specially benefited by the local public sewer improvement, will be allocated one benefit. MSD will assign benefits according to the following criteria:

- 1.) MSD will assess all buildable parcels, regardless of type and size, as 1 benefit per parcel. MSD will apply this policy whether the parcel is a single-family residence, a school, an industrial-use development or undeveloped property.
- 2.) MSD will assess a vacant parcel that is buildable, regardless of type and size, in the local public sewer improvement project area as 1 benefit, except as provided below:
 - i) Vacant parcels that have been placed in a land conservation easement, duly recorded with the Hamilton County Recorder before the date the Board adopts the resolution to proceed for the local public sewer improvement, will receive zero benefit.

APR - 2 2014

IMAGE

103

- ii) The Board will determine if a vacant parcel **not** placed in a land conservation easement is buildable and to be included in a sewer assessment district.
- 3.) MSD will report to the Board how it has determined and assigned benefits for each local public sewer improvement, subject to the Board's approval.
- 4.) The Board will confirm benefits after a local public sewer improvement is complete and accepted for use.
- 5.) Subject to the provisions of Chapter 6117 ORC, the Board's determination of benefits shall be final.
- 6.) MSD will report benefits determination to the Board at the time of the local public sewer improvement project's public hearing. Benefits so determined are subject to the provisions of §6117.09 ORC regarding objection and legal challenge. (Properties included in the assessment district as the result of an executed petition, statement and waiver are not subject to provisions of §6117.09 ORC regarding objection and legal challenge.)

G. Financing of Local Public Sewer Improvements. All costs of a local public sewer improvement shall be reported to the Board by MSD. The cost of the aforesaid local public sewer improvement, per Chapter 6117 ORC, shall be paid in part by Special Assessments against the property or properties abutting on and specially benefited by the local public sewer improvement. It is the policy of the Board to structure the financing of local public sewer improvements in the following manner:

- 1.) The total cost of said special assessment shall be the actual cost of the local public sewer improvement.
- 2.) Actual costs are those defined under ORC Chapter 6117, et. seq.
- 3.) Total actual cost shall be divided by the number of benefited properties to determine the per-benefit cost.
- 4.) MSD shall apply all applicable assessment credits, per Section 1216, to the total actual per-benefit cost.
- 5.) Actual costs per benefited property shall apply only to parcels benefited by the local public sewer improvement.
- 6.) Benefited parcels are determined under Section 1805 (H).
- 7.) MSD shall apprise property owners of their ability to apply to the Board for individual Community Block Development Grant (CDBG) funding. MSD shall apprise the political jurisdiction in which the local public sewer improvement is located of their ability to apply to the Hamilton County Department of Community Development for CDBG funding. The use and award of such funding is subject to the rules and regulations associated with it. The Board will endeavor to secure such CDBG funding where available and applicable.

H. Deferred Assessments. Under ORC 6117.061, the Board of County Commissioners may defer collection of up to 75% of the principal amount of a local public sewer improvement assessment for up to 20 years.

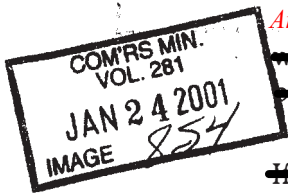
- 1.) It is the policy of the Board that the ability of a property owner to place the assessed cost of the local public sewer improvement on the property tax duplicate, over 20 years, constitutes, *de-facto*, a deferment under this chapter of the Revised Code.
- 2.) Per ORC 6117.061, the decision of the Board in this matter is final and no appeal thereof may be taken.
- 3.) MSD will report to the Board on all deferment requests received and request the Board to dispose of the same as a part of the project legislation. Decisions of the Board are final, with no avenue of judicial appeal.



I. **Pump Station Capacity.** It is the policy of the Board of County Commissioners of Hamilton County, Ohio that when an existing pump station requires an upgrade to accommodate the additional flows associated with a local public sewer improvement, the costs for said upgrade should be incorporated into the local sewer public improvement's actual costs, consistent with Sections 1805 (H)-(I). The distribution of those costs among the specially benefited properties shall also follow the provisions of Section 1805 (I), above.

J. **Definitions.**

- 1.) **Absolute Majority:** Voting basis for petitions, whether at the signature stage or polling stage, that requires more than half of *all* the benefited properties within the assessment district (including those not voting) to vote in support of the petition in order for the petition to be considered valid. In practical terms, abstention from voting is equivalent to a *no* vote
- 2.) **Assessment or Special Assessment:** The amount of actual cost assessed against a property benefited by a local public sewer improvement.
- 3.) **Assessment District:** The area consisting of properties benefited from a local public sewer improvement as determined by MSD.
- 4.) **Benefited Property:** A property within the MSD service area that abuts or is adjacent to a local public sewer improvement and will receive sewer service from said public improvement, whether directly connected to the local sewer at the time of the improvement's completion or not.
- 5.) **Buildable Parcel:** A benefited property within the MSD service area that does not have a structure on it at the time the Board of County Commissioners adopt tentative assessments for a local sewer assessment project, but can be developed under existing zoning regulations.
- 6.) **Land Conservation Easement:** An easement recorded to a buildable parcel that governs that parcel's development and use.
- 7.) **Local Public Sewer Improvement or Local Sewer Assessment Project:** A public sewer improvement designed and constructed to serve a specified number of benefited properties in an assessment district within the MSD service area. Costs are borne, in part, by the benefited properties.
- 8.) **MSD Service Area:** Hamilton County Sewer District No. 1.
- 9.) **Household Sewage Treatment System:** The household wastewater disposal system used to serve a property not connected to the MSD service area public sewers.
- 10.) **Net Assessment Amount:** The net assessment amount is the total project cost of the local sewer project divided by the number of benefited parcels within the local sewer project, less the amount of all assessment credits applicable to the particular parcel.
- 11.) **Petition:** A form, containing the names, addresses, parcel identifications, signatures, and per parcel vote of benefited properties of a local sewer assessment project.
- 12.) **Public Sewer Improvement:** A sewer constructed, operated, and maintained by the Board of County Commissioners of Hamilton County Ohio within the service area of the Metropolitan Sewer District of Greater Cincinnati (Sewer District No. 1) under the provisions of Chapter 6117 of the Revised Code of Ohio.
- 13.) **Tentative Assessment:** The estimated amount of cost anticipated to be assessed against a property benefited by a local public sewer improvement.
- 14.) **Vacant Parcel:** A benefited property within the MSD service area that does not have a structure on it at the time the Board of County Commissioners adopt tentative assessments for a local sewer assessment project.



Amended on April 2, 2014 (Comm'rs Min. Vol. 334, Images 88 - 105)

~~whose owners respond affirmatively to the polling letter as compared with the number of premises which could be served by the proposed sewer improvement.~~

~~If the Board decides that a sewer improvement shall be designed, it will direct MSD to prepare plans, specifications, estimate of cost, and tentative assessments for a sewer improvement to serve the premises. If the Board decides that a sewer improvement shall not be designed, it will notify the Board of Health of its decision.~~

- ~~C. Public Health Hazard. If the Board receives notice that the Board of Health of a jurisdiction within the MSD has adopted a resolution declaring that a public health hazard exists in a specified location in the sewer district and that the public health hazard may be remedied by the construction of a sewer improvement, the Board will consider directing MSD to prepare plans, specifications, estimate of cost, and tentative assessments for a sewer improvement to serve the specified location to remedy the public health hazard.~~
- ~~D. Order of the Director of the Ohio Environmental Protection Agency (OEPA). Pursuant to ORC 6117.34, if the Board receives notice from the director of the OEPA that it is necessary for the public health and welfare that sewer improvements or sewage treatment or disposal works be constructed, the Board shall obey such order and proceed to construct such sewers or treatment works, or maintain, repair, or operate the same, as are required by such order and in such manner as is satisfactory to the Director.~~
- ~~E. Completion of final plans, specifications, estimate of cost, and tentative assessments. If the Board decides that a local sewer improvement shall be designed, upon completion of the design MSD will certify final plans, specifications, estimate of cost, and tentative assessments to the Board for its consideration.~~

~~The Board will decide whether to proceed with the necessary legislative steps, as provided in Ohio Revised Code Chapter 6117, to undertake the local sewer improvement. In making its decision, the Board will consider any notice of unsanitary conditions or public health hazard from a Board of Health, whether the sewer improvement is necessary for the preservation and promotion of public health and welfare, and the level of interest in the sewer improvement among the owners of properties to be served by the proposed sewer improvement. The Board will determine the level of interest by providing the tentative assessment amount to the premises owners, then polling the premises owners. The determination will be based upon the number of premises whose owners respond affirmatively to the polling letter as compared with the number of premises which could be served by the proposed sewer improvement.~~

Section 1806 Policy Regarding Acceptance of Private and Public Sewers by the Board of County Commissioners for Public Control, Use, Operation, and Maintenance

An owner of a sanitary sewer which is owned, controlled, operated, and/or maintained by a person other than the Board of County Commissioners of Hamilton County (BOCC) through the MSD may petition BOCC to accept dedication of the said sewer for public use, control, operation, and maintenance.

The policy of BOCC is to require the following before it will consider accepting dedication of a sanitary sewer for public use, control, operation, and maintenance:



- A. A television inspection will be done to document the condition of the sewer. The inspection and any sewer cleaning necessary to perform the inspection will be provided by MSD one time only. The owner must provide a right of entry for the inspection. The said television inspection will include only sewer sections that have adequate equipment access and sufficient pipe structural integrity to allow equipment passage through the sewer.
- B. The owner must, at his own cost, provide a smoke and dye inspection of the sewer to identify any sources of inflow or infiltration.
- C. The owner must, at his own cost, make any and all repairs or improvements to the sewer that are necessary to bring the sewer to MSD's current standards. If repairs or improvements are necessary, the owner shall provide to MSD a television inspection of the said private sewer after the necessary repairs or improvements are made.
- D. The owner must dedicate and provide a recordable plat for any and all easements necessary for the maintenance and operation of the sewer, at no cost to the County.
- E. The Director of MSD will notify the owner of any repairs or improvements that are necessary to bring the sewer to MSD's current standards.

After the above requirements are met, the Director of MSD will make a recommendation for BOCC's consideration as to the acceptability of the said sewer for public use, control, operation, and maintenance. If BOCC decides to accept the said sewer, it will adopt a resolution so stating. BOCC does not consider any private sewers to be under its jurisdiction unless and until such a resolution is adopted.

Dedication of combined sewers which are owned, controlled, operated, and/or maintained by a person other than BOCC will not generally be considered for acceptance by BOCC of County Commissioners. However, any owner of a combined sewer may appeal to BOCC in writing to accept dedication of the said sewer. The owner must accompany such an appeal with data demonstrating that the combined sewer has sufficient capacity to convey flow in such a manner so as to prevent backups, flooding, and sewer overflows.

Section 1807 Policy on Sewer Improvement Easement Acquisitions

Section VIII, paragraph 13 of the April 10, 1968 Agreement between the City of Cincinnati (City) and the Board of County Commissioners of Hamilton County (BOCC) for the MSD places responsibility for sewer easement acquisition with the City. It is the policy of BOCC that acquisition of easements for sewer construction, operation, maintenance and repair shall be as expeditious and efficient as is possible.

In order to acquire easements for sewer purposes, the City shall perform an appraisal of the fair market value of the easement and negotiate a final offer with the property owner. The City will use its best efforts to adhere to the following schedule for this process. This policy does not preclude shorter timeframes whenever possible.



A.	Project design complete (including acceptable easement drawings)		
B.	MSD prepares for submittal to Law Department for easement acquisition		1 month
C.	Law Department initiates appraisal and title opinion		2 months
D.	Review appraisal Assign to negotiator		1 month
E.	First contact with owner by negotiator		2 weeks
F.	Minimum of three contacts with owner by negotiator		3 months

If negotiations are successful:

G.	Obtain release of mortgage		2 months
H.	Record executed documents		1 month

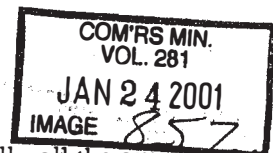
If the property owner does not agree to grant the necessary easement, the Director of MSD shall notify the Board of County Commissioners. The Board will decide whether to authorize additional negotiation or to refer the matter to the County Prosecutor to appropriate the easement through litigation.

MSD will provide semi-annual status report on easement acquisition to BOCC with reference to the above schedule and timeframes. MSD will report to BOCC on any easement acquisitions that exceed any of the timeframes referenced in the above schedule.

Section 1808 Policy Regarding Repairs to Private Sewers Under Circumstances of a Public Health Emergency

If the Board receives notice that a Health Commissioner of a Health District within the Metropolitan Sewer District has declared that a public health emergency exists at a specified location in the sewer district and that the public health emergency is due to the failure of a private sewer which connects indirectly or directly to the public wastewater collection and treatment system of MSD, then MSD will proceed immediately to make necessary repairs to resolve the public health emergency. When the repairs are complete and the public health emergency is resolved, MSD will seek reimbursement from the Board of Health of the Health District within which the emergency occurred. The billing for reimbursement will include the total cost of the repairs including engineering, inspection and incidental costs.

If, after the public health emergency is abated, an appropriate public authority requests additional repairs be performed such that the private sewer will be in a condition which meets MSD current standards for acceptance for dedication to public use, MSD will provide such repairs, provided the public authority commits to reimburse all costs of said repairs.



If the public authority declines to pay the costs of said additional repairs, MSD will poll the owners of the private sewer to determine whether the owners are interested in MSD completing such repairs, with the owners to be assessed for the cost of said additional repairs in accordance with ORC 6117.01-6117.51. If at all possible this polling will take place while MSD contractors, workers and equipment are still on the job site of the emergency repair, so that costs mobilization may be minimized.

If 100% of owners of the private sewer are in favor of an assessment project to repair the private sewer to standards such that it is acceptable for dedication to public use, and if 100% of owners waive their rights to object to the assessment project, then MSD will proceed with completion of the repairs.

If fewer than 100% of owners of the private sewer are in favor of the assessment project, no further work will be performed by MSD. An assessment project may be initiated in accordance with the procedures defined in Article XVIII, Section 1805.

Section 1809 Sewer Construction Inspection Fees

General Construction Inspection of Private Development \$50 per Hour

Section 1810 Mutual Aid Policy

Governmental agencies (cities, townships and villages in Hamilton County) request from MSD various types of assistance unrelated to the wastewater system, using MSD personnel and equipment. MSD may respond to requests for equipment and personnel services from other governmental agencies under the following conditions:

- a. The governmental agency requesting MSD services must designate in writing to the Director of MSD the individual(s) authorized to request and pay for requested services.
- b. MSD will bill the governmental agency for the services provided, within 30 days from the last day of service.
- c. MSD will not provide service to any governmental agency (including departments or divisions within the governmental agency) if bills for prior services are unpaid after 180 days.
- d. The services provided shall benefit the public and include public health and safety situations in the community.
- e. The MSD services shall be for a short duration and will not impair the basic sewer service provided by MSD to the MSD rate payers.
- f. MSD will not rent equipment or hire additional staff to provide these services.
- g. The Director of MSD or the Director's designee shall authorize any MSD services. In the cases of disaster or extreme emergency, the Director of MSD or the Director's designee shall take reasonable and immediate action to provide services as requested by a governmental agency. Expenditures shall be made in accordance with Section 2402 of these Rules and Regulations.
- h. Charges for service shall include overhead costs, as specified by the County Administrator, in addition to labor and equipment.
- i. The Director of MSD will report to the County Administrator all actions taken by MSD under the provisions of this policy prior to the next meeting of the Board of County Commissioners.



ARTICLE XIX

INSPECTION OF CONSTRUCTION

Section 1901 Inspection and Testing of Building Sewers

All building sewers that connect either directly or indirectly into the wastewater treatment system under the management of the District shall be inspected by and subject to testing under the supervision of the District or its designated representatives.

Section 1902 Inspection and Testing of Sewers

All sewers which will connect either directly or indirectly into the wastewater treatment system under the management of the District and which are to be constructed by any person shall be inspected by and subject to the testing under the supervision of the District or its designated representatives.

Section 1903 Inspection Fees

The cost of all inspection performed by the District shall be in accordance with Article 25 of these Rules and Regulations, and shall be borne by the person responsible for the sewer construction. Said person is required to deposit with the District a sum of money, payable to the City Treasurer, in an amount to be determined by the Director for each application, before any construction can commence. The Director will require additional deposits to this fund if the original deposit proves inadequate.

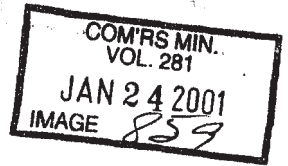
When the District certifies that no further field engineering service will be required for the improvement, the Director will prepare a voucher in favor of the Depositor refunding any balance remaining in his account.

Section 1904 Acceptance of Facilities

No sewer shall be acceptable to or accepted by the Board without the Director's written approval.

ARTICLE XX

MAINTENANCE OF THE WASTEWATER TREATMENT SYSTEM



Section 2001 Public Sanitary Sewers in Municipalities

All public sanitary sewers, which are located within any municipality which has adopted the proper ordinances, and which are accepted for maintenance and operation by Resolution of the Board shall be maintained and operated by the District.

Section 2002 Public Combined Sewers in Municipalities

All existing public combined sewers, which are located within any municipality which has adopted the proper ordinances, and which are accepted for maintenance and operation by Resolution of the Board shall be maintained and operated by the District. Catch basins, inlet structures, inlet connections and other appurtenances used for the purpose of conveying storm waters to combined sewers and which are located within any municipality may be maintained and operated by the District only upon execution of a written agreement by the municipality, the Board and the City of Cincinnati. The cost of such work shall be at the expense of the municipality.

Section 2003 Public Sanitary Sewers in Unincorporated Areas

All public sanitary sewers that are located within the unincorporated areas of the District shall be — maintained and operated by the District.

Section 2004 Public Combined Sewers in Unincorporated Areas

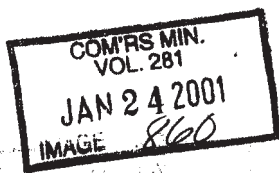
All existing public combined sewers (excluding stormwater facilities such as catch basins, inlet structures, inlet connections and other storm water appurtenances) which are located within the unincorporated areas of the District shall be maintained and operated by the District.

Section 2005 Wastewater Lift Stations and Wastewater Treatment Plants

All wastewater lift stations and wastewater treatment plants constructed by the District shall be maintained and operated by the District.

Section 2006 Wastewater Lift Stations and Wastewater Treatment Plants

All wastewater lift stations and treatment plants constructed by any person and approved by the District and which are properly conveyed to and accepted by the Board shall be maintained and operated by the District.



Section 2007 Storm Structures

No watercourses, storm sewers, or detention basins shall be maintained by the District.

Section 2008 Maintenance and Repair of Building Sewers

The owner of the premises served by a sewer shall be responsible for the maintenance and cleaning of the building sewer from the building to the point of connection with the public local sewer. Repair and reconstruction of the building sewer in a public street right-of-way or within the specified width of a recorded public easement shall be the responsibility of the District except as follows. Prior to commencing any repairs, the owner must provide the District with requested property access rights needed to make the repair. Where a building or structure is located over a sewer or within the public easement, repair of the building sewer shall be the owner's responsibility. For public sewers located on private property where no easement width is defined, the District will be responsible for making repairs for that portion of the building sewer within 5 feet of the centerline of the sewer. It shall be the responsibility of the owner or his agent to establish, by means of a valid sewer cleaner contractor's receipt, that such a repair or reconstruction is the responsibility of the District. The District shall have the right to verify the sewer cleaner's finding prior to beginning repair or reconstruction. A proper clean out must be in place prior to such operation by the District.

A proper clean out, inside the building, is defined as 18" or less off the floor, has a 4" inch opening or larger (6-inch preferred), a wye-type connection to the building lateral, is readily accessible with a cap or plug to the clean out that can be easily removed using standard plumbing tools.

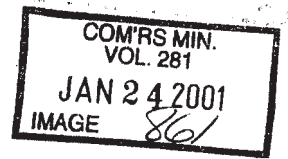
If the length (the distance from the building to the public sewer) of the building lateral exceeds 100', a clean out shall be installed to allow cleaning and inspection. The clean out shall be located on private property and maintained by the property owner.

Section 2009 Private Sewers

It shall be the obligation of the owner to properly maintain private sewer mains and laterals on private property. Sewers which have structurally failed or sewers which are defective and allow excessive inflow, infiltration or surrounding earth materials to enter the downstream public sewer shall be repaired promptly upon finding such deficiencies or upon notification by the District. Any person who fails to make a proper repair, within 90 days of being notified, shall be subject to a fine or fines in accordance with Section 2201 of these Rule and Regulations.

ARTICLE XXI

POWERS AND AUTHORITY



Section 2101 Right of Entry

The Director and other duly authorized employees and agents of the District bearing proper credentials and identification shall be permitted to enter upon all properties for the purposes of surveying, inspection, observations, measurement, smoke and dye testing, sampling and testing of all wastewater treatment works under the management of the District and the wastewater discharges thereto.

