

New York State Department of Environmental Conservation

Division of Environmental Permits, Region 2

47-40 21ST Street, Long Island City, NY 11101-5407

Phone: (718) 482-4997 • FAX: (718) 482-4975

Website: www.dec.state.ny.us



Joe Martens
Commissioner

September 27, 2012

By Email

Karen Argenti
KarenArgenti@aol.com

Re: Comments received on draft SPDES permit – NYCDEP Croton Aqueduct Shaft 24 & 25
Application ID: 2-6201-00043/00005
SPDES # NY0200859

Dear Commentor:

The Department has received and reviewed your comments in response to the application referenced above and offers the attached responses from both the Department and the applicant. The Department appreciates your comments on this application. A copy of the issued permit is attached.

Sincerely,

Stephen A. Watts III
Environmental Program Specialist II

cc: Robert Elburn, P.E., DOW
Selvin Southwell, P.E., DOW
Chan Chakrabarti, P.E., DOW
Edward Coleman, P.E., NYCDEP
File

Responsiveness Summary
NYCDEP Croton Aqueduct Shaft 24 & 25
Application ID: 2-6201-00043/00005
SPDES # NY0200859
September 26, 2012

The following comments were received on the draft permit. In all cases, the numbered answers refer to the referenced comment in the original comment letter. The full comments have not been restated here for purposes of brevity.

Responses to Karen Argenti comment letter dated July 25, 2012

Comment 1 – Your statement regarding my email is incorrect, it was never conveyed to you that an Environmental Review was never conducted. See attached NYCDEP response letter (attachment 1).

Comment 2 - See attached NYCDEP response letter (attachment 1).

Comment 3 - See attached NYCDEP response letter (attachment 1).

Comment A – The permit has been in effect since 1993 (attachment 2).

Comment B – The map included in the permit is sufficient for the purposes of the permit.

ATTACHMENT 1



**Environmental
Protection**

Carter H. Strickland, Jr.
Commissioner

James J. Roberts, P.E.
Deputy Commissioner
Bureau of Water &
Sewer Operations
jroberts@dep.nyc.gov

59-17 Junction Boulevard
Flushing, NY 11373

September 14, 2012

Mr. Stephen Watts
Division of Environmental Permits
NYSDEC, Region 2 Office
47-40 21st Street
Long Island City, NY 11101-5407

Re: NYCDEC Permit #2-6201-00043/00005
SPDES # NY-0200859
Facility: NYCDEP Croton Aqueduct Shaft 24 & 25
Response to Public Notice Comments

Dear Mr. Watts,

As requested, the New York City Department of Environmental Protection (NYC DEP) has reviewed the three comments received in response to the public notice for SPDES permit modification NY-0200859. We would like to offer the following responses:

- 1) *The public has not been able to comment on this application which has never had an environmental impact statement review as stated in your email to me. As referred, I reviewed the CWTP FSEIS and there is no mention of any modification, change or impact to the SPDES permit at all. The CWTP FSEIS at the Mosholu Site did not review any permits from NYS DEC except for Air. The NYC DEP did not identify this as a permit in the FSEIS, and so the details have not been presented.*

The NYCDEP did not identify the NY-0200859 SPDES modification in the Croton Water Filtration Plant FSEIS because at the time the CWFP FSEIS was produced, it was thought that the CWFP would only operate within the existing 60 MGD SPDES discharge threshold. Furthermore, no environmental impact would occur under the original 60 MGD scenario given the near-potable quality of the discharge and its small size relative to the flow of the receiving waters. The original permit was issued in 1993 and modified in 2001 for the purpose of aqueduct dewatering. Subsequent to issuing the FSEIS, a detailed startup plan for the CWFP was developed to incorporate various design and operational changes that have been implemented since this project's inception. The modification to this permit was requested after a change in the startup strategy contemplated a discharge of 90 MGD during plant startup. There was a public comment period pursuant to the requirements of this modification.

The water used in the Croton Water Filtration Plant startup process will be discharged from outfall 001 of Shaft 25 into the Harlem River and

is temporary in nature. The proposed increased flow would not alter or damage the water body's existing character, quality, values, or functions. Also, in order to ensure water quality, the discharge will be monitored for chlorine (TRC), turbidity, and pH. The discharge quality will range from partially treated raw water to filtered water.

