

DRAFT Sampling Narrative

POTW Influent Study

9/18/23

Introduction

The U.S. Environmental Protection Agency (EPA) is performing a study of influent to publicly owned treatment works (POTWs) across the nation. This POTW Influent study has the following goals:

- Identify categories of IUs discharging wastewater contaminated with PFAS.
- Collect data on PFAS concentrations in domestic wastewater influent to POTWs.
- Characterize PFAS currently being discharged from IUs and domestic sources.
- Collect data on adsorbable organic fluorine (AOF) concentrations in wastewater.
- Better understand PFAS pass through in POTWs to biosolids and effluent.

As part of this study, EPA will work with NACWA and the largest 400 POTWs (see Appendix A for the draft list of POTWs) in the US to identify a total of 2000 industrial users (IUs) to target for sampling. Selected POTWs will collect up to 10 samples of IU effluent, in addition to domestic effluent, and POTW influent, effluent, and biosolids. The samples will be analyzed for per- and polyfluoroalkyl substances (PFAS), as well as other parameters of interest identified in the Sampling Procedures section. POTWs will be responsible for contracting and paying for lab work.

Based on the feedback we received during the last meeting on May 31st, 2023, some POTWs were concerned with POTW influent, effluent, and biosolid sampling data being published. EPA will modify or remove identifying information from published POTW influent, effluent, and biosolid sampling data. For example, POTWs names will be replaced with a unique ID and identifying information like location and average flow will be changed to EPA region number and average flow range, respectively.

EPA is in the early stages of seeking approval from the Office of Management and Budget (OMB) for an information collection request (ICR) to facilitate this study.

This document is for discussion purposes and is not yet finalized. EPA wishes to incorporate NACWA and NACWA member feedback in the study design.

Sampling Overview

EPA intends to coordinate with NACWA as we develop a questionnaire as part of the ICR. The goal of the coordination is to ensure the questions will be as little burden as possible. EPA expects to ask roughly 11 questions related to the following:

- General facility information
- Average flow
- Industrial contributors
 - Flow from each source

- Is it comingled or sole-sourced?
 - Are you aware of any significant contributors of PFAS to your influent?
 - Can you provide previous data/publication/report?
- Are you able to collect samples prior to mixing?
- What percentage of your flow is residential?
- Generic information about your POTW treatment train
 - Secondary, tertiary treatment?
 - Do you perform targeted removal of PFAS?
 - If so, what treatment technology do you use?
 - How much PFAS do you remove on the average day (lbs/day)?
- Biosolids:
 - Please identify the management practice(s) used for your generated sewage sludge, as well as the quantity (dry metric tons) produced over the last calendar year.
 - What is the treatment process for your finished biosolids?
 - Within the past twelve months, what is the estimated average storage time of the finished biosolids (treated sewage sludge) or sewage sludge generated at your POTW before being hauled to their respective end use (land application, landfill, incineration, etc.)?
 - Have you completed a NPDES Permitting Program Application Form 2S: New and Existing Treatment Works Treating Domestic Sewage?
 - If yes, to whom did you submit your form and when did you submit it?

EPA will use the results of this questionnaire to inform the selection of up to 10 IUs for sampling at each POTW. POTWs selected for sampling will be required to collect samples at the selected sampling points and to prepare, package, and ship the samples to laboratories for analysis, in accordance with an EPA provided general sampling plan (GSP), developed with the support and expertise of NACWA. The GSP will include specific instructions on sample handling procedures, including sample collection, preservation, holding times and temperatures, bottle sizes, number of field QC samples, etc.

Each POTW will collect grab samples from ten different IUs, a domestic source, and from POTW influent, effluent, and biosolids. POTWs will also collect field quality control (QC) samples for each parameter. Field QC sampling locations for each parameter will be outlined in the GSP. Ideally, samples from IUs will be collected as close to their final discharge as possible to minimize mixing. The POTW sampling team will document the sample collection and will record contemporaneous engineering and field measurement data for submission using the forms provided in the GSP.

