United States Environmental Protection Agency
Region 2
Water Division
290 Broadway
New York, New York 10007

FACT SHEET

DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
Salamanca Wastewater Treatment Plant
PERMIT No. NY0020508

This Fact Sheet sets forth the principle facts and technical rationale that serve as the legal basis for the requirements of the accompanying draft permit. The draft permit has been prepared in accordance with Clean Water Act (CWA) section 402 and its implementing regulations at Title 40 of the *Code of Federal Regulations* (CFR), Parts 122 through 124.

PART I. BACKGROUND

A. Permittee and Facility Description

The City of Salamanca has applied for renewal of its National Pollutant Discharge Elimination System (NPDES) permit. The Permittee is discharging pursuant to NPDES Permit No NY0020508**.** The Permittee submitted Application Form 2A dated March 4, 2019 and Application Form 1 dated June 3, 2019**,** and applied for a NPDES permit to discharge treated wastewater from the Salamanca Wastewater Treatment Plant**,** called the facility. The facility is classified as a major discharger by EPA in accordance with the EPA rating criteria.

The Permittee owns and operates a wastewater treatment plant. Attachment A of this Fact Sheet provides a map of the area around the facility and a flow schematic of the facility.

The treatment system consists of the following: screening, grit removal, contact stabilization, settling and, chlorination (seasonally May 15- October 15).

Sludge is aerobically digested. Biosolids from secondary gravity thickeners are subsurface injected on permitted land or thickened and pressed for landfill disposal.

Summary of Permittee and Facility Information

Permittee	City of Salamanca
Facility contact, title, phone	Jeffrey Shurilla, Chief Operator, (716) 945-1691
Permittee (mailing) address	299 Center Street, Salamanca, New York 14779-1001
Facility (location) address	299 Center Street, Salamanca, New York 11479-1001
Type of facility	POTW
Pretreatment program	N
Facility monthly average flow	1.62 million gallons per day
Facility design flow	2.0 million gallons per day
Facility classification	Major

B. Discharge Points and Receiving Water Information

Wastewater is discharged from Outfall 001 to the Alleghany River**,** a water of the United States, in the Alleghany River Watershed.

The draft permit authorizes the discharge from the following discharge point:

Outfall	Effluent description	Outfall latitude	Outfall longitude	Receiving water name and classification
001	wastewater	42°, 09', 40" N	78°, 45', 00" W	Allegany River / C

As indicated in the New York State Water Quality Standards (NYSWQS) Regulations, the designated use for Class C receiving waters include: fishing. According to 6 NYCRR Parts 701 these waters shall be suitable for fish, shellfish, and wildlife propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

CWA Section 303(d) requires New York State to develop a list of impaired waters, establish priority rankings for waters on the list, and develop TMDLs for those waters. The receiving water has not been determined to have water quality impairments for one or more of the designated uses as determined by section 303(d) of the CWA.

C. Mixing Zone/Dilution Allowance

A mixing zone or dilution allowance does not apply to this discharger.

D. Compliance Orders/Consent Decrees

The Permittee does not have any compliance order or consent decrees that affect this permit action.

E. Summary of Basis for Effluent Limitations and Permit Conditions - General

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with the following, as applicable: for POTW:

1. Clean Water Act section 401 Certification
2. NPDES Regulations (40 CFR Part 122)
3. NYSWQS (August 1999)
4. Secondary Treatment Requirements (40 CFR 133)
5. Biosolids (Sewage Sludge) Requirements (40 CFR Parts 257, 258 and 503)

PART II. RATIONALE FOR EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

CWA Section 301(b) and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable technology-based requirements where necessary to achieve applicable water quality standards. In addition, 40 CFR 122.44(d)(1)(i) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that cause, have the reasonable potential to cause, or contribute to an exceedance of a water quality criterion, including a narrative criterion. The process for determining reasonable potential and calculating water quality-based effluent limits (WQBELs) is intended to protect the designated uses of the receiving water, and achieve applicable water quality criteria. Where reasonable potential has been established for a pollutant, but there is no numeric criterion for the pollutant, WQBELs must be established using (1) EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

The City of Salamanca provided EPA with an analysis of organics, toxicity and metals. The metals and organics data was below detection except for copper and nickel. Based on the toxicity, copper, and nickel data and factoring in dilution from the receiving stream, Salamanca does not have a reasonable potential to violate the NY State water quality standards for toxicity, copper, or nickel.

