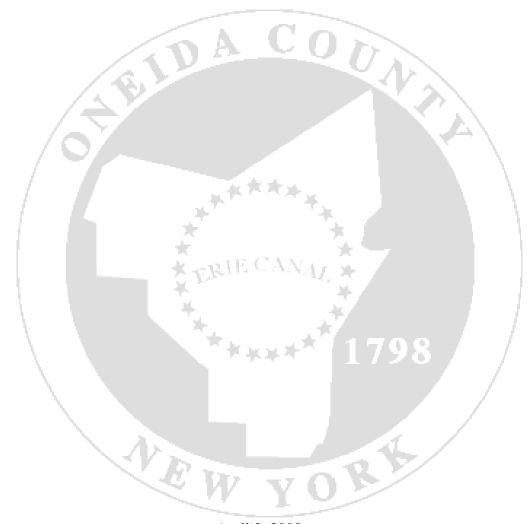
# **ONEIDA COUNTY SEWER DISTRICT**

# INFLOW/INFILTRATION OFFSET PLAN



April 2, 2008 Revised: September 23, 2008

# Oneida County Department of Water Quality & Water Pollution Control

Steven P. Devan, P.E., Commissioner 51 Leland Avenue Utica, NY 13502 Approved On: April 2, 2008

Amendment No. 1: September 23, 2008

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#### **Oneida County Sewer District (OCSD) Member Municipalities:**

| Village of Clayville       | Town of New Hartford      | Town of Schuyler*     |
|----------------------------|---------------------------|-----------------------|
| Town of Deerfield          | Village of New Hartford   | City of Utica         |
| Town of Frankfort*         | Village of New York Mills | Town of Whitestown    |
| Village of Holland Patent* | Village of Oriskany       | Village of Whitesboro |
| Town of Marcy              | Town of Paris             | Village of Yorkville  |

<sup>\*</sup>Service by intermunicipal agreement.

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# **APPENDICES**

APPENDIX A: APPLICATION FOR NEW SEWER CONNECTION PERMIT

#### 1.0 AUTHORITY

This Inflow/Infiltration Offset Plan (Offset Plan) is prepared pursuant to the requirements of Consent Order No. R6-20060823-67 between Oneida County and the New York State Department of Environmental Conservation (NYSDEC or Department) as a result of overflows from the Sauquoit Creek Pump Station (Outfall 002) operated by the Oneida County Sewer District and located in the Town of Whitestown.

Specifically, Schedule "A" – ITEM 3, of the Consent Order requires that Oneida County "submit to the Department an approvable plan that ensures that any new connection(s) to the collection system of Outfall 002 is (are) offset by removal of infiltration and inflow in an amount five times (5) the flow the new connection(s) is (are) expected to contribute, until such time as discharges from Outfall 002 are brought into compliance with the permit." The Plan must be submitted to NYSDEC on or before January 7, 2008.

In addition, Schedule "A" – ITEM 4, of the Consent Order requires that Oneida County "prior to hookup, or submission to the Department for approval of a new connection(s) and/or extension(s), whichever comes first, submit certification to the Department that any new connection(s) and/or extension(s) complies with ITEM 3 above. Allow no new connection(s) and/or extension(s) to the collection system of Outfall 002 unless in compliance with #3 above, until such time as discharges from Outfall 002 are brought into compliance with the permit." The requirement for submitting certification must be effective beginning July 11, 2007.

The Consent Order provides the rationale for the creation of an Offset Plan administered by Oneida County. The proposed amendment to the Oneida County Sewer Use Rules and Regulations (Sewer Use Law) establishes the legal authority to implement the Offset Plan. As set forth in Article III Section 308 of the Sewer Use Law, the Commissioner may recommend the implementation of a moratorium on new connections to segments of the POTW that exceed their hydraulic or organic capacity at any time until the conditions leading to the moratorium are

corrected. As set forth in the proposed amendment to the Sewer Use Law, such correction may entail the implementation of the Offset Plan.

#### 2.0 GENERAL

The elimination of Sanitary Sewer Overflows (SSO) is a high priority for the Oneida County Sewer District (the District). It will require complex and costly solutions which must be implemented over several years. While these improvements are being planned and implemented, requests for additional flows to the sewer system are being made by developers and other entities. This Offset Plan is designed to ensure that flow from new connections added to the sanitary sewer system tributary to Outfall 002 does not exacerbate the existing frequency and volume of SSO. The Offset Plan is based upon a ratio of 5 gallons of infiltration and inflow (I/I) reduction per 1 gallon of new connection flow. The District will be guided by the input and recommendations of the Sewer District Advisory Board, which is comprised of the communities that are members of the Oneida County Sewer District, as this Plan is implemented.