Section 2102 Terms of Easement

The Director and other duly authorized employees and agents of the District bearing proper credentials and identification shall be permitted to enter all private properties for the purpose of surveying, inspection, maintenance, operation, repair, smoke and dye testing, and reconstruction of any portion of the wastewater treatment system under the management of the District subject to the terms of the easement.

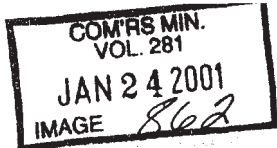
Section 2103 Private Sewers

All private sanitary and combined sewers which discharge into public sewers in the District shall be controlled by the Director but maintained and operated by their owners.

The Director and other duly authorized employees of the District bearing proper credentials and identification shall be permitted to enter upon all properties containing a private sanitary or combined sewer for the purpose of surveying, inspection, observation, measurement, sampling and testing of all wastewater and/or private wastewater facilities which connect either directly or indirectly into the wastewater treatment system under the management of the District. In accordance with Section 1806 of these Rules and Regulations, the Board may accept for maintenance and operation any private sewer which meets the District's standards for same and for which a proper easement is dedicated to the Board.

Section 2104 Violation

Upon a finding that a discharge of wastewater has been taking place in violation of these Rules and Regulations, Director's order, or wastewater source control requirements, effluent limitations or pretreatment standards, or the provisions of a Wastewater Discharge Permit, the Director may require the User to submit for approval, with such modifications as the Director deems necessary, a detailed time schedule of specific actions which the User shall take in order to either prevent the discharge or correct the violation of requirements resulting therefrom.



Section 2105 Cease and Desist Order

When the District finds that a discharge of wastewater has taken place, or threatens to take place, in violation of these Rules and Regulations or of the provisions of a Wastewater Discharge Permit issued under the provisions of Article XV, the Director may issue an order to cease and desist, and direct that those persons not complying therewith shall:

- A. Comply forthwith.
- B. Comply in accordance with a time schedule set forth by the Director, or
- C. Take appropriate remedial or preventive action in the event of a threatened violation.

Section 2106 Revocation of; Termination of Service

The Director may revoke any Wastewater Discharge Permit, or permit issued pursuant to Article XIV, or terminate or cause to be terminated wastewater treatment system service to any premise, if a violation of any provision of these Rules and Regulations is found to exist or if a discharge of wastewater causes or threatens to cause a condition of contamination, pollution, or nuisance as defined in these Rules and Regulations. This provision is in addition to other statutes, rules, or regulations, authorizing termination of service for delinquency in payment. Revocation of a permit is sufficient grounds for termination of service.

Section 2107 Levy of Charges

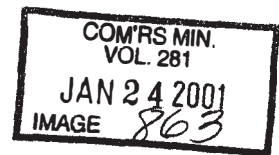
When a discharge of wastes by any User causes an obstruction of, or damage or any other impairment to, a wastewater treatment works, the District is authorized to levy a charge against said User for the cost of the work required to clear and/or repair the wastewater treatment works affected by said discharge. The District may add such charge to the User's usual WTS service charges, surcharges, and fees or issue a separate bill. The District may also certify amounts not timely paid to the County Auditor for collection in accordance with Section 6117.02, Ohio Revised Code.

Section 2108 Rejection of Wastes; Additional Requirements

If any waters or wastes are discharged or are proposed to be discharged to the wastewater treatment system, which waters contain the substances or possess the characteristics enumerated in Sections 1513 through 1518 of these Rules and Regulations, and which in the judgment of the Director, may have a deleterious effect on the aforesaid system or receiving waters, or which otherwise create a hazard to life or constitute a public nuisance, the Director may:

- A. Reject the wastes.
- B. Require pretreatment to an acceptable condition for discharge to the wastewater treatment system.
- C. Require control over the quantities and rates of discharge.
- D. Require payment to cover the added costs of handling, treating, and disposing of the wastes not covered by the wastewater treatment system Service Charge.

No provision of this Section 2108 shall be construed as authorizing a violation of or a variance from National Categorical Pretreatment Standards.



Section 2109 Injunctive Relief

Either as an alternative to any procedure established in these Rules and Regulations or as an enforcement action thereunder, the Director may seek injunctive relief to restrain the violation, or attempted violation, of any provision of these Rules and Regulations.

Section 2110 Authority of Director

No statement contained in these Rules and Regulations shall be construed as preventing any special agreement or arrangements between the Director and the developer, or as preventing the Director from stopping issuance of additional permits or revoking outstanding permits should conditions warrant such action in the opinion of the Director; provided that no special agreement or arrangement shall authorize a violation of or a variance from National Categorical Pretreatment Standards.

Section 2111 Special Agreements

No statement contained in these Rules and Regulations shall be construed as preventing any special agreement or arrangement between the Director and any person whereby an industrial waste of unusual strength or character may be accepted by the District for treatment, subject to payment therefore; provided that no special agreement or arrangement shall authorize a violation of or a variance from National Categorical Pretreatment Standards.

Section 2112 Conflicting Provisions

In cases where two or more provisions of these Rules and Regulations apply to the same set of circumstances and said provisions are neither complementary nor supplementary but are conflicting, the most stringent provision shall apply.

Section 2113 Enforcement

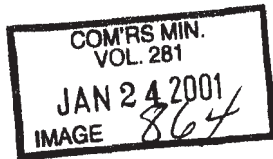
The Director shall be responsible for the enforcement of these Rules and Regulations and shall have authority to serve notices of violation thereof; to issue orders including without limitation Compliance Orders, Consent Orders, and Cease and Desist Orders; to impose penalties as authorized therein, and assess and require payment for consequential damages; to establish limits for the discharge of toxic or objectionable substances; and shall have any other powers or authority necessary and proper for the enforcement and the achievement of the goals of these Rules and Regulations.

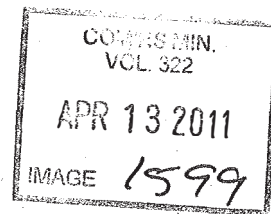
Section 2114 Amendments

The Board reserves the right to amend these Rules and Regulations at any time and in any manner and to establish more stringent limitations or requirements where deemed necessary to comply with the objectives set forth in the Introduction to these Rules and Regulations.

Section 2115 Non-limitation

The enumeration of powers and authority herein shall not be in limitation of any other powers and authority that the Director, the District, or the Board may have the right to exercise.





ARTICLE XXII

PENALTIES

Section 2201 Noncompliance

The Director may impose a civil penalty of up to \$100 per violation, or such other fines and penalties as are authorized by these Rules and Regulations upon any person who fails to comply with any provision of these Rules and Regulations.

All fines and penalties authorized by these Rules and Regulations shall be in conformity with applicable law and shall be in accord with fines or fine ranges approved by the Board.

Section 2202 Industrial Waste Violations

The Director may impose a civil penalty as set forth in Sections 2203 and/or 2204 of this Article upon any person who violates Section 409 of Article IV or any provision of Articles XIV or XV of these Rules and Regulations or any permit condition, effluent limitation, or pretreatment or toxicity standard, issued or established by the Board to implement these Rules and Regulations.

Section 2203 Civil Penalties

A. A User who has violated, or continues to violate, any provision of this ordinance, an individual wastewater discharge permit, or a general permit or order issued hereunder, or any other Pretreatment Standard or Requirement shall be liable to the District for a maximum civil penalty of \$10,000 per violation, per day.

B. The Director may recover reasonable attorneys' fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the District.

C. In determining the amount of civil liability, the Court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the User's violation, corrective actions by the User, the compliance history of the User, and any other factor as justice requires.

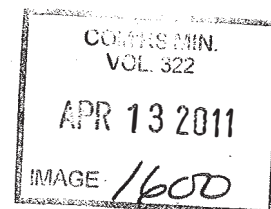
D. Filing a suit for civil penalties shall not be a bar against, or a prerequisite for, taking any other action against a User.

Section 2204 pH Violations

The Director may impose the penalties established by the Board for pH ranges and periods of flow as set forth in Table 3 and 4 of the District's Enforcement Response Plan.

Section 2205 Criminal Prosecution

A. A User who willfully or negligently violates any provision of these Rules and Regulations, an individual wastewater discharge permit, or a general permit or order issued hereunder, or any other Pretreatment Standard or Requirement shall, upon conviction, be guilty of a misdemeanor,



punishable by a fine of not more than \$25,000 per violation, per day, or imprisonment for not more than six (6) months, or both.

B. A User who willfully or negligently introduces any substance into the POTW which causes personal injury or property damage shall, upon conviction, be guilty of a misdemeanor and be subject to a penalty of at least \$25,000, or be subject to imprisonment for not more than six (6) months, or both. This penalty shall be in addition to any other cause of action for personal injury or property damage available under State law.

C. A User who knowingly makes any false statements, representations, or certifications in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this ordinance, individual wastewater discharge permit, or general permit or order issued hereunder, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this ordinance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, per day, or imprisonment for not more than six (6) months, or both.

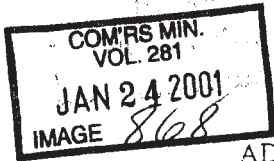
Section 2206 Failure to Obtain Permit

The Director may impose an administrative penalty of up to \$1,000.00 per violation upon any person who violates Section 1201, Article XII by failing to obtain a permit for making any connection with, altering, or disturbing a public or private sanitary or combined sewer or appurtenance thereof, in addition to such other fines, fees, tap-in-fees, and penalties as are authorized by these Rules and Regulations.

It shall be the obligation of the person causing the violation to expose the work area or provide proof, to the satisfaction of the District that the work was done in accordance with these Rules and Regulations. The Director may revoke the Sewer Tapper's License, cause the forfeiture of the Sewer Tapper's bond, or both, for failure of the violator to cooperate.

Section 2207 Clean Water Violation

Any person who violates Section 1201a, Article XII by allowing clean water to enter a sanitary sewer system building lateral or appurtenance thereof shall be subject to a fine of up to \$25,000 per violation in addition to any liability for any consequential damage resulting from the violation for which the penalty is imposed. Consequential damages shall include, but not be limited to, fines and penalties imposed upon the District, or the Board by other public authorities.



ARTICLE XXIII

ADMINISTRATIVE ENFORCEMENT, PRACTICES AND PROCEDURES

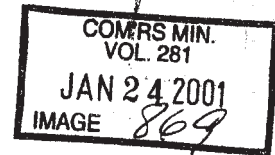
Section 2301 Notice of Violation: Administrative Complaint and Proposed Action

- A. A Notice of Violation or Noncompliance ("NOV") shall mean a written notice from the District to a User which identifies the date, time, nature, and details of a violation of these Rules and Regulations or conditions of a permit issued under Article XV of these Rules and Regulations to a User. The District shall send a NOV to the User as expeditiously as possible after the District first receives information that such violation has occurred. If a prolonged time period elapses (in excess of 45 days) before a User receives an NOV, the User may present that fact as a mitigating circumstance in any subsequent enforcement action brought by the District. A User shall respond to an NOV in writing on a form provided by the District, eliciting information which may include the source of the violation, measures taken to prevent recurrence, rebuttal, explanation or other pertinent facts. As a result of such information, the District may modify, amend or withdraw a NOV.
- B. An Administrative Complaint and Proposed Action ("Proposed Action") shall mean a written notice from the District to a User which (i) identifies the NOV(s) issued by the District to the User which form the basis for the Proposed Action or otherwise identifies a violation of these Rules and Regulations, (ii) sets forth any proposed action, including but not limited to monetary charges or penalties, and the date upon which such proposed action shall become final, (iii) informs the User of its rights under this Article XXIII to request a settlement conference, request an administrative appeal, or request a judicial appeal, and (iv) is sent by the District to the User via certified mail.
- C. Effective Date. Except for cease and desist orders or other extraordinary action of the Director taken pursuant to these Rules and Regulations, no Proposed Action shall become effective until after the expiration of the thirtieth (30th) day after receipt by User of the Proposed Action. If the User requests a settlement conference, pursuant to Section 2302 of these Rules and Regulations, the Proposed Action shall be stayed pending the issuance of the Director's Final Action pursuant to Section 2303 of these Rules and Regulations. If no request for a settlement conference is made by the User, the Proposed Action shall become the Director's Final Action automatically upon the effective date set forth in the Proposed Action.

Section 2302 Settlement Conferences

2302-1 Request for Settlement Conference

Upon receipt of a Proposed Action, the User shall be entitled to request a settlement conference with the District, provided that the User notifies the Director that it is exercising its right by delivering to the Director a written request for a settlement conference. The requests must concisely state each issue in dispute and must be sent to the Director via certified mail, postmarked no later than fourteen (14) days after the User's receipt of the Proposed Action.



As soon as convenient for the User and the District, the settlement conference shall be held. The purpose of this informal meeting shall be to share information and points of view in an attempt to resolve matters in dispute, which are the subject of the Proposed Action. In lieu of a conference, the User may submit a written response to the Proposed Action. The Superintendent of the Division of Industrial Waste (or other Division, when the matter in dispute does not involve industrial waste), or his/her staff, will represent the District in the settlement conference. One or more individuals familiar with the issues in dispute shall represent the User. The settlement conference will not be transcribed and statements made and information provided by the User and the District will not be admissible in any subsequent administrative or judicial proceeding. It is the policy of the District to encourage settlement and to resolve disputes if settlement is consistent with the provisions and objectives of these Rules and Regulations and applicable law.

Section 2303 Director's Final Action

The Director's Final Action shall be the final administrative order with respect to any Proposed Action. If no settlement conference has been requested, it shall take effect according to the provisions of Section 2301(C) of these Rules and Regulations. If a settlement conference has been requested and conducted, the Director shall, upon consideration of all available facts, promptly issue a Final Action; such Final Order will be effective upon the Director's signature. In the interests of economy and efficiency, the issuance of a Final Order may be delayed for no more than ninety (90) days, for the purpose of allowing the Director to consolidate some or all Proposed Actions pending against the same User. The fact that the Director may not have consolidated some or all Proposed Actions shall not operate as a waiver or release of any such Proposed Action(s). The Director's Final Action shall (i) identify the date, time, nature, and details of all violations found, (ii) specify the final administrative action ordered, including but not limited to the achievements and maintenance of compliance with applicable laws and regulations immediately or in accordance with a compliance plan and time schedule, payment of penalties, and/or payment of stipulated penalties upon violation of any order, (iii) inform the User of its rights under this Article XXIII to an administrative appeal or a judicial appeal, and (iv) be sent to the User via certified mail. A summary of the Director's Final Action shall be published in the *City Bulletin* of the City of Cincinnati.

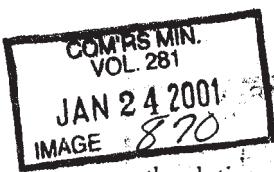
Section 2304 Administrative Appeal

2304-1 Notice of Appeal

Upon receipt of a Director's Final Action, or upon the effective date of such Final Action if it became effective automatically pursuant to Section 2301(C), the User shall be entitled to an administrative appeal of such Final Action, provided that the User notifies the Director that it is exercising its right by delivering to the Director a written notice of appeal. This notice of appeal must concisely state each issue in dispute and must be sent to the Director via certified mail, postmarked no later than thirty (30) days after (i) User's receipt of the Final Action or (ii) the effective date of the Final Action, whichever is later.

2304-2 Hearing Examiner

Administrative Appeals brought under Section 2304 of these Rules and Regulations shall be heard and decided by a hearing examiner nominated by the City Manager and approved by the County Administrator. A hearing examiner shall be appointed solely with regard to his or her qualifications for



the duties of the office, and shall have such training or experience as will qualify the hearing examiner to conduct administrative or quasi-judicial hearings involving discretionary review hearings and administrative decisions and findings. In addition, the hearing examiner shall have expertise and experience in the field of regulation in which the hearing examiner is to exercise authority. The hearing examiner may employ scientific, engineering or other technical assistants necessary to adequately adjudicate a pending appeal.

2304-3 Procedure

The Administrative Appeal heard under Section 2304 of these Rules and Regulations shall be conducted in accordance with the following procedural guidelines:

A. General Duties.

Hearing examiners shall review and examine all information, conduct public hearings, prepare records thereof, enter findings, conclusions, and orders in cases assigned to the examiner for decision or review, in accordance with the procedures set forth herein and with all other applicable laws, ordinances and regulations.

B. Freedom From Improper Influence.

No person shall interfere with, attempt to interfere with, or improperly influence or attempt to improperly influence a hearing examiner in the performance of the duties of office.

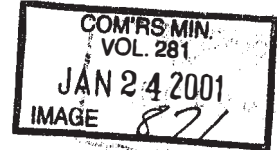
An examiner shall not conduct or participate in any hearing or decision in which the examiner or any of the following persons has a direct or substantial financial interest: a spouse, brother, sister, child, parent, or in-law of the examiner, or business firm or organization in which the examiner has a substantial interest. The examiner shall promptly report to the County Administrator any attempt at interference or improper influence or any actual or potential conflict prior to such hearing.

Wherever it may be shown to the satisfaction of the appropriate appellate authority that an examiner was subjected to improper influence, interference or interest, such improper influence, interference or interest shall be grounds for vacating any decision made by the examiner in such proceedings.

C. Ex Parte Communications Prohibited.

No party or other person participating in any proceeding before a hearing examiner shall communicate by any means with the examiner regarding that proceeding other than at a public hearing, or at a pre-hearing conference at which all interested persons have been given notice or by mail with copies sent to all other parties and interested persons. This provision shall not prohibit communication between an examiner and any member of the administration assigned to assist or give legal counsel to the examiner in the pending proceeding.

D. Public Hearings.



The hearing examiner shall conduct a public hearing on all appeals whenever so authorized by these Rules and Regulations or other applicable laws and regulations. When the respective filing requirements of the applicable laws, rules, and regulations have been met, a date shall be assigned by the examiner for public hearing. The hearing shall be held within 30 days after the filing of the notice of appeal, unless otherwise provided in the applicable law, rule or regulation, or the delay is agreed to by all parties to the proceeding or is necessary in the interest of justice. The examiner may conduct such pre-hearing conferences as the examiner shall deem necessary or desirable upon notice to all interested persons. The right of cross-examination of witnesses shall be afforded only to counsel for the parties of record.

E. Reconsideration.

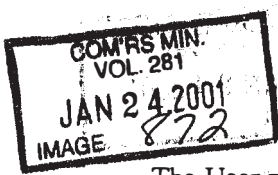
Any party or intervenor may request reconsideration of that decision by the examiner. The request shall be filed in writing with the examiner within seven days of the date of mailing of the original decision and set forth with particularity the alleged errors. The party requesting reconsideration shall serve copies of the request upon all other parties of record. Within 30 days of receipt of the request for reconsideration and after review of the record and consideration of such additional evidence as the examiner may in his or her discretion admit, the examiner shall affirm, modify or reverse the earlier decision. No decision shall be subject to reconsideration more than once.

In addition, the administrative appeal shall be heard in a manner and according to procedures not inconsistent with the administrative procedures set forth in Ohio Administrative Code 3745-47-11, Filing of papers and service requirements; 3745-47-15, Intervention; 3745-47-16, Rights of a dismissed party and of a person denied permission to intervene; 3745-47-17, Motions; 3745-47-18, Continuances; 3745-47-19, Pre-hearing conferences; proceedings prior to adjudication hearing; 3745-47-21, Adjudication hearing procedures; 3745-47-23, Burden of proof; 3745-47-25, Record; 3745-47-30, Rules of ethics, provided that any party may obtain discovery or protection from discovery in the same manner and to the same extent as is prescribed in the Ohio Rules of Civil Procedure.

2304-4 Decision

The hearing examiner shall promptly issue a decision after the close of the hearing, which decision shall (i) address all issues in dispute (ii) be in writing, and (iii) be delivered via certified mail to the User and the District.

2304-5 Waiver of Administrative Appeal



The User may waive its right to an Administrative Appeal pursuant to this Section 2304 and proceed, instead, with a judicial appeal of the Director's Final Action by filing a notice of appeal to the Hamilton County Court of Common Pleas pursuant to Ohio Revised Code Chapter 2506 and any other remedy of appeal provided by law. Issues of Joinder or Intervention shall be determined in accordance with the Ohio Rules of Civil Procedure, and other applicable law.

2304-6 Stay of Effective Date

Upon the filing of a notice of appeal pursuant to Section 2304-1 or Sections 2304-5 and 2305, the Director's Final Action, with respect to monetary penalties only, shall be stayed pending the final decision of the hearing examiner or court. At any time during the pendency of an administrative or judicial appeal, the District, User or Intervener may apply to the hearing examiner or court for an order suspending or modifying the stay. For good cause shown, the stay shall be suspended or modified.

Section 2305 Judicial Appeals

In addition to the rights afforded to the User under Section 2304-5 of these Rules and Regulations, nothing herein shall be interpreted to limit, and these Rules and Regulations specifically do not limit, the right of the User, Intervener or District to appeal any decision of the hearing examiner under Section 2304-4 to the Court of Common Pleas of Hamilton County, Ohio.

