admin Hale

7/1/2014

New York State Department of Environmental Conservation Division of Environmental Permits, 4th Floor

625 Broadway, Albany, NY 12233-1750

Phone: (518) 402-9167 • Fax: (518) 402-9168

Website: www.dec.ny.gov

June 9, 2014



Mr. Tom Rhoades, P.E. Commissioner Onondaga Co. Dept. of Water Environment Protection 650 Hiawatha Blvd. West Syracuse, NY 13204

Re:

Meadowbrook Limestone WWTP

DEC#7-3138-200022/00001 SPDES#: NY0027723

Dear Mr. Rhoades:

Enclosed is a final modified and renewed State Pollutant Discharge Elimination System (SPDES) permit for the above referenced facility. This permit has been modified and renewed under the Environmental Benefit Permit Strategy. Comments on this modification were received from you and Ms. Michelle Josilo, USEPA, Region 2. All comments are addressed in the enclosed responsiveness summary.

Be advised, the Uniform Procedures Regulations (6NYCRR Part 621) provide that an applicant may request a public hearing if a permit contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of permit issuance and must be addressed to the Chief Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Should you have questions on the administration of this modification and renewal, please feel free to contact me at the address or phone number listed above. Should you have technical questions on permit content, please contact the permit engineer, Dare Adelugba, at (518) 402-8119, or the Regional Water Engineer, Joseph Zalewski, at (315) 426-7500.

Sincerely,

Teresa Diehsner

Division of Environmental Permits

Enclosure

c:

D. Bimber, RPA

J. Zalewski, RWE

D. Adelugba, Permit Engineer

C. Jamison, CO-BWP Permit Coordinator

M. Josilo, EPA Reg 2

M. Child, IJC

NYSDOH District Office

RESPONSIVENESS SUMMARY TO COMMENTS

MEADOWBROOK LIMESTONE WWTP

SPDES PERMIT # NY0027723

DEC ID# 7-3138-00022/0001

By Dare Adelugba, P.E. Division of Water

Background: The above referenced draft SPDES permit was developed as a Department initiated modification and renewal pursuant to 6NYCRR Part 750-1.18, New York State's Environmental Benefit Permit Strategy (EBPS). The draft permit was public noticed in the Environmental Notice Bulletin on 7/10/2013, and in the Post-Standard on 07/09/2013. Comments were received from Mr. Tom Rhoads, P.E., Commissioner, Onondaga County Department of Water Environment Protection, and Ms. Michelle Josilo, NPDES Section Chief, USEPA Region 2. Additional comments were received on 3/21/2014 from the permittee. All comments are addressed below. A revised draft has been provided to USEPA.

ADDITIONAL COMMENTS: RECEIVED FROM THE PERMITTEE ON MARCH 21, 2104 IN AN EMAIL TO THE REGION 7 OFFICE

1. Typographical Issues

1.1. Page 4 of 19: UOD monitoring has no "X" for effluent, yet there is an effluent limit of 2,093 lbs/day.

Response: Effluent monitoring has been checked.

1.2. Page 4 of 19: Add a footnote for Total Cyanide indicating the sample collection location will be prior to chlorination due to chlorine interference with lab analysis results. This is not a standards method issue, this a sample location issue.

Response: According to our Water Quality Assurance Section, whether the parameter in question is total or free cyanide they should sample after the chlorination tanks. Furthermore, the sampling location for SPDES cyanide monitoring compliance must be representative of the discharge and needs to be collected after the chlorination tanks. Total Cyanide is a measure of all the potential sources of HCN regardless of its origin. There have been advances in the analysis of cyanide and the issue of interference in the determination of cyanide can be addressed through the preservation and analytical methods. The effects of chlorine interference can be mitigated following 40 CFR Part 136 recommenced procedures. Measuring after the tank with chlorine mitigation is the most accurate way to determine the composition of the discharge.

Additionally, post chlorination sampling requirement in the Meadowbrook Limestone permit is consistent with other SPDES permits statewide. Therefore, your request cannot be granted.

1.3. Page 4 of 19: Correct the Total Residual Chlorine limit to match the fact sheet and responsiveness summary value of 0.02 mg/L.

Response: We have made the correction.

1.4. Page 5 of 19: Whole Effluent Toxicity (WET) Testing has been added to the new permit on a quarterly basis and a frequency during calendar years ending in 4 and 9. We recommend modifying to years ending 5 and 10 since we are nearly through the 1st quarter of 2014.

Response: We have changed the years to 5 and 0.

2. General Comments on Outlying Treatment Plant Permits

2.1. Permit consistency issues: The compliance schedules for disinfection should be similar for each facility with a requirement. All compliance schedules for each permit should have the same deliverable requirements in the table. Baldwinsville would be a good model – pg 19/24.

Response: We have revised the requirement on Page 14 of 19 as requested.

2.2. The General Requirements included in section XI should be the same for each permit. The requirement for Section J, Water Treatment Chemicals (WTC), was excluded from the Meadowbrook Limestone and Baldwinsville permits. The County would prefer to report chemical usage in gallons rather than pounds as this is how it is applied in the facility.

Response: We have added the missing requirements (see Page 18 of 19).

2.3. The County would like to encourage the NYSDEC to list the responsible agent on the cover page as Head Operator without a name. There will be a number of retirements and personnel changes in the upcoming year. This change will make the administration aspects of the permit easier.

Response: We have modified Page 1 of the permit to list "Commissioner, WEP" and "Head Operator" as the permittee contact and responsible agent for DMRs.

CHANGES FOLLOWING THE NOVEMBER 22, 2013 CONFERENCE CALL WITH PERMITTEE

- 1. The requirement for enterococci has been removed since the facility does not discharge to coastal recreation waters. The 40 CFR 131.41 is not applicable and no E. coli or Enterococci monitoring is necessary at this time.
- 2. The referenced Footnote 5 for Mercury on has been removed. As agreed, one grab sampling is sufficient to satisfy the permit monthly requirement.

7/25/2013 COMMENTS FROM THE PERMITTEE ON THE ORIGINAL DRAFT

GENERAL COMMENT

Comment #1: In future correspondence regarding this permit, please include the satellite municipal communities that are tributary to the Meadowbrook Limestone WWTP. The following municipalities are considered stakeholders: City of Syracuse: Town of DeWitt, Town of Manlius, Village of Manlius, Village of Fayetteville, and Town of Pompey.

Response: The mentioned stakeholders will be added to a list of interested parties for the Meadowbrook Limestone WWTP.

COMMENTS ON FACT SHEET

Comment #2 – Page 4 of 15, Impaired Waterbody Information: Onondaga County does not support the use of the language from the Priority Waterbody List (PWL) in this permit fact sheet indicating nutrient impacts are likely from the Meadowbrook Limestone WWTP which has a "history" of "frequent" permit violations. NYSDEC is well aware of the number of permit violations which are listed in section D of the fact sheet also on Page 4 of 15. This table does not support the conclusion reached under the PWL discussion.

Response: Please note that this information is already in the 2007 Priority Waterbody List (PWL) which is a public document. The fact sheet merely explained the water quality information of the waterbody associated with Meadowbrook-Limestone WWTP effluent discharges.

Comment #3 – Page 6 of 15, Ammonia: The language "summer limit will be monitor only" is not consistent with page 4 of the permit. It should read the winter limit will be monitor only.

Response: The error has been corrected.

COMMENTS ON PERMIT

Comment #4 – Page 4 of 19, Total Cyanide: In the previous permit, a footnote specified that "Sampling shall be taken prior to chlorination". This was necessary due to interference from chlorination on the cyanide results. Please re-insert the historically approved footnote, or provide the current basis for removing the footnote.

Response: This request cannot be granted. The detailed rationale for this denial is in Item 1.2 of Page 1 of this document.

Comment #5 – Page 4 of 19, Mercury: Please add Footnote 5 for this parameter (Three (3) grab samples collected and combined in the laboratory prior to analysis); 24-hr composites for low-level mercury are prone to contamination and QNQC exceedances.

Response: Your request is granted. Sampling Type has been changed to "grab."

Comment #6 – Page 4-5 of 19, Fecal Coliform: The single row in this table is covered on two (2) pages; the "Type" and "Units" are split between both pages.

Response: The pages have been reformatted.

Comment #7 – Page 5 of 19, Total Chlorine Residual: Please clarify the permit limitation; specifically 0.5 mg/l as detailed in the permit. Correct the 0.02 mg/l described in the Municipal Factsheet.

Response: Please see response to comment 1.1 above. Refer to the Schedule of Compliance on page 14 of the permit for more information. The error has been corrected.

Comment #8 – Page 5 of 19, Footnote 6: The text should reference "selected alternative" rather than assume a dechlorination system will be installed. The text also references the compliance schedule on Page 11, should read page 13.

Response: Agreed. The statement has been revised. Also, the correct page has been listed on the footnote.

Comment #9 – Page 5 of 19: Whole Effluent Toxicity (WET) Acute Limits should be deleted or listed as monitor only. Footnote 8 specifically states WET Testing shall consist of Chronic only.

Response: WET testing requirements in the permit are "Action Levels" and not "Limits." The referenced footnote was written as intended. Meadowbrook-Limestone WWTP is required to perform "Chronic" test only.

Comment #10 – Page of 5, Footnote 7: The second paragraph states "....shall read the flow recorder in Limestone Creek at Fayetteville". We assume the reference is to the historic USGS Station, which has not provided daily data since 1986, and peak stream flow data since 1994. This station is not owned by the County, or maintained by the USGS as a functional device, therefore data cannot be collected. We would like to partner with the NYSDEC to explore the potential re-commissioning of this gage.

Without a dam to back up the creek, it is very unlikely that water will be diverted to the canal. At a very high flow observation, a recent diversion inspection noted that no diversion was occurring; rather the canal was flowing into the creek through the structure. Likewise at low creek flow levels, diversion cannot occur due to the difference in elevation. Due to the rare or remote possibility that a diversion will occur, it is requested that the requirement for daily diversion monitoring be eliminated from this permit.

Response: Based on the recent information from the permittee, this requirement has been removed. However, the permit may be reopened if future information shows that the dam is operational. (Please note that Footnote 7 now applies to WET testing requirements).