The Offset Plan utilizes estimated flow rates from proposed new development and established I/I flow contributions in evaluating the proposed flow additions and removals. The plan describes a sewer bank established to track the flow credits available for new development as calculated in accordance with the offset ratio. The plan will remain in place at least until such time as discharges from Outfall 002 are brought into compliance with the SPDES permit. The plan may be modified and implemented as described herein.

Oneida County owns and operates the County interceptor sewer system including the trunk sewers, force mains, pumping stations, sewage regulators, sewage treatment plant and other appurtenant structures. The member municipalities own and operate their individual public sewerage systems. The member municipalities that are tributary to Outfall 002 and subjected to the Offset Plan, include the villages of Clayville, New York Mills, Yorkville, Whitesboro, New Hartford, Oriskany, and the sewered areas of the towns of Paris and Whitestown and tributary portions of the town of New Hartford.

The effective date of this plan is April 2, 2008.

2.1 OBJECTIVES

The primary objective of the Offset Plan is to enable the District to authorize new sewer service

connection(s) and/or extension(s) to the sanitary sewer system tributary to Outfall 002, while

making system improvements resulting in a reduction of infiltration and inflow in accordance

with the Consent Order requirements, thus causing no increase in the frequency and volume of

the SSO at Outfall 002.

All applications for sewer extensions, including applicable engineering reports and engineering

drawings, must still be submitted to the New York State Department of Environmental

Conservation for formal technical review and approval prior to the construction and operation of

the sewer system. Such submittal must include the District's certification of flow credits and

authorization for connection.

2.2 ORGANIZATION OF PLAN

The key elements of the Offset Plan are addressed individually as follows:

Section III – Definitions

Section IV – Offset Plan Description

Section V – Offset Plan Implementation

Section VI – Offset Plan Modifications

Section VII – Appendices

3.0 **DEFINITIONS** 

This section presents definitions of terms used throughout this document.

County Interceptor Sewer System, or County System - The trunk sewers, force mains,

pumping stations, sewage regulators, sewage treatment plants, and other appurtenant structures

owned and operated by the County of Oneida, New York.

Fees in Lieu of Mitigation – Money paid into a fund by an applicant for new connections in

order to use available Sewer Bank flow credits rather than funding and undertaking an I/I

remediation project.

Flow Credits – Gallons per day of flow capacity available for proposed new connections that are

generated through I/I remediation projects/initiatives completed according to District-approved

plans, within the sanitary sewer system tributary to Outfall 002.

Infiltration – Water, other than waste water that enters a sewerage system, (including sewer

service connections) from the ground through such means as defective pipes, pipe joints,

connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

Inflow – Water, other than wastewater, that enters a sewerage system, (including sewer service

connections) from sources such as: roof leaders; cellar drains; sump pumps; missing or defective

cleanout caps; swimming pools; yard drains; area drains; foundation drains; drains from springs

and swampy areas; manhole covers; cross connections between storm sewers, process, and

sanitary sewers; catch basins; cooling towers; stormwaters; surface runoff; street wash waters; or

drainage. Inflow does not include, and is distinguished from, infiltration.

**Inflow/Infiltration** (I/I) – The total quantity of water from both infiltration and inflow, without

distinguishing the source.

**I/I Remediation** – Specific projects and initiatives including system improvements, repairs, and upgrades that reduce I/I gallons conveyed by the sanitary sewer system. Routine maintenance is

not an I/I remediation project or initiative.

I/I Remediation Fund – A fund where the "fees in lieu of mitigation" income generated from

the sale of available flow credits reside and will be used to finance future I/I remediation projects

and initiatives, or pay debt service on funds borrowed to undertake I/I remediation

projects/initiatives.

New Connection – Attachment of one or more new user(s) to a POTW sewer, the extension of

which was approved post July 11, 2007, that is tributary to Outfall 002 and not approved prior to

July 11, 2007.

Offset Ratio – The ratio of required gallons of I/I removed from the sanitary sewer system to the

additional gallons allowed for new connections. The ratio is affected by both the confidence in

the volume of I/I removed as well as the desire to improve water quality.