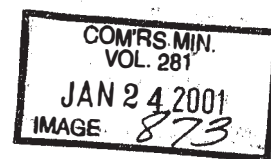
Section 2306 Penalty Payments

Any monetary penalty ordered as part of the Director's Final Action (and subsequently affirmed if appealed) shall be paid to the District within thirty (30) days after the later of the (i) effective date of the Director's Final Action, (ii) the date when the User receives the Director's Final Action, (iii) the date when the User receives the final decision of the hearing examiner pursuant to Section 2304-4, or (iv) the date of subsequent judicial affirmance. The District may accept payment in installments and may submit a separate bill or may add the amount to the User's sewer bill. The District may also certify amounts not timely paid to the County Auditor for collection in accordance with Ohio Revised Code 6117.02.

Section 2307 Civil Proceedings, Injunctive Action

Nothing herein shall be interpreted to limit, and these Rules and Regulations specifically do not limit, authority granted to the City Solicitor of the City of Cincinnati and the Prosecutor of Hamilton County, Ohio under the Cincinnati Municipal Code and/or the Ohio Revised Code to institute civil proceedings at any time in the name of the District to enjoin any person from violating these Rules and Regulations and/or the Cincinnati Municipal Code and/or the Ohio Revised Code, or seek other relief as afforded thereunder, without first exhausting any other remedy.

ARTICLE XXIV
ADMINISTRATIVE RULES



Section 2401 Administrative Rule No. 1

Payment will be made to the City of Cincinnati upon authorization of the County Administrator or his designee only for services specifically identified in the 1968 agreement between the City of Cincinnati and Hamilton County. General overhead expenditures incurred by the City in the administration of the MSD constitute services for which no compensation will be made pursuant to Section X of the agreement.

(Note: Administrative Rule No. 1 was superceded and invalidated by the 1997 Agreement which set up a process for determining overhead charges by both the City and the County. The indirect overhead cost formula is based on OMB Circular A-87.)

Section 2402 Administrative Rule No. 2

Amended on April 2, 2014 (Comm'rs Min. Vol. 334, Images 48 - 50)

~~The City of Cincinnati will follow the Hamilton County adopted Purchasing Policy without exception when purchasing goods and services and in entering into any contracts. Any exception in following the county purchasing policy must be authorized by the Board of County Commissioners by resolution.~~

~~In the performance of sewer repair work, the District shall follow the guidelines of Section 307.86 of the Ohio Revised Code, which delineates competitive bidding requirements. In addressing those circumstances falling under paragraph (A), which outlines certain exceptions to competitive bidding requirements, the County Administrator may make a determination that a real and present emergency exists, thereby precluding the requirement for a competitive bid. The County Administrator may delegate some or all of this authority to the Director of MSD.~~



ARTICLE XXIV

ADMINISTRATIVE RULES

Section 2402 Administrative Rule No. 2

The City of Cincinnati, acting in their role as sole operator of MSD, shall follow the Hamilton County adopted Procurement and Purchasing Policies without exception when purchasing goods and services and in entering into any contracts. Specifically, the City of Cincinnati, as operator of MSD, shall not use any procurement policies which deviate from Hamilton County's policies or Hamilton County's authority under State or Federal law, as determined by the County. For example, no MSD contracts may be bid utilizing any Local Hire, Local Preference, Responsible Bidder, or any other policy containing a geographic preference. Any exception in following the County procurement and purchasing policies must be authorized by the Board of County Commissioners by resolution.

In the performance of sewer repair work, the District shall follow the guidelines of Section 307.86 of the Ohio Revised Code, which delineates competitive bidding requirements. In addressing those circumstances falling under paragraph (A), which outlines certain exceptions to competitive bidding requirements, the County Administrator may make a determination that a real and present emergency exists, thereby precluding the requirement for a competitive bid. The County Administrator may delegate some or all of this authority to the Director of MSD.

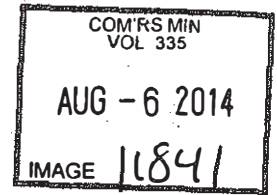


Exhibit A

Section 2403 Reports to the Board/County Administration and Recordkeeping

2403-1 Monthly Program Management Activity ("PMA") Reports

A. General Duty

MSD shall submit to the County Administration, Program Management Activity ("PMA") Reports summarizing the activities completed during each month.

B. Timely Submission

The PMA Report for each month must be submitted no later than the last day of each subsequent month.

C. Content of PMA Reports

Each PMA Report shall contain three general sections: (a) Director's Overview, (b) Monthly Program Activities, and (c) Monthly Program Financials. The minimum analytic reporting requirements for each general section are specified in the subsections below. MSD shall, where applicable, measure the analytics reported in each PMA Report against the Programmatic Performance Metrics in accordance with section D of this rule. Performance data should reflect each month's performance, as well as year (calendar year) to date and program-to-date, as applicable.

As a general rule, all reported project costs will include costs directly attributable to the project cost account plus all other costs that appropriately apply to and should be allocated to the project but were spent thru another cost account, e.g. Program Management or Sustainable Infrastructure. Estimated Cost to Complete and Estimated Cost at Completion, and similar reports items should reflect anticipated future allocated costs.

The County, upon receipt of the report, may approve the report, raise questions or seek additional information, or pursue additional policy directives. These metrics may be modified as deemed appropriate by the Board or County Administration.

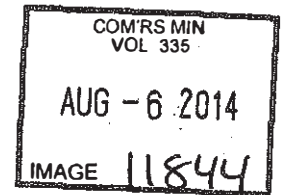
1. Director's Overview. This section provides the MSD Executive Director's opinion about the Program's overall health, key accomplishments and major risks. Specific reporting areas and analyses shall include, at a minimum:
 - Program's health, including, but not limited to, budget compliance, schedule compliance, and relationships with the Regulators and MSD ratepayers
 - Regulatory coordination (during the reporting month and for the next three months)

- County coordination (legislative and other critical actions required during the next three months)
 - Risk management (program risks and mitigation or recovery strategies)
 - Significant upcoming events (public meetings, conferences, etc.)
 - Progress toward meeting each milestone date under the Final Wet Weather Improvement Program, as conditionally approved on January 6, 2010, as may be amended from time to time ("WWIP"), issued pursuant to the Consent Decrees issued in United States of America, et al. v. The Board of County Commissioners of Hamilton County, et al., Case No. C-1-02-107, U.S. District Court, S.D. OH ("Consent Decree")
 - Identification of any WWIP project that is within 180 days of any of the project's WWIP milestone dates, risk assessment regarding milestone achievement, and recovery plan, as appropriate
 - Report on all Memoranda of Understanding ("MOU") and grant applications/agreements executed during the reporting month, including:
 - The MOU/Grant Contract Number or other identifying information
 - MOU/Grant parties
 - Purpose, and details about services to be provided or performed, or activities funded by Grant
 - Description of the MOU/Grant Agreement (both capital and operating fund financed), including details of party (ies) receiving financial or other benefits from the MOU/Grant agreement. Any work activities and/or financial commitments extending beyond completion of the initial MOU scope will be highlighted.
 - This section will also report on all related MSD financial obligations arising from each MOU/Grant, to include current cumulative expenditures to date and future expenditures required to complete the agreement. This report will include detail about work activities completed by current cumulative expenditures and work activities anticipated for future expenditures.
 - The report shall also address all MOUs under negotiation as well as any MOUs/Grants expected to be negotiated within the next six months.
 - All expenditures shall adhere to the capitalization policies in Section 2405-4 of the MSD Rules and Regulations.
2. Monthly Program Activities. This section provides a summary of the number and phase status of the active projects in a particular month for the five active capital project categories: (1) Consent Decree/WWIP, (2) Non-Consent Decree Asset Management, (3) Sustainable Infrastructure, (4) Local Sewer and Lateral, and (5) Business Case Evaluation projects under internal consideration at MSD. The term "project" as used in this Section 2403 shall mean any project, work, or activity listed in this paragraph, including those in pre-

planning, planning, design, easement acquisition, or construction phases. For each active project category, specific reporting areas and analytics shall include, at a minimum (see Table 2403-1 below for more details for supporting documentation):

- Project activity phase (i.e. close-out, construction, design, project on hold, etc.)
 - Number of projects in each activity phase
 - Cumulative costs and EAC for projects in each activity phase
 - Total number of projects and total EAC for each active project category
 - Total number and project value (total expected expenditures) of active projects in each watershed
 - For those Projects that have completed planning or design phases and have not advanced to the next phase within six months, a report to the Board with an explanation for the delay and identifying those projects that may be deemed impaired and the related costs of such impairment
 - LMCPR activities shall be reported in a separate section and the costs of those activities shall be reported in current dollar and in 2006 dollars as compared to the \$244.3 million budget
 - Project governmental permitting activities, including submission of PTI applications
 - Safety performance and accident statistics by facility or department as appropriate.
3. Monthly Program Financials. This section provides a detailed accounting of activities in each month that impacts Program financials. Specific reporting areas and analyses shall include, at a minimum (see Table 2403-1 for more details on program financials and supporting documentation):
- Master Cash Flow Schedule ("MCFS") and actual spending to date for projects included in the MCFS
 - Cash flow for projects or activities not included in the MCFS, if any
 - Schedule variances
 - Budget variances
 - Legislation activities including, where applicable, legislated funding
 - Monthly allowance spending
 - Contracting activities
 - Bidding activities
 - Change orders
 - Notices of Advisement

- Program Contingency usage report
- De-Legislation activities
- Payments to the City of Cincinnati



D. PMA Performance Metrics and Documentation Requirements

Where applicable, each PMA Report shall state the goal or acceptable performance metric for each activity, indicate whether the performance metric has been achieved, and provide documentation supporting satisfaction of the applicable performance metric in accordance with Table 2403-1. If the performance metric is not achieved, MSD shall describe corrective actions which are being taken to bring that activity back to an acceptable performance level.

Performance Metrics may be modified with approval by the Board of County Commissioners.

Table 2403-1 Monthly Program Management Activity (PMA) Performance Metrics and Documentation Requirements

<u>Program Activity</u>	<u>Metric</u>	<u>Supporting Documentation</u>
Active capital projects summary	None	Base Report: Narrative and summary (chart/table) of active project activities Appendix: Program and Project Controls Score Card
Permit applications	Submit application prior to applicable deadline	Ohio EPA time stamped copy of application or other documentation supporting timely submission
Permit violations	No NPDES permit limit exceedances or other violations	Report of all permit violations, including description of the violation, actions taken to return to compliance, and measures implemented to prevent reoccurrence; copy of notification letters or other communication to all local, state and federal governmental agencies for overflows, bypasses, or noncompliance activity; copies of correspondence to and from governmental agencies regarding any permit noncompliance
Safety performance	No lost time accidents; no significant OSHA noncompliance or MSD safety audit findings	Report of all safety accidents and incidents by facility or department as appropriate, and measures taken to prevent reoccurrence of any accident or incident

Cash flow forecast vs. actual expenditures	90% of original baseline forecast for each month	Base Report: cash flow chart Appendix: 1. Program Cash Flow Report. All projects that will have cash expended thru Phase 1 shall be included in the Master Cash Flow Schedule. The monthly report will present an 18- month rolling period, updated each month. All months in the current fiscal year should be included even as additional months are added and shall include, at a minimum: • Project ID number • Project description • Budget by phase • Monthly actual expense • Budget to actual variance by month. • A forecast of expected cost. 2. An attachment to the base report will identify the cash flow forecast for all capital expenditure activities for the current 5-year CIP period. 3. Variance analysis. An analysis shall be provided detailing the reasons for each project variance exceeding 5% or a minimum of \$100,000. 4. Failure to achieve the required confidence level for 3 consecutive months shall result in a report by MSD to the County Administration identifying the cause of the inadequate confidence level and
--	--	---

AUG - 6 2014

IMAGE

11846

Budget variances	Zero budget variance	Base Report: 1. Provide a budget variance report for all active and completed projects in an Excel file that includes, at a minimum (only WWIP projects require reporting 2006\$ values in addition to current): • Project ID • Project description • Actual costs incurred by year and in 2006\$ For current year provide Monthly actual/forecasted cost in actual \$'s and 2006\$'s • Forecasted annual costs to completion in both actual\$'s and 2006\$'s by year. • Include BAC, current EAC (in actual \$'s and 2006\$'s), previous quarter's BAC and EAC (in actual \$'s and 2006\$'s) and related Variances 2006\$'s • Total each numeric column with subtotals for WWIP and AM projects. 2. Report a summary of projects exceeding metric with explanations and plan for budget recovery or adjustment. • Detailed supporting information including change order documentation and the recovery plan for each project in variance shall be made available for the Board's review.
Legislation	None	Base Report: provide a forecast of upcoming legislation requests for the next three months
Contracting activities	N/A	Base report: report all contracting activities (by contract type, value, vendor name), including MSA's, PSA's and their individual task orders. This information will be reported in Excel format and include year to date as well as current month data. Appendix: Bid Board Summary

AUG -6 2014

IMAGE 11847

Schedule variances	No Variance > 30 days	Base Report: 1. Provide a schedule variance report that includes all active projects categorized by phase. The report will include as a minimum: • Project ID • Project Description • Schedule Duration • Baseline Schedule • Baseline Schedule Adjustment • Current Schedule • Schedule Variance • Comment Column for explaining schedule adjustments. 2. Provide a summary of projects exceeding metric with explanations and plan for schedule recovery. 3. Detailed supporting information including change order documentation and the recovery plan for each project in variance shall be made available for the Board's review.
Change Orders and Notices of Advisement	Continuous reduction in the amount of change to time and cost	Base report: report all Change Orders or NOA's, and the program aggregate of percent of cost and schedule growth for all current active construction projects. Provide analysis as to causes of schedule and cost growth and the measures being taken to improve project cost and schedule growth

AUG - 6 2014

IMAGE 11848

Program Contingency Usage	N/A	Base report: forecasted program contingency vs. actual use Appendix: Program Contingency Log (see Section 2405-2(A)(4))
De-Legislation activities	Compliance with Section 2405-3	Submit annual report each January. Monthly report project level de-legislation activity. Report shall include project level detail categorized by Stage 1, 2 or 3 (see Section 2405-3 (B) and will provide appropriate summary level data

AUG - 6 2014

IMAGE 11849

Transfers, Payments and Disbursements
to the City of Cincinnati

Compliance with Section 2405-8

Monthly report payments made for the
reporting month, and the cumulative
payments to date for each city department
paid. Include date of County approval for
each transaction.

AUG - 6 2014

IMAGE

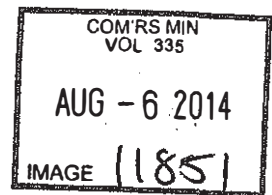
11850

2403-2 Other Reports and Notices to the Board and/or County Administration**A. Project Status and Performance Reporting****1. Report of Substantial Completion of Construction under Consent Decree/WWIP:**

- a. Prior to awarding a WWIP project design contract, and again prior to awarding a construction contract, MSD will review with the County Administration the scope of work to confirm that it aligns with the WWIP prescribed scope of work.
- b. For each WWIP project, at least 30 days prior to the anticipated substantial completion of construction date, MSD will meet with the County Administration to review the project's status and whether the project has reached substantial completion of construction under the consent decree/WWIP.
- c. For each WWIP project, MSD shall report achievement of substantial completion of construction under the Consent Decree, to the County Administration within 10 working days of the date on which substantial completion of construction under the Consent Decree/WWIP has been achieved and declared. Each report shall contain a Certificate of Substantial Completion of Construction under the Consent Decree signed by the project design professional engineer or similarly qualified person

who has personal and substantial knowledge of the project details and has reviewed the project status. MSD shall provide the County Administration with the basis for determining that the WWIP project has reached substantial completion of construction under the Consent Decree, and provide copies of all documents supporting such determination, along with a description of all applicable warranties for the project. MSD will provide the County access to all warranty information upon request.

2. Report of Project Performance. Except as noted below in this Section 2403-3(B), one year after substantial completion of construction has been achieved and declared for each project, the MSD shall submit to the County a project performance report, including relevant technical data, demonstrating that the project is performing as it was designed to perform. If relevant warranties applicable to any project expire in one year or less, then the deadline for submission of this report shall be no less than 90 days prior to the expiration of the first of such warranties. The information that is required under this rule is not intended to serve as a replacement for, or in lieu of, any post-construction monitoring required under the Consent Decree.



B. Notices From MSD to the Board Involving Legal Disputes

1. MSD shall provide written notice to the Board of any claim, complaint, appeal or other legal action that is anticipated to be asserted by MSD against a party. The notice shall be submitted to the Board under the attorney client privilege in the form of a memorandum describing the facts and legal authority supporting the claim, and shall be submitted at least 14 days in advance of filing said claim or assertion.

MSD shall immediately, upon MSD's receipt of any form of notice of same, provide to the Board notice and copies of all claims, complaints, threats thereof, appeals, notices of violation from any regulatory agency, compliance reports from any regulatory agency, documents that assert any non-compliance with any consent decree, order, or permit, whether against MSD itself, the City in its role as operator of MSD, and/or the Board in its role as owner of MSD.

2. MSD is prohibited from entering into any settlement agreement or resolution of any claim or threat of claim, whether initiated by MSD or another person, without the prior approval of the Board, except for matters which involve in the aggregate a payment of no more than \$25,000 to MSD, or the other persons, and do not involve the transfer of other consideration or equitable relief. The notice shall be submitted to the Board under the attorney client privilege and shall include, at a minimum:
 - The Director's analysis of the claim
 - Negotiation issues and strategy
 - Recommendation to accept or reject the settlement.
3. MSD will provide to the County copies of all required notifications and notices to all local, state or federal governmental agencies required under the consent decrees, NPDES permits and air pollution permits for the Mill Creek WWTP Incinerator and Little Miami WWTP Incinerator, such as noncompliance notifications, overflow notices, or bypass notifications.

- C. Master Services Agreement (MSA), Task Orders (TO) and Professional Services Agreements (PSA) Pursuant to Section 2405-8. MSD will report on a quarterly basis all MSAs and their task orders, and all PSAs awarded year-to-date. The report will include the MSA, TO, PSA number, vendor name, project number, a brief description of the services being performed, contract/TO amount, identification of sub-consultants and their percentage of work under the TO / PSA, and the cumulative amount of awards to each vendor under each contract/TO.

- D. Annual/Month-End Financial Information. MSD is to provide an annual/monthly trial balance including account balances per the City Financial System "CFS" and any necessary journal entries to create the month end trial balance as reflected in the monthly

financial statements. All journal entries should be separately documented and explained. Information is to be provided for both the Operating Fund "701" and the Capital Fund "704". In addition, MSD is to provide a monthly fixed asset register by asset type including a crosswalk to the project IDs in "CFS" and or PeopleSoft. MSD will provide the County with any/all supporting detail upon request of County Administration.

2403-3 Review Process for Consent Decree Reports, Permit Applications and other official documents due to Government Agencies and Draft, Proposed and Final Permits or other approvals issued by Governmental Agencies, and Transmittal of Such Documents to the County

The County Administration must review and approve all Consent Decree and WWIP reports, WWIP project Permit to Install applications (except for Local and Lateral projects), and other official documents prepared by MSD which are due to government agencies, prior to submission of such reports, applications or documents to the relevant government agency. To ensure the County Administration has adequate time to conduct its review, the schedule below shall be followed:

- For consent decree quarterly reports, submit to County Administration at least 10 business days in advance of the deadline to submit the report to the government agency;
- For consent decree annual reports, and all WWIP required studies and non-standardized reports, submit to County Administration at least 15 business days in advance of the deadline to submit the study or report to the government agency; and
- For all WWIP project Permit to Install (PTI) applications (except for Local and Lateral projects), NPDES permit applications for wastewater treatment plants and CSOs, CWA Section CWA 404 permit applications/Section 401 water Quality Certification requests, and air pollution permit applications, submit to County Administration at least 15 business days in advance of planned submittal date.
- For all draft or proposed permits (e.g., air or wastewater permits) issued by a governmental agency or proposed governmental approvals, submit such documents to County Administration immediately upon receipt from the governmental agency.
- For all final permits and approvals issued by governmental agencies, submit to County Administration immediately upon receipt from the governmental agency.

2403-4 Project Cost Estimates

The MSD shall immediately report to the County Administration when it learns or determines that any dollar amount estimated to be spent exceeds the applicable WWIP project cost estimate, as set forth in the WWIP. Each report of WWIP cost estimate exceedance, and each subsequent monthly report required herein, shall be accompanied by a corrective action plan to bring the project back under the cost estimate, with subsequent monthly reports providing an update on the effectiveness of the

corrective action plan. For purposes of this rule, the term "immediately" shall mean within 24 hours of any business day in which MSD first discovers or reasonably knows that a WWIP project cost estimate has been, or will likely be, exceeded by actual or obligated MSD spending.