Comment #11 – Page 9 of 19: Paragraph D specifies "The reporting period shall be annual. Each report shall cover the period from October 1 to September 30." The County requests the reporting period begin on January 1 and end on December 31 consistent with our other treatment facilities.

Response: Your request is granted.

Comment #12 – Page 13 of 19: The Onondaga County Department of Water Environment Protection does not concur with the NYSDEC's requirement to complete a Sanitary Sewer Evaluation Study (SSES). Onondaga County believes that another SSES will not yield significantly different results than the SSESs completed in 1983 and 2003. It is our contention that scarce resources would be better spent on completing Inflow and Infiltration reduction projects rather than collecting redundant information. We have detailed this effective approach in the Meadowbrook Limestone WWTP service area flow management plan quarterly reports. To date, we have expended more than \$350,000 to repair and rehabilitate manhole structures in the treatment plant service area. We have also performed more than 400 manhole inspections and televised greater than 15,000 feet of sewer. As part of the ongoing progressive effort to control inflow and infiltration, Onondaga County has developed a Suburban Green Infrastructure Program to provide funding for elimination of inflow and infiltration (I/I) sources in the satellite municipal collection systems. We are currently in the second year of this very successful program and many of the communities in the Meadowbrook Limestone Treatment Plant service area have submitted proposals for funding of projects that will remove I/I.

Beginning in April of 2012, Onondaga County has required that all new connections made in the Meadowbrook Wastewater Treatment Plant service area offset the added flow contribution. The developer is required to coordinate with the Town's representative to develop an offset plan prior to the completion of the development. Some of the offset projects consisted of flood protection of manholes; proper decommissioning of leaking abandoned lateral connections and installation of manhole rain dishes.

We are continuing to address the I/I issues within the Meadowbrook Wastewater Treatment Plant service area and, as reported in the quarterly flow management reports, those efforts are working. The I/I issues existed before the Onondaga County Consolidated Sanitary District was formed and there have been many projects advanced to address the long standing issues. Again, future resources should be directed to I/I reduction projects and the use of green and innovative technologies rather than further study.

Response: This requirement has been revised. The county is simply required to submit a report on updated activities regarding the existing Sewer System Evaluation Survey.

Comment #13 – Page 14 of 19: Reference to page 3 for Total Residual Chlorine limit should be Page 5.

Response: The error has been corrected.

Comment #14 - Page 14 of 19: Schedule of Compliance -

- Change due date for plans and specifications to 18 months + EDP.
- Change construction start date to 120 days + date of plan approval.
- Change construction completion to 16 months from plan approval.

The schedule of compliance states that progress report submittals should coincide with the duration of the project. If only six (6) months are allowed for construction and start-up (which may be insufficient, and should be based on the engineer approved design and construction schedule estimate), a six month progress report appears unreasonable. The Department would recommend a completion report with compliance demonstration detailed therein.

Response: The entire schedule has been revised. To accommodate your request for a revised due date for plans and specifications, and to comply with the federal and state regulations, the initial milestone date has been split into two. The federal regulation 40 CFR §122.47(a)(3) says that compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. Also, the New York State regulations at 6 NYCRR §750-1.14 requires that "in no event shall more than nine months elapse between interim dates." Additionally, the reporting of progress reports has also changed in compliance with 40 CFR §122.47(a)(4) that the permittee shall submit a report no later than 14 days following each interim dates.

We believe the comments provided herein meet our mutual needs and align with our common goal of protecting the receiving waters of Onondaga County. We also continue to express our larger interest in aligning priorities with the NYSDEC on the many projects and permits presently in process. At this time work is progressing on Amended Consent Judgment projects and the EPTS phase II consent order project, and we note that the NYSDEC has five of six Onondaga County wastewater treatment plants in a draft permit status; opportunities exist for prioritization and coordination. A mutually convenient comment review session may be beneficial to both parties, and we would be happy to meet with your representatives at your convenience.

Response: Thank you for the information

COMMENTS FROM US EPA

On June 27, 2013, the New York State Department of Environmental Conservation provided notice of the draft modified State Pollutant Discharge Elimination System (SPDES) permit (SPDES No. NY0027723) for the Meadowbrook-Limestone Wastewater Treatment Plant (WWTP). In accordance with 40 CFR §122.44, the Environmental Protection Agency has reviewed the draft permit and provides the following comments. These comments must be satisfactorily addressed in order to eliminate the potential for permit objection pursuant to the 1975 Memorandum of Agreement between the EPA and NYSDEC and 40 CFR §122.44.

Comment #1: Biosolids Language — SPDES permits must include a condition requiring compliance with 6 NYCRR Part 360 in order to clearly inform the permittee of the full breadth of regulations regarding publicly-owned treatment works and biosolids. The draft Meadowbrook-Limestone WWTP permit does not have this condition.

Response: DEC recently updated the general conditions that are included in SPDES permits. These have been included in the permit and should address concerns about general conditions, including biosolids issues.

Comment #2: Compliance Schedule — The draft modified Meadowbrook-Limestone WWTP permit contains a compliance schedule for total residual chlorine. As described in the May 10, 2007 memo from James Hanlon of EPA's Office of Wastewater Management to Alexis Strauss, Director of EPA Region 9's Water Division, and 40 CFR §122.47(a)(3), compliance schedules that are longer than one year in duration must set forth interim requirements and dates for their achievement. New York State regulations at 6 NYCRR §750-1.14 require that "in no event shall more than nine months elapse between interim dates." Please review 40 CFR §122.45 and 6 NYCRR §750-1.14 and ensure that the compliance schedule in the Meadowbrook-Limestone WWTP permit is in accordance with regulations and establishes milestones at least every 9 months.

Response: The compliance schedule has been revised.

Comment #3 — Mercury: Page 5 of the draft modified Meadowbrook-Limestone WWTP permit establishes a Mercury Minimization Plan for Low Priority Publicly Owned Treatment Plants (POTWs). TOGS 1.3.10-Mercury Provides that POTWs with design flow of 5 MGD or greater are high priority POTWs. As the design flow of the Meadowbrook-Limestone WWTP is 6.5 MGD, please ensure that a Mercury Minimization Plan for High Priority POTWs is established in the permit. Additionally, TOGS 1.3.10 states that high-priority POTWs are required to have an effluent limitation for mercury. Please ensure that the Meadowbrook-Limestone permit establishes an appropriate effluent limitation for mercury.

TOGS 1.3.10 also provides that Multiple Discharge Variance (MDV) is in effect for "five years from the effective date specified on page 1 of this document". Page 1 indicates that the issue date (assuming this is the effective date as well) is October 2010; therefore the MDV is only effective until September 2015. As the term of the Meadowbrook-Limestone WWTP permit extends beyond the expiration date of the MDV, the permit must a final water quality-based effluent limit (WQBEL) of 0.7 ng/l as of September 2015 unless other relief is provided in the permit (e.g., compliance schedules, renewal of the MDV).

Response: NYSDEC's interpretation of the applicable regulations (40 CFR Part 132, Appendix F, Procedure 2 and 6 NYCRR Part 702.17) and policy (DOW 1.3.10, Section 4.2.1.11) is that the MDV may be applied from October 2010 thru September 2015 and that the "variance" actually happens when an individual permit is changed to include these requirements, i.e., if the MDV is applied to a permit prior to October 2015 then the resulting requirements may be in effect for the permit term which extends past October 2015. NYSDEC's interpretation appears to be consistent with practices in other States.

Comment: Pretreatment Program Implementation Requirements – The following error was found in the Pretreatment Program Implementation Requirements beginning on page 7 of the draft modified Meadowbrook-Limestone WWTP permit.

Section A(3) should refer to 40 CFR §403.3(q)

Please ensure that the Pretreatment Program Implementation Requirements section of the Meadowbrook-Limestone WWTP permit contains the correct citation.

Response: The citation error has been corrected.

Comment: Whole Effluent Toxicity – The draft modified Meadowbrook-Limestone WWTP permit establishes action levels for whole effluent toxicity (WET) but the fact sheet does not provide a reasonable potential analysis (RPA) for WET. With no RPA or discussion of the basis for not establishing limits, it is not clear how the permit meets the requirements of 40 CFR §122.44(d)(i) or 40 CFR part 132 which specify that if the WET of an effluent is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any numeric WET criterion, an effluent limitation for WET must be established in the permit. Please provide an RPA of existing WET data or a justification for not establishing effluent limitations for WET.

Federal regulations at 40 CFR §122.62 state that when a permit is modified, only the conditions subject to modification are reopened. However, the EPA submits the following comments on the draft modified Meadowbrook-Limestone WWTP permit for consideration.

Response: The Division has reviewed EPA's comment regarding the WET testing requirements in the draft permit. As part of the permit development process, the SPDES permit application and the facility's submitted data were evaluated using the most recent edition of Division of Water Technical and Operational Guidance Series (1.3.2), ACUTE AND CHRONIC TOXICITY TESTING IN THE SPDES PERMIT PROGRAM. This guidance document, which was reviewed and accepted by EPA, describes the procedures which should be followed when determining whether to include WET testing in a SPDES permit. This facility is new to the WET program; therefore no WET data exists to be able to perform a reasonable potential determination (RPD) to determine the need for WET Limits. As a result, we believe in accordance with TOGS 1.3.2, the facility has received the appropriate WET program requirements with this initial WET Action Levels. Once four quarterly WET tests are completed, the RPD will be completed to determine if the WET Action Levels should be upgraded to enforceable WET Limits.

Comment: Concentration-based Effluent Limits. Page 4 of the draft modified Meadowbrook Limestone WWTP permit establishes mass-based effluent limits for Total Kjeldahl Nitrogen

(TKN), and ammonia (as NH3) but does not establish concentration-based limits for these parameters. 40 CFR §122.45(f)(ii) states that mass-based limits are required except when applicable standards are expressed in terms of another unit of measure. As the standards for these parameters in the New York State Water Quality Standards at 6 NYCRR Part 700 are concentration-based, please ensure that concentration-based effluent imitations for TKN and ammonia are established in the Meadowbrook Limestone WWTP permit.

Response: In this case the applicable regulations do not require concentration-based limits. EPA's recommendation to add such limits has been reviewed. Considering the available effluent dilution and discharge volume variability, the Department believes that mass-based limits are sufficient to protect water quality and that concentration-based limits are not necessary.