**Outfall 002** – The outfall at the Sauquoit Creek Pumping Station.

Publicly Owned Treatment Works or POTW – A treatment works as defined by Section 212

of the Act (33 USC 1292), that is owned in this instance by the County. This definition includes

any sewers and appurtenances that convey wastewater to the POTW treatment plant, but does not

include pipes, sewers or other conveyances not connected directly or indirectly to a facility

providing treatment. For the purpose of this Law, POTW shall also include any sewers and

appurtenances that convey wastewater to the POTW from persons outside the County who are,

by contract or agreement with the County Sewer District, users of the County POTW. POTW

shall also include the sewers and appurtenances owned by municipalities geographically covered

by the County Sewer District(s).

**Sanitary Sewer Overflow or SSO** – Results when a wastewater collection system that by design includes sewage, but may include inflow and infiltration beyond the capacity of the system, resulting in untreated wastewater discharges to the waters of the state.

**Sewer Bank** – A mechanism in which to track flow credit deposits, withdrawals, and transfers.

**Sewer Extension** -Any and all sanitary sewer facilities, including sewer pipe and manholes, and any fittings and connections related thereto which are to become part of the POTW. It shall also include, where applicable, all pumping stations, force mains, and associated facilities.

**Sewer, Public** – A sewer controlled by public authority.

**Sewerage System** – All facilities for collecting, regulating, pumping, transporting, treating, and disposing of sewage and sludge.

#### 4.0 OFFSET PLAN DESCRIPTION

This section describes the Offset Plan and is divided into three major sections:

- 1. Sewer Bank.
- 2. New Connection Sewage Flow Rates.
- 3. Approved I/I Flow Contributions.

#### 4.1 SEWER BANK

The sewer bank is a mechanism controlled by the District whereby flow credits generated from the successful completion of State, District, and member municipality approved I/I remediation projects and initiatives can be deposited, withdrawn, or transferred. The bank will consist of individual sub-accounts for each member municipality subject to the Offset Plan as well as a main District account.

The bank administrator is the Commissioner of the Department of Water Quality and Water Pollution Control of the County of Oneida, or his duly authorized agent. The bank administrator will review and sign off on all applications for sewer bank deposits, withdrawals and transfers.

All flow credits generated from District funded I/I remediation projects and initiatives will be deposited directly into the main District bank account. Flow credits generated from member municipality funded I/I remediation projects and initiatives will be deposited into the respective municipal sub-account. Flow credits earned from privately funded and executed I/I remediation projects performed by a developer will be used by that developer for new connections. If an I/I remediation project performed by a private developer generates more flow credits than needed by the applicant, then all excess flow credits return to the bank account of the owner of the public sanitary sewer system on which the I/I remediation project was performed. If the excess credits are the result of private property I/I remediation, then the excess credits will be deposited

into the account of the municipality in which the remediation work was done. Developers will not have individual bank accounts in which to deposit flow credits.

Flow credits may be purchased if available or earned and are subject to expiration. Flow credits will be determined using the Offset Ratio and the estimated I/I reduction from each activity. For example, if an I/I remediation project is approved to result in 100 gallons per day of I/I removal, and the Offset Ratio is 5 to 1 for the activity, then 20 gallons per day of flow credits will be deposited into the Sewer Bank for new connections. The transfer of flow credits between impacted municipalities is allowed and requires District approval based on an inter-municipal request.

Flow credit withdrawal will be granted in accordance with a list of prioritized development projects. A system to prioritize development projects will be determined by the District for new connections to the County System. A system to prioritize development projects will be determined by each member municipality for new connections to their respective public sewerage system.

#### 4.2 NEW CONNECTION SEWAGE FLOW RATES

Guidelines for use by the District in determining the flow contribution of new connections to the system are shown on Table 4-1. Residential, commercial, restaurants, industrial, and other flows were based on the "Design Standards for Wastewater Treatment Works', 1988 edition as published by NYSDEC. Table 4-1, also presents the recommended calculations to determine flow contributions from some of the sources. For industrial and other facilities listed in the table, the flows will be determined at the time of application based on similar type and size of business. The intent of this table is to provide a document for use by the District and developers, to quantify flows for new connections to the collection system.