The effluent limitations and permit conditions in the permit have been developed to ensure compliance with all federal and state regulations, including NYSWQS. The basis for each limitation or condition is discussed below.

A. Effluent Limitations

The permit establishes Technology-based Effluent Limitations (TBELs) and Water Quality Based Effluent Limitations (WQBEL) for several pollutants and the basis for these limitations are discussed below**.**

1. **Flow:** An effluent limitation for flow has been established in the permit. Monitoring conditions are applied pursuant to 40 CFR 122.21(j)(4)(ii).
2. **5-Day Biochemical Oxygen Demand (BOD_5):** The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards for publicly owned treatment works (POTWs) specified in 40 CFR 133.102(a). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation (see section C.1.—Monitoring Requirements— of this Part).
3. **Total Suspended Solids (TSS):** The effluent concentration and percent removal limitations are based on technology-based secondary treatment standards for POTWs specified in 40 CFR 133.102(b). The permit also requires influent monitoring and reporting in accordance with 40 CFR 122.44(i) to meet the requirement of the percent removal limitation (see section C.1.—Monitoring Requirements— of this Fact Sheet).
4. **pH:** The effluent limitation for pH is based on technology-based secondary treatment standards for POTWs specified in 40 CFR 133.102(c).
5. **Temperature:** There is a monitoring only requirement for temperature.
6. **Fecal Coliform and Total Coliform:** The discharge consists of domestic sewage that is a source of pathogens. To ensure that the recreational use of the water body is met, effluent limitations for fecal coliform and total coliform are established in the permit and are based on the water quality criterion for Class C waters as specified by NYSDEC to ensure compliance with NYSWQS and compliance with other appropriate requirements of State law as provided by Section 401(d) of the CWA.
7. **Total Residual Chlorine (TRC):** TRC has been identified as a contaminant of concern since the facility uses chlorination to disinfect the effluent to meet water quality criteria for pathogens. NYSWQS has a numeric water quality criterion of 5 µg/L for TRC in class C waters. To protect aquatic life from the impact of TRC, EPA has calculated the permit limit.

   Qr = Allegany River 7Q10: 120 cfs

   Source: Published 7Q10 MA7CD10 in 1979 Low Flow Frequency Analyses of Steams in New York Bulletin 74 (“Bulletin 74”) prepared by NYSDEC/USGS for USGS gauging station 03011020 “Allegheny River at Salamanca”, about 1.5 miles upstream of the WWTP discharge.

   Qe = Design Flow of WWTP = 2.0 MGD (3.094 cfs).

   Source: City of Salamanca Application dated May 13, 2013 as Design Flow.

   The Allegheny River is a Class C water, therefore the chronic water quality standard of 5 µg/l applies for total residual chlorine (TRC). Use as Cr in equation.

   Dissipation Factor (DF) = 5

   Source: NYSDEC Memorandum issuing Amendment to TOGS 1.3.1E, “Total Maximum Daily Loads and Water Quality-Based Effluent Amendment- Permit Limit Development for Certain Parameters” Dissipation Factor = 5 for TRC.