Comment: Pathogen Criteria Implementation — The Meadowbrook-Limestone WWTP discharges to class C waters. As specified in New York State Water Quality Standards (NYSWQS) at 6 NYCRR Part 701.8, the best usage of class C fresh waters is fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival and for primary and secondary contact recreation. The draft modified Meadowbrook-Limestone WWTP permit establish effluent limitations for fecal coliforms but does not establish limits for total coliforms. The NYSWQS at 6 NYCRR Pan 703.4 establishes water quality criteria for fecal coliforms and total coliforms for facilities discharging into class C waters. As stated in the NYSWQS (6 NYCRR Part 701.1), the discharge of sewage, industrial waste, or other wastes shall not cause impairment of the best usages of the receiving water. In order to comply with the NYSWQS and ensure that the best usages of the receiving water are not impaired, please conduct a reasonable potential analysis for total coliforms and, if necessary, establish total coliforms effluent limitations in the Meadowbrook-Limestone WWTP permit.

Response: Compliance with water quality standards for Total Coliforms is indicated by Fecal Coliforms limits. Additional limits for Total Coliforms are unnecessary, consistent with DEC's existing disinfection policy in TOGS 1.3.3. Parallel monitoring for total coliform would be redundant.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

Industrial Code: Discharge Class (CL):

4952

05 T

07

03

Toxic Class (TX): Major Drainage Basin;

Sub Drainage Basin:

Water Index Number:

ONT-66-11-P26-37-6-2

Compact Area: IJC SPDES Number:

DEC Number:

NY-0027723

7-3138-00022/0001

Effective Date (EDP): Expiration Date (ExDP): 07/01/2014

Modification Dates:

06/30/2019

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name:

Onondaga County

650 Hiawatha Boulevard West

Street: City:

Syracuse

Attention: Commissioner, WEP

State: NY

Zip Code:

Onondaga

12304-1194

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name:

Meadowbrook-Limestone Wastewater Treatment Plant

Location (C,T,V): Facility Address:

Manlius (T)

City:

Kirkville

7530 Manlius Center Road

NYTM -E:

From Outfall No.: 001

at Latitude: 43 °

NYTM - N: 20 "

03 '

State: NY

County:

Zip Code: 13082

Class: C

into receiving waters known as:

Limestone Creek

Longitude:

00 '

Responsible Official or Agent:

and; (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name:

Onondaga County Department of Water Environment Protection - Syracuse Metro

Street:

650 Hiawatha Boulevard West

City:

Syracuse

Head Operator

State: NY

Zip Code: 13204-1194

Phone: (315) 637-3314

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator RWE/RPA M. Josilo, USEPA Reg 2 NYSEFC NYSDOH District Office Mayor, C-Syracuse

Chief Permit Administrator: John J. Ferguson Address: Division of Environmental Permits 625 Broadway Albany, NY 12233-1750 Date:

Section	Table of Contents	Page
I.	Administrative	Cover
. II.	Permit Limits, Levels and Monitoring Definitions	3
III.	Permit Limits, Levels and Monitoring Definitions - Applicable Footnotes - Action Levels	4 5 6
Į IV.	Pretreatment Program Implementation Requirements	7
. V.	Stormwater Pollution Prevention Plan for POTWs with Stormwater Outfalls	10
VI	Mercury Minimization Plan – High Priority	12
VI.	Schedule of Submittals – SSES Survey Report	13
VII.	Schedule of Compliance – TRC Engineering Report	14
VIII.	Discharge Notification Requirements	15
IX.	Monitoring Locations	16
X.	SPDES Permit General Requirements	17
XI.	Recording, Reporting and Additional Monitoring Requirements	19

II. PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING	
	for discharge. Examples include process or sanitary		The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)	

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
_	l	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration . Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Notes:

I. EFFLUENT LIMIT TYPES:

- a. DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
- b. DAILY MAX.: The highest allowable daily discharge. DAILY MIN.: The lowest allowable daily discharge.
- c. MONTHLY AVG: The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- d. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week.
- e. 30 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- f. 7 DAY GEOMETRIC MEAN: The highest allowable geometric mean of daily discharges over a calendar week.
- g. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
- 2. ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

III. PERMIT LIMITS, LEVELS AND MONITORING – MUNICIPAL

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
001	[X] All Year [] Seasonal from to	Limestone Creek	07/01/2014	06/30/2019

			···							
PARAMETER		EFFLU	ENT LIM	пт		MONITORING REQUIREMENTS				
TAKAWETEK	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Loc	ation Effluent	FN
Flow	30-Day Average	6.5	MGD	_		Continuous	N/A	Х	_	
CBOD₅	30 day average	25	mg/l	1355	lbs/d	2/week	24-hr comp	X	X	1
CBOD₅	7-Day Average	40	mg/l	2168	lbs/d	2/week	24-hr comp	X	X	
UOD	7-Day Average	Monitor	mg/l	2093	lbs/d	2/week	24-hr comp	X	X	2
Solids, Suspended	30-Day Average	30	mg/l	1626	lbs/d	2/week	24-hr comp	X	X	1
Solids, Suspended	7-Day Average	45	mg/l	2439	lbs/d	2/week	24-hr comp	X	X	
Solids, Settleable	Daily Max.	0.1	ml/l	-	-	3/day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	5.0	mg/l	-	-	2/week	Grab	Х	X	
pН	Range	6.0 - 8.5	SU	-	_	3/day	Grab	Х	X	
TKN (as Nitrogen)	30-Day Average	<u>-</u>	-	Monitor	lbs/d	2/week	24-hr comp	X	X	
Ammonia (as NH ₃) (May 15 to October 15)	30-Day Average	-	-	76.0	lbs/d	2/week	24-hr comp	Х	Х	
Ammonia (as NH ₃) (October 16 – May 14)	30-Day Average	-		Monitor	lbs/d	2/week	24-hr comp	Х	Х	
Phosphorus, Total (as P)	30-Day Average	1.0	mg/l	-	-	2/week	24-hr comp	_	X	
Cyanide, Total	Daily Maximum	Monitor	mg/l	0.69	lbs/d	1/month	8-hr comp	-	X	4, 5
Iron Recoverable	Daily Maximum	Monitor	mg/l	90.0	lbs/d	1/month	24-hr comp	-	Х	:
Mercury	Daily Maximum	50	ng/l	-	-	Quarterly	Grab	-	X	3
Temperature		Monitor	°C	-	-	3/day	Grab	Χ.	X	
Effluent Disinfection req	uired: [] All	Year X] Seasor	nal from _	May 15	to October	· <u>15</u>			,
Coliform, Fecal	30 day geometric mean	200	No./1 00 ml			2/week	Grab	-	х	4
Coliform, Fecal	7 day geometric mean	400	No./1 00 ml		-	2/week	Grab	-	Х	4
Chlorine, Total Residual	Daily Max.	0.02	mg/l			3/day	Grab	_	Х	4, 6

Page 5 of 19

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				
		Sample Units Frequency		Location		FN				
Whole Effluent Toxicity			Ones	Action	Units	Frequency	Туре	Influent	Effluent	<u> </u>
WET - Acute		, 		Levels			<u> </u>	<u> </u>	1	T
Invertebrate	See footnote	<u> </u>		0.3	TUa	Quarterly	See footnote	-	X	7
WET - Acute Vertebrate	See footnote			0.3	TUa	Quarterly	See footnote	-	Х	7
WET - Chronic Invertebrate	See footnote			2.9	TUa	Quarterly	See footnote		X	7
WET - Chronic Vertebrate	See footnote			2.9	TUa	Quarterly	See footnote	-	x	7

Footnotes:

- 1. Effluent shall not exceed 15% and 15% of influent values for BOD5 & TSS respectively.
- 2. Ultimate Oxygen Demand shall be computed as follows: UOD = 1.5 X CBOD5 + 4.5 X TKN (Total Kjeldahl Nitrogen)
- 3. See page 12 for additional information.
- 4. Monitoring of these parameters is only required during the period when disinfection is required.
- 5. Three (3) grab samples shall be collected and combined in the laboratory prior to analysis.
- 6. Interim limit of 2.0 mg/l shall be effective until 60 days after the installation of a selected alternative. See compliance schedule on page 14 of this permit.

7. Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of Chronic only. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 1.47:1 for acute, and 1.94:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

 $\underline{\text{Monitoring Period}}$ - WET testing shall be performed at the specified sample frequency for the duration of the permit during calendar years ending in 5 and 0.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC50) or (100)/(48 hr EC50) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC50 or 48 hr EC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

PERMIT LEVELS AND MONITORING

TEACHT DE CHESTAND MONITORING							
PARAMETER	MONITORING ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN		
Zinc, Total Recoverable	Monitor	mg/l	2/year	24-hr comp			
Zinc, Total Recoverable	3.1	lbs/d	2/year	24-hr comp			
Chloroform	Monitor	. mg/l	2/year	Grab			
Chloroform	0.6	lbs/d	2/year	Grab			
Bis(2-ethylhexyl) Phthalate	Monitor	mg/l	2/year	8-hr comp	1		

Footnote:
1. Three grab samples shall be collected and combined in the laboratory prior to analysis.

IV. PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

- A. <u>DEFINITIONS</u>. Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section (PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS):
 - 1. <u>Categorical Industrial User (CIU)</u> an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Sub-chapter N;
 - 2. <u>Local Limits General Prohibitions</u>, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
 - 3. The Publicly Owned Treatment Works (the POTW) as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.
 - 4. <u>Program Submission(s)</u> requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by letter dated <u>September 26, 1985</u>.
 - 5. <u>Significant Industrial User (SIU)</u>
 - a. CIUs;
 - b. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
 - c. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
 - d. Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.
 - 6. <u>Substances of Concern</u> Substances identified by the New York State Department of Environmental Conservations Industrial Chemical Survey as substances of concern.
- B. <u>IMPLEMENTATION</u>. The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:
 - 1. <u>Industrial Survey</u>. To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
 - a. Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
 - b. Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
 - c. Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all significant industrial users of the POTW.
 - 2. <u>Control Mechanisms</u>. To provide adequate notice to and control of industrial users of the POTW the permittee shall:
 - a. Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS-Continued

standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

- b. Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
- 3. <u>Monitoring and Inspection</u>. To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
 - a. Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
 - b. The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
 - c. The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
 - d. Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
- 4. <u>Enforcement</u>. To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
 - a. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
 - b. Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 471.
 - c. Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).
 - d. Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.
- 5. Record keeping. The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with Part II. Section 10.3.a.
- 6. <u>Staffing</u>. The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS-Continued

C. <u>SLUDGE DISPOSAL PLAN</u>. The permittee shall notify NYSDEC and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

D. <u>REPORTING</u>. The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Permits and Compliance Branch; USEPA Region II; 26 Federal Plaza; New York, NY 10278; a periodic report, prepared and submitted in accordance with the consistent periodic reporting format established by the Department in the document entitled <u>NYSDEC POTW Periodic Pretreatment Report</u> - 1994, that briefly describes the permittee's program activities over the previous year. This report shall be submitted to the above noted offices within 60 days of the end of the reporting period. The reporting period shall be annual. Each report shall cover the period from January 1st to December 31st.