**Table 4-1: New Development Flow Rates** 

| Source of Flow         | Flow Rate to be Added to the System (2)   | Reference                                      |
|------------------------|---|--|
| Residential Homes      | 1 Bedroom - 150 gal/day   | Design Standards for Wastewater Treatment      |
|                        | 2 Bedroom - 300 gal/day   | Works, 1988 edition as published by the NYSDEC |
|                        | 3 Bedroom - 400 gal/day   | (1)  |
|                        | 4 Bedroom - 475 gal/day   |  |
|                        | 5 Bedroom - 550 gal/day   |  |
| Apartments             | 1 Bedroom - 150 gal/day   | Design Standards for Wastewater Treatment      |
|                        | 2 Bedroom - 300 gal/day   | Works, 1988 edition as published by the NYSDEC |
|                        | 3 Bedroom - 400 gal/day   | (1)  |
| Office Buildings       | Based on the larger of 15 gal/day times the number of employee's                    | Design Standards for Wastewater Treatment      |
| office Buildings       | or  | Works, 1988 edition as published by the NYSDEC |
|                        | 0.1 gal/day times the total square footage of space                                 | (1)  |
|                        | 6   |  |
| Restaurants            | Ordinary Restaurant – 35 gal/day/per seat   | Design Standards for Wastewater Treatment      |
|                        | Small Restaurant/Tavern – 20 gal/day/per seat                                       | Works, 1988 edition as published by the NYSDEC |
|                        |   | (1)  |
| Industrial Flams       | To be determined at the time of annihilation based on similar industry time         |  |
| Industrial Flows       | To be determined at the time of application based on similar industry type and size |  |
|                        | and size  |  |
| Other Sources Such as  | To be determined at the time of application based on similar business type          |  |
| Stores, Motels/Hotels, | and size or the Design Standards for Wastewater Treatment Works, 1988               |  |
| Recreational           | edition as published by the NYSDEC (1)  |  |
| Facilities, etc.       |   |  |

- (1) In the event that NYSDEC amends the 1988 edition, the amended edition shall govern.
- (2) The Design Standards for Wastewater Treatment Works, 1988 edition as published by NYSDEC allow for the following:
  - a. Hydraulic loading rates based on actual water usage data if available for the specific type of new development facility.
  - b. 20% reduction in the above listed flow rates if certified water saving plumbing fixtures are used.
  - c. Expected hydraulic loading rates (flow rates) based on new/alternative technologies will be considered on a case-by-case basis.

4.3 APPROVED I/I FLOW CONTRIBUTIONS

This plan includes guidelines for use by the District in determining the flow reduction of I/I

remediation projects. The intent of these infiltration and inflow guidelines are to be used by the

District and NYSDEC to estimate infiltration and inflow removed from the system by specific

projects.

Some of the components of infiltration include leaks through manholes, pipe segments, laterals,

and other connections. Table 4-2 provides guidelines to determine the expected infiltration

contribution to the system from these sources. The values presented in Table 4-2 are based on

the ASCE Manual of Practice, the 1982 Oneida County SSES Report, and infiltration guidelines

previously approved by NYSDEC for use in other New York State Counties. Other infiltration

values are to be determined on a case by case basis by using calculations, flow metering,

televised inspection, and data from previously completed studies.

Components of inflow include sump pumps, roof drains, catch basins, drainage through manhole

covers, and cross connections. Table 4-3 provides guidelines to determine the expected inflow

contribution to the system from these sources. The contribution from sump pumps was based on

a NYSDEC approved value for the Village of Sackets Harbor, NY. 
The Soil Conservation

Service methodologies (i.e.: TR-20 and TR-55) will be used to calculate the contribution from

catch basins and cross connections to the system. Table 4-4 presents a list of recommended

runoff coefficients to be used in the Rational Equation.