2403-5 Document Control/Recordkeeping

A. General Duty

Upon the initiation of each WWIP and Asset Management project, MSD shall create and maintain a file, either electronically or in paper, satisfying all recordkeeping requirements established under this rule. The file for each project shall contain all records regarding project status, cost estimates, contracts, schedules, significant correspondence with the County, other government entities or third parties, and any other pertinent information. All project files shall be kept in one location. For any active WWIP project initiated prior to the effective date of this rule, MSD shall make a reasonable effort to maintain a file in accordance with this rule. In addition:

1. MSD shall maintain a separate file for all monthly PMA Reports submitted to the County and all reports submitted to government entities during a particular calendar year.
2. MSD shall maintain in its Document Control files, all Professional Services Agreements, Work Orders, Task Orders, and similar agreements, not associated with a project file. All accounts payable documentation, including ID Bill transactions will be maintained in a manner that is electronically available to County for online review (REMIT System).
3. MSD shall designate and provide the County with the contact information for the person(s) responsible for maintaining the files in accordance with this rule. In the event the person(s) responsible for maintaining these files changes, MSD shall so notify the County within 10 business days of such change.

B. County Access

The County shall have unfettered access for review or copying to all documents, information and files, whether electronic, paper or otherwise, maintained by MSD.

C. Duration of File Maintenance

1. In general, the individual WWIP and Asset Management paper project files shall be maintained for at least three years after the particular project is completed. To the extent possible, all files shall be maintained in an electronic format, and be stored for a minimum of 10 years or the asset's useful life, whichever is longer.
2. All studies and as-built/record drawings should be maintained for the duration of the associated asset's useful life.
3. If a project includes fixtures or equipment accompanied by a warranty, the files shall be maintained for at least three years or through the expiration of the warranty, whichever is longer.

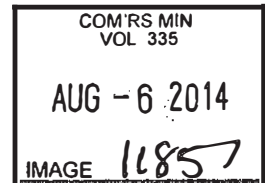


Exhibit A

Article XXIV, Section 2405

Section 2405 Financial and Budget Protocol

This section establishes a financial and budget protocol to facilitate the effective allocation of funds and oversight of expenditures for Projects (defined below in 2405-2A) in the implementation of the Capital Improvement Program ("CIP") and all capital Projects and spending. It also establishes procedures for the development of the annual operating budget. The rules promulgated under this section require adherence to strict standards of Project and financial management, transparency, and accountability. The MSD Financial Policy Manual (approved by the Board December 16, 2009, as may be amended by the Board) is considered to provide implementing procedures to this Rule, and is hereby incorporated by reference herein. Any updates to the MSD Financial Policy Manual shall be consistent with the policy established herein, and shall be approved by the Board.

2405-1 Performance Assessment

To evaluate the effectiveness of the financial and budget protocols, the Board may, at its discretion, employ the services of a professional service firm to perform a performance assessment relating to the activities of the MSD to evaluate the effectiveness and efficiency of MSD operations, capital improvement programs, wet weather programs, overall program design and achievement, service levels and priorities for resource allocation, staffing levels, and operations costs and workloads. The Board may establish such procedures as it deems appropriate for each performance assessment. The Board, at its discretion, may establish for each performance assessment a review team consisting of appropriate partners from the County, MSD, and others identified by the Board, at its sole discretion. The review team shall review the performance assessment and provide to the Board a report analyzing the performance assessment, with an emphasis on identifying findings and recommendations which will result in financial savings to MSD and MSD ratepayers.

2405-2 Contingency

No capital Projects shall be proposed or included in any legislation, budget, plan or program with any financial contingency. Instead, each capital Project shall be offered for approval bearing a cost estimate that shall serve as a Project cost cap, which cap may be altered by resolution approved by the Board.

A. Capital Improvement Program (CIP) Contingency

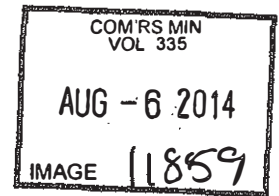
1. Annual Cash Flow Based Program Contingency ("Program Contingency") is the planning, design, construction and procurement of capital assets, including structures, systems, fixtures, and major equipment (collectively referred to as "Projects") contingency that is based on a set percentage of the forecasted annual cash flow

AUG -6 2014

IMAGE 11858

amount for Projects, and is budgeted annually to be used only for unforeseen or materially different conditions, design shortfalls identified after funding is legislated, or emergencies. The Program Contingency amount shall be proposed annually by MSD with its CIP budget request, and reviewed and approved annually by the Board and may be, if appropriate, adjusted quarterly correlating to Projects completed, terminated and suspended, and remaining Projects' cash flow for the fiscal year. Program Contingency shall not be used to pay for:

- Goods or services that are not legislated by the Board;
 - Goods or services that are not directly related to Projects; and
 - Goods or services resulting from consultant's and/or contractor's negligence or to cover any scope of work that is not included or reasonably inferable in the Request for Proposal, Master Services Agreement and/or Professional Services Agreement with consultant, and bid and/or contract documents with the contractor.
2. Consistent with Section 2405-3, below, and unless otherwise approved by the Board, at the end of each County fiscal year all unspent Program Contingency allocated for the fiscal year is terminated and set at zero dollars.
 3. Program Contingency is included in the annual MSD CIP budget as a separately legislated Project Allowance to cover needed contingency for all Projects legislated. Anticipated expenditures shall be included in the annual cash flow projection schedule included in each annual CIP so Projects may continue with minimal interruption for approved scope or cost changes, subject to Appendix A – Contingency Management Delegated Authority, below.
 4. Those projects authorized in 2013 and in prior years whose budgets contain a project contingency will continue to use the project contingency budget item to fund approved change orders, however all change orders for these projects are subject to Appendix A – Contingency Management Delegated Authority. The use of project contingency for these projects will be reported in the Program Contingency Log as described Section 5 below.
 5. Each decision to use funds from the Program Contingency shall be made by MSD on a case-by-case basis. MSD shall keep accurate accounting and detailed descriptions of Program Contingency use ("Program Contingency Log") for each separate Project and each use of Program Contingency. MSD shall submit the Program Contingency Log to the Board monthly pursuant to Rule 2403. The Program Contingency Log shall contain the following:
 - Project ID
 - Project Description
 - Project Type



- Vendor Name
- Contract or Task Order Number
- Change Order Description and Change Order Date
- Original Contract Amount
- Adjusted Contract Amount and % Change
- Original Contract Time
- Adjusted Contract Time , and % Change,
- Total Number of Change Orders for the Contract, and
- Identification of Change Order Type

Project Type shall be one of the following:

- CSO / SSO
- Allowance
- Sustainable
- Treatment, or
- Sewer

The Change Order Type categories shall be one of the following:

- Unforeseen Conditions
- Errors and Omission
- Time Extension
- Owner Directed Change
- Emergencies, or
- Other

6. MSD shall be responsible for the implementation, maintenance and operation of internal controls related to the Program Contingency account, including but not limited to reconciliation and tracking. Such controls shall use procedures which shall include, at a minimum, the following:
 - MSD shall not include any contingency funding in budget estimates for Projects utilized for forecasting cash flow. Contingency may be considered in Business Case Evaluations and other Project evaluation tools. Project legislation shall not include any contingency amount. Annual and multi-year CIP budgets shall not include any contingency amount outside of the single Program Contingency line item.

- Project contingency will be funded solely from the annual approved Program Contingency, except for Allowance funded projects as provided in the next paragraph, and will be allocated based on a calculated percentage of projected cash flow for Projects. An eighteen (18) month cash flow projection shall be developed and maintained. Each quarter the 18-month period will be advanced one quarter. The Actual versus Forecasted cash flow data will be reported monthly to the Board in accordance with Section 2403-1 of the MSD Rules and Regulations.
- Construction projects funded from the Emergency Sewer, High Risk Asset Renewal, Waste Water Treatment Asset Renewal, Manhole Rehabilitation Trenchless Technology and Sewer Rehabilitation Trenchless Technology Allowances are not subject to Program Contingency. These projects will include contingency within the project budgets.
- MSD will provide the appropriate level of review of each change order to insure sound justifications and decisions are being used to increase project budgets. For projects larger than \$50,000 in design value and \$75,000 in construction value, MSD will establish a change order review committee to insure senior level review of all change orders.

7. Calculation of the annual Program Contingency shall be as follows:

- 15% of planning and design cash flow amount
- 6% of construction cash flow amount
- 4% of major equipment purchase (valued at more than \$5 million for a project).

Example: For a \$100 million projected annual cash flow, assuming \$10 million is for planning and design, \$80 million for construction, and \$10 million for major equipment purchase:

\$10,000,000 x 15% =	\$1,500,000
\$80,000,000 x 6% =	\$4,800,000
\$10,000,000 x 4% =	\$400,000
TOTAL: \$100,000,000	\$7,700,000 or 7.7%

8. On a quarterly basis, MSD shall provide to the County an updated Program Contingency calculation. When Program Contingency funds are used for a Project, those funds shall be allocated to the Project so that the total cost of the Project is accurately reported. The Program Contingency budget will be debited an equal amount.
9. Over time, as actual experience with the Program Contingency is gained, the County may modify the annual Program Contingency calculation factors to reflect a more accurate prediction of required budget.

AUG - 6 2014

IMAGE

11861

10. This Section 2405-2(A) became effective January 8, 2014.

B. Use of Construction Manager at Risk or Design Build Contracts for Project Contingency

Notwithstanding the general prohibition on financial contingencies for capital projects under Section 2405-2, the use of Construction Manager at Risk or Design Build Contracts may be used as project delivery methods, which include contingencies, in accordance with Ohio Revised Code Chapters 9 and 153 and the requirements specified below.

1. Each contract shall contain the following:
 - A Guaranteed Maximum Price or Lump Sum Bid
 - Language specifying the amount of the contingency and its authorized use.
2. With a minimum of 20 working days for County review, MSD shall submit each draft contract to the Board for review and approval prior to including the draft contract in the RFQ/RFP documents, and MSD shall submit any subsequent proposed changes to the contract, including the final contract, to the Board for review and approval prior to contract execution with a minimum of 10 working days.

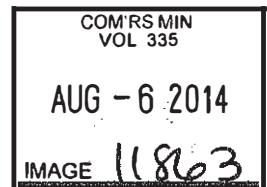
C. Project Change Management

1. The Board has sole authority, through its legislation, to authorize annual Program Contingency, changes to the legislated amount of each annual Program Contingency, delegation of its authority regarding use of the Program Contingency, and changes to the legislated amount for individual Projects. Through this Rule, the Board specifically delegates the limited authority listed in Appendix A below to the individuals holding the positions set forth below. This authority will be used for the review and approval of proposed contract changes for planning, design and construction of projects, to include change orders, task orders and field directives. All authority not delegated as specifically set forth below is retained by the Board.
2. MSD will provide a minimum of 15 working days for County review.
3. Construction projects valued less than \$250,000 will not be subject to the Procedures in Appendix A, but will be managed according to MSD's defined change management procedures. However, the results of any approved changes for these size projects will be subject to all other provisions of this Rule and Rule 2403, for example inclusion in the Cost and Schedule Variance Report and the Program Contingency Usage Report.



Appendix A – Change Management Delegated Authority

Primary Approval	Design Cost*	Construction Cost*	Time Increase	Reviewing Authority
Field Inspector	N/A	Up to \$5,000 each occurrence; not to exceed 1% of project cost in aggregate	No authority to approve time or schedule extension	Project Construction Manager
Project Design Manager	Up to \$5,000 each occurrence; not to exceed 2% of initial engagement contract amount in aggregate	N/A	No authority to approve time or schedule extension	Principal Engineer
Project Construction Manager	N/A	Up to \$25,000 each occurrence; not to exceed 1.5% of project initial contract amount in aggregate	No authority to approve time or schedule extension	Principal Engineer
Principal Engineer	Up to \$25,000 each occurrence; not to exceed 4% of initial engagement contract amount in aggregate	Up to \$50,000 each occurrence; not to exceed 2% of project initial contract amount in aggregate	No authority to approve time or schedule extension	Project Delivery Superintendent
Project Delivery Superintendent	Up to \$50,000 each occurrence; not to exceed 7% of initial engagement contract amount in aggregate	Contract Value < \$250,000: Up to \$25,000 each occurrence; not to exceed 10% of initial contract amount Contract Value \$250,000 or greater: Up to \$75,000 each occurrence; not to exceed 2.5% of project initial contract amount in aggregate	Time or schedule extension up to 30 days or 5% of original contract schedule, without exceeding project / program schedule and Consent Decree deadline, where applicable	Reviewed and Recommended by Change Order Committee and supported by Project Design/ Construction Manager and Principal Engineer
MSD Executive Director/ Director	Up to \$75,000 each occurrence; not to exceed 10% of initial engagement contract amount in aggregate	Contract Value < \$250,000: Up to \$37,500 each occurrence; not to exceed 15% of initial contract amount in aggregate Contract Value \$250,000 or greater: Up to \$150,000 each occurrence; not to exceed 4% of initial engagement contract amount in aggregate	Time or schedule extension up to 90 days or 15% of original contract schedule, without exceeding project / program schedule and Consent Decree deadline, where applicable	Reviewed and Recommended by Change Order Committee and supported by Project Delivery Superintendent
County Administrator or Assistant County Administrator or County Utility Oversight Coordinator	Up to \$150,000 each occurrence; not to exceed 15% of initial engagement contract amount in aggregate	Up to \$300,000 each occurrence; not to exceed 6% of initial engagement contract amount in aggregate for project value > \$250,000 and not to exceed 25% for project value < \$250,000	Time or schedule extension up to and without exceeding project / program schedule and Consent Decree deadline, where applicable	Supported by MSD Director



2405-3 De-Legislation

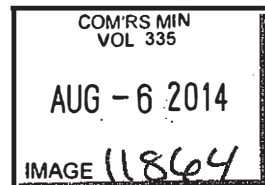
A. Annual De-Legislation

1. All prior approvals for funding for the MSD Projects listed in 2405-3(A)(3) below are hereby automatically de-legislated, de-authorized, and terminated, effective the last day of each fiscal year. The Board may, at its discretion, modify the list of projects in subsection (A)(3) below.
2. MSD shall provide to the Board by January 31 of each year, a report confirming the decertification of unspent funds of all Project accounts.
3. CIP Projects requiring annual de-legislation include:
 - 10180100 Sewer Relining Trenchless Technology Program
 - 10180105 Manhole Rehabilitation Trenchless Technology Program
 - 10180465 Rainfall Derived Infiltration and Inflow Program
 - 10180750 WWIP Progress Studies and Recreation Management
 - 10180900 MSD Sustainable (Green) Infrastructure Program
 - 10190107 Recreation Management
 - 10190207 Combined Sewer Capacity Program
 - 10190209 Urgent Capacity Response
 - 10190307 Home Sewer Treatment Systems Extensions
 - 10199000 Wet Weather Program Management and Support Services
 - 10280002 Land Acquisition
 - 10280035 Emergency Sewer Repairs
 - 10280124 CIP Project Planning
 - 10280160 CSO and SSO Overflow Compliance Monitoring
 - 10280180 WWT System Asset Renewal
 - 10280421 Flow Monitoring and Modeling for Compliance
 - 10280440 Flow and Water Quality Modeling
 - 10280451 High Risk System Asset Renewal

At the end of each calendar year, costs accumulated in project IDs not unique to their activity, such as Wet Weather Program Management and Support Services, CIP Planning and Sustainable Infrastructure will be de-legislated and allocated, and legislated to appropriate project accounts.

B. Monthly Legislation and De-Legislation

1. At the end of each month, MSD will de-legislate the Program Contingency, and legislate it into the appropriate project.
2. Items denoted in Section C below will be de-legislated monthly.



C. Monthly De-Legislation of Legislated Project Funding

1. The implementation of the Program Contingency for all Projects shall necessitate periodic de-legislation of currently budgeted CIP funds. This de-legislating of CIP funds may be implemented at three stages.

- a. Stage 1: Upon conclusion of planning for each Project:

When a Project with a separate planning budget is transitioned from Project planning to design, terminated during or upon conclusion of Project planning phase or Project planning activity is suspended for over 90 days, all unused, legislated Project planning phase dollars shall be de-legislated as of that date.

- b. Stage 2: Upon award of a design, property appropriation or construction contract, or related Task Order, for a Project:

When a contract is awarded for Project design, property acquisition, and construction, any and all legislated budget in excess of the contract amount shall be automatically terminated and de-legislated. When a construction contract is awarded, all remaining design phase funds shall be automatically terminated and de-legislated. All legislated budget line items supporting the previous phase shall also be de-legislated, e.g. MSD Admin, ROW. If the contract amount is greater than the legislated budget, the overage shall be funded from Program Contingency.

- c. Stage 3: Upon final completion of a Project (all punch list items are complete and final payments made, including retainage):

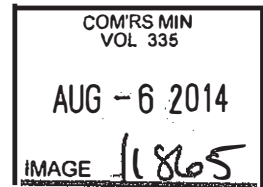
When a construction Project achieves final completion, all remaining and/or unused legislated dollars for the Project shall be automatically terminated and de-legislated. If a Project is terminated during construction, or suspended for over 180 days, all remaining and/or unused legislated design and construction funds shall be automatically terminated and de-legislated, and the corresponding Program Contingency amount, based on the terminated or suspended Project's cash flow, shall be automatically terminated and de-legislated.

2. This Section 2405-3 shall become effective January 8, 2014, and shall be applicable to the 2014 CIP budget, and all budgets thereafter.

2405-4 Capitalization Rules

A. Adherence to Government Capitalization Standards

MSD shall adhere to authoritative text and guidance on fixed asset capitalization issued by the Governmental Accounting Standards Board ("GASB") as well as "non-authoritative" text issued by the Government Finance Officers Association ("GFOA"). MSD's procedures to implement this policy shall be presented to the



Board for review and approval.

B. Cost Capitalization

MSD shall capitalize the following costs:

1. Direct Costs – Costs directly related to the acquisition of a specific asset and directly charged to that Project.
2. Internal Costs – Internal costs directly related to the acquisition of a specific asset or clearly related to the acquisition of capital assets will be charged monthly to a specific Project, e.g., internal labor costs. These costs include but are not limited to Project managers, modelers, planners, schedulers, estimators, legal and right of way activities. Any indirect costs, such as document control will be allocated annually to specific project accounts
3. External Costs – External costs directly related to the acquisition of a specific asset or clearly related to the acquisition of capital assets charged to a specific Project, e.g., design and construction contracts.
4. Indirect Costs – Costs that are related to the acquisition of assets but not specific Projects will be allocated to projects as long as they are clearly related to Projects under development or construction, including but not limited to accounts payable, procurement, document control, consent decree legal costs, and enterprise risk management costs. In general, indirect costs will be allocated annually across all active Projects weighted by level of expenditures. At the end of each calendar year, these amounts will be de-legislated and appropriated into Project specific ID for all Projects that were active during the calendar year.

C. Capitalization Policies

MSD shall adhere to the following capitalization policies:

1. Projects that have completed the planning or design phases shall advance to the next phase within six months. Those Projects that do not advance within six months shall be reported to the Board monthly in accordance with Section 2403-1 of the MSD Rules and Regulations.
2. In instances of stoppage of development/construction, costs incurred to date shall be expensed given that there is no useful life over which economic benefit (revenue) will be provided by the use of the asset.
3. When a capital asset is built or acquired that replaces another asset, any remaining value of the original asset that has not yet been depreciated shall be written off.

4. Surveys, plans and studies shall be capitalized if expenses for such activities are incurred after it has become probable that an asset will be acquired. Consequently, the cost of a feasibility study shall not be capitalized, even if the associated asset ultimately is capitalized (because the cost was incurred prior to a determination of feasibility.) Those planning activities that cannot be allocated to a specific Project shall be expensed.
5. MSD shall not capitalize on MSD's books those Projects on other property and for which MSD is not responsible for the long term maintenance, use, or control.
6. Capital assets shall be defined as land, improvements to land; easements, buildings, building improvements, vehicles, machinery, equipment, infrastructure, and all other tangible property used in operations and that have initial useful lives extending beyond a single reporting period.

2405-5 Master Cash Flow Schedule

- A. The Master Cash Flow Schedule (MCFS) shall represent all anticipated capital spending for a five-year CIP period.
- B. Within 10 working days of BoCC approval of the annual capital plan, MSD will provide the County a MCFS that is representative of the approved CIP. Thereafter, the MCFS shall be updated monthly reflecting actual costs to date for each month of the current calendar year, total cumulative costs as of 2006 and then annual expenditures for subsequent years until current year and anticipated costs for the out years of the CIP period. The schedule shall include dollars spent and expected to be spent, but shall not include encumbered or legislated amounts.
- C. MSD shall report to the County, on a monthly basis, the 18-month MCFS at Project level detail in accordance with Section 2403-1 of the MSD Rules and Regulations.
- D. MSD shall report Project cost information on a monthly basis in accordance with Section 2403-1.

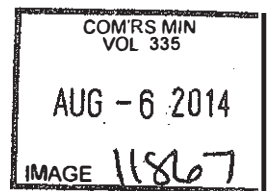
2405-6 Prohibition of Transfers of Legislated Funds

MSD shall not transfer line item funds in any Operating budget or CIP budget from one specific line item matter, or Project, to another, unless approved the Board.

2405-7 Procedures for Allowance Spending

- A. Allowances

This section 2405-7 applies to all allowances identified in section 2405-3(A)(3) above.