The periodic report shall include:

- 1. <u>Industrial Survey</u>. Updated industrial survey information in accordance with 40 CFR 403.12(i)(l) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
- 2. <u>Implementation Status</u>. Status of Program Implementation, to include:
 - a. Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
 - b. Listing of significant industrial users issued permits.
 - c. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results.
 - d. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
 - e. Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
 - f. A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
- 3. <u>Enforcement Status</u>. Status of enforcement activities to include:
 - a. Listing of significant industrial users in Significant Non-Compliance (as defined by 40 CFR 403.8(f)(2)(viii)) with federal or local pretreatment standards at end of the reporting period.
 - b. Summary of enforcement activities taken against non-complying significant industrial users. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR Part 403.8(f)(2)(viii).

V. STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS

1. <u>General</u> - The Department has determined that stormwater discharges from POTWs with design flows at or above 1 mgd shall be covered under the SPDES permit. If the permittee has already submitted a Notice of Intent to the Department for coverage under the General Storm Water permit, the permittee shall submit a Notice of Termination to the Department upon receipt of this final SPDES permit containing the requirement to develop a SWPPP.

The permittee is required to develop, maintain, and implement a Storm Water Pollutant Prevention Plan (SWPPP) to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and other stormwater discharges including, but not limited to, drainage from raw material storage.

The SWPPP shall be documented in narrative form and shall include the 13 minimum elements below and plot plans, drawings, or maps necessary to clearly delineate the direction of stormwater flow and identify the conveyance, such as ditch, swale, storm sewer or sheet flow, and receiving water body. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the SWPPP and may be incorporated by reference. A copy of the current SWPPP shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

- 2. <u>Compliance Deadlines</u> The initial completed SWPPP shall be submitted by 7/1/2015 to the Regional Water Engineer. The SWPPP shall be implemented within 6 months of submissions, unless a different time frame is approved by the Department. The SWPPP shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the SWPPP is inadequate, or (c) a letter from the Department identifies inadequacies in the SWPPP. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All SWPPP revisions (with the exception of minimum elements see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the SWPPP (or of any minimum elements) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
- 3. <u>Facility Review</u> The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at http://www.dec.state.ny.us/website/dcs/permits/olpermits/form2c.pdf) as well as those that are required to be monitored by the SPDES permit.

4. A. 13 Minimum elements - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify Best Management Practices (BMPs) that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of minimum elements of the SWPPP and BMPs is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 833-B-09-002 (available on-line at http://nepis.epa.gov/pubtitleOW.htm) At a minimum, the plan shall include the following elements:

STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS - Continued

1. Pollution Prevention Team	6. Security	10. Spill Prevention & Response
2. Reporting of BMP Incidents	7. Preventive Maintenance	11. Erosion & Sediment Control
3. Risk Identification & Assessment	8. Good Housekeeping	12. Management of Runoff
4. Employee Training	9. Materials/Waste Handling, Storage, & Compatibility	13. Street Sweeping

5. Inspections and Records

Note that for some facilities, especially those with few employees, some of the above may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the SWPPP that do not apply to your facility, along with an explanation, for instance if street sweeping did not apply because no streets exist at the facility.

B. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters - As part of the erosion of and sediment control element, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters.

The SWPPP shall conform to the New York Standards and Specifications for Erosion and Sediment Control and New York State Stormwater Management Design Manual, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity at least 30 days prior to soil disturbance. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed Notice of Intent (NOI) form shall be submitted (available at www.dec.state.ny.us/website/dow/toolbox/swforms.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP is properly implemented.

Page 12 of 19

VI. MERCURY MINIMIZATION PROGRAM – High Priority POTWs

- 1. General The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP). The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP will be to reduce mercury effluent levels in pursuit of the WQBEL. Note The mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy DOW 1.3.10.
- 2. <u>MMP Elements</u> The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. As a minimum, the MMP shall include an on-going program consisting of: periodic monitoring designed to quantify and, over time, track the reduction of mercury; an acceptable control strategy for reducing mercury discharges via cost-effective measures, which may include more stringent control of tributary waste streams; and submission of periodic status reports.
 - A. Monitoring The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. All permit-related wastewater and stormwater mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples shall be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls. Minimum required monitoring is as follows:
 - i. <u>Sewage Treatment Plant Influent & Effluent, and Type II SSO Outfalls</u> Samples at each of these locations must be collected in accordance with the minimum frequency specified on the mercury permit limits page.
 - ii. <u>Key Locations in the Collection System and Potential Significant Mercury Sources</u> The minimum monitoring frequency at these locations shall be semi-annual. Monitoring of properly treated dental facility discharges is not required.
 - iii. <u>Hauled Wastes</u> Hauled wastes which may contain significant mercury levels must be periodically tested prior to acceptance to ensure compliance with pretreatment/local limits requirements and/or determine mercury load.
 - iv. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request.
 - B. <u>Control Strategy</u> An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, including but not limited to more stringent control of industrial users and hauled wastes. The control strategy will become enforceable under this permit and shall contain the following minimum elements:
 - i. <u>Pretreatment/Local Limits</u> The permittee shall evaluate and revise current requirements in pursuit of the goal.
 - ii. Periodic Inspection The permittee shall inspect users as necessary to support the MMP. Each dental facility shall be inspected at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6NYCRR Part 374.4. Other mercury sources shall also be inspected once every five years. Alternatively, the permittee may develop an outreach program which informs these users of their responsibilities once every five years and is supported by a subset of site inspections. Monitoring shall be performed as above.
 - iii. Systems with CSO & Type II SSO Outfalls Priority shall be given to controlling mercury sources upstream of CSOs and Type II SSOs through mercury reduction activities and/or controlled-release discharge. Effective control is necessary to avoid the need for the Department to establish mercury permit limits at these outfalls.
 - iv. <u>Equipment and Materials</u> Equipment and materials which may contain mercury shall be evaluated by the permittee and replaced with mercury-free alternatives where environmentally preferable.
 - C. Annual Status Report An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year; and, (e) progress toward the goal. The first annual status report is due one year after the permit is modified to include the MMP requirement and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation, including the dental forms required by 6NYCRR Part 374.4, which shall be available for review by NYSDEC representatives. Copies shall be provided upon request.
- 3. MMP Modification The MMP shall be modified whenever: (a)changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or, (d) pursuant to a permit modification.

VII. SCHEDULE OF SUBMITTALS

The permittee shall submit the following information to the Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page of this Permit, and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505:

Outfall(s)	Parameter(s) Affected	Required Action	Due Date
001	Flow	The permittee shall submit a report updating activities being undertaken as part of the existing Sewer System Evaluation Survey (SSES). The updated survey report shall detail efforts the permittee has made since the 2002 SSES report, including a summary of areas identified as being in need of attention and any resulting improvements made to the collection system. The update report shall include additional methods the County is either using, or proposing to use, to remove all I/I to the maximum extent practical. These methods may include, but are not limited to, those described in the Handbook: Sewer System Infrastructure Analysis and Rehabilitation, EPA/625/6-91/030, 1991; and Existing Sewer Evaluation and Rehabilitation, WEF MOP FD-6, 1994, including sewer system rehabilitation, improvements in its operation and maintenance program, updated sewer use ordinances or intermunicipal agreements that address satellite collection system operation and maintenance, and/or improvements to its WWTP.	01/01/2015
-		The permittee shall submit an implementation schedule for any proposed additional activities or modifications to the SSES.	04/01/2015
		The permittee shall submit quarterly progress reports, no later than the 15 th of the month following the end of the calendar quarter, documenting its efforts to remove all I/I to the maximum extent practical during the previous calendar quarter.	Every Jan. 15, Apr. 15, Jul. 15, Oct. 15

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

b) The above actions are one time requirements. The permittee shall submit the results of the above actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submittal(s) noted above. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT."

VIII. SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Parameter(s) Affected	Interim Effluent Limit(s)	Compliance Action	Due Date
001	Chlorine, Total Residual	2.0 mg/l	Interim Permit Limit	Effective 07/01/2014 to 05/15/2018
001	Chlorine, Total Residual	-	Permittee shall provide plans to the Department for achieving final permit limit	04/01/2015
001	Chlorine, Total Residual		Permittee shall provide status report to the Department documenting progress toward achieving final permit limit.	01/01/2016 (see note (b) below)
001	Chlorine, Total Residual	0.02 mg/l (final)	Final Permit Limit	Effective 05/18/2018

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

- b) For any action where the compliance date is greater than 9 months past the previous compliance due date, the permittee shall submit interim progress reports to the Department every nine (9) months until the due date for these compliance items are met.
- c) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
 - 1. A short description of the non-compliance;
 - A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 - 3. A description or any factors which tend to explain or mitigate the non-compliance; and
 - 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- d) The permit may be modified to contain a new or additional schedule, if necessary, leading to timely completion of milestone dates. Additionally, the permittee may request an extension of the final compliance date in accordance with 6 NYCRR Part 750-1.18 should the final compliance action be delayed as a result of extended review by a federal, state or local government or as a result of public process. Such request shall be made in writing to the Region 7 Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505. The Department shall make all best efforts to respond to such written request as soon as practicable and, if the Department is in agreement with the request, will grant the proposed extension at that time. The Department will not unreasonably withhold its approval for a modification.