   Water Quality Based Effluent Limit (WQBEL) Ce = Cr x DF x (Qr + Qe)/Qe

   WQBEL = (5 µg/l) x 5 x (120 + 3.094 cfs)/(3.094 cfs) = 995 µg/l = 1 mg/l for TRC

B. Effluent Limitations Summary Table

Outfall Number 001

Parameter	Units	Effluent limitations					
		Averaging period	Highest Reported Value (1),(2)	Existing limits	Interim limits	Final limits	Basis
Flow	MGD	Average monthly	1.68	2.0	--	2.0	TBEL
Effluent TSS	mg/L	Average monthly Average weekly	10 17	30 45	-- --	30 45	TBEL
	lbs/day	Average monthly Average weekly	162 391	500 750	-- --	500 750	TBEL
	minimum % removal	Average monthly	54	55	--	85	TBEL
BOD, 5-day	mg/L	Average monthly Average weekly	13 21	30 45	-- --	30 45	TBEL
	lbs/day	Average monthly Average weekly	204 368	500 750	-- --	500 750	TBEL
	minimum % removal	Average monthly	54	60	-- --	85	WQBEL
Fecal Coliform	#/100ml	Average monthly Average weekly	120 360	200 400	-- --	200 400	WQBEL
Total Coliform	#/100ml	Average monthly Average weekly	N/A	N/A	--	2,400 5,000	WQBEL
pH	SU	N/A	6.4 7.2	6.0 9.0	-- --	6.0 9.0	WQBEL
Temperature	oC	Average monthly Average weekly	-- --	-- --	-- --	Monitor only Monitor only	NA
Settleable Solids	ml/l	Daily maximum	0.1	0.3	--	0.3	WQBEL
Total Residual Chlorine	mg/l	Daily Maximum	1.2	1.3	--	1	WQBEL

Notes, Footnotes and Abbreviations

Note: Dashes (--) indicate there are no effluent data, no limitations, or no monitoring requirements for this parameter.
(1) Wastewater data from DMRs dated January 1, 2014 to March 31, 2019.
(2) Limits for % removal of TSS and BOD, 5-day as well as pH are the lowest reported values.

C. Monitoring Requirements

NPDES regulations at 40 CFR 122.48 require that all permits specify requirements for recording and reporting monitoring results. The Part III of the Permit establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements for this facility.

1. **Influent Monitoring Requirements**

   For POTWs: To calculate percent removal values, influent monitoring is required for BOD_5 and TSS in accordance with 40 CFR 133.102. Influent monitoring must be conducted before any treatment, other than de-gritting, and before any addition of any internal waste stream.

2. **Effluent Monitoring Requirements**

   Effluent monitoring frequency and sample type have been established in accordance with the requirements of 40 CFR 122.44(i) and recommendations in EPA's TSD.

D. Compliance with Federal Anti-Backsliding Requirements and New York State's Anti-Degradation Policy

Federal regulations at 40 CFR 131.12 require that state water quality standards include an anti-degradation policy consistent with the federal policy. The discharge is consistent with the anti-degradation provision of 40 CFR 131.12, 72 Federal Register 238 (December 12, 2007, pages 70517-70526) and NYSDEC's *Anti-Degradation Policy* dated September 9, 1985. In addition, CWA sections 402(o)(2) and 303(d)(4) and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. Further, the Region 2 Antibacksliding Policy provides guidance regarding relaxation of effluent limitations based on water quality for New York State SPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit with some exceptions where limitations may be relaxed. All effluent limitations in the permit are at least as stringent as the effluent limitations in the existing permit**.**

PART III. RATIONALE FOR STANDARD AND SPECIAL CONDITIONS

A. Standard Conditions

In accordance with 40 CFR 122.41, standard conditions that apply to all NPDES permits have been incorporated by reference in Part IV.A.1 of the permit and expressly in Attachment B of the permit. The Permittee must comply with all standard conditions and with those additional conditions that are applicable to specified categories of permits under 40 CFR 122.42 and specified in Part IV.A.2 of the Permit.