B. Allowance Budgets

MSD shall prepare an annual detailed budget for each Allowance activity as part of its annual CIP budget, which budget shall include at minimum information on the following for each activity:

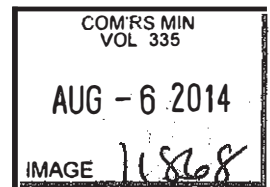
- Project ID number, description, Allowance Title
- Contract, Work Order and Task Order
- Vendor
- Invoice number, date
- Asset Location
- Asset Description
- Quantity, Unit Costs, Extended Costs, Allocated labor/other costs,
- Project costs from prior periods
- Total Cost

C. Procedures for Allowance Spending

1. MSD shall obtain Board legislative approval prior to incurring obligations or expending funds for any and all Allowance funded construction activity (including equipment purchases and other project related expenses) exceeding \$25,000, with the exception of construction activity undertaken through the Emergency Sewer Repairs Allowance. The County will be provided a minimum of 10 working days for review.
2. MSD shall report monthly to the County a detailed monthly expenditure activity report for each allowance identified in section 2405-3(A)(3) above in accordance with Section 2403-1 of the MSD Rules and Regulations.
3. MSD shall not use any funds authorized for Allowance spending for any purpose other than that which was authorized by the Board.

2405-8 Master Services Agreement (MSA) Task Orders and Professional Services Agreements (PSA)

- A. The County will review and approve or not approve any MSA, or MSA Task Order (TO) exceeding \$300,000, whether funded by capital or operating budget. Along with the MSA and TO, MSD will provide the County with all vendor selection evaluation summary information. The County will be provided a minimum of 15 working days of review time.
- B. The County will review and approve or not approve any PSA exceeding \$1,000,000. Along with the PSA, MSD will provide the County with all vendor selection evaluation summary information. The County will be provided a minimum of 15 working days of review time.



- C. MSD will report on a quarterly basis in accordance with Section 2403-2, C of the MSD Rules and Regulations.

2405-9 Memoranda of Understanding (MOU)/Grants; Transfers, Payments, Disbursements to City of Cincinnati

- A. If MSD intends to or is required to execute an MOU or grant application/agreement with an entity (including but not limited to departments of the City, other government entities, and utilities, or private organization) for either operating or capital needs, MSD shall present the terms of the MOU/Grant to the County for review and approval prior to executing any MOU/Grant. MSD will provide the County with a minimum of 15 working days of review time.
- B. MSD shall report monthly to the County all MOU/Grant financial activity in accordance with Section 2403-1, C.1 of the MSD Rules and Regulations.
- C. MSD shall not transfer, make payment, or disburse funds to the City of Cincinnati for matters or costs other than those specifically permitted under the Agreement between the City and Board dated July 14 and 15, 1997 and referred to as the "Indirect Cost Plan" in the December 24, 1997 City-Board Agreement (addressing City Overhead matters), without the prior written approval of the Board. MSD will provide the County with a minimum of 10 working days of review time.
- D. MSD shall report monthly to the County, all transfers, payments and disbursements to the City of Cincinnati in accordance with Section 2403-1, C.1 and Table 2403-1 of the MSD Rules and Regulations.

2405-10 MSD Funded Public Relations Account

- A. The project budget format, as defined in Section 1.9.5 of the MSD Financial Analysis Manual, dated June 13, 2013, will be modified. The budget for Public Relations will become a separate budget line item rather than being contained within the Miscellaneous Costs budget line item.
- B. If a project requires budget for Public Relations activities, this new budget line item will reflect the requested budget amount in all MSD funding request documents. The purpose for and details of Public Relations activities will be clearly explained.

2405-11 Delegation of Authority

The Board delegates its authority to its administrators for reviewing and approving certain documents as noted in Exhibit B.

AUG - 6 2014

IMAGE 11869

EXHIBIT B

Task	Reference	Task Description	Delegation of Authority
Program Contingency	2405-2.A.7	Meet with MSD quarterly to evaluate Program Contingency requirements to meet balance of year requirements, confirm annual calculation of Program Contingency as part of CIP Budget, recommend to Board, any changes to the Program Contingency policy	County Director of Utility Oversight
Construction Manager at Risk and Design Build Contracts	2405-2.B	Construction Manager at Risk and Design Build Contracts contingency provisions	County Director of Utility Oversight
Contingency Management Delegated Authority	2405 Appendix A	Review Change Orders that exceed MSD Director's Authority	> \$100K -- County Administrator, or Designee \$50K - \$99,999 - Assistant County Administrator < \$50K - County Director of Utility Oversight
Procedures for Allowance Spending	2405-7.C	Review MSD requests to Board for Allowance funded construction projects exceeding \$25,000.	> \$100K - County Administrator, or Designee \$50K - \$99,999 - Assistant County Administrator <\$50K - County Director of Utility Oversight
Project Status and Performance Reporting	2403-2.A.1.a	Prior to award of WWIP Project design or construction contract, County and MSD will review SOW to insure alignment with WWIP SOW	County Director of Utility Oversight
Project Status and Performance Reporting	2403-2.A.1.b	30 days prior to each WWIP Project's Substantial Completion (SC) MSD and County will review project status and whether project has reached SC.	County Director of Utility Oversight
Project Status and Performance Reporting	2403-2.A.1.c	Review SC documentation for each WWIP Project to insure completeness.	County Director of Utility Oversight
Project Status and Performance Reporting	2403-2. A.2	One Year after SC of each WWIP Project MSD and County will review the performance of the project to confirm project is performing as designed.	County Director of Utility Oversight
Memoranda of Understanding (MOU)/Grants; Transfers, Payments, Disbursements to City of Cincinnati	2405-9. A	Review MOU/Grant agreements to consider impacts to County operations and finances and recommend County response to the intended MOU/Grant commitments. Confirm that expenditures are consistent with County approvals	County Administrator, or Assistant County Administrator
Memoranda of Understanding (MOU)/Grants; Transfers, Payments, Disbursements to City of Cincinnati	2405-9.C	Prior County written approval of MSD requests to Board to make payment/disbursement of funds to City for matters other than those permitted in the Indirect Cost Plan.	> \$100K - County Administrator, or Designee \$50K - \$99,999 - Assistant County Administrator, <\$50K - Director of Utility Oversight
Notices from MSD to Board Involving Legal Disputes	2403-2.C	Review any MSD notice to Board involving a legal dispute and provide recommendations to Board about proper actions. This review will include any MSD recommended settlement agreement greater than \$25,000.	> \$100K - County Administrator, or Designee \$50K - \$99,999 - Assistant County Administrator <\$50K - Director of Utility Oversight

AUG - 6 2014

IMAGE

11870

Master Services Agreement Task Orders and Professional Services Contracts	2405-8	Prior County written approval required before MSD issues an MSA TO exceeding \$300,000 or a PS A contract exceeding \$1,000,000	>\$5M - BoCC \$1M-\$5M - County Administrator, or Designee \$501K - \$999K - Assistant County Administrator \$300K-\$500K - Director of Utility Oversight
---	--------	---	--

2405-12 CIP and Operating Budget Preparation

- A. The following time table will be followed for the preparation, review and approval of the annual MSD CIP and Operating budgets. When dates fall on a weekend, the due date is changed to the earliest previous workday.

DATE	TASK	REQUIRED SUPPORTING INFORMATION
Mid May	County completes budget target recommendations	County produces analysis data to support recommendations
Mid May	County transmits budget target to MSD and required budget supporting documentation	MSD produces: 1. OB – draft budget at dept / object code level to achieve budget target 2. CIP – draft budget to achieve Allowance, AM and WWIP budget targets
Mid June	MSD transmits to County preliminary budget with supporting documentation	See above
Mid July	County provides MSD with review questions	Specific list of questions for MSD response
3 rd Week July	MSD provides County with budget question responses	
End of Month (EOM) July	Operating budget review Meeting to discuss any unresolved issues	MSD provides no later than 8 working days in advance of meeting any support for issues it wants to discuss at meeting
EOM July	CIP Budget review meeting to discuss any unresolved issues	MSD provides no later than 8 working days in advance of meeting any support for issues it wants to discuss at meeting
Mid-August	MSD provides County with updated budgets incorporating final changes	MSD produces: 1. OB – draft budget at dept / object code level to achieve budget target 2. CIP – draft budget to achieve Allowance, AM and WWIP budget targets 3. Draft legislation language
EOM August	County completes final review of proposed MSD budgets. If any issues remain, County schedules meeting with MSD to resolve.	
Mid-September	County Administration reviews budget recommendations with Board	County Team produces draft legislation
1 st Week October	County finalizes Budget legislation	
2 nd Week October	Public review period begins	
3 rd Week October	Public review period ends	
1 st Week	Any budget adjustments completed	Updated budget legislation, as needed

AUG - 6 2014

IMAGE

11871

November		
3 rd Week	Board approves budgets	
November		

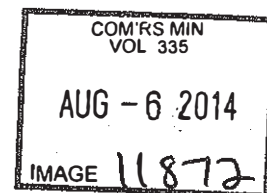
B. To provide for an efficient review of MSD's operating budget request, MSD will provide the following in an excel format by June 16:

- For the past five years, provide budgeted and actual expenditures by department, unit and object code. Annualize the current year. Include the full year budget request in the schedule. For example:

		2010	2010	2011- 2013	2014	2014	2015
Dept/Unit	Expense Line Item	Budget	Actual	Years separately identified	Full Year Budget	Annualiz ed Amt based on Actual	Full Year Budget
431- 0000	Information Technology						
	7213-Training						
	7452- Subscriptions						
449- 0000	Maintenance						
	7111-Regular Hours						
	7289- Expert Services						

Note that only a sample of items is included – Information provided should include all departments, units and object codes.

- Provide headcounts of current positions filled for the number of employees and supplemental staff included within regular hours, legal services, sundry contracts and expert services for each department and unit for the last 5 years. Include budgeted positions by department for upcoming year.
- Provide detail support for City Pension (7521), Hospitalization (7532) and CRS Pension (7561) for both the current year and budget request year.
- For budget request year, provide detail for the City's General Fund Overhead allocation.
- Provide detail of budget request year's planned expenditures for each department and unit for the following line items:
 - Travel - 7214
 - Training - 7215
 - Legal Services - 7281
 - Expert Services - 7289
 - Sundry Contracts – 7299
 - Office Machinery - 7415
 - Software and Licensing Fees - 7418



- Subscriptions & Memberships – 7452
- OTEA – 7600
- Vehicles – 7615

6. For current year and budget request year provide allocated GCWW billing and Automotive by Municipal Garage costs. Include support for how the allocations were determined, and how MSD's percentage was calculated.
7. For any costs included in the shared services arena, provide detail calculations of how and what costs are to be allocated to MSD for current year and budget request year. Likewise, if costs are recorded on MSD's books, explain the method for allocating to other utilities.
8. For current and previous years, note amounts paid to other city departments and include budgeted amounts for budget request year. Amounts paid to city departments should be classified by department and service provided. For example:

	2013	2014	2015
	Actual	Annualized Actual	Budget
Enterprise			
GCWW			
- Billing			
Parks			
Planning			
Recreation			
CDOE			
- Street Paving			

Note that only a sample of items is included – information provided should include all amounts paid to any City Department. (I.e. GCWW should separately show amounts paid for sewerage service, billing, expert services etc.)

9. Provide detail accounting of the Duke Energy Program, Flow Monitoring, and SBU costs for the past two years and anticipated costs in the upcoming budget.
10. Provide a debt schedule for known and anticipated debt instruments for current and budget request year. Provide payments by debt type separately noting principal and interest.
11. Identify potentially impaired assets for the years' previous year, current year and budget request year

12. Within 10 working days of BoCC approval of the MSD operating budget, MSD is to provide the annual budget on a monthly basis by department and object code.
- C. In order to facilitate review and approval of the MSD annual CIP budget, MSD will provide the CIP by June 16:
1. WWIP
 - i. Identify those projects that must be scheduled in order to achieve WWIP Milestones.
 - ii. Prioritize remaining WWIP projects based on Phase 1 (and Phase 2 when appropriate) requirements and cost/benefit analyses.
 - iii. Schedule 5-year CIP according to 1 & 2 above, and Phase 1 (and/or 2) cash flow report. The cash flow forecast will include all capital expenditures thru completion, i.e. WWIP, AM and Allowances.
 - iv. For projects identified that are not in the WWIP but provide a coordination opportunity or potential significant program benefit, meet with County in advance of detailed planning to gain approval before incorporating into the CIP proposal.
 - v. The County will establish a budget target for each CIP year.
 2. Asset Management
 - i. Develop project list based on an asset management program where assets are improved based upon historical records of maintenance and repairs, proper estimations of remaining asset life, etc., and the proximity to other projects adjacent to each other that are being planned and designed which could potentially impact the other if sequenced or coordinated. To the extent practical, the distribution of projects should consider equitable investment throughout the County. The asset management projects should be coordinated with the WWIP projects to make sure there is not unnecessary asset management projects built which are later found to be obsolete as a result of the Integrated Watershed Action Plans findings.
 - ii. Prior to draft CIP proposal submission, coordinate with County to establish current remaining useful life of collection system, needed asset investment, and annual renewal rate to then establish yearly budget and assets to be renewed.
 - iii. Prioritize asset renewal projects based on increased asset value from ROI, increased capacity, and quantified O&M cost savings.
 - iv. Establish key level of service measurements (with any eye towards industry benchmarks) and prioritize annual asset renewal to work towards meeting those measurements.
 - v. Coordinate asset renewal projects with WWIP projects, I/I removal, and existing overflows/basement backup's abatement by sub watershed.
 - vi. The County will establish a budget target for each CIP year.
 3. Allowances

- i. Each Allowance budget request will be fully explained by providing a needs assessment, historical spending, and other relevant information that justifies the amount of investment for the CIP period. Provide a prioritized list of projects/activities for each Allowance account for the requested budget year.
- ii. The PMC budget activities will be justified in detail. No activities directly related to project activities will be funded within PMC, unless specifically approved by the County. Those activities will be funded within project budgets. Acceptable costs include Project Management, Risk Management, Scheduling, Estimating, QA/QC, MPMP, Monitoring, and Document Control, which will eventually be allocated to project budgets according to this Rule.

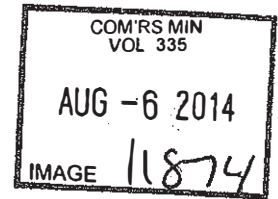




Exhibit A

Section 2407- Storm Water Separation Policy

Preamble

It is well documented that storm water contains pollutants which may cause or contribute to water quality impairment in our local streams and rivers. Storm water entering the combined sewer system and separate sanitary sewer system also leads to unwanted wet weather overflows. The regulation of storm water quantity and quality is increasing. MSD plans to implement strategic sewer separation projects where a combined sewer will be separated into a separate storm water sewer and a separate sanitary sewer. These separation projects will result in new storm water discharges that will need to be addressed in terms of quantity and quality. The Board of County Commissioners (BOCCs) directed the County Administration to adopt an appropriate policy, in the form of an MSD rule and regulation, that will govern the implementation of sewer separation projects to (a) ensure that all appropriate measures are being taken to comply now and in the future with applicable water pollution laws, regulations, and policies, (b) consider long-term costs, risks, and benefits from storm water separation projects, and (c) establish requirements for the use and non-use of storm water separation in the implementation of current and future CIP programs, asset management programs, the WWIP, and any adaptive management project proposals that may result in changes to the WWIP.

Storm Water Separation Policy

This Storm Water Separation Policy ("Policy" or "Storm Water Separation Policy") governs projects where storm water separation ("Separation") occurs by MSD. Separation projects are defined as projects that plan, design or construct (i) green infrastructure, (ii) separate storm sewers, or (iii) the repurposing of existing sanitary sewers or combined sewers to separate storm sewers, any of which result in:

- (a) a new storm water outfall from an MS4¹ in Hamilton County to waters of the state, or
- (b) additional storm water discharges to an existing MS4, or
- (c) storm water discharges routed back to the combined sewer system after separation.

The overarching purpose of the Storm Water Separation Policy is to maximize improvement to in-stream water quality and ultimately achieve attainment of water quality standards at the lowest reasonable cost as outlined in the Affordable Water Quality Decision Flow Chart in Attachment B. The Storm Water Separation Policy is designed to achieve the lowest cost storm water pollutant reduction for the investment.

¹ MS4 (Municipal Separate Storm Sewer System) is defined by Ohio EPA in the MS4 NPDES permit issued to Hamilton County and members of the Hamilton County Storm Water District.

This Policy applies to all MSD Separation projects as defined above, whether such projects are listed in the Final WWIP or Consent Decrees, or is an Allowance project or Asset Management project.

This Policy does not apply to those projects (i) listed in the Revised Original LMCPR as submitted to the Consent Decree Regulators in December 2012 and approved by those Regulators, and (ii) specifically exempted on a case by case basis as determined and approved by the BOCCs.

TOPIC	POLICY AND PROCEDURES
Water Quality	This Policy requires MSD to: (a) gather sufficient water quality data for the receiving stream/creek in the area surrounding the proposed project or associated discharge; (b) thoroughly and accurately identify, evaluate, and document expected water quality impacts for each Separation project; (c) determine the lowest cost project to maximize improvement to in-stream water quality and achieve further reasonable progress towards attainment of water quality standards in the receiving stream; and (d) present to the BOCCs a report on this work for each Separation project subject to the Separation Policy. Attachment A sets forth a Sewer Separation Project Decision Flow Chart for Water Quality required to be used by MSD and County Administration in implementing this Policy. Attachment B sets forth an Affordable Water Quality Decision Flow Chart for Program/Watershed to achieve the lowest reasonable cost for pollution reduction required to be used by MSD and County Administration in implementing this Policy. Attachment C sets forth Technical Water Quality Criteria to Meet <u>Current</u> Standards required to be used by MSD and the County Administration, in all water quality evaluations of Separation projects and Program/Watershed-wide planning that may include Separation Projects, to meet current Legal Standards. Attachment D sets forth Technical Water Quality Criteria to Meet <u>Future</u> Legal Standards required to be used by MSD and the County Administration, in all water quality evaluations of Separation projects and Program/Watershed-wide planning that may include Separation Projects, to meet future legal standards.

JUL 23 2014

IMAGE

9757

TOPIC	POLICY AND PROCEDURES
	Attachment E is a summary of potentially applicable Legal Standards. Attachment H sets forth technical criteria for Separation projects that separate storm water from the combined sewer system and reconnects to the combined sewer system, required to be used by MSD and the County Administration in implementing this Policy. Attachment I outlines the primary steps and analyses required to be performed for each proposed storm water Separation project in implementing this Policy.
Water Quantity / Flooding	This Policy requires MSD to: (a) thoroughly and accurately identify, evaluate, and document water quantity impacts to the receiving stream/creek including those related to water volume and peak flow, for each Separation project, and (b) present to the BOCCs a report on this work for each Separation project as noted above. Attachment F sets forth a Sewer Separation Project Specific Water Quantity/Flooding Decision Flow Chart required to be used by MSD and County Administration in implementing this Policy. Attachment G sets forth Technical Water Quantity Evaluation Criteria required to be used by MSD and the County Administration in all water quantity/flooding evaluations of Separation projects and in Program/Watershed-wide planning that may include Separation Projects. Attachment H sets forth Technical Criteria for Projects that Separate Storm water from the combined sewer system and reconnects to the combined sewer system required to be used by MSD and the County Administration in implementing this Policy. Attachment I outlines the storm water Separation primary steps and analyses required to be performed for each proposed Separation project in implementing this Policy.
Costs: Short Term and Long Term	This Policy requires MSD to: (a) thoroughly and accurately identify, evaluate and document costs for each Separation project according to, at a minimum, all of the following criteria: • Estimated capital project costs, including planning, design, and

JUL 23 2014

IMAGE

9758

TOPIC	POLICY AND PROCEDURES
	construction based on a Class 3 Schematic/Deterministic 30% Design level cost estimate in accordance with MSDGC Estimating Guidelines, January 2009 or current County approved MSDGC Estimating Guidelines; • Long-term operation and maintenance and/or replacement over 25 and 40 year time spans (so-called "lifecycle costs"); • Costs needed to maintain compliance with all applicable laws and regulations, including the Clean Water Act and MS4 NPDES permits ("Legal Standards"), including: – Minimum costs estimated to meet current Legal Standards, which are set forth in Attachment C; – Best value scenario – Identify additional costs above the minimum cost estimate that could be added to the project that would not only meet current Legal Standards, but also would control, to a reasonable level, any other pollutants of concern listed in Attachment D without a significant increase in cost; – Maximum estimated costs required to meet potential future legal standards set forth in Attachment D in 25 years; (b) express costs in both 2006 U.S. Dollars and in net present value current year (e.g., 2014); (c) use nationally accepted cost evaluation methods for comparable projects such as the Association for the Advancement of Cost Engineering International; (d) clearly identify and break-out separately all contingency cost estimates for each stage of each project; (e) if the Separation project is, in whole or in part, to address CSO/SSO issues related to the Consent Decrees, compare the initial estimated capital costs, with the cost estimate for the relevant original project in the Final WWIP; and (f) present to the BOCCs a report on this work for each Separation project subject to the Separation Policy. Attachment C lists technical and water quality assumption criteria required to be used to estimate costs to meet current Legal Standards.