**Table 4-2: Infiltration Guidelines** 

| INFILTRATION                               |   |  |   |  |
|--|---|--|---|--|
| Problem Type                               |   | Contribution   | Reference   |  |
|  |   | (gpm)  |   |  |
|  | Joint Leaks- Paved<br>Areas <sup>(1)</sup>  | Heavy- 1.1 gpm<br>Moderate- 0.65 gpm<br>Minor- 0.27 gpm  | ASCE Manual of Practice No. 92  |  |
| Manholes                                   |   |  | ASCE Manual of Practice No. 92  |  |
|  | Joint Leaks- Unpaved Areas <sup>(1)</sup>   | Heavy- 4.6 gpm<br>Moderate- 2.3 gpm<br>Minor- 1.1 gpm  | Erie County Division of<br>Sewerage Management (Value<br>has been approved by NYSDEC) |  |
|  | Joint Leaks- Manhole<br>Near Watershed Area | To be determined on a case by case basis.  |   |  |
|  | Low Lying<br>Manholes/Surface<br>Water      | 4 gpm  | Erie County Division of<br>Sewerage Management (Value<br>has been approved by NYSDEC) |  |
|  | Exposed or Cracked<br>Covers/ Frames        | To be determined on a case by case basis.  |   |  |
| Pipe So                                    | egments <sup>(2)</sup>                      | To be determined for each specific project by using calculations, flow metering, and/or televised inspection and data from previously completed studies. | The 1982 SSES Report should be utilized as a guideline when feasible.                 |  |
| Laterals/ Other Connections <sup>(2)</sup> |   | To be determined for each specific project by using calculations, flow metering, and/or televised inspection and data from previously completed studies. | The 1982 SSES Report should be utilized as a guideline when feasible.                 |  |

<sup>(1)</sup> Based on condition of manhole. "Heavy" means severe cracks and cracks throughout manhole. "Moderate" means moderate cracks within manhole. "Minor" means minor cracks within manhole.

<sup>(2)</sup> Calculations must be prepared by a New York State Licensed Professional Engineer.

**Table 4-3: Inflow Guidelines** 

| INFLOW                             |  |   |  |  |
|------------------------------------|--|---|--|--|
| Problem Type                       | Contribution   | Reference   |  |  |
|                                    | (gpm)  |   |  |  |
| Sump Pumps                         | 5 (1)  | Village of Sackets Harbor<br>(Value has been approved by<br>NYSDEC) |  |  |
| Roof Drains                        | 11 <sup>(2)</sup>  | 1982 SSES Report (2)  |  |  |
| Catch Basins/ Cross<br>Connections | To be calculated based Soil Conservation Service methodologies                                     |   |  |  |
|                                    | The 1-year, 24-hour storm event utilizing the Type II Standard Rainfall Distribution will be used. |   |  |  |
|                                    | 1-year storm rainfall amount is 2.30 inches for Oneida<br>County per NYSDOT Highway Design Manual. |   |  |  |

<sup>(1)</sup> Based on 5 gpm over a 24 hour per day period.

<sup>(2) 201</sup> Wastewater Facilities Planning, Sewer System Evaluation Survey, Sauquoit Creek Pumping Station Drainage Area – July 1982, prepared for the Oneida County Sewer District by Hazen and Sawyer, PC and Stetson-Dale