B. Special Conditions

In accordance with 40 CFR 122.42 and other regulations cited below, special conditions have been incorporated into the permit. This section addresses the justification for special studies, additional monitoring requirements, Best Management Practices, Compliance Schedules, and/or special provisions for POTWs as needed. The special conditions for this facility are as follows:

1. **Special Conditions**

   In accordance with 40 CFR 124.55, EPA has established Special Conditions in the permit that were determined necessary to meet NYSWQS. The Special Conditions established in this section are only those conditions that have not been established in other parts of the permit.

2. **Best Management Practices (BMP) Plan**

   In accordance with 40 CFR 122.2 and 122.44(k), BMPs are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution to waters of the United States. The Permittee is required to develop a BMP Plan in Part IV.B.3.a of the permit to control or abate the discharge of pollutants.

3. **Stormwater**

   Stormwater requirements have been added in the permit in order to mirror the requirements that are in the federal Stormwater Multi-Sector General Permit.

3. **Compliance Schedules**

   A compliance schedule has not been authorized for any pollutant or parameter in the permit on the basis of 40 CFR 122.47.

PART IV. COMPLIANCE WITH APPLICABLE PROVISIONS OF OTHER FEDERAL LAWS OR EXECUTIVE ORDERS

A. Coastal Zone Management Act

Under 40 CFR 122.49(d), and in accordance with the Coastal Zone Management Act of 1972, as amended, 16 *United States Code* (U.S.C.) 1451 *et seq*. section 307(c) of the act and its implementing regulations (15 CFR Part 930), EPA may not issue an NPDES permit that affects land or water use in the coastal zone until the Permittee certifies that the proposed activity complies with the Coastal Zone Management Program in New York State. The Permittee has indicated the outfall is not in a coastal area and EPA has determined it will not affect the coastal area. Therefore, the requirements of 40 CFR 122.49(d) do not apply to this discharge.

B. Endangered Species Act

Under 40 CFR 122.49(c), the EPA is required pursuant to section 7 of the Endangered Species Act (ESA), 16 U.S.C. 1531 *et seq*. and its implementing regulations (50 CFR Part 402) to ensure, in consultation with the National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) that the discharge authorized by the permit is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

The ESA requires the Regional Administrator to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by the EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat.

In a May 2000 memo to the Regions, EPA Headquarters provided guidance to the Regions in making a determination as to whether a final permit may be issued while waiting for consultation to be concluded. As part of this permit action, if consultation has not been completed by final permit issuance and the EPA has concluded that permit issuance is consistent with section 7 prior to the conclusion of consultation, the EPA will re-issue the final permit before consultation is concluded and will document this decision in the Administrative Record. At the time consultation is completed, the EPA may decide that changes to the permit are warranted after permit issuance based on the results of the consultation. Therefore, a reopener provision to this effect has been included in the Permit Part IV.A.1.b.

C. Environmental Justice

EPA has performed an Environmental Justice (EJ) Analysis for the discharge in accordance with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Population and Low-Income Populations, and EPA's Plan EJ 2014. EJ is the right to a safe, healthy, productive and sustainable environment for all, where "environment" is considered in its totality to include the ecological, physical, social, political, aesthetic and economic environments. The NPDES permitting process provides opportunities to address EJ concerns through appropriate avenues for public participation, seeking out and facilitating involvement of those potentially affected, and, when relevant, including public notices in more than one language where appropriate. Based on the EPA Region 2 Environmental Justice Assessment Tool, the facility is not in an area characterized as overburdened and therefore is not subject to the EPA Region 2 Regional Implementation Plan to Promote Meaningful Engagement of Overburdened Communities in Permitting Activities.

D. Coral Reef Protection

Under Executive Order 13089, *Coral Reef Protection*, EPA is required to ensure that discharge authorized under the permit will not degrade any coral reef ecosystem. No corals or coral ecosystems are in the vicinity of the discharge.