JUL 23 2014

IMAGE

9759

TOPIC	POLICY AND PROCEDURES
	Attachment D lists technical and water quality assumption criteria required to be used to estimate costs to meet future Legal Standards. Attachment E summarizes potentially applicable Legal Standards required to be used by MSD and the County Administration in their respective evaluations of Separation projects and in Program/Watershed-wide planning that may include Separation projects. Attachment H sets forth criteria for Separation Projects that reconnect to the combined sewer system required to be used by MSD and the County Administration in implementing this Policy.
Ownership of Old and New Pipes	This Policy requires MSD to: (a) thoroughly and accurately identify, evaluate and document the risks and future costs, including long-term life-cycle costs, of installing a new pipe system for both a "storm water only" (new storm water pipe) scenario and a "sanitary sewage only" (new sanitary sewage pipe) scenario for each Separation project and all related Allowance work, and (b) present to the BOCCs for approval the design/performance criteria (with technical and cost information) for the "new pipe systems" for the "storm water only" scenario and "sanitary sewage only" scenario. This Policy directs that there is no automatic presumption that (i) the "new pipe" will be for storm water or sanitary flows, or (ii) the storm water pipe will be owned, operated and/or maintained by MSD. MSD shall make recommendations to the BOCCs in this regard. Discussion and coordination with local jurisdictions may be needed to develop a recommendation, and MSD shall document all such discussion and coordination for review by the County Administration and BOCCs. This Policy also prohibits MSD from entering into any Memorandum of Understandings (MOUs) or other agreements with any cities or villages (including the City of Cincinnati Storm Water Management Utility (SMU)) regarding ownership, O&M, or design/performance criteria for Separation projects or related Allowance work without the prior approval of the BOCCs. This Policy clarifies that the BOCCs will make policy decisions regarding: (a) the use of Separation on any given project and its strategic use in any program or watershed; (b) whether the "new pipe" is for storm water only or for sanitary sewage

JUL 23 2014

IMAGE

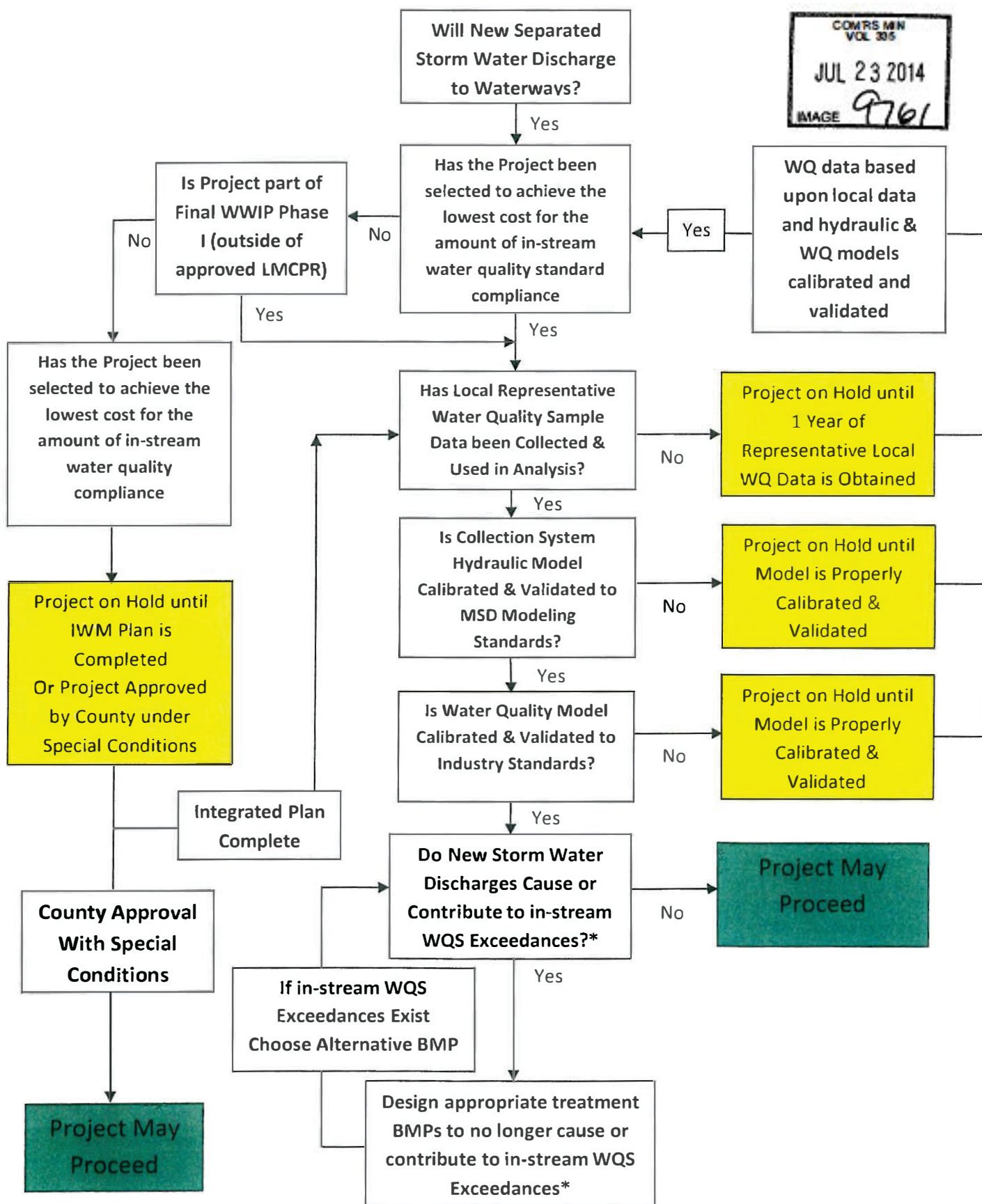
9760

TOPIC	POLICY AND PROCEDURES
	only; (c) whether the County will or will not own and or maintain the "new pipe"; and (d) what future obligations, if any, MSD will bear for renovation, upgrade, replacement and O&M costs.
County Review Procedures	This Policy directs that County Administration (including the Administration staff, County MSD Monitor, and County legal) shall review MSD Separation projects at various stages in the development of the project, including during project concept development, project nomination, planning, and detailed design and engineering. The County Administration team is directed to review the projects for consistency with the Separation Policy and provide recommendations to the BOCCs.

Attachments

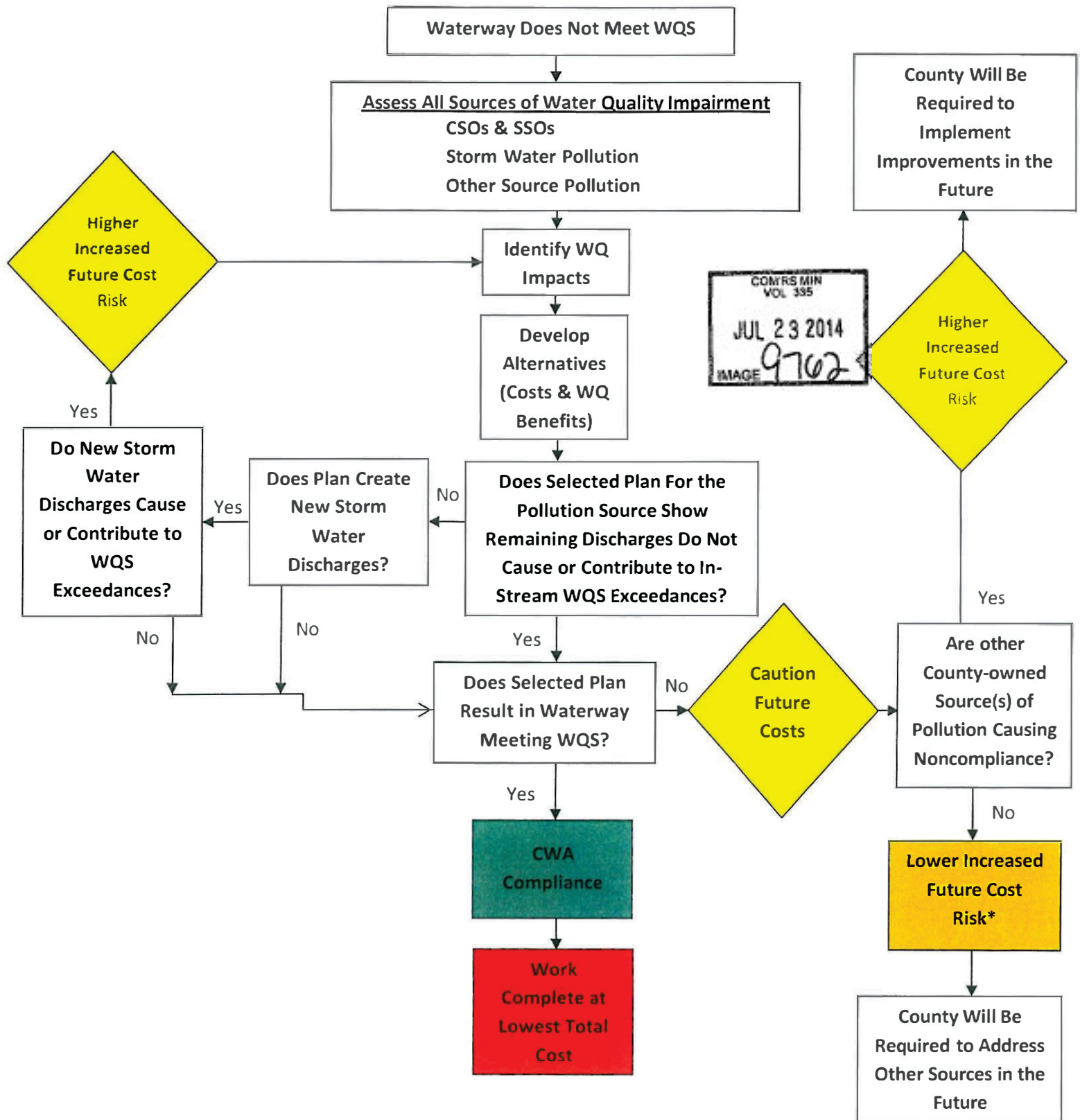
- A Sewer Separation Project Decision Flow Chart for Water Quality
- B Affordable Water Quality Decision Flow Chart for Program/Watershed
- C Technical Water Quality Evaluation Criteria to Meet Current Legal Standards
- D Technical and Water Quality Evaluation Criteria to Meet Future Legal Standards
- E Potentially Applicable Legal Standards Summary
- F Sewer Separation Project Water Quantity/Flooding Decision Flow Chart
- G Technical Water Quantity Evaluation Criteria
- H Technical Criteria for Projects that Separate Storm Water from the Combined Sewer System and Reconnects to the Combined Sewer System
- I Storm Water Separation Policy Guidance: Sample Scope of Work for Implementing the Storm Water Separation Policy

Attachment A - Sewer Separation Project Decision Flow Chart for Water Quality

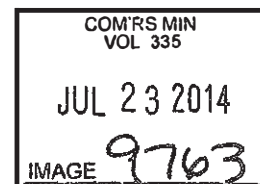


*In-stream water quality analysis is required with and without background sources to show compliance.

Attachment B - Affordable Water Quality Decision Flow Chart for Program/Watershed



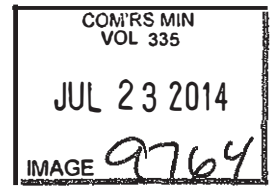
*Based on experience of other communities, there is a future risk that more pollution abatement from SSOs, CSOs, and/or storm water discharges could be required by EPA at more cost because receiving waterway does not meet WQSs.



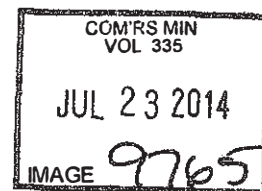
Attachment C

Technical Water Quality Evaluation Criteria to Meet Current Legal Standards

1. Collect and/or use local representative sampling data for the storm sewer discharge, and in-stream dry weather and in-stream wet weather water quality sampling data upstream and downstream of the project area. Monitoring and Sampling Program shall be based on industry standards to be developed by MSD and approved by the County Administration.
2. Water Quality Models shall be based on standards to be developed by MSD that are consistent with Industry Standards and approved by the County Administration.
3. Demonstration that new storm water discharges do not cause or contribute to in-stream Water Quality Standard (WQS) exceedances:
 - (a) The Pollutants of Concern for such demonstration shall be Bacteria (E. Coli), and nutrients (Nitrate + Nitrite and Total Phosphorus). For each water body, determine the applicable Ohio EPA in-stream WQS for these Pollutants of Concern. For the Mill Creek, utilize the nutrients values in the Ohio EPA TMDL dated September 2004 for in-stream Nitrate + Nitrite at 2.5 mg/l and in-stream Total Phosphorus at 0.25 mg/l. The in-stream WQS or in-stream target concentrations shall be determined or developed by MSD for each water body and approved by the County. In the absence of an applicable in-stream WQS or in-stream target pollutant concentration for these Pollutants of Concern for a water body, contact Ohio EPA for guidance. The development of in-stream target concentrations is for internal use by MSD and the County in performing water quality analyses and appropriate planning, and is not intended to encroach or supplant the authority of any other regulatory agency.
 - (b) Select and size appropriate water quality and/or volume-based best management practices (BMPs) to remove the Pollutants of Concern (above) to meet applicable Legal Standards (as defined in this attachment) and demonstrate that the storm water discharges will not cause or contribute to in-stream WQS or in-stream target concentration exceedances at or downstream of the discharge. BMP pollutant removal performance shall be based on pilot demonstrations from local or locally applicable BMP installations of representative size and capacity.
 - (c) Run calibrated and validated water quality model with and without existing pollutants from existing sources already in the stream/creek (background sources) for the typical year or longer typical period to demonstrate that the separated storm water after treatment by the selected BMPs will not cause or contribute to in-stream WQS or in-stream target concentration exceedances at or downstream of the discharge for each Pollutant of Concern above.
4. If the Separation project storm water discharge is determined to cause or contribute to in-stream WQS or in-stream target concentrations exceedances based on step 3(c) above, then additional BMPs shall be selected and step 3(c) repeated (or the project modified,



changed or eliminated) until the storm water discharge is determined to not cause or contribute to in-stream WQS or in-stream target concentration exceedances at or downstream of the discharge for each Pollutant of Concern above.



Attachment D

Technical and Water Quality Evaluation Criteria to Meet Future Legal Standards

1. Collect and/or use local representative sampling data for the storm sewer discharge and in-stream dry weather and in-stream wet weather water quality sampling data upstream and downstream of the project area. Monitoring and Sampling Program shall be based on Industry Standards to be developed by MSD and approved by the County Administration.
2. Water Quality Models shall be based on standards to be developed by MSD that are consistent with Industry Standards and approved by the County Administration.
3. Demonstrate that new storm water discharges do not cause or contribute to in-stream Water Quality Standard (WQS) exceedances:

- (a) In addition to those Pollutants of Concern identified in Attachment C evaluate:

Total Suspended Solids
Organic enrichment
Metals
Toxics
Temperature
Dissolved Oxygen

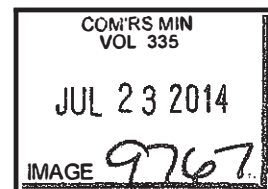
For the applicable water body, refer to Ohio EPA WQSs, Ohio EPA TMDLs, Watershed Action Plans, biological and water quality studies and other EPA standards, for information on each Pollutant of Concern listed above.

- (b) Using knowledge about the water body, and its in-stream WQS attainment status and sources of impairment, determine which Pollutants of Concern listed in 3(a) above should be specifically considered for treatment or control to a reasonable level because of potential future Legal Standards or would achieve further reasonable progress towards attainment of in-stream water quality standards, without a significant increase in cost. Determine the applicable in-stream WQS or appropriate in-stream target pollutant concentration for those Pollutants of Concern selected that will be protective of in-stream water quality for the applicable water body. The applicable in-stream WQS or in-stream target pollutant concentration shall be determined or developed by MSD for each water body and approved by the County Administration. In the absence of such an applicable in-stream WQS or in-stream target pollutant concentration for a water body, contact Ohio EPA for guidance. The development of in-stream target concentrations is for internal use by MSD and the County in performing water quality analyses and appropriate planning, and is not intended to encroach or supplant the authority of any other regulatory agency.
- (c) Select and size appropriate water quality and/or volume-based best management practices (BMPs) to remove the Pollutants of Concern above to meet applicable



Legal Standards and demonstrate that the storm water discharges will not cause or contribute to in-stream WQS or in-stream target pollutant concentration exceedances at or downstream of the discharge. BMP pollutant removal performance shall be based on pilot demonstrations from local or locally applicable installations of representative size and capacity.

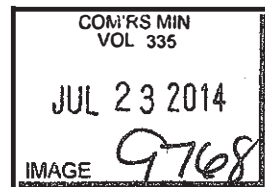
- (d) Run calibrated and validated water quality model with and without existing pollutants from existing sources already in the stream/creek (background sources) for the typical year or longer typical period to demonstrate that the separated storm water after treatment by the selected BMPs will not cause or contribute to WQS or in-stream target pollutant concentration exceedances at or downstream of the discharge for each Pollutant of Concern selected above.
- 4. If the Separation project storm water discharge is determined to cause or contribute to in-stream WQS or in-stream target concentration exceedances based on step 3(d) above, then additional BMPs shall be selected and step 3(d) repeated (or the project modified, changed or eliminated) until the storm water discharge is determined to not cause or contribute to in-stream WQS or in-stream target concentration exceedances at or downstream of the discharge for each Pollutant of Concern above.
- 5. The costs for such BMPs or project modification resulting from step 4 above will be used in identifying additional costs above the minimum cost estimate that could be added to the project that would not only meet current Legal Standards, but also would control, to a reasonable level, the Pollutants of Concern selected in step 3b without a significant increase in cost, and the maximum estimated costs required to meet potential future legal standards as projected in 25 years.