IX. DISCHARGE NOTIFICATION REQUIREMENTS

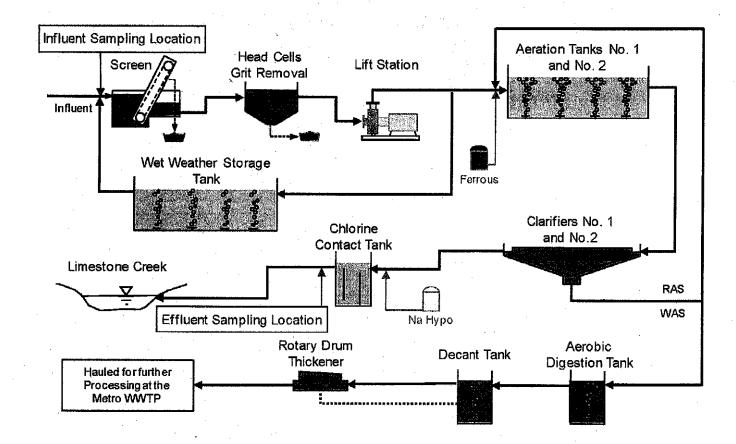
- (a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

N.Y.S. PERMITTED DISCHARGE POINT SPDES PERMIT No.: NY OUTFALL No. :	
For information about this permitted discharge contact:	
Permittee Name:	·
Permittee Contact:	
Permittee Phone: () - ### - ####	
OR:	
NYSDEC Division of Water Regional Office Address :	
NYSDEC Division of Water Regional Phone: () - ### -####	

- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water. The signs shall have minimum dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:
- (e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the RECORDING, REPORTING. AND ADDITIONAL MONITORING REQUIREMENTS page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained on record for a period of five years
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.
- (g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:
 - (i) such sign would be inconsistent with any other state or federal statute;
 - (ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;
 - (iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;
 - (iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or
 - (v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.
- (h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, Central Office, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

X. MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



XI. General Requirements

6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs b through g following.

General Conditions b.

a.	Duty to comply	6 NYCRR Part 750-2.1(e) & 2.4
Ъ.	Duty to reapply	6 NYCRR Part 750-1.16(a)
c.	Need to halt or reduce activity not a defense	6 NYCRR Part 750-2.1(g)
d.	Duty to mitigate	6 NYCRR Part 750-2.7(f)
e.	Permit actions	6 NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h)
f.	Property rights	6 NYCRR Part 750-2.2(b)
g.	Duty to provide information	6 NYCRR Part 750-2.1(i)
h.	Inspection and entry	6 NYCRR Part 750-2.1(a) & 2.3
ara	tion and Maintenance	

c. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR Part 750-2.8
2.	Bypass	6 NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR Part 750-1.2(a)(94) & 2.8(c)

Monitor d.

ring	and Records	
1.	Monitoring and records	6 NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2),
		2.5(d) & 2.5(a)(6)
2.	Signatory requirements	6 NYCRR Part 750-1.8 & 2.5(b)
ina D) aquiraments	

e. Reporting Requirements

•	•	
1.	Reporting requirements	6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17
2.	Anticipated noncompliance	6NYCRR Part 750-2.7(a)
3.	Transfers	6NYCRR Part 750-1.17
4.	Monitoring reports	6NYCRR Part 750-2.5(e)
5.	Compliance schedules	6NYCRR Part 750-1.14(d)
6.	24-hour reporting	6NYCRR Part 750-2.7(c) & (d)
7.	Other noncompliance	6NYCRR Part 750-2.7(e)
8.	Other information	6NYCRR Part 750-2.1(f)
9.	Additional conditions applicable to a POTW	6 NYCRR Part 750-2.9
10.	Special reporting requirements for	6 NYCRR Part 750-2.6

ſ. Planned changes.

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
 - The alteration or addition could significantly change the nature or increase the quantity of pollutants ii. discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR 122.42(a)(1).
 - The alteration or addition results in a significant change in the permittee's sludge use or disposal iii. practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency, addressed as follows: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

Notification Requirement for POTWs g.

discharges that are not POTWs

- All POTWs shall provide adequate notice to the Department and the USEPA of the following: i.
 - Any new introduction of pollutants into the POTW from an indirect discharger which would be 1. subject to section 301 or 306 of CWA if it were directly discharging those pollutants:
 - 2. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

XI. General Requirements

- 3. For the purposes of this paragraph, adequate notice shall include information on:
 - a. the quality and quantity of effluent introduced into the POTW, and
 - b. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, addressed as follows: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

H. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

I. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

J. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed WTC Notification Form for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

- 1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department.
- 2. The permittee shall **maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
- 3. The permittee shall **submit a completed** *WTC Annual Report Form* each year that they use and discharge WTCs. This form shall be attached to either the December DMR or the annual monitoring report required below.

The WTC Notification Form and WTC Annual Report Form are available from the Department's website at http://www.dec.ny.gov/permits/93245.html.

XII. RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A.	The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five year from the date of the sampling for subsequent inspection by the Department or its designated agent. Also, monitoring information required by this permit shall be summarized and reported by submitting;
	(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.
	(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.
	X (if box is checked) a monthly "Wastewater Facility Operation Report" (form 92-15-7) to the:
	X Regional Water Engineer and/or X County Health Department or Environmental Control Agency specified below
	Send the <u>original</u> (top sheet) of each DMR page to: Department of Environmental Conservation Division of Water Bureau of Watershed Compliance Programs 625 Broadway Albany, New York 12233-3506 Send the first <u>copy</u> (second sheet) of each DMR page to: Department of Environmental Conservation Regional Water Engineer, Region 7 615 Erie Boulevard West Syracuse, New York 13204
	Phone: (518) 402-8177 Phone: (518) 402-8177
	Send an additional <u>copy</u> of each DMR page to: Onondaga County Department of Health Division of Health
	P. O. Box 190 Syracuse, NY 13215
	Syracuse, NT 19219
В.	Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
C.	More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
D.	Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
E.	Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
F.	Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Deportment of Health

Environmental Laboratory Accreditation Program.

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 1 OF 14

Municipal SPDES Permit Fact Sheet

I. SUMMARY OF PROPOSED PERMIT CHANGES

A State Pollutant Discharge Elimination System (SPDES) permit 5-year renewal is proposed. Following is a summary of the proposed changes in the draft permit as compared to the currently effective permit; the details of these changes are specified below and in the draft permit:

- 1. Cover Page: Facility address and names of contacts and responsible officials were updated.
- 2. Permit pages and conditions were updated to reflect current permit language, Department guidance, and format. Permit pages and conditions were renumbered and reordered.
- 3. Pages 5: Permit included a requirement for Whole Effluent Toxicity (WET).
- 4. Page 10: Stormwater Pollution Prevention Plan requirement was added.
- 5. Page 12: Mercury Minimization Plan requirement is included.
- 6. Page 13: A Schedule of Submittal for an SSES report.
- 7. Page 14: A Schedule of Compliance for TRC Report
- 8. Page 16: A revised flow diagram from the permittee was added.
- 9. Page 17: Permit includes the General Requirements incorporating the 6 NYCRR Part 750 by reference.
- 10. Page 18: Includes updated page for Recording, Reporting and Additional Monitoring.

Please note that when the Department updates a permit this typically includes updated forms incorporating the latest general conditions.

II. BACKGROUND INFORMATION

As noted throughout this document, SPDES permits are based on both federal and state requirements - law, regulation, policy, and guidance. These can generally be found on the internet. Current locations include: Clean Water Act (CWA) www.epa.gov/lawsregs/laws/index.html#env; Environmental Conservation Law (ECL) www.dec.ny.gov/regulations/40195.html; federal regulations www.gpo.gov/fdsys/browse/collectionCfr.action? collectionCode=CFR; state environmental regulations www.dec.ny.gov/regulations/regulations.html; NYSDEC water policy, often referred to as Technical and Operational Guidance Series memos (TOGS), www.dec.ny.gov/regulations/2654.html.

A. Administrative History

The current SPDES permit for the facility became effective on July 1, 2010 and has an expiration date of June 30, 2015. In response to the Department's September 13, 2012 Request for Information, the permittee provided a SPDES NY-2A permit application form and sampling data on December 14, 2012.

B. Outfall and Receiving Water Information

Outfall Information:

The facility discharges treated sewage through Outfall 001. The sewage collection system consists of separate sewers. The Meadowbrook-Limestone (MBLS) WWTP is operated under the Onondaga County Department of Water Environment Protection (OCDWEP). The WWTP has been in service since 1973 and has a design flow of 6.5 MGD with a peak flow capacity of 16 MGD. This facility provides advanced secondary treatment of wastewater using extended aeration activated sludge process. Wastewater is collected throughout significant sections of the Towns of Dewitt and Manlius; along with smaller portions of the Town of Pompey and the City of Syracuse. Wastewater is transported via a series of pumping stations and gravity trunk sewers to the MBLS WWTP. The 48" Meadowbrook Trunk Sewer and the 18" Fremont Trunk Sewer enters the property via gravity

Permittee:

Onondaga County Department of Water Environment

Facility:

Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 2 OF 14

feed and combine at Manhole No.2, located off the southeast corner of the maintenance garage. Wastewater influent is primarily from residential and commercial sources.

Raw influent wastewater enters the headworks building for screening and grit removal using a bar rack and a mechanical screen rake. Grit removal occurs in an aerated grit head cell, which uses a EUTEK Systems, Inc., stacked tray vortex grit removal system. Screenings and grit are collected and stored in dumpsters, removed by trucks and hauled to landfill. Wastewater is then pumped from the influent wet well, through a flow sensor measurement device and then into the aeration distribution box where it is mixed with return activated sludge. The wastewater/sludge mixture is then split evenly in into two (2) Aeration Tanks where the activated sludge treatment process occurs in a parallel configuration. The activated sludge then flows to the circular final clarifiers where sludge settling occurs. Effluent from the Final Clarifiers flows to the Chlorine Contact Tank for seasonal disinfection, sodium hypochlorite, before discharge to Limestone Creek. Total Phosphorus is removed year round with the use of ferrous chloride.

Activated sludge collected in the clarifiers is recirculated to the Aeration Tank Distribution Structure and/or wasted to the aerated sludge holding tank. Decanted sludge is thickened using a rotary drum thickener, stored in a thickened sludge holding tank and hauled to the Metropolitan-Syracuse WWTP for further treatment.