E. Climate Change

EPA has considered climate change when developing the conditions of the permit. This is in accordance with the draft *National Water Program 2012 Strategy: Response to Climate Change* that identifies ways to address climate change impacts by NPDES permitting authorities (77 Federal Register 63, April 2, 2012, 19661-19662). Climate change is expected to affect surface waters in several ways, affecting both human health and ecological endpoints. As outlined in the draft National Water Program 2012 Strategy, EPA is committed to protecting surface water, drinking water, and ground water quality, and diminishing the risks of climate change to human health and the environment, through a variety of adaptation and mitigation strategies. These strategies include encouraging communities and NPDES permitting authorities to incorporate climate change strategies into their water quality planning, encouraging green infrastructure and recommending that water quality authorities consider climate

change impacts when developing water load and load allocations for new TMDLs, identifying and protecting designated uses at risk from climate change impacts. The 2010 *NPDES Permit Writers' Manual* also identifies climate change considerations for establishing low-flow conditions that account for possible climatic changes to stream flow. The conditions established in the permit are consistent with the draft National Water Program 2012 Strategy.

F. National Historic Preservation Act

Under 40 CFR 122.49(b), EPA is required to assess the impact of the discharge authorized by the permit on any properties listed or eligible for listing in the National Register of Historic Places (NRHP) and mitigate any adverse effects when necessary in accordance with the National Historic Preservation Act, 16 U.S.C. 470 et seq. EPA's analysis indicates that no soil disturbing or construction-related activities are being authorized by approval of this permit; accordingly, adverse effects to resources on or eligible for inclusion in the NHRP are not anticipated as part of this permitted action.

G. Magnuson-Stevens Fishery Conservation and Management Act

Under 40 CFR 122.49, the EPA is required to ensure that the discharge authorized by the permit will not adversely affect Essential Fish Habitat (EFH) as specified in section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), 16 U.S.C. 1801 *et seq*. The EPA is coordinating with NMFS for this facility. While the EPA is reissuing the permit at this time, the EPA may decide that changes to the permit are warranted based EFH on discussions with NMFS. A reopener provision to this effect has, therefore, been included in the permit.