**Table 4-4:** Curve Numbers for use in Runoff Calculations<sup>(1)</sup>

|   |                 | Curve numbers forhydrologic soil group |           |           |          |  |
|---|-----------------|--|-----------|-----------|----------|--|
| Cover description   |                 |  | ydrologic | soil grou | up       |  |
|   | Average percent |  |           |           |          |  |
| Cover type and hydrologic condition                           | impervious area | A                                      | В         | С         | D        |  |
| Open space (lawns, parks, golf courses, cemeteries, etc.)     |                 |  |           |           |          |  |
| Poor condition (grass cover <50%)                             |                 | 68                                     | 79        | 86        | 89       |  |
| Fair condition (grass cover 50% to 75%)                       |                 | 49                                     | 69        | 79        | 84       |  |
| Good condition (grass cover >75%)                             |                 | 39                                     | 61        | 74        | 80       |  |
| Impervious areas:   |                 |  | 01        |           |          |  |
| Paved parking lots, roofs, driveways, etc.                    |                 |  |           |           |          |  |
| (excluding right-of-way)                                      |                 | 98                                     | 98        | 98        | 98       |  |
| Streets and roads:  |                 |  |           |           |          |  |
| Paved; curbs and storm sewers (excluding                      |                 |  |           |           |          |  |
| right-of-way)   |                 | 98                                     | 98        | 98        | 98       |  |
| Paved; open ditches (including right-of-way)                  |                 | 83                                     | 89        | 92        | 93       |  |
| Gravel (including right-of-way)                               |                 | 76                                     | 85        | 89        | 91       |  |
| Dirt (including right-of-way)                                 |                 | 72                                     | 82        | 87        | 89       |  |
| Urban districts:  |                 |  |           |           |          |  |
| Commercial and business                                       | 85              | 89                                     | 92        | 94        | 95       |  |
| Industrial  | 72              | 81                                     | 88        | 91        | 93       |  |
| Residential districts by average lot size:                    |                 |  |           |           |          |  |
| 1/8 acre or less (town houses)                                | 65              | 77                                     | 85        | 90        | 92       |  |
| 1/4 acre  | 38              | 61                                     | 75        | 83        | 87       |  |
| 1/3 acre  | 30              | 57                                     | 72        | 81        | 86       |  |
| 1/2 acre  | 25              | 54                                     | 70        | 80        | 85       |  |
| 1 acre  | 20              | 51                                     | 68        | 79        | 84       |  |
| 2 acres   | 12              | 46                                     | 65        | 77        | 82       |  |
|   |                 | Curve numbers forhydrologic soil group |           | mbers fo  | or       |  |
| Cover description   |                 |  |           | ıp        |          |  |
|   | Hydrologic      |  |           |           |          |  |
| Cover type  | condition       | A                                      | В         | С         | D        |  |
| Destrue areasland or ronge continuous                         | Poor            | 68                                     | 70        | 86        | 89       |  |
| Pasture, grassland, or range – continuous forage for grazing. | Fair            | 49                                     | 79<br>69  | 79        | 89<br>84 |  |
| forage for grazing.   | Good            | 49<br>39                               | 61        | 79<br>74  | 80       |  |
|   | Good            | 39                                     | 01        | /4        | 80       |  |
| Meadow – continuous grass, protected from                     |                 | 30                                     | 58        | 71        | 78       |  |
| grazing and generally mowed for hay.                          |                 |  |           |           |          |  |
| Brush – brush-weed-grass mixture with brush                   | Poor            | 48                                     | 67        | 77        | 83       |  |
| the major element.  | Fair            | 35                                     | 56        | 70        | 77       |  |
| •   | Good            | 30                                     | 48        | 65        | 73       |  |
|   |                 |  |           |           |          |  |

| Cover description   |                      | Curve numbers forhydrologic soil group |    |    |    |
|---|----------------------|--|----|----|----|
| Cover type  | Hydrologic condition | A                                      | В  | С  | D  |
| Woods – grass combination (orchard                              | Poor                 | 57                                     | 73 | 82 | 86 |
| or tree farm).  | Fair                 | 43                                     | 65 | 76 | 82 |
|   | Good                 | 32                                     | 58 | 72 | 79 |
| Woods.  | Poor                 | 45                                     | 66 | 77 | 83 |
|   | Fair                 | 36                                     | 60 | 73 | 79 |
|   | Good                 | 30                                     | 55 | 70 | 77 |
| Farmsteads – buildings, lanes, driveways, and surrounding lots. |                      | 59                                     | 74 | 82 | 86 |

<sup>(1)</sup> United States Department of Agriculture, Urban Hydrology for Small Watersheds, TR-55

### 4.4 REPORTING REQUIREMENTS

The District will retain records available for inspection by the NYSDEC as to the status of the implementation and management of the Offset Plan, including the following:

- 1. Sewer bank including flow credit balances, flow credits purchased, and flow credits transferred for main District and individual member municipality accounts.
- 2. I/I remediation projects completed on the Oneida County Sewer District and member municipality public sewerage systems, describing the remediation work performed and estimated I/I removed.
- 3. Status of I/I remediation fund.
- 4. List of identified available I/I remediation projects in the Oneida County Sewer District and member municipality public sewerage systems, and private properties.
- 5. List of applications for proposed new connections and sewer extensions to the County System and member municipality public sewerage systems.
- 6. List of new connections and sewer extensions completed in the District since the Offset Plan went into effect.

Each member municipality will retain records available to the Commissioner as to the status of the implementation and management of the Offset Plan, including the following:

- 1. I/I remediation projects completed on each member municipality's public sewerage system detailing work performed and estimated I/I removed.
- 2. List of member municipality-identified potential I/I remediation projects in each member municipality's public sewerage system and private properties, in priority order.
- 3. List of applications for proposed new connections and sewer extensions to the member municipality's public sewerage system in priority order.

#### 5.0 OFFSET PLAN IMPLEMENTATION

#### 5.1 IDENTIFYING AND PRIORITIZING I/I REMEDIATION PROJECTS

The District, member municipality, or developer may identify specific I/I remediation projects located on publicly owned property or on private property, including system improvements, repairs, and upgrades, that reduce I/I flow rates within the area tributary to Outfall 002. Routine maintenance will not be viewed as an acceptable I/I removal project. I/I remediation projects identified will be assigned flow rate contributions in accordance with this Offset Plan as outlined in Section 4.3. All identified projects will be will be kept on file and prioritized by the District and applicable member municipality for projects they identify.