The following are the service area pumping stations which are tributaries to Meadowbrook Limestone WWTP:

Pump Station	Ownership
Jamesville Penn	OCDWEP
Manlius	OCDWEP
Butternut I	Town of Dewitt
Butternut II	Town of Dewitt
East Genesee	Town of Dewitt
Jamesville Hamlet	Town of Dewitt
Limestone	Town of Dewitt
Lyndon	Town of Dewitt
Peck Hill	Town of Dewitt
Towpath Commons	Town of Dewitt
Winterton I	Town of Dewitt
Winterton II	Town of Dewitt
Austin Meadows	Town of Manlius
Cavalry Woods	Town of Manlius
Clark Hill	Town of Manlius
Falconview I	Town of Manlius
Falconview II	Town of Manlius
Fremont	Town of Manlius
Highbridge Commons	Town of Manlius
Kendall Drive	Town of Manlius
Ninty Acres	Town of Manlius
Signal Hill I	. Village of Fayetteville
Signal Hill II	Village of Fayetteville
Arbutus Park	T own of Pompey

In addition, a one-million gallon tank is available for storing excess flows during high flow/wet weather events.

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 3 OF 14

The location of the outfall, and the name, classification and index numbers of the receiving waters are indicated in the *Outfall & Receiving Water Location Table* at the end of this fact sheet. The classifications of individual surface waters are specified in 6 NYCRR Parts 800 – 941. The best uses and other requirements applicable to the specific water classes are specified in 6 NYCRR Part 701.

Receiving Water Information:

This permit was developed based on the 7Q10 flow of 19 cfs which was obtained from the USGS/NYSDEC, Bulletin 74, 1979, gauging station number. The 30Q10 flow of 22.2 cfs was then estimated by multiplying the 7Q10 flow by 1.2. There appears to be a discrepancy between the 7Q10 value in the permit file which was given as 18 cfs. Whereas, the Bulletin lists the flow as 19 cfs – the value being used in this current permit renewal.

The existing permit was originally developed based on an agreement between the permittee and the NYSDOT to allow some flow diversions from the Limestone Creek to the Barge Canal. The agreement also specified that there will be no diversion during low flows. Therefore, a flow of approximately 6.1 cfs was used to divert flows from Limestone Creek at the structure near Fayetteville from May 15 to October 15. The permit was developed based on the remaining 7Q10 flow of 11.9 cfs.

The permittee submitted a SPDES permit renewal application on December 14, 2012. The application also included photographs showing that the diversion structure has been demolished or in disrepair. The photographs appeared to indicate that there will no longer be any flow diversions from the creek to Barge Canal. As part of this permit development, DEC staff and the facility representatives visited the site of the diversion structure on April 26, 2013. During the visit, staff observed evidence of ongoing renovation but could not determine who the parties responsible for the renovation (see attached photos). More importantly, there was no evidence of a weir or a barrier between the creek and the canal that could prevent flow diversions under any flow conditions.

NYSDEC would like to ensure that during critical low flows at Limestone Creek the stream will have enough assimilative capacity for maximum allowable loadings of treated effluents at the Meadowbrook-Limestone WWTP. Based on the information received from the permittee, the present condition of the diversion structure shows that during low flow conditions, there will be a negligible flow diversion from Limestone Creek to the Canal. However, a 10% flow diversion will be assumed for unforeseen events so that the 7Q10 flow of 17.1 cfs will be used in this permit renewal. The structure in the dam area is under renovation to include a walk bridge and other recreational structures, hence, the permit may be reopened for modification if additional information shows that the conditions in Limestone Creek will not support enough assimilative capacities at all times.

Mixing zone analyses are conducted in accordance with the following documents: EPA T.S.D, entitled "Water Quality Based Toxics Control," dated March, 1991; EPA Region VIII "Mixing Zones and Dilution Policy", dated December, 1994; NYSDEC TOGS 1.3.1, entitled "Total Maximum Daily Loads and Water Quality Based Effluent Limits." Other critical receiving water data for temperature, pH, hardness and/or salinity were based on record on file. This flow information is listed in the *Pollutant Summary Table* at the end of this fact sheet together with applicable ambient water quality criteria, ambient background data (if available), and outfall pollutant data.

Impaired Waterbody Information – The CWA requires states to identify impaired waters, where designated uses are not fully supported. For these impaired waters/pollutants, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) restricting waterbody uses.

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 4 OF 14

The 2008 Priority Waterbody List (PWL) inventory listed the water quality conditions in Limestone Creek as moderately impacted due to "wastewater treatment plant discharges is the Onondaga County Meadowbrook-Limestone WWTF which has a history of permit violations."

C. Discharge Composition

The *Pollutant Summary Table* at the end of this fact sheet presents the existing effluent quality of the facility. Concentration and mass data are presented, based on Discharge Monitoring Report (DMR), permit application, and possibly other data submitted by the permittee for the period December 2009 to November 2012. The statistical methods utilized to calculate 95th and 99th percentiles are in accordance with TOGS 1.2.1 and the USEPA, Office of Water, Technical Support Document For Water Quality-based Toxics Control, March 1991, Appendix E. Statistical calculations were not performed for parameters with insufficient data. Generally, ten or more data points are needed to calculate percentiles (See TOGS 1.2.1 Appendix D). Non-detects were excluded from the statistical calculations.

D. Compliance History

A review of the facility's DMRs and other compliance information from December 2009 to November 2012 shows that the facility had the following violations:

Parameter	Periods of Excedances	Number of Occurrence(s)
Flow	3/10, 12/10, 3/11, 4/11, 5/11, 1/12	6
Nitrogen	4/11	1
UOD	8/10, 4/11	
Settleable Solids	2/11	1
Suspended Solids Percent Removal	4/11	1
TSS 7-Day Average Loading	8/10, 4/11	2
Zinc, Total	6/10, 6/11	2
Flow Management Certification	2011	>95%

III. PROPOSED PERMIT REQUIREMENTS

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL provide the basis for the effluent limitations and other conditions in the draft permit. The NYSDEC evaluates discharges with respect to these sections of the CWA, ECL, and the relevant federal/state regulations, policy, and guidance to determine which conditions to include in the draft permit.

For existing permittees, the previous permit typically forms the basis for the next permit. Permit revisions are implemented where justified due to changed conditions at the facility and/or in response to updated regulatory requirements.

A. Effluent Limitations

If applicable, the existing permit limits are evaluated to determine if these should be continued, revised, or deleted. Generally, existing limits are continued unless there is justification to do otherwise. Other pollutant monitoring data are also reviewed to determine the presence of additional contaminants that should be included in the permit.

The permit writer determines the **technology-based effluent limits (TBELs)** that must be incorporated into the permit. A TBEL requires a minimum level of treatment for industrial point sources based on currently available

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014 Permit Writer: Dare Adelugba

PAGE 5 OF 14

treatment technologies and/or Best Management Practices (BMPs). The Department then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances to occur, water qualitybased effluent limits (WQBELs) must be included in the permit. A WQBEL is designed to ensure that the water quality standards of receiving waters are being met. In general, the CWA requires that the effluent limits for a particular pollutant are the more stringent of either the TBEL or WOBEL.

1. TBELs & Anti-Backsliding:

CWA sections 301(b)(1)(B) and 304(d)(1), ECL section 17-0509, and 6 NYCRR Part 750-1.11 require technology-based controls, known as secondary treatment, on Publicly Owned Treatment Works (POTW) effluents. The applicable regulations are specified in 40 CFR Part 133.102 and 6 NYCRR Part 750-1.11. These and other requirements are summarized in TOGS 1.3.3.

Anti-backsliding requirements are specified in the CWA, sections 402(o) and 303(d)(4), ECL 17-0809 and regulations at 40 CFR 122.44(l) and 6 NYCRR Part 750-1.10. These requirements are summarized in TOGS 1.2.1. Generally, the regulations prohibit the relaxation of effluent limits in reissued permits unless one of the specified exceptions applies. In practice, limits in reissued permits will generally be no less stringent than previous permit limits to ensure compliance with anti-backsliding requirements. Otherwise, the specific exceptions that allow backsliding will be cited on a case-by-case basis.

Following is the TBEL & Anti-backsliding assessment for each pollutant present in the discharge(s). A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific TBEL & Anti-Backsliding Analysis:

In addition to the concentration limits noted below, 40 CFR 122.45(f) requires that SPDES permits contain mass-based limits for most pollutants. Mass-based limits in lbs/day are derived by multiplying the design flow in MGD by the concentration limit in mg/L by a conversion factor of 8.34. Limits are typically expressed using two significant figures.

Flow – Consistent with TOGS 1.3.3, a monthly average flow limit of 6.5 MGD is specified, which is equal to the average daily design capacity of the treatment plant.

pH range - 40 CFR 133.102 requires that the effluent pH be within the range of 6.0 to 8.5 standard units (SU).

Temperature – Monitoring is required for process control and informational purposes,

Dissolved Oxygen – See WQBEL below.

5-day Carbonaceous Biochemical Oxygen Demand (CBOD₅) - 40 CFR 133.102 requires that the 30 day (monthly) average be limited to 25 mg/L, the 7-day (weekly) average be limited to 40 mg/L, and the minimum monthly average percent removal be 85%. The 25mg/L and 1355 lbs/d WQBELs from the previous permit are being rolled over in accordance with anti-backsliding requirements. See WQBEL section for more basis.

40 CFR 133.102 requires that the 30 day (monthly) average be limited to 30 mg/L, the 7-day (weekly) average be limited to 45 mg/L, and the minimum monthly average percent removal be 85%. However, these TBELs are superseded by a very low UOD WQBEL.

Total Suspended Solids (TSS) – Requirements are identical to BOD5. The 30 mg/L and 1626 lbs/d WOBELs from the previous permit are being rolled over in accordance with anti-backsliding requirements. See WOBEL section for more basis.

Permittee:

Onondaga County Department of Water Environment

Facility:

Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 6 OF 14

Settleable Solids – In accordance with TOGS 1.3.3 a limit of 0.1ml/l is being rolled over from the existing permit.