Attachment E

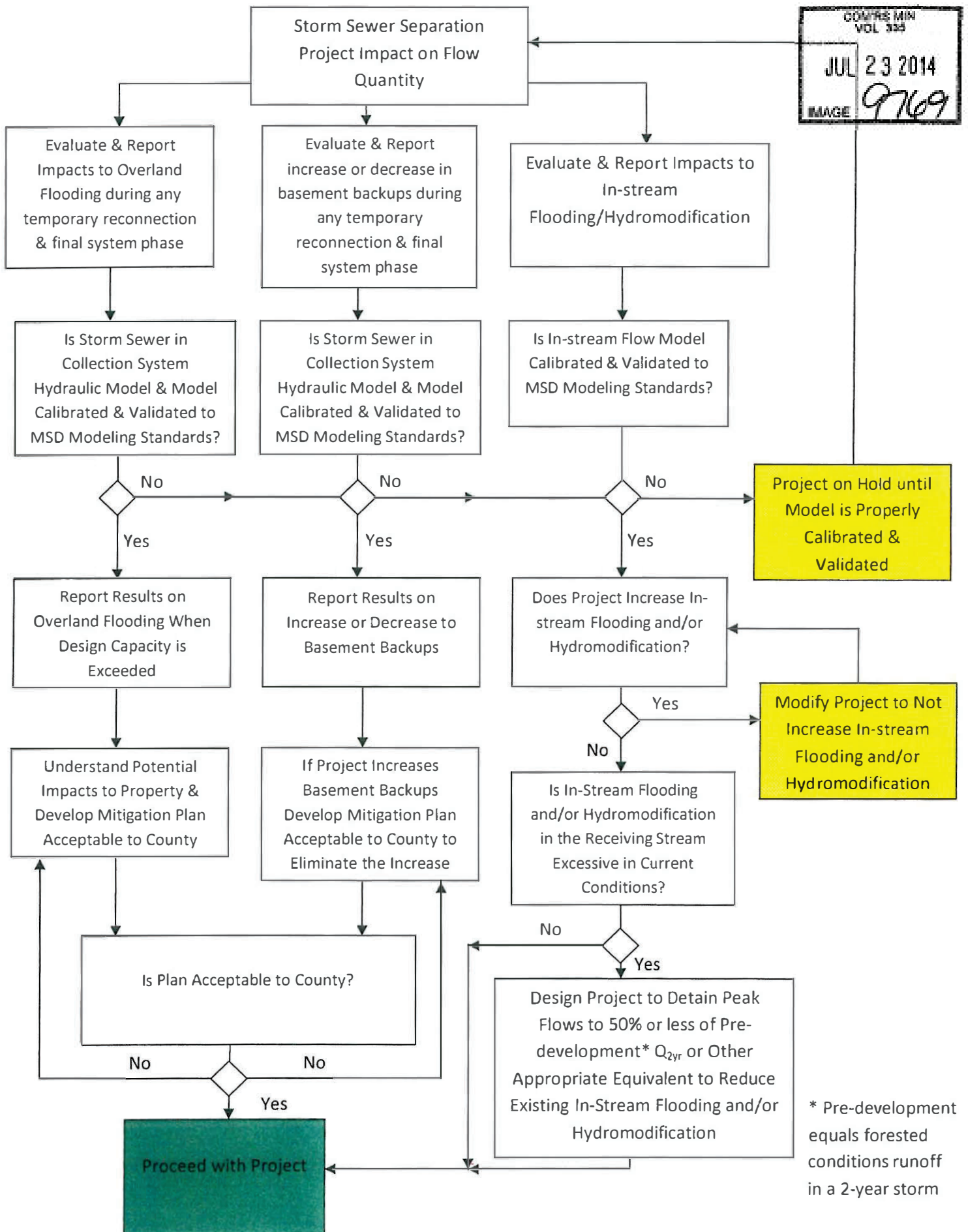
Potentially Applicable Legal Standards Summary

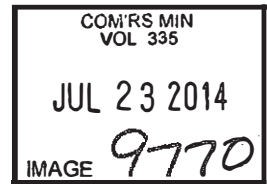
1. Federal
 - 1.1 Statutes
 - 1.1.1 Clean Water Act
 - 1.1.2 Safe Drinking Water Act
 - 1.1.3 Rivers and Harbors Act
 - 1.1.4 Flood Disaster Protection Act
 - 1.1.5 Other
 - 1.2 Federal regulations
 - 1.2.1 Current
 - 1.2.2 Future (reasonably possible)
 - 1.3 USEPA policies and guidance
 - 1.4 FEMA flood-related policies and guidance
 - 1.5 USACOE cut/fill/wetlands related policies and guidance
 - 1.6 NEPA (National Environmental Policy Act)
 - 1.7 Cultural resources survey – archaeological and cultural resources review/permit (see also 2.5 below)
 - 1.8 US Fish & Wildlife review for endangered species
2. State of Ohio
 - 2.1 Ohio Revised Code
 - 2.1.1 OEPA regulation of surface water, underground injection, wetlands
 - 2.1.2 Ohio DNR regulation
 - 2.1.3 Ohio Historical Preservation Office regulation
 - 2.2 Ohio EPA regulations
 - 2.2.1 Current
 - 2.2.2 Future (reasonably possible)
 - 2.3 Ohio EPA Permits
 - 2.3.1 Permits to Install
 - 2.3.2 NPDES
 - 2.3.2.1 Existing for CSO's (modification)
 - 2.3.2.2 New for direct discharges (or MS4 Permit, see below)
 - 2.3.2.3 Construction run-off
 - 2.3.3 MS4 Permit (see also County Storm Water District, below)
 - 2.3.4 UIC Permits (potential)
 - 2.3.5 CWA 401/414 Permits (cut/fill/wetlands)
 - 2.4 Ohio DNR
 - 2.4.1 Permits: Dams, retention basins, etc.
 - 2.5 Ohio Historical Preservation Office review/permit



3. Consent Decree
 - 3.1 Consent Decree (2004 as amended)
 - 3.2 Wet Weather Implementation Plan
 - 3.2.1 Final WWIP (2009)
 - 3.2.2 Any approved changes post 2009
4. Local Water Quality Regulation
 - 4.1 Hamilton County Storm Water District (HCSWD) Rules and Regulations and MS4 Permit terms and conditions
 - 4.2 Municipal ordinances adopting the HCSWD rules
 - 4.3 Other municipal ordinances/rules/policies regulating water quality
5. Local Water Quantity Regulation
 - 5.1 MSD Rules and Regulations
 - 5.2 Municipal or County ordinances/resolutions/rules/policies covering water quantity

Attachment F - Sewer Separation Project Water Quantity/Flooding Decision Flow Chart





Attachment G

Technical Water Quantity Evaluation Criteria

1. Thoroughly and accurately identify, evaluate and document the following with regard to the level of service (storm year/size capacity) (collectively, "Level of Service"):
 - (a) The existing Level of Service in the specific areas to be impacted by the Separation project;
 - (b) The Level of Service that would be required or used if the local jurisdiction constructed and paid 100% of the Separation project;
 - (c) The Level of Service that would be used if the Separation project is designed according to the standards of the Hamilton County Engineer;
 - (d) If the Separation project is within the City of Cincinnati, the Level of Service under the City's Storm Water Management Utility ("SMU") standards;
 - (e) The MSD recommended Level of Service to be provided by the Separation project after construction with justification, including justification for any deviations from existing Level of Service; and
 - (f) If the MSD recommended Level of Service is different from the local jurisdiction's or Hamilton County's required Level of Service based on their required rainfall distribution, then provide the cost differential between MSD's recommended Separation project costs and an alternative project using, (i) existing Level of Service, (ii) 10 year storm Level of Service, (iii) 25 year storm Level of Service, (iv) 50 year storm Level of Service, and (v) 100 year storm Level of Service.¹
2. Present to the BOCCs a report on this work for each Separation project subject to the Separation Policy.
3. The quantity of expected flow of storm water from the Separation project shall be based upon accurately calibrated and validated collection system models using both the "Code of Practice for the Hydraulic Modeling of Sewer Systems" — Wastewater Planning Users Group (WaPUG) Version 3.01 (2002), and MSDGC Modeling Guidelines and Standards November 2011, or in the alternative, models proposed by MSD and approved by the County Administration.

¹ Based on the SCS Type II storm rainfall distribution.

JUL 23 2014

IMAGE

9771

4. Provide an evaluation of whether the Separation project will increase or decrease the likelihood of basement back-ups during any temporary reconnection phase and the final storm water system phase. For Level of Service for protection against basement backups, use Water-in-Basement (WIB) Program requirements in the Consent Decree and associated exhibits (now called the Sewer Backup (SBU) Program), and applicable decisions of the Magistrate or Judge in reviewing WIB claims.
5. There are two primary issues associated with peak flows: (i) impacts to overland flooding and (ii) in-stream flooding/hydromodification. To address these issues, use current Hamilton County requirements (e.g., Ohio EPA MS4 NPDES Permit; County Engineer's Rules) or MSD Rules and Regulations, in addition to the following:
 - (a) Calibrated and validated collection system models that model the proposed storm sewer system to understand flow routing and overland flooding impacts. "Code of Practice for the Hydraulic Modeling of Sewer Systems" — Wastewater Planning Users Group (WaPUG) Version 3.01 (2002), and MSDGC Modeling Guidelines and Standards November 2011, shall be used.
 - (b) Calibrated and validated in-stream flow models that model the proposed storm sewer discharges and their effects on in-stream flooding/hydromodification. Models in items (a) and (b) shall be connected where needed to assess Separation project impacts. Models based on Industry Standards to be developed by MSD and approved by the County Administration.
 - (c) Separation projects shall be designed to evaluate and address overland flooding risks. If the new storm water conveyance system capacity is exceeded due to a storm event that is more severe than the design storm, the expected path of overland flooding shall be determined and potential impacts to private and public property identified. A mitigation plan shall be developed both during any temporary reconnection phase and the final storm water system phase to address the overland flooding and mitigate identified potential impacts. The standards governing when such mitigation is required shall be developed by MSD and approved by the County Administration. Detention of peak flows as a mitigation method shall be evaluated.
 - (d) Separation projects shall be designed to not increase in-stream flooding and/or hydromodification (increase in in-stream shear stress/sediment transport), except with BOCCs approval after evaluation of risks. Post-Separation peak flow discharges into streams shall be evaluated to determine if they will increase in-stream flooding and/or hydromodification. If in-stream flooding/hydromodification is excessive in current conditions or the Separation project will increase in-stream flooding/hydromodification, project shall be designed to detain the peak flows to 50% or less of the 2-year storm in predevelopment forested conditions to improve/reduce in-stream flooding/ hydromodification. Other appropriate equivalent means to address the flooding/hydromodification conditions may be proposed.

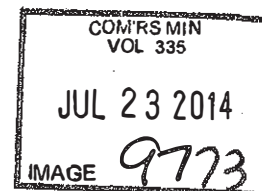
JUL 23 2014

IMAGE

9772

Attachment H**Technical Criteria for Projects that Separate Storm Water from the Combined Sewer System and Reconnects to the Combined Sewer System**

1. Applies to projects that separate storm water from the combined sewer system to infiltrate or detain storm water flows before reconnecting to the combined sewer system, and/or at a later date be separated from the combined sewer system. These requirements also apply to Separation projects with a phased implementation which will result in the later creation of new MS4 discharges.
2. These projects will be evaluated under this Storm water Separation Policy by analyzing;
 - (a) Cost per gallon of CSO reduced, evaluating the lowest cost solution for CSO reduction.
 - (b) Identify the Water Quality benefit provided by the BMP's to be implemented.
 - (c) Design in accordance with **Attachment C** "Technical Water Quality Evaluation Criteria to Meet Current Legal Standards" to remove the pollutants of concern to the designated levels for the most likely stream receiving the separated storm water discharges.
 - (d) Design in accordance with **Attachment D** "Technical and Water Quality Evaluation Criteria to Meet Future Legal Standards" to remove the pollutants of concern to the designated levels for the most likely stream receiving the separated storm water discharges.
 - (e) Design to meet the technical requirements set forth in **Attachment F** "Sewer Separation Project Water Quantity/Flooding Decision Flow Chart".



Attachment I

Storm Water Separation Policy Guidance: Sample Scope of Work

The following Sample Scope of Work is guidance for implementing the Storm Water Separation Policy.

Sample Scope of Work

Follow Attachment A –Sewer Separation Project Decision Flow Chart for Water Quality of the Separation Policy. Confirm if project has been “*selected to achieve the lowest cost for the amount of in-stream water quality standards compliance*” as stated in the second decision box of the flowchart. If the answer is “Yes”, proceed to the analysis described below. If the answer is “No” or “Not Sure” follow the remaining steps in the Attachment A Decision Flow Chart.

Four Main Areas of Analysis:

1. Water Quality Compliance Impact
2. Water Quantity/Flooding
3. Costs – Short-term & Long-term
4. Ownership of Old & New Pipes – Storm water Only & Sanitary Sewage Only Scenarios

All steps outlined below shall be completed for each project. **For storm water projects that discharge into waterways with a tributary area less than 600 acres, the analysis can be based partially upon water quality data and stream flow data from larger watersheds in which these sub-basins under study are located.**

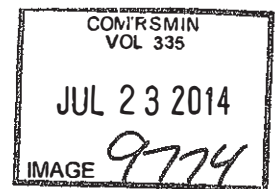
REPORT

Document the analysis of all four areas with a comprehensive report which includes the water quality and flow conditions relevant to the specified storm condition, including backup data, model documentation and calculations, the associated costs, and ownership assessment & recommendation.

Area 1: Water Quality Compliance Impact

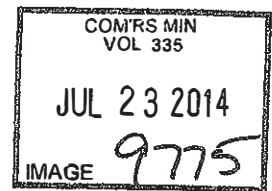
Outcome:

1. Identifying the number and locations of required Best Management Practices (BMPs) needed for the project to remove the pollutants of concern for the waterbody such that they Do Not Cause or Contribute to WQS exceedances or exceed target in-stream values.
2. Identifying the pollutants of concern that cannot be sufficiently reduced with BMPs. Identify the other technologies that may be required to reduce these pollutants to the required loadings.



Steps to Follow to Implement the Policy:

1. Collect local representative Water Quality (WQ) sample data on storm sewer discharges, and in-stream water quality.
 - a. WQ data for storm sewer discharges will be used to set the baseline pollutant concentrations typically occurring in storm water. Locally collected data should be compared against available literature data to understand local differences.
 - i. See Attachment C of Policy for Bacteria, nitrate+nitrite, total P,
 - ii. See Attachment D of Policy for TSS, Organics, Metals, Toxics, Temp, D.O.
 - b. WQ data for in-stream will be used for updating/developing in-stream WQ models
2. Collect local representative effluent WQ data from green infrastructure BMPs that would be used to treat the Storm water (SW) to remove the pollutants of concern. Locally collected data should be compared against available literature data to understand local differences.
3. Develop a calibrated and validated in-stream WQ model for the particular waterway that the project will discharge to:
 - a. For small projects and projects that discharge into small waterways of 600 acres or less of tributary area, WQ models are not necessary. Pollutant loading calculations compared to pollutant in-stream Water Quality Standards (WQS) or in-stream target concentration can be used instead.
 - b. For larger projects that discharge to the Mill Creek or waterways of more than 600 acres of tributary area, the existing WQ models can be used or new WQ models developed (as needed).
4. Confirm collection system hydraulic model is calibrated and validated to MSD modeling standards. Update hydraulic model as necessary to meet MSD standards.
5. Using knowledge about the receiving water body, determine the WQS or target in-stream concentration (when a WQS has not yet been set) for the pollutants of concern as listed in Step 1.a.i and 1.a.ii.
 - a. Example: Bacteria WQS is 126 cfu/100 ml for E.Coli, Target concentration for Nitrate+Nitrite = 2.5 mg/l, Total P = 0.25 mg/l (Mill Creek TMDL target values – Attachment C)
6. Compare SW baseline pollutant concentrations (from Step 1a) against the WQS and target in-stream concentrations for the pollutants of concern (from Step 5).

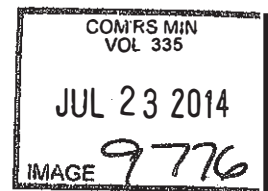


- a. If SW baseline pollutant concentrations do not exceed WQS or target in-stream concentration – no further work is needed for that pollutant(s).
 - b. For SW baseline concentrations that exceed the in-stream WQS or target value proceed to next step.
7. Determine pollutant load reduction required so SW discharges Do not Cause or Contribute to in-stream WQS exceedances or in-stream target concentration for each pollutant of concern.¹
 - a. Small projects (as defined in Step 3a) – Utilize simple mixing calculations to analyze required pollutant discharge loading such that the in-stream target value or in-stream WQS is met. Flows from the storm water separation project shall be based on both current separated flows as well as future flows if the project is part of a larger overall separation of the sewershed. Assume a baseline flow and baseline pollutant concentration (for each pollutant of concern) in the waterway to be used in the mixing calculations. Select and Design BMPs to meet the required pollutant discharge loading for each pollutant of concern.

For example, separation projects less than 600 acre tributary area,

- i. Add green infrastructure BMPs along roadways, other utility easements or at the SW discharge such that E. coli with the SW discharge meets the in-stream WQS or target value after in-stream mixing.
 - ii. Determine which pollutants of concern are not reduced to the in-stream WQS or in-stream target values by a specific BMP. For example, utilizing BMPs will not sufficiently reduce the pollutant concentration for Copper to the in-stream target value or in-stream WQS. List the pollutants of concern that can't be sufficiently addressed through BMPs.
 - b. Projects greater than 600 acres (as defined in Step 3b) – Utilize calibrated and validated WQ model. Flows from the storm water separation project shall be based on both current separated flows as well as future flows if the project is part of a larger overall separation of the sewershed. Analyze WQ with and without background sources for typical year to determine required pollutant load reduction in order to not cause or contribute to in-stream target value or in-stream WQS exceedances. Required load reduction is established at the pollutant load from which no increase in attainment of in-stream WQS or decrease in target pollutant concentration is achieved.

¹ Proposed new single property development or redevelopment of areas tributary to proposed storm water separation projects should undergo a separate analysis under applicable County and local jurisdictional standard.



- i. Based on the identified pollutant load reduction, select and design BMPs to achieve the identified load reduction.
 - ii. Determine which pollutants of concern that utilizing BMPs to reduce the pollutants to the in-stream WQS or in-stream target values is not possible. For example, utilizing BMPs will not sufficiently reduce the pollutant concentration for Copper to the in-stream target value or in-stream WQS. List the pollutants of concern that can't be sufficiently addressed through BMPs.
8. For the pollutants of concern that can't be sufficiently addressed through BMPs (identified in Step 7.a.ii and 7.b.ii), determine if other technologies can be used to reduce those pollutants to the in-stream WQS or in-stream target values before discharge. Determine costs associated with utilizing the other technologies. Costs will be used under Area 3 – long-term costs.

Area 2: Water Quantity/Flooding

Outcome:

1. Identify impacts to overland flooding from the proposed storm water separation project when capacity is exceeded. Prepare a Mitigation Plan for the impacts.
2. Identify if there an increase or decrease in basement backups from the project. Mitigation plan to eliminate any increase acceptable to County.
3. Identify impacts to in-stream flooding and hydromodification from the project. Prepare a Mitigation Plan to address the impacts.

Steps to Follow to Implement the Policy:

1. Add the project storm sewers to the collection system hydraulic model to understand impact on remaining combined sewer system and new storm sewer system. Collection system hydraulic model contains the ability to model overland impacts and where the stormwater will travel.
2. Thoroughly and accurately identify, evaluate and document the following with regard to the level of service (storm year/size capacity) (collectively, "Level of Service"):
 - (a) The existing Level of Service in the specific areas to be impacted by the Separation project;
 - (b) The Level of Service that would be required or used if the local jurisdiction constructed and paid 100% of the Separation project;
 - (c) The Level of Service that would be used if the Separation project is designed according to the standards of the Hamilton County Engineer;

JUL 23 2014

IMAGE

9777

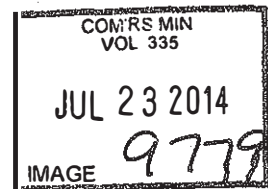
- (d) If the Separation project is within the City of Cincinnati, the Level of Service under the City's Storm Water Management Utility ("SMU") standards;
- (e) The MSD recommended Level of Service to be provided by the Separation project after construction with justification, including justification for any deviations from existing Level of Service; and
- (f) If the MSD recommended Level of Service is different from the local jurisdiction's or Hamilton County's required Level of Service based on their required rainfall distribution, then provide the cost differential between MSD's recommended Separation project costs and an alternative project using, (i) existing Level of Service, (ii) 10 year storm Level of Service, (iii) 25 year storm Level of Service, (iv) 50 year storm Level of Service, and (v) 100 year storm Level of Service. Storms shall be based on the SCS Type II storm rainfall distribution.
3. Run hydraulic model for storm events larger than the new storm sewer design capacity, i.e., storm events greater than the 25-year storm in most cases. Run model for both temporary reconnection phase and the final storm water system installation phase.
 - a. Assess where storm water flows overland in the model when storm sewer capacity is exceeded. Document flow paths.
 - b. Understand where basement backups decrease and if an increase in backups may occur downstream where storm sewers reconnect to existing combined sewers. Document results.
 4. Based on results of Step 2, develop a mitigation plan to address:
 - a. Any overland flooding impacts
 - b. Increases or changes in basement backups
 5. In-Stream Flooding/Hydromodification Evaluation – Develop calibrated and validated in-stream flow model to model impacts:
 - a. Small projects that discharge into small creeks or tributaries – In-stream flow model not necessary. In-stream field walks can be made to assess existing flooding and erosion impacts in the stream.
 - b. Larger projects that discharge into Mill Creek, Muddy Creek, etc. use existing in-stream flow models or develop new in-stream flow model. Model developed for water quality analysis in Area 1 WQ Impacts can be used for this analysis.
 - c. Projects that discharge to the Ohio River directly would not need a in-stream flooding/hydromodification evaluation due to the overall size of the Ohio River.
 6. Determine flooding and hydromodification impacts from proposed stormwater separation project:
 - a. Small projects – If field walks show waterway has excessive existing hydromodification then design project to detain peak discharge flows to 50% or

JUL 23 2014

IMAGE

9778

- less of the predevelopment flow for a 2-year storm. Other appropriate equivalent means to address the flooding/hydromodification conditions may be proposed.
- b. Larger projects – Run in-stream flow models for storm events ranging from the 2-year to 100-year storm events with and without the flows from the stormwater separation project and determine changes in in-stream velocities and flooding levels.
- i. If the in-stream model shows excessive flooding and/or hydromodification in existing conditions then you know that the added storm water from the project will exacerbate this existing condition.
 - ii. Design project to detain peak discharge flows to 50% or less of the predevelopment flow for a 2-year storm. Other appropriate equivalent means to address the flooding/hydromodification conditions may be proposed.
 - iii. If the in-stream model does NOT show excessive flooding and/or hydromodification in existing conditions and the additional SW from the project will not cause the existing condition to increase or worsen then no detention is required for the project. This will be a very rare case as most urban streams have excessive flooding and hydromodification.



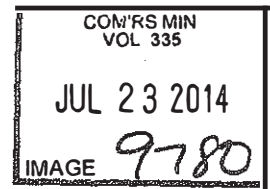
Area 3: Costs – Short-term & Long-term

Outcome:

1. Determine Minimum Cost - Capital and life-cycle costs for complying with minimum WQ requirements (addressing Bacteria and Nutrients) set forth in the Policy, Attachment C.
 - a. Specifically, the costs to install and maintain the required BMPs identified in Area 1 WQ Compliance Impact (above) will be provided in addition to the base cost of the project needed for the project to remove the pollutants of concern for the water body such that they Do Not Cause or Contribute to in-stream WQS exceedances or exceed target in-stream values.
2. Determine Best Value Cost- Capital and life-cycle costs to add to Minimum Cost to control the additional pollutants of concern to a reasonable level as listed in the Policy, Attachment D, without a significant increase in cost.
3. Determine Maximum Cost – Capital and life-cycle costs required to meet all of the pollutants of concern listed in the Policy, Attachment D.