During the anticipated 6 to 8 months of startup discharge, the NYCDEP will prepare Discharge Monitoring Reports (DMRs) as required by SPDES permit. When the Croton WFP is not in operation, the NYCDEP will prepare the DMRs in accordance with the conditions set forth by the NYSDEC in the existing SPDES Permit NY-0200859.

The temporary discharge resulting from the plant startup process is expected to be between 30 MGD and 90 MGD over a period of 6 to 8 months. The maximum of 90 MGD is a conservative estimate, and the final volume rate could end up being significantly less. To put the plant startup discharge into perspective, the existing outfall, 001, is currently permitted to discharge a maximum of 60 MGD. Based on outfall modeling scenarios as calculated by Jay, D.A. and M. J. Bowman, *The Physical Oceanography and Water Quality of New York Harbor and Western Long Island Sound: Technical Report #23 of the Marine Sciences Research Center of the State University of New York, Stony Brook, New York, (December 1975)*, the Harlem River flows at an average rate of approximately 5,161 MGD. Therefore, at a the currently permitted flow of 60 MGD, discharges from outfall 001 would contribute less than 1.2% of the natural daily water flow in the Harlem River. By increasing the existing SPDES permit limit to 90 MGD, it would contribute 1.7% of flow, an increase of approximately 0.5% of the natural daily water flow of the Harlem River. In addition, at a tidal exchange rate of approximately 1,613 MGD, the entire volume of the Harlem River is exchanged every 3.2 days.

Given that the temporary activation activities are expected to mainly discharge treated water from an existing, permitted outfall, and given that the increased discharge is expected to have an increased daily volume of approximately than 0.5% of the natural daily water flow in the Harlem River, the proposed permit modification is expected to have no significant impact on the Harlem River. In addition, by adhering to all conditions of the existing State Pollutant Discharge Elimination System permit, any startup discharge would meet NYSDEC rules and regulations, ensuring an acceptable level of solids, chlorine, and pH.

- 2) *The quantity of either 60 MGD or 90 MGD of water, whether it is potentially drinking water or not, is of major significance during a wet weather event. At the very least, consideration should be made that there not be any discharges within 2 days of a rain event, that they cannot use more than one outfall at the same time or in the same day, and that monitoring and notification be setup for selected areas of both the Harlem and the Hudson Rivers. USGS is conducting a watershed study and most likely need to know if your permitted discharge would change their monitoring. Scientifically, we should be able to figure out the impact of such a large discharge on the waterbody and the fish. The impact of this amount of water on the already fragile ecosystem should be of interest to your Department.*

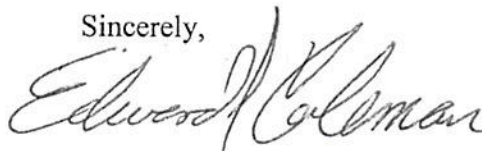
Associating the discharge at Shaft 25 with CSO events is a misunderstanding of the nature of that discharge, being of drinking water quality vs. a sewage discharge. As previously stated, by adhering to conditions set forth by the NYSDEC in the existing SPDES Permit NY-0200859, it has been determined that the proposed increase in flow from 60 MGD to 90 MGD during plant startup will not result in an adverse impact to receiving waters. For reference, the average flow rate through the Harlem River during the running tide is about 8,000 cfs. The tidal exchange rate is about 2,500 cfs. The entire volume of the Harlem River is exchanged every 3.23 days. Note that 60 MGD equates to 93 cfs, and 90 MGD equates to 139 cfs, so your peak flow is adding 46 cfs, what we consider a diminutive amount. It is also unclear how our permitted discharge would affect the USGS study.

- 3) *There may be other alternatives to this action which should be explored. For instance, they could easily place the water into the Jerome Park Reservoir and hold it to slowly discharge to the river. Why did they choose to do it 5 miles away? Croton Shaft 24 and 25 is as much part of the distribution system as is the Jerome Park Reservoir (JPR). For years, the NYC DEP has drained the water from JPR to the sewer system.*

Shaft 25 was designed for precisely the purpose of dewatering the New Croton Aqueduct. Discharging water of this quality to the sewer places an unnecessary burden on the wastewater treatment plant given the Shaft 25 dewatering option.