PART V. PUBLIC PARTICIPATION

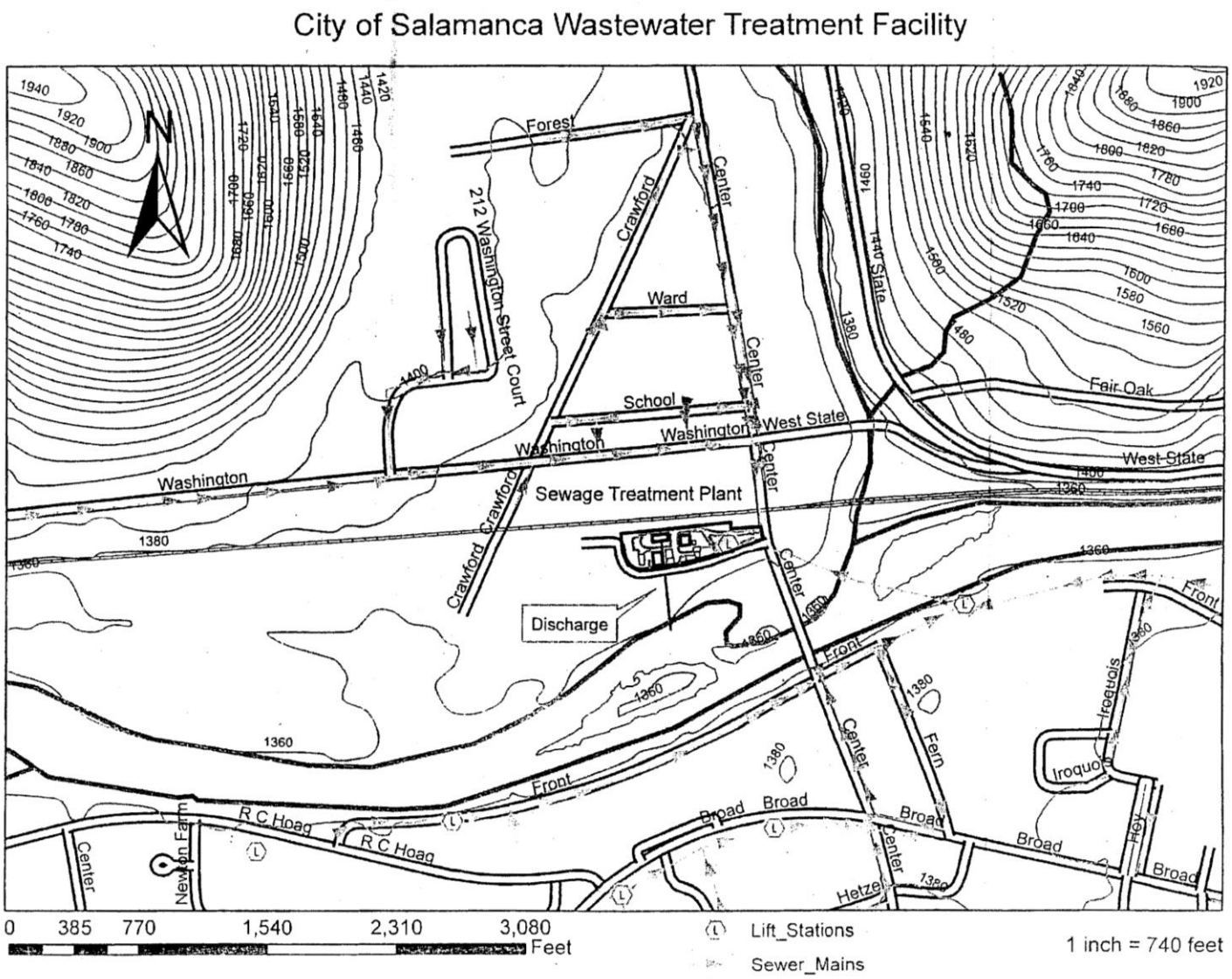
The procedures for reaching a final decision on the draft permit are set forth in 40 CFR Part 124 and are described in the public notice for the draft permit, which is published in *Salamanca Press.* Included in the public notice are requirements for the submission of comments by a specified date, procedures for requesting a hearing and the nature of the hearing, and other procedures for participation in the final agency decision. EPA will consider and respond in writing to all significant comments received during the public comment period in reaching a final decision on the draft permit. Requests for information or questions regarding the draft permit should be directed to:

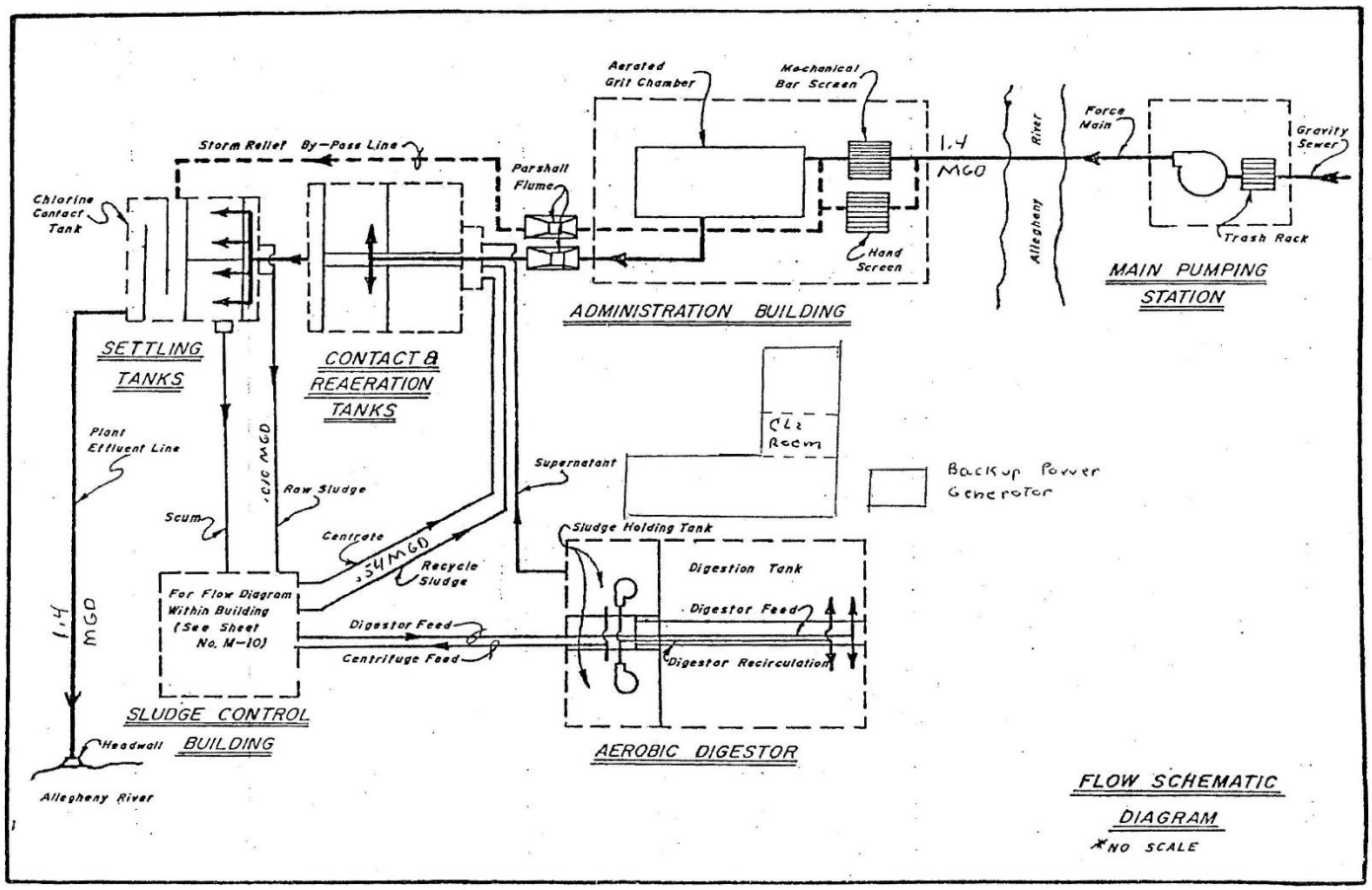
Andrea Coats
EPA Region 2, Water Division
Permit Writer Phone: 212-637-3850
Permit Writer Email: coats.andrea@epa.gov

A copy of the draft permit is also available on EPA's website at www.epa.gov/region02/water/permits.html.

ATTACHMENT A — FACILITY MAP AND FLOW SCHEMATIC

The facility map and flow schematic are attached as provided by the discharger in the application.




Aerated Grit Chamber
Mechanical Bar Screen
Storm Relief By-Pass Line
Parshall Flume
1.4 MGD
River
Force Main
Gravity Sewer
Chlorine Contact Tank
Hand Screen
Trash Rack
Allegheny
MAIN PUMPING STATION
ADMINISTRATION BUILDING
SETTLING TANKS
CONTACT & REAERATION TANKS
Cl2 Room
Backup Power Generator
Plant Effluent Line
1.0/0 MGD
Raw Sludge
Supernatant
Scum
Centrate
.354 MGD
Recycle Sludge
Sludge Holding Tank
Digestion Tank
For Flow Diagram Within Building (See Sheet No. M-10)
Digestor Feed
Digestor Feed
Centrifuge Feed
Digestor Recirculation
1.4 MGD
SLUDGE CONTROL BUILDING
Headwall
AEROBIC DIGESTOR
Allegheny River
FLOW SCHEMATIC DIAGRAM
NO SCALE