#### 5.2 FUNDING I/I REMEDIATION PROJECTS

The District or a member municipality may fund I/I remediation projects which are performed on public properties only. In addition, the District or a member municipality may fund initiatives to reduce private property I/I. Developers may fund I/I remediation projects on public or private property via an agreement to fund the project in accordance with the Offset Plan to earn flow credits. The flow credits will be obtained at the time new sewer construction is certified as completed by the member municipality and accepted by the District, which is contingent upon successful completion of the funded I/I remediation project. All excess flow credits earned by the developer, above and beyond those used for the development project, will return to the Offset bank account of the owner of the public sewer system on which the I/I remediation project was performed. If the excess credits are the result of private property I/I remediation, then the excess credits will be deposited into the account of the municipality in which the work was done.

#### 5.3 UNDERTAKING I/I REMEDIATION PROJECTS

The District and/or member municipalities may undertake the work of I/I remediation projects on public property. I/I remediation work may be conducted by the District and/or member municipality using in-house staff or by outside public contract.

I/I Remediation work on private property may be undertaken by a developer, but must have prior approval of the District and member municipality. Developers may undertake I/I remediation work on private property that is under the developer's control and on public property within the area tributary to Outfall 002. Developers may only undertake I/I remediation work with prior approval of the District and associated member municipality, but must first formally request in written form a remediation project through the District in accordance with the application process of this Offset Plan. Other methods of undertaking the I/I remediation work may be considered upon written request to the District.

The scope of I/I remediation projects must be designed by a licensed professional engineer who is licensed to practice in the State of New York. The scope of I/I remediation work must include a verification process that demonstrates that the work was completed in accordance with the design documents. The scope of work shall be approved by the District as well as the member municipality on whose sanitary sewer system the work is to be performed. Developers undertaking their own remedial work must use design, materials, and construction procedure requirements that conform to the requirements of Article VIII of the Sewer Use Law. Municipal staff or their agents from the approving agency will be required to observe and certify to the District that the I/I remediation work was completed in accordance with the approved scope and design documents. In accordance with 6NYCRR 750-2.3, representatives of the New York State Department of Conservation will be allowed to enter onto any property where an I/I remediation project is being performed, for the purpose of observing such project.

#### 5.4 FEES IN LIEU OF MITIGATION

If a private owner or developer does not fund or undertake the I/I remediation work, they may pay a fee to purchase available flow credits from the associated member municipality in which the development project will be constructed or from the District under the sewer bank withdrawal requirements. The District and the member municipality will have the authority to limit the sale of available flow credits and require that I/I remediation projects be conducted in lieu of the purchase of flow credits. The District and member municipalities will have the authority to establish their respective fee schedules for the purchase of flow credits.

All income generated from fees to purchase flow credits from a sewer bank account holder will be used to reimburse that account holder the actual cost of the I/I remediation work initially funded by that account holder, with the remaining income deposited into the account holder's I/I remediation fund. The I/I remediation funds will be dedicated to the financing of future I/I remediation projects and initiatives, or pay debt service on funds borrowed to undertake I/I remediation projects.

#### 5.5 APPLICATION FOR NEW CONNECTION(S) AND/OR SEWER EXTENSION(S)

Applications for a sewer connection permit for new connections and/or sewer extensions will be made available to applicants through each member municipality. The sewer connection permit is required in conjunction with the SEQRA and site plan approval process for commercial development and residential subdivision projects, and as part of the building permit approval process for construction of a single residential building. Applications for a sewer connection permit must be completed by the applicant and submitted by the member municipality to the District at the appropriate time in the member municipality's approval process for review and approval by the Commissioner.

A sample application for sewer connection permit is included in Appendix A. Applications will require a parcel ID number, estimated date for completion of new development construction, and an estimate of new sewage flow rates. Each applicant will be provided a choice to either purchase available flow credits or, for developers only, an agreement to fund I/I remediation projects to obtain flow credits.

