



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.

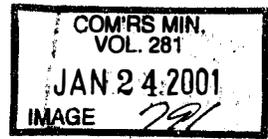
Section 502 Plan Submission Requirements

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

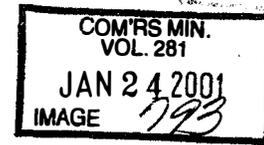
Plans requiring the approval of the State of Ohio Environmental Protection Agency will be transmitted by the Director following his approval.

(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:

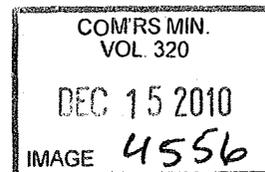
- A. The Director of the Metropolitan Sewer District shall permit sewage holding tank wastes to be discharged only to a facility which has sufficient capacity to receive the said wastes.
- B. The Director of MSD shall NOT permit any discharge of sewage holding tank wastes which will create conditions 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 Amendments December 15, 2010

Other Amendments to this Section were adopted

- October 23, 2006
- March 28, 2007

These were repealed with the 2010 Amendment



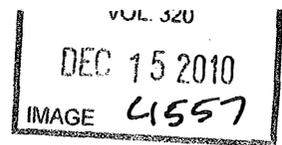
Section 514 Development Provisions

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:

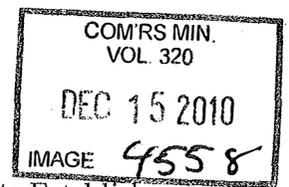
1. Connection Credit Stormwater Facilities means permanent storm water infrastructure constructed for the development of commercial or residential property in order to establish connection credits under Subsection VI of this Section 514, such as sewers, manholes, pervious pavement, or other appurtenances 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.

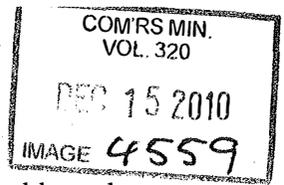
B. Acquisition of Sanitary Facilities.

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 Necessary for Development</u>	<u>Size Required by MSD</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 Necessary for Development</u>	<u>Size Required by MSD</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%

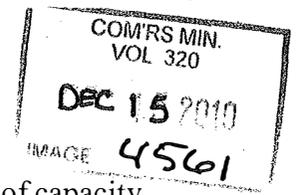
¹(These tables are not intended to include extraordinary circumstances, such as an alignment change or extreme soil conditions. Refer to Sections D and F for such circumstances.)

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.

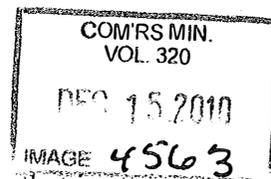
In the event that a pump station, waste water treatment plant, force main or pipe bursting application is required by the District to be upsized or constructed to provide capacity for territory outside of the development for which it was originally constructed, the purchase price of the excess capacity 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:

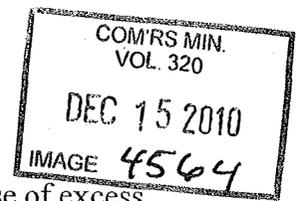


1. Requests reimbursement from tap-in fees for construction and public dedication of certain new or upgraded Limited Sanitary Facilities constructed by the party that the Board determines are necessary and appropriate for the collection, transportation and treatment of sewage from new development; and/or
 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



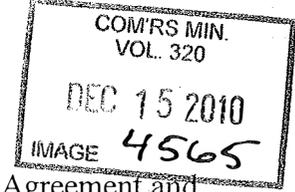
Board with the exception of that part of the Limited Sanitary Facilities that is excess sewer capacity due to over-sizing requested and purchased by the Board in accordance with the excess capacity purchase provisions of this Section 514.

- 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



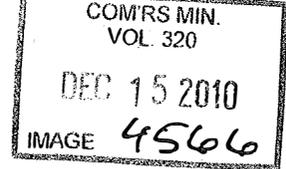
documented, less any costs paid by the County for the purchase of excess capacity, or extra work requested.

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

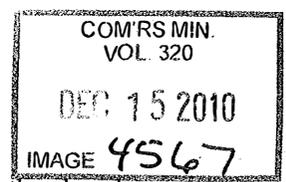


prepared by the party requesting a Tap-in Fee Reimbursement Agreement and submitted to the District for approval.

- 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.

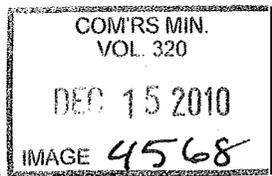
- C. Connection credits are established by making water quality improvements that will remove inflow and/or infiltration or, in some circumstances, a controlled release detention of flow (as approved by OEPA), to the sewer system upstream of the CSO and must be used in the same sewer system upstream 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:

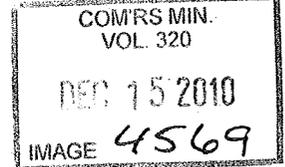
Peak Flow Factor = 4.0 (dimensionless)

Average Daily Stormwater Flow = Q10/4.0 (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 Amendments

August 28, 2002

) - ~~Q~~ -) with December 2010 amendment of Section 514

Section 516 Amendments

October 13, 2004

) - ~~Q~~u) with December 2010 amendment of Section 514