Ultimate Oxygen Demand (UOD) - See WQBEL Section below.

Total Kjeldahl Nitrogen (TKN)/ Total Nitrogen - Existing permit limits will be carried over.

Ammonia – The existing limit for ammonia will apply to summer time only. The winter limit will be "monitor only."

Phosphorus - A phosphorus limit of 1.0 mg/l was carried over from the existing permit.

Fecal Coliform - See WQBEL section.

Total Residual Chlorine (TRC) - See WQBEL section.

Mercury – See WQBEL section below.

2. WQBELs & Anti-Degradation:

In addition to the TBELs previously discussed, the NYSDEC evaluated the discharge to determine compliance with CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Part 750-1.11. These require that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation (WLA).

The procedure for developing WQBELs includes knowing the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. Factors also considered in this analysis include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources. If the expected concentration of the pollutant of concern in the receiving water may exceed the ambient water quality standard or guidance value then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL or WLA for the pollutant is required.

Antidegradation Policy: New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," signed by the Commissioner of NYSDEC, dated September 9, 1985; and, (2) TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegration Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)." A SPDES permit cannot be issued that would result in the water quality criteria being violated. The permit for the facility contains effluent limits which ensure that the existing beneficial uses of the receiving waters will be maintained.

Following is the WQBEL analysis for each pollutant present in the discharge(s). Anti-degradation analysis which justifies applying water quality standards of a higher classification is noted below, if applicable. Refer to section II.B. above for information on discharge location, receiving water information (class, dilution, chemistry), and the existence of any TMDLs. A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Permittee:

Onondaga County Department of Water Environment

Facility:

Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 7 OF 14

Pollutant-Specific WQBEL & Anti-Degradation Analysis:

pH range – The dilution ratio is at least 1:1 so a limit equal to the water quality standard of 6.0 - 8.5 is appropriate.

Temperature – The discharge is to non-trout waters and, typical of STPs, existing effluent quality is below 90 F. Therefore, a limit is not necessary (see 6 NYCRR 704.2(b)(1)(i)) but monitoring only has been specified.

5 day Biochemical Oxygen Demand (BOD5) – See TBEL section above.

Total Suspended Solids (TSS) – See TBEL section above.

Settleable Solids - The narrative water quality standards provided in 6 NYCRR Part 703.2 state that the discharge of settleable solids shall not cause deposition or impair the receiving waters for their best usages. At dilution ratios less than 10:1 a daily maximum WQBEL of 0.1 ml/l is required. Otherwise, the TBEL is sufficient.

Ultimate Oxygen Demand (UOD) – Existing permit was expressed as a mass value only. However, this draft permit now includes both mass and concentration in accordance with 40 CFR 132, Procedure 7 that requires that WQBELs in Great Lake States be expressed as both a concentration value and a corresponding mass loading rate.

Additionally, in DEC TOGS 1.2.1, Section I.C2e, mass and concentration can be included in the permit where there is a variability of the wastewater discharge flow to low flow of the stream. Variability can be determined as the difference between the mean and the high wastewater treatment discharge. The DMR data from December 2009 and November 2012 shows a Standard Deviation value of 1.25; therefore, the limits for UOD are "Monitor" and 2039 lbs/day, respectively, for concentration and loading.

Dissolved Oxygen - Monitoring is required for process control and informational purposes. However, due to the water quality conditions in the stream, the existing limit of 5.0 mg/l will continue in the permit. This is the best possible DO value that can ensure consistent compliance with that the water quality standards for DO within the first reach in the stream.

Total Kjeldahl Nitrogen (TKN)/Ammonia/Total Nitrogen - Existing permit limits for these parameters will continue. Although the 7Q10 flow in the stream has increased from 14.5 cfs to 19 cfs because there are no longer diversions from Limestone Creek, the change results in minimal changes to the WQBELs. The 2008 Priority Waterbody List (PWL) inventory listed the water quality conditions in Limestone Creek as moderately impacted due to "wastewater treatment plant discharges is the Onondaga County Meadowbrook-Limestone WWTF which has a history of permit violations." Because of the known water quality issues in the creek, the existing permit limits will continue without consideration to the increase in the 7Q10 stream flows.

Phosphorus - A phosphorus limit of 1.0 mg/l was carried over from the existing permit.

Pathogens - Fecal Coliform geometric mean limits of 200/100 ml monthly average and 400/100 ml weekly average are specified.

Total Residual Chlorine (TRC) – The existing permit contains a TRC limit of 2.0 mg/l. However, the new water quality analysis shows a daily maximum TRC WQBEL of 0.02 mg/L. This limit was determined by

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

PAGE 8 OF 14 multiplying the water quality standard of 5ug/L by the chronic dilution ratio in accordance with DEC TOGS

Date: April 24, 2014

Permit Writer: Dare Adelugba

1.3.1.E according to the following equation: Dilution Factor x WOC (ug/l)

The permit will contain an interim limit of 2.0 mg/l along with a compliance schedule for the permittee to submit a plan on how the WOBEL will be met.

Metals – Monitoring for metals includes both concentrations and loadings. This is consistence with (6NYCRR 750-1.10(a); TOGS 1.3.3, Section VI.C.5.a. (5); and Section 5.7.1, EPA 1991 Toxicity Support Document, for effluents discharging into waters with low dilution to ensure attainment of water quality standards.

Cadmium/Lead/Chromium/Copper/Nickel: These parameters will be removed from the permit because a 3-year DMR analysis shows that they were not detected or detection was significantly low in the WWTP effluent discharges.

Zinc – DMR analysis during the period between December 2009 and November 2012 showed two exceedances of Action Levels (AL).

Water quality evaluation showed that the aquatic chronic and acute water quality standards for Class C waters are 0.182 mg/L and 0.26 mg/L, respectively. This water quality standard is expressed as a dissolved concentration; therefore, EPA metals translators of 1.014 for chronic and 1.022 were used to calculate a total effluent limits. Based on the design flow of the facility, the calculated limits are 0.355 mg/L (19.24 lbs/day) and 0.383mg/L (20.77 lbs/day), respectively for chronic and acute. Although the calculated WQBEL is higher than the projected effluent limit of 4.88 lbs/day, the existing level will continue as a permit limit. The decision to continue with the existing permit limit was based on the DEC TOGS 1.2.1, Section I.B.3.

Iron – There was no reported exceedances of permit limit in the DMR analysis during the period between December 2009 and November 2012. The aquatic water quality standard for Class C waters is 1.0 mg/L. This water quality standard is expressed as a dissolved concentration; therefore, EPA metals translator of 1.521 was used to calculate a total effluent limit. The calculated WOBEL limit is 2.08 mg/L (96.06 lbs/day). Although the calculated WOBEL is higher than the projected effluent limit of 47.63 lbs/day, the existing permit limit of 90 lbs/day will continue consistent with the Antibacksliding policy under 40 CFR 122.44.

Cyanide /Chloroform/Bis(2-ethylhexyl) Phthalate: These parameters were recorded in the DMR as present only once during the period between December 2009 and November 2012. Existing permit limits for loadings and concentrations are being rolled over into the new permit.

Mercury

Mercury was detected in the effluent at a level of 4 ng/l, which exceeds the water quality standard of 0.7 ng/L. New York State's mercury multiple discharge variance (MDV) in TOGS 1.3.10 is being applied. Consequently, the permit includes a 50 ng/L effluent limit; a mercury minimization program requirement; and routine monitoring using EPA Method 1631. Refer to TOGS 1.3.10 for further detail.

Chloroform – There is no WQ guidance for Class C for this parameter so the existing permit monitoring will continue.

Whole Effluent Toxicity (WET) Testing - WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests; acute and chronic. Acute

Onondaga County Department of Water Environment Permittee:

Date: April 24, 2014 Facility: Meadowbrook-Limestone WWTP Permit Writer: Dare Adelugba

SPDES No: NY0027723 PAGE 9 OF 14

toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

- 1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
- 2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
- 3. There is the presence of substances for which WOBELs are below analytical detectability.
- 4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
- 5. There are observed detrimental effects on the receiving water biota.
- 6. Previous WET testing indicated a problem.
- 7. Treatment plants which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs < 1 MGD which are managing industrial pretreatment programs.

A Reasonable Potential analysis was performed, including an evaluation of the discharge against the seven criteria noted above. Criteria 4 and 7 are applicable to the discharge. Based upon this evaluation, WET testing action levels of 0.3 TUa and 2.9 TUc have been included in the draft permit for each species.

B. Monitoring & Reporting Requirements

CWA section 308, 40 CFR 122.44(i), and 6 NYCRR Part 750-1.13 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and for reporting results on DMRs. The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions Specific to This Permit

Compliance Schedule(s): The Total Residual Chlorine (TRC) for the existing permit is substantially lower than the new calculated WQBEL. The permit will contain a compliance schedule asking the permittee to submit an approvable engineering report which evaluates and recommends an alternative disinfection method that will bring the permittee into compliance with the WQBEL for TRC.

Best Management Practices (BMPs) for Combined Sewer Overflows (CSOs): Permit is a separate sewer system so no CSO requirements are applicable.

Industrial Pretreatment Program: The permittee is required to implement a Pretreatment Program in accordance with 40 CFR 403. The program specifies development of an industrial user compliance program. submission of user information, modification of local sewer use law (if necessary), and periodic reporting. This requirement is based on 40 CFR 403 and TOGS 1.3.3 and is being continued from the previous permit.

Sanitary Sewer Overflows (SSOs):

Both the Town of Manlius and Village of Manlius are among the service areas under Meadowbrook Limestone. These two tributary service areas have experienced occasional SSO discharges due to wet weather flows and/or vandalism to the sewer systems. The department is tracking all the SSO events and the department may require abatement under an enforcement order.