Steps to Follow to Implement the Policy:

1. Minimum Cost – Estimate costs for the BMPs identified and designed in Step 7a and 7b in Area 1 WQ Compliance Impact to address the Policy Attachment C pollutants (Bacteria and Nutrients). Determine total capital cost, operation and maintenance costs, and life-cycle cost over 25 years and 40 years.
2. Best Value Cost – Estimate the additional cost of BMPs identified in Steps 7a and 7b in Area 1 WQ Compliance Impact to address the Policy Attachment D pollutants (TSS, Organics, Metals, Toxics, Temperature, Dissolved Oxygen). Determine which BMPs are low cost and can be added to the Minimum Cost in order to not significantly increase the Minimum Cost. Determine total capital cost, operation and maintenance costs, and life-cycle cost over 25 years and 40 years for these best value BMPs.
3. Maximum Cost – Determine cost to address all of the Policy Attachment D pollutants identified in Steps 7a and 7b of Area 1, including the costs identified in Step 8 of Area 1 that require alternative technologies to address the pollutants. Determine total capital cost, operation and maintenance costs, and life-cycle cost over 25 years and 40 years.



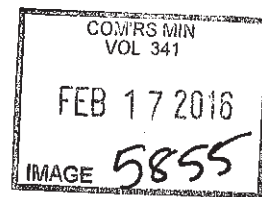
Area 4 - Ownership of Old & New Pipes – Storm water Only & Sanitary Sewage Only
Scenarios

Outcome:

1. Total capital, operation and maintenance, and life-cycle costs and associated project risks for a new storm water pipe system for storm water separation. In this case, the existing combined sewer would be used as a sanitary sewage system.
2. Total capital, operation and maintenance, and life-cycle costs and associated project risks for a new sanitary sewage system for storm water separation. In this case, the existing combined sewer would be used as a storm sewer system.

Steps to Follow to Execute the Policy:

1. Determine scope of proposed storm water separation project.
 - a. Analyze the feasibility and routing for a new storm sewer system to perform the separation. The existing combined sewer would be used as a sanitary sewage system in this case.
 - b. Analyze the feasibility and routing for a new sanitary sewer to perform the separation. The existing combined sewer would be used as a storm sewer system in this case.
2. Determine associated project risks for Steps 1a. and 1b above.
3. Determine total capital, operation and maintenance, and life-cycle costs for Steps 1a. and 1b above.
4. Provide a recommendation regarding future ownership of new and existing storm water pipes and rationale for recommendation.



ATTACHMENT A

**MSDGC RULES AND REGULATIONS
ARTICLE XXIV, SECTION 2409**

**MSDGC HYDRAULIC MODELING STANDARDS,
INCLUDING CALIBRATION AND VALIDATION**

Hydraulic modeling for projects shall comply with the MSDGC Modeling Standards for Hydraulic Modeling of Sewer Systems (Version 3) in effect as of October 1, 2015. Where the MSDGC Modeling Standards Version 3 do not completely address a subject or issue, the Wastewater Planning User's Group (WaPUG) Code of Practice for the Hydraulic Modeling of Sewers (Version 3.001) in effect as of December 2002, shall be followed for that subject or issue [note, WaPUG is part of the Chartered Institution of Water and Environmental Management (CIWEM)]. With respect to achieving model calibration and validation under these standards, the standards checked below in Table 1 shall be followed for the listed model calibration and validation step (where "Partially Addressed" is noted in Table 1 for a step, an explanation for clarity is included in the footnotes to the table). The modeling standards shall be followed by MSD unless the Board of County Commissioners decides otherwise for a specific project.

Table 1

Model Calibration and Validation (CV) Step	Follow WaPUG Modeling Standards	Follow MSDGC Modeling Standards (Ver. 3)
1. Select flow meter sites that are critical to ensure the model accurately represents the measured flows in the system.	✓	Not Addressed
2. Select a sufficient number of time periods within the flow meter data set to reasonably calibrate and validate the results; use a single continuous flow record where there is significant rainfall induced variation in inflow and infiltration.	✓	Partially Addressed ^[1]
3. Select dry weather days to evaluate the model's Dry Weather Flow performance against measured flows		✓
4. Using the selected rainfall time periods, continuous flow record and dry weather days, compare measured and modeled flows, volumes, and depths for meter sites from Step 1.	✓	Partially Addressed ^[1]
5. For at least 2/3rds of the rain events selected in Step 2, the measured results must match model results within WaPUG Standards for all selected flow meter sites.	✓	Partially Addressed ^{[1] [2]}

FEB 17 2016

IMAGE

5856

6. Confirm the model accurately represents the measured system flows in terms of frequency and volume at the major CSO & SSO locations selected in Step 1.	✓	Partially Addressed ^[3]
7. Flooding during calibration & validation storms should be reproduced by the model	✓	Not Addressed
8. Historic flooding location(s), severity and frequency should generally be reproduced by model	✓	Not Addressed

^[1] The MSDGC Modeling Standards mention using a range of storm events; however, it directs to select only 3 to 5 events for model calibration and validation. Sufficient storm events should be used that are representative of the range of frequency, antecedent moisture effects, and storm events interaction, and should not be limited to only 3 to 5 storm events.

^[2] The MSDGC Modeling Standards use the same peak flow and volume Calibration and Validation criteria as listed in the WaPUG Standards. However, the MSDGC Modeling Standards use different Calibration and Validation criteria for depth. The depth standards provided in the WaPUG Standards listed below shall be utilized:

Depth of Surge = +1.6 feet to -0.3 feet

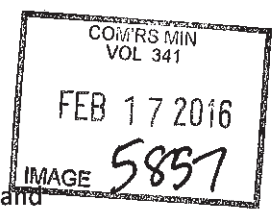
Unsurched Depth at Key Locations where this is important having regard to the objectives of the model (e.g. at combined sewer overflows) = ± 0.3 feet.

^[3] The MSDGC Modeling Standards mention comparing overflow location activity (frequency of overflow) where data is available, but the manual does not focus on measuring overflow volumes and selecting major CSO & SSO locations. When major CSOs and SSOs are within the area being modeled, frequency and volume data from these locations shall be used in the model calibration and validation effort. If it can be demonstrated that monitoring a CSO or SSO outfall directly is unsafe or not possible, the upstream flow and associated underflow shall be monitored to allow for proper calculation of the overflow volume from the monitoring data and for use in model calibration and validation.

When continuous calibration is used, the modeled results must at a minimum match 2/3rds of the storm events in the continuous series for all three parameters (Peak Flow, Volume and Depth) within the limits established by the WaPUG Standards. In all cases the storm events, as indicated above, must represent the range of storm frequencies for which the model is intended to be used.

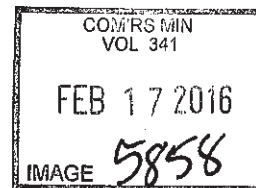
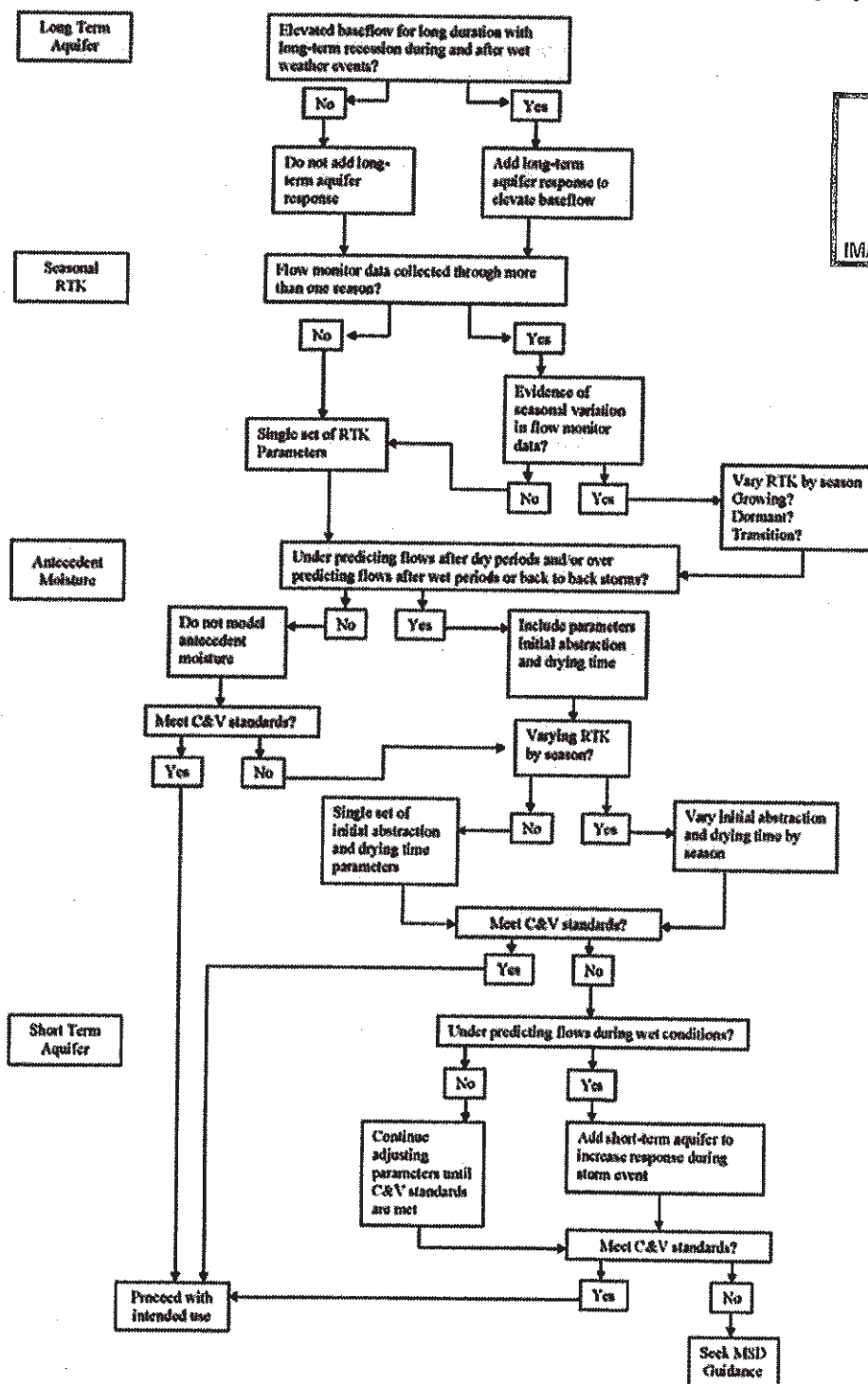
Validation storm events shall be selected prior to the beginning of the calibration effort, in order to avoid the appearance of bias in selecting storm events. Of the storm events selected, 2/3rds of the events must match the monitored data for each flow monitor, for all three parameters (Peak Flow, Volume, and Depth) within the limits established by the WaPUG Standards. The storms selected for validation shall to the extent possible represent the storm events for which the model is intended to be used.

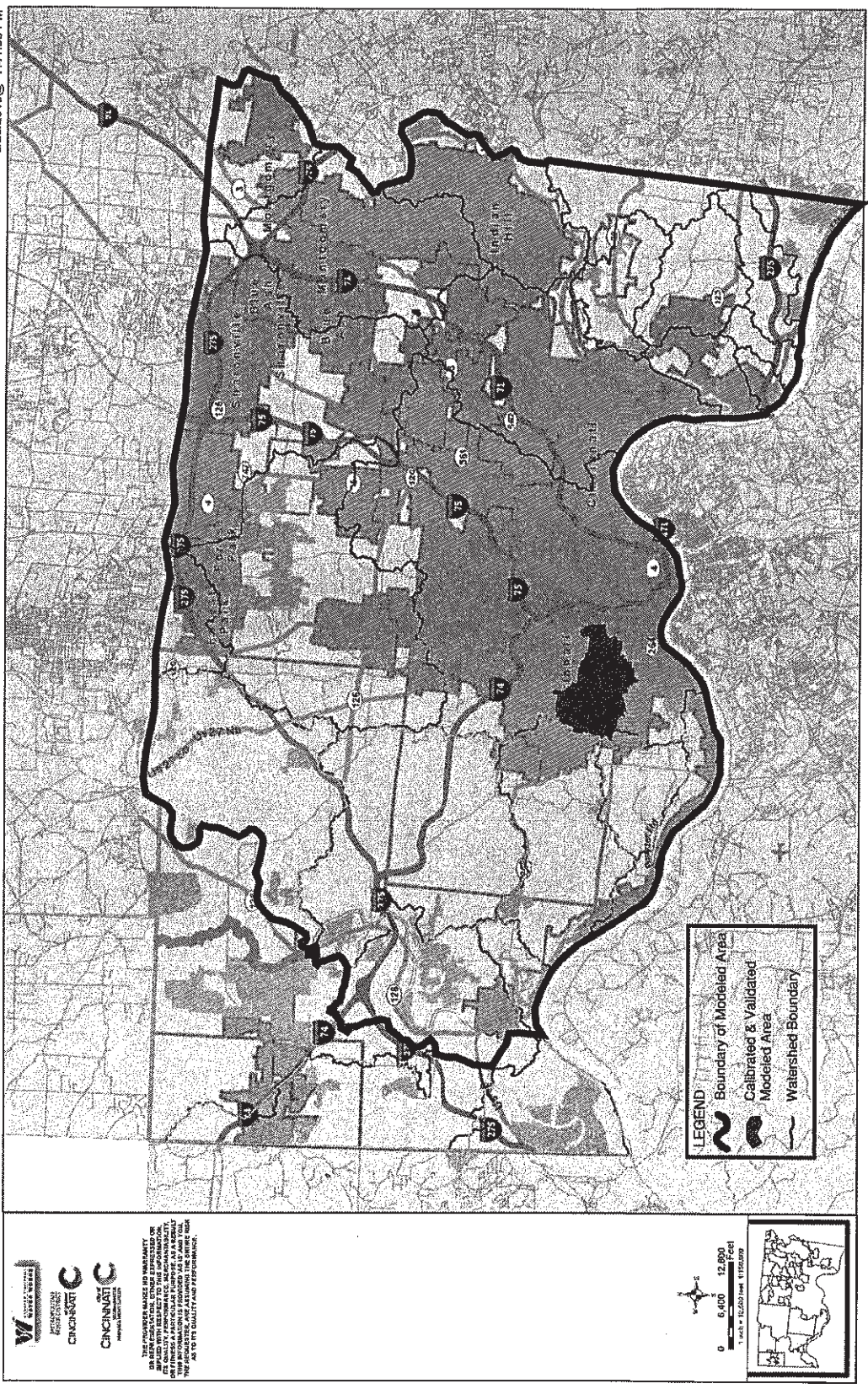
In all cases, the validation of the model shall be performed using storm events different from the storm events or continuous series used for calibration, unless an exception is approved by the Hamilton County Administration. When continuous calibration is used, a different continuous series of storm events shall be used for validation.



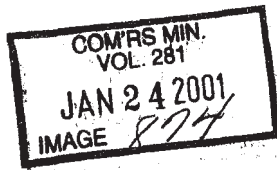
In order to address back-to-back storm events and antecedent moisture effects in calibrating and validating the model or a sub-model, the MSDGC decision flowchart below shall be followed (identified as Figure 17 – Parameter Selection Guidance for SWM Modeling of Sanitary System). (Reference note: this flowchart was developed by MSDGC and its consultant, and was followed to successfully calibrate and validate a portion of the Upper Duck Basin model to address antecedent moisture effects for the sewer system in accordance with MSDGC and WaPUG Standards. For more information, see Upper Duck All Bundle (UDAB) Task No. 800, SSO 228 Refined Calibration & Validation Final Technical Memorandum (April 29, 2015)).

Figure 17 – Parameter Selection Guidance for SWM Modeling of Sanitary Systems





COM/RS MIN
VOL 341
FEB 17 2016
IMAGE 5861



ARTICLE XXV

FEES, CHARGES, PENALTIES, CREDITS

Section 2501 Fees and charges; annual adjustments

The following table lists fees charges and penalties listed in these Rules and Regulations. Certain fees and charges will be adjusted for inflation annually. The annual adjustments will be made on January 1, beginning with January 1, 2002. The adjustment will be calculated based on the September Engineering News Record Construction Cost Index (ENR CCI) for Cincinnati, Ohio. The calculation will be made as follows: the currently effective fee or charge will be multiplied by the ratio of the current year's September ENR CCI to the ENR CCI for September, 2000 (5907.06), rounded to the nearest \$10. The table contains notations as to whether specific fees and charges are subject to this annual adjustment.

Table 2501-1

section	service; item	1/1/2001 charge	subject to annual adjustment
401	penalty for failure to remove clean water connection	\$100/day	no
1007	fee for preparation of as-built drawings	\$250 for first 2 segments; \$50 each additional segment	yes
1212	sewer tapper license fee	\$100	yes
1215	sewer tap-in fee	\$480 or \$2500 or higher depending on size of water meter	yes
1403	holding tank discharge permit fee	\$100 / vehicle	yes
1404	holding tank waste disposal fee	\$35/1000 gallons holding tank capacity	yes
1538	pretreatment monitoring fees	actual cost of monitoring	no
1540	one-time discharge permit fee	\$225 each	yes
1604	penalty for delinquent reporting of add meter readings	\$10 / day for each day delinquent	no
1809	Construction inspection fee	\$50 / hour	yes
2107	charge for the cost of work to clear and/or repair an obstruction of, or damage or any other impairment to, a wastewater treatment works	actual cost of repair	no
2201	penalty for violations of R&R	\$100 / violation	no
2203	penalty for violations of section 409, article XIV or article XV	\$10,000 maximum per violation	no
2204	penalty for pH violation	\$100 - \$500	no
2205	criminal liability	\$25,000 per day	no
2206	penalty failure to obtain permit	\$1000 / violation	no

2207	penalty clean water violation	\$25,000 / violation plus consequential damages	no
------	-------------------------------	---	----



Section 2502 Annual adjustment of assessment credit

Amended April 2, 2014 (Comm'rs Min. Vol. 334, Images 88 - 105)

~~The following credit will be adjusted for inflation annually on January 1, beginning with January 1, 2002. The adjustment will be calculated based on the September Engineering News Record Construction Cost Index (ENR CCI) for Cincinnati, Ohio. The assessment credit shall be multiplied by the ratio of the current year September ENR CCI to the ENR CCI for September, 2000 (\$907.06), rounded to the nearest \$100.~~

section	service	1/1/2001 charge	subject to annual adjustment
1216	assessment credit	\$5,400 maximum	yes



ARTICLE XXV

FEES, CHARGES, PENALTIES, CREDITS

Section 2502 Annual adjustment of assessment credit

The following credit will be adjusted for inflation annually on January 1, beginning with January 1, 2005. The adjustment will be calculated based on the September Engineering News Record Construction Cost Index (ENR CCI) for Cincinnati, Ohio. The assessment credit shall be multiplied by the ratio of the current year September ENR CCI to the ENR CCI for September, 2000 (5907.06), rounded to the nearest \$100.

Section	Service	1/1/2014 charge*	Subject to Annual Adjustment
1216	Single Family or "Primary" Assessment Credit	\$ 7,200 maximum	Yes
	"Secondary" Assessment Credit	variable; based upon single family or primary assessment credit, HSTS reimbursement credit, and remainder of benefited property cost in excess of \$12,000	No
	HSTS Reimbursement Credit - Absorption	\$5,800**	No
	HSTS Reimbursement Credit - Discharge	\$3,600**	No

*entered into the Commissioners Minutes, December 18, 2013, Vol. 332, Images 13017-13019.

**added as of the date of the adoption of these amendments.



ARTICLE XXVI

VALIDITY

Section 2601 Conflicts

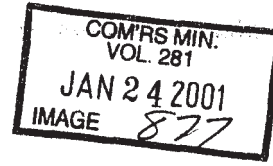
All resolutions and ordinances, or parts thereof, in conflict herewith are hereby repealed.

Section 2602 Individuality

If the provisions of any paragraph, section or article of these Rules and Regulations are declared unconstitutional or invalid by the final decision of any court of competent jurisdiction, the provisions of the remaining paragraphs, sections or articles shall continue in full force and effect.

ARTICLE XXVII

RIGHTS PRESERVED



Section 2701

Nothing in these Rules and Regulations shall constitute, or be construed as, a waiver, release, abandonment, or estoppel from an assertion, on the part of the Board or the City, of any rights, privileges or immunities conferred by the laws or the constitutions of the State of Ohio or the United States of America.



ARTICLE XXVIII

RULES AND REGULATIONS IN FORCE

Section 2801

These Rules and Regulations shall be in full force and effect on and after _____, 2000.

ADOPTED by the Board of County Commissioners of Hamilton County, Ohio, on the ____ day of _____, 2000.