The Commissioner has the right to negotiate and limit the number of flow credits purchased or approved when the sewer connection permit is approved. I/I remediation projects funded by a developer must be completed prior to a member municipality certifying as acceptable the developer's completed new development sewer construction. The District-approved flow credits are obtained by the developer only after the sewer construction certification is issued to the developer by the member municipality. If a developer defaults on the development, then all prior-approved and earned flow credits shall return to the Offset bank account of the owner of the public sewer system on which the I/I remediation project was performed and all prior purchased flow credits return to the District or municipal bank account from which they were purchased. No refund will be given for costs incurred by a developer to purchase flow credits or undertake I/I remediation projects.

Applicants of new connections and/or sewer extensions can fulfill the Offset Plan requirement as follows:

1. Fees in Lieu of Mitigation: Purchase the required flow credits in accordance with Section 5.4. Applicants can purchase, if available, the required number of flow credits at a predetermined cost per gallon per day. The Commissioner will assign a date for flow credit expiration after which the flow credits return to the sewer bank from which the credits were acquired. The District and the member municipality retain the option to grant additional time to complete the new development construction or withdraw the flow credits.

2. Applicants can fund, or fund and undertake identified I/I remediation projects in accordance with the requirements of the Offset Plan and obtain flow credits (subject to the established Offset Ratio) when the I/I remediation project is successfully completed. The Commissioner will assign a date for flow credit expiration after which the flow credits return to the sewer bank account of the owner of the public sewer system on which the I/I remediation project was performed. The District and the member municipality retain the option to grant additional time to complete the construction or withdraw the flow credits.

For those projects involving the construction of sanitary sewers to be transferred to a
municipality for ownership and operation, flow credits will be reserved for use but not
made available until such time as transfer of the sanitary sewers to the municipality has
occurred.

Failure of the applicant to meet these requirements will result in the dedicated flow credits being returned to the applicable sewer bank and the applicant will not be entitled to any financial reimbursement from the sewer bank account holder or its agents.

Failure to adhere to all applicable Offset Plan requirements will result in denial of a sewer connection permit as an added condition for site plan approval and/or building permit approval.

#### 6.0 OFFSET PLAN MODIFICATIONS

The Offset Plan will be reviewed as a minimum on an annual basis. Possible amendments may include:

- 1. Change in offset ratio.
- 2. Change in flow figures or methodologies undertaken to remove I/I from the sanitary sewer system. Such changes should result from improved quality data obtained from completed flow monitoring as outlined in the Flow Monitoring Work Plan.
- 3. Changes due to regulatory requirements.

Offset Plan modifications require the approval of the New York State Department of Environmental Conservation.

# 6.1 AMENDMENT NO. 1 – REDEVELOPMENT OF EXISTING SEWER CONNECTIONS (SEPTEMBER 23, 2008)

This amendment indicates changes to the Inflow/Infiltration Offset Plan (Plan) dated April 2, 2008. This amendment was approved by the New York State Department of Environmental Conservation (NYSDEC) on May 19, 2008, and is formally made part of the Plan.

Where an existing property will be redeveloped for alternative use such that there will be a significant increase or decrease of flow from the existing condition, the following procedure will be followed in order to determine the amount of offset flow credit that will be required in order to allow the addition of wastewater to the public sewer system from the redevelopment project:

1. The New York State Division of Equalization and Assessment Property Type Classification Code (Code) for the parcel will be used to determine if a change in use of a particular property will occur.

- 2. If the resultant project generates a change in Code, then an analysis of the project will be done to determine the net sanitary flow impact from this project.
- 3. Both the existing and proposed wastewater flows will be evaluated in accordance with Section 4.0 of the Inflow/Infiltration Offset Plan and the *Design Standards for Wastewater Treatment Works*, NYSDEC, 1988 or amended edition.
- 4. If the proposed wastewater flow rate is greater than the existing flow rate, then the difference is subject to the generation/acquisition of flow credits in accordance with the Inflow/Infiltration Offset Plan.
- 5. If the proposed flow rate is less than the existing flow rate, then offset credits will not be required and the net difference in flow rate will be applied to the municipal offset credit bank in accordance with the Inflow/Infiltration Offset Plan.
- 6. Properties that had an inactive water meter account as of July 11, 2007, the date of the Consent Order, are not eligible for this alternative evaluation since those properties were not contributing to the wet weather overflow at the Sauquoit Creek Pumping Station at the time the Consent Order was signed.

# APPENDIX A

# APPLICATION FOR NEW SEWER CONNECTION PERMIT