Permittee: Onondaga County Department of Water Environment

Facility: Meadowbrook-Limestone WWTP

SPDES No: NY0027723

Date: April 24, 2014

Permit Writer: Dare Adelugba

PAGE 10 OF 14

SSES: The previous Sanitary Sewer Evaluation Survey for the service area was completed in 2003. That report recommended that if rehabilitation of non-County owned sewer system infrastructure was unfeasible, then all leaking County-owned manholes must be rehabilitated, with the concurrent construction of a 5.9 million gallon storage tank located at the treatment plant. Although the County has rehabilitated portions of its collection system and converted a former aerobic digester into a one-million gallon wet weather storage tank, in the intervening time period, the facility's treatment capacity has become severely burdened. Residential and commercial development in the area has increased without an adequate expansion of capacity at the WWTP. The continued occurrence of TYPE III SSOs indicates that the entire sanitary system is overburdened. Therefore, the Department is requiring the facility to submit a report updating activities being undertaken as part of the existing Sanitary Sewer Evaluation Survey to assess the collection system to determine methods of eliminating I/I by sewer system rehabilitation, improvements in its operation and maintenance program, and/or improvements to its WWTP.

Water Treatment Chemicals (WTCs): None.

Pollutant Minimization Program (PMP): Not applicable.

Discharge Notification Act: In accordance with Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters. The permittee is also required to provide a public repository for DMRs as required by the SPDES permit. This requirement is being continued from the previous permit.

Stormwater Pollution Prevention Plan: The permittee is required to develop a stormwater pollution prevention plan to minimize contamination of stormwater run-off from the facility.

D. General Conditions Applicable To All Permits

The permit contains standard regulatory language that is required to be in all SPDES permits. These permit provisions, based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750, include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities. These "general conditions" of permits are typically specified, summarized, or referenced on the first and last pages of the permit.

Permittee: Onondaga County Department of Water Environment Facility: Meadowbrook-Limestone WWTP SPDES No: NY0027723

Date: April 24, 2014 Permit Writer: Dare Adelugba PAGE 11 OF 14

OUTIFALL & RECEIVING WATER LOCATION TABLE

)	Outfall Information	tation	:			Re	ceiving Wa	Receiving Water Information	tion				
	Latitude	Latitude Longitude	Flow Ra	Flow Rate (MGD)					For use l	For use by WQ Engineer - Critical Data	Critical Data			
Outfall #	, , , , ,	", "	Average	Maximum	Name	Class	Water Index Number	7Q10 (MGD)	30Q10 (MGD)	Dilution/ Mixing		Hd	Temp (°F)	Hardness (mg/L)
001	43,03,20	76,00,33	5.54	6.8	Limestone Creek	٦	ONT-66-11- P26-37-6-2	61	22.2	2:1	Acute	8.0	25	250

POLLUTANT SUMMARY TABLES

00

Outfall #

Effluent Parameter	Existing E	Existing Effluent Quality	ality		TBELS			Water Quality Data & WQBEL	ılity Data	& WQBI	£L		Permit Basis
(concentration in ug/l and mass in 1bs/day unless otherwise	concentration	uo	mass				Basis	Ambient Criteria	ient ria		WQBEL		(T or WQ or
(вестед)	Avg/Max 95%/99 %	% 66/%S6	Avg/Max	95%/99% сопс.	сопс.	mass		conc.	тазѕ	conc.	mass	Туре	(VXI
Flow Rate, units = MGD Average 5.54	Average	5.54	Maximum	8.9			NA	7Q10 = =	,30Q10=		, Dilution/Mixing	Aixing	
Stream Flow Monitoring								Roll ov	Roll over from previous permit : June to October	revious per October	rmit : Jun	s to	
(ns) Hd	Minimum 6.96	96.9	Maximum	8.0	6.0 – 8.5			Apply Technology	hnology.				F
Temperature (C)	Average 16.83	16.83	Maximum	22.0	Monitor			Apply Technology	hnology				Т

Onondaga County Department of Water Environment Meadowbrook-Limestone WWTP Permittee: Facility: SPDES No:

NY0027723

Effluent Parameter	Existing E	Existing Effluent Quality	ality .		TBELS			Water Quality Data & WQBEL	ality Data	& WQBI	EL .		Permit Peri
(concentration in ug/l and mass in 1bs/day unless otherwise	concentration	ion	mass				Basis	Ambient	ient ria		WQBEL		(T or WQ or
specinea)	Avg/Max	95%/99 %	Avg/Max	%66/%56	conc.	mass		conc.	mass	conc.	mass	Type	(A)
CBODs, 30 day average, (mg/L), lbs/d	2.25/7.0		70.97/100		25		40 CFR 133.102	Apply Secondary Treatment Technology	condary nent nogy				Н
CBOD _{5,} 7-Day Average, (mg/L), lbs/d	5.5/10		210.97/500	·	40	1355	40 CFR 133.102	Apply Secondary Treatment Technology	condary nent logy				T
Solids, Suspended, 30 day average, (mg/L), lbs/d	4.25/20		211.11/1000		30	2168	40 CFR 133.102	Apply Secondary Treatment Technology	condary nent logy				F
Solids, Suspended, 7- Day Average, (mg/L), lbs/d	10.86/26		667.5/3600		45	2093	40 CFR 133.102	Apply Secondary Treatment Technology	condary nent logy				[
Solids, Settleable, ml/l	0.12/0.7	ŕ			0.1		TOGS 1.3.3	Narrative Std 703.3	td Part				
Ultimate Oxygen Demand (mg/L), lbs/d	782/2000	2000/20			Calculated	2439							—
Dissolved Oxygen (mg/L), lbs/d	8.93/11	11/11			5.0	1 .		4.0- min 5.0 - Avg		3.0		·	٣
TKN (as Nitrogen) (mg/L), lbs/d			74.83/200		Monitor								Т
Ammonia (as NH ₃) (mg/L), lbs/d – Summer			17.66/99.7		ı			0.93	0.549	1.93	104.3		WQ
Ammonia (as NH ₃) (mg/L), lbs/d - Winter		·	17.66/99.7			92		1.30	0.768	2.72	147.0		WQ

Onondaga County Department of Water Environment Meadowbrook-Limestone WWTP NY0027723 Permittee: Facility: SPDES No:

Date: April 24, 2014

	iter: Dare Adelugba	OF 14
-	₩r	13
	Permit Writer: D	PAGE

Effluent Parameter	Existing E	Existing Effluent Quality	ılity		TBELS	-		Water Qu	Water Quality Data & WQBEL	& WQBI	31.		Permit
(concentration in ug/l and mass in lbs/day unless otherwise	concentration	uo	mass				Basis	Ambient	ient sria		WQBEL		(T or WQ or
specified)	Avg/Max	95%/99	Avg/Max	95%/99%	conc.	mass		conc.	mass	conc.	mass	Туре	NA)
Cadmium, T. Recovery (mg/L), lbs/d			0.0/0.04	0.04/0.04	N/A	N/A		0.0045 – C 0.011 – A	0.662 – C 1.603 – A	0.010- C 0.018- A	0.52 – C 0.95 – A		Į.
Phosphorus, Total (as P) (mg/L), lbs/d	0.63/0.91				1.0		GLWQA	1.0 GLWQA		1.0	MA	GLW QA	
Lead, T. Recovery (mg/L), ibs/d			0.0	0.0	N/A	N/A	TOGS 1.1.1	0.11 – C 0.28 – A	1.594- C 40.89-	0.023 – C 0.580 – A	1.23 – C 31.4 – A	DM	F
Cyanide, Total (mg/L), lbs/d			0.03/0.94	0.94/0.94.	69:0	69:0	Rolled over	0.005 – C 0.022 – A	0.759 – C 3.21 – A	0.011 – C 0.046 –	0.50- C 2.11- A	DM	Į
Iron Recoverable (mg/L), lbs/d			18.82/51.40	7.63/47.63	Monitor	52	TOGS 1.1.1	1.0	145.9	2.08	90.96	DM	H
Temperature, °F			16.83/22		Monitor	Monitor						DM	Ţ
Copper, Total Recoverable			0.11/0.63		Monitor	2.5	TOGS 1.1.1	0.02 – C 0.033 – A	2.98 – C 4.84 – A	0.030 – C 0.049 – A	1.63 – C 2.65 – A	DM	ÒM
Nickel, Total Recoverable			0.0	0.0	N/A	N/A	TOGS 1.1.1	0.113 – C 1.017 –A	16.52 – C 148.4 – A	0.167 – C 1.497 – A	9.03 – C 81.2.–	DM	-

Onondaga County Department of Water Environment Meadowbrook-Limestone WWTP NY0027723 SPDES No: Permittee: Facility:

Date: April 24, 2014
Permit Writer: Dare Adelugba
PAGE 14 OF 14

T- 100													
Manuell Farameter	EXISTING E	Existing Effluent Quality	alirty		TBELS			Water Quality Data & WQBEL	ality Data	& WOB	EL		Permit Basis
(concentration in ug/l and mass in lbs/day unless otherwise	concentration	ion	mass			·	Basis	Ambient Criteria	ient žria		WQBEL		(T or WQ or
specified)	Avg/Max	95%/99	Avg/Max	%66/%56	conc.	mass	·	conc.	mass	conc.	mass	Туре	(VX
Zinc, Total Recoverable		·	2.25/3.7	3.7/3.7	Monitor	3.1	Rolled over	0.183 – C 2.260 –A	26.67 – C C 37.98 – A	0.355 – C 0.383 – A	19.24 – C C 20.77 –	DM	L
Chromium, Total Recoverable			0.0	0.0	N/A	N/A	TOGS 1.1.1	0.182 -C 3.815 - A	26.62 – C 556.8 – A	0576 – C 7.933 – A	26.62 – C 366.5 –	DM	£
Chloroform			0.12/0.40	0.4/0.4	Monitor	Monitor	TOGS 1.1.1	Not applicable to Class C	le to Class			DM	
Bis(2-ethylhexyl) Phthalate			0.03/0.20	0.2/0.2	Monitor	Monitor	TOGS 1.1.1	9.0	32.5	1.17	63.25	M	Ţ
Fecal Coliform(7 day), #/100 mL	72.67/320		•		200	1	6NYCRR 703.4	200	700	0		GM	F
Fecal Coliform, monthly median, #/100 mL	31.39/76	r	,	- ,	400	-1	TOGS 1.3.3	2400/ 5000				ВG	Т
Enterococci	1		,	-		,						GM	
Chlorine, Total Residual, mg/L	1.56/2.0				0.02		TOGS 1.3.3	0.005	1.256	0.010*	0.95	DM	L

Notes: C – Chronic

A - Acute

T - Technology

WQ - Water Quality

* Recommend an effluent limit equal to PQL of 0.02mg/l.