We anticipate that the above responses will meet the requirements of the SPDES # NY-0200859 public notice period. If you require additional information please contact Mr. Josh Sager, Assistant Project Manager at (718) 595-3081.

Sincerely,

A handwritten signature in cursive script that reads "Edward Coleman". The signature is written in black ink and is positioned above the printed name.

Edward Coleman, P.E

ATTACHMENT 2

New York State Department of Environmental Conservation
REGULATORY AFFAIRS
47-40 21ST STREET, LONG ISLAND CITY, NY 11101
(718) 482-4997



Thomas C. Jorling
Commissioner

September 27, 1993

Joseph W. Iannuzzi
Acting Chief
Planning and Programs
NYC Department of Environmental Protection
59-17 Junction Blvd
Corona, N.Y. 11368

020 0859

Re: DEC Permit No. 2-6201-00043/00001-0; Croton Aqueduct

Dear Mr Iannuzzi,

Enclosed is a State Pollutant Discharge Elimination System Permit for the activity referenced above. Please read all conditions carefully. If you are unable to comply with any condition, please contact Michelle Moore at the number referenced above.

Very truly yours,

John J. Ferguson
Regional Permit Administrator

cc: SPDES Distribution
Jim Marold, Harza



Div. of
Bur. Waste-water
Facilities Design

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT
Special Conditions (Part I)



Industrial Code: 9999
Discharge Class (CL): 02
Toxic Class (TX): N
Major Drainage Basin: 17
Sub Drainage Basin: 04 02
Water Index Number: E.R. 1 portion
Compact Area: ISC

SPDES Number: NY- 0200859
DEC Number: 2-6201-00043/00001-0
Effective Date (EDP): September 27, 1993
Expiration Date (ExpD): September 27, 1998
Modification Date(s): _____
Attachment(s): General Conditions (Part II) Date
November 1990

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: _____ Attention: Nicholas Ilijic

Name: NYC Department of Environmental Protection
Street: 59-17 Junction Blvd., 19th Floor
City: Elmhurst State: NY Zip Code: 11373-5107

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS:

Name: Croton Aqueduct - Shaft 25
Location (C.T.V): 180th Street and the Harlem River Drive County: New York
Facility Address: same State: _____ Zip Code: _____
City: _____
NYTM-E: _____ NYTM-N: 4
From Outfall No. 002 at Latitude: _____ & Longitude: _____
into receiving waters known as: Harlem River Class: I

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

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in Special Conditions (Part I) and General Conditions (Part II) of this permit.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: _____
Street: _____
City: _____ State: _____ Zip Code: _____
Responsible Official or Agent: _____ Phone: () _____

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:

SPDES Distribution

Permit Administrator: John J. Ferguson
Address: NYSDEC
47-40 21 St, LIC, NY 11101
Signature: [Handwritten Signature] Date: _____



EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning September 27, 1993

and lasting until September 27, 1998

the discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

Outfall Number & Effluent Parameter	Discharge Limitations		Units	Minimum Monitoring Requirements	
	Daily Avg.	Daily Max.		Measurement Frequency	Sample Type
002 Chlorine		2.0	mg/l	3 day	Grab
Flow			MGD	Daily	Grab

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of three years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also;

(if box is checked) monitoring information required by this permit shall be summarized and reported by submitting completed and signed Discharge Monitoring Report (DMR) forms for each ____ 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.

Send the original (top sheet) of each DMR page to:

Department of Environmental Conservation
 Division of Water
 Bureau of Wastewater Facilities Operations
 50 Wolf Road
 Albany, New York 12233-3506
 Phone: (518) 457-3790

Send the first copy (second sheet) of each DMR page to:

Department of Environmental Conservation
 Regional Water Engineer
 1 Hunters Point Plaza
 47-40 21st Street
 Long Island City, NY 11101
 Phone: (718) 482-4933

- c) A monthly "Wastewater Facility Operation Report..." (form 92-15-7) shall be submitted (if box is checked) to the
 Regional Water Engineer and/or County Health Department or Environmental Control Agency listed above.
- d) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in the attached General Conditions (Part II)
- e) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- f) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- g) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- h) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- i) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two 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 sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

Discharge Outfall - 002
Location Map

Croton Aqueduct
Dewatering - Chlorination