Summary of samples:

- 10 IU sample points
 - EPA Draft Method 1633
 - EPA Draft Method 1621
 - Field QC samples
- 1 domestic sample point
 - EPA Draft Method 1633
 - EPA Draft Method 1621
 - Field QC samples

- 1 POTW influent sample point
 - EPA Draft Method 1633
 - EPA Draft Method 1621
 - Field QC samples
- POTW biosolids samples
 - EPA Draft Method 1633
 - Standard Method 2540
 - EPA Method 9056A
 - EPA Method 6010
 - EPA Method 440
 - Field QC samples
- 1 POTW effluent sample
 - EPA Draft Method 1633
 - EPA Draft Method 1621
 - Field QC samples

Information collected from the questionnaire will be used to select IUs to be sampled. A total of 2000 IUs will be sampled as a part of this study. Some POTWs may be asked to sample only 1 or 2 IUs, while other POTWs may be asked to sample up to 10 IUs.

Sampling will likely occur in mid - late 2024 to early 2025.

Lab reports will be required to accompany sampling data.

Sampling Procedures

At each POTW, grab samples will be collected from 10 or less IUs selected by EPA, from a domestic source, and from POTW influent, effluent, and biosolids. Wastewater samples will be analyzed for PFAS using EPA (Draft) Method 1633 and AOF using EPA (Draft) Method 1621. Biosolids samples will be analyzed for PFAS using EPA (Draft) Method 1633, as well as EPA Methods 6010 and 6020 for metals, 9056A for inorganic anions, 440 for total carbon, hydrogen, and nitrogen, and Standard Method 2540 for total solids, volatile solids, and fixed solids. Including field QC, facilities should plan for approximately 16 wastewater samples for each PFAS method (32 total), 3 biosolids samples per parameter (18 total), and 2 additional biosolids samples for long-term storage at EPA. Some methods may require duplicate or triplicate samples for method pre-analysis steps. These guidelines will be further outlined in the GSP.

Appendix A: POTW List

Facility/Project Name	Flow	Permit Number	City	State
Stickney Treatment Plant, MWRDGC	812	IL0028053	Cicero	IL
DETROIT STP	661	MI0022802	Detroit	MI
BLUE PLAINS STP	370	DC0021199	Washington	DC
Joint WPCP	339	CA0053813	Carson	CA
Hyperion WWTP	325	CA0109991	Playa Del Rey	CA
Mass. Water Resources Authority	310	MA0103284	Boston	MA
NORTHSIDE (O'Brien) WATER RECLAMATION PLANT	292	IL0028088	Skokie	IL
Passaic Valley Sewerage Commission - CS/CSO/STP	278	NJ0021016	Newark City	NJ
New York (C) - Newtown Creek WPCP	271	NY0026204	Brooklyn	NY
New York (C) - Wards Island WPCP	250	NY0026131	Manhattan	NY
CALUMET WRP	233	IL0028061	Chicago	IL
MILWAUKEE MSD COMBINED	212	WI0036820	Milwaukee	WI
METROPOLITAN TP	204	MN0029815	Saint Paul	MN
PHILADELPHIA WATER DEPT (SW)	199	PA0026671	Philadelphia	PA
PHILADELPHIA WATER DEPT (NE)	197	PA0026689	Philadelphia	PA
Point Loma WWTF	184	CA0107409	San Diego	CA
Middlesex County UA - CS/STP	178	NJ0020141	Sayreville	NJ
New York (C) - North River WPCP	170	NY0026247	Manhattan (Subdivision)	NY
NEORSD Southerly WWTP	170	OH0024651	Cuyahoga Heights	OH
Sunol Blvd Collection System	167			CA
Sacramento Regional WWTF	165	CA0077682	Elk Grove	CA
ALCOSAN STP (ALLEGHENY COUNTY)	164	PA0025984	Pittsburgh	PA
BACK RIVER WWTP	155	MD0021555	Baltimore	MD
Metro Wastewater Reclamation District - Robert W. Hite WWTF	152	CO0026638	Denver	CO
Central WWTP - TRA	152	TX0022802	Dallas	TX
OCSD WWTP No. 2	151	CA0110604	Fountain Valley	CA
MSD Mill Creek Drainage Basin	151	OH0025461	Cincinnati	OH
Buffalo (Sewer Auth.)Bird Island STP	149	NY0028410	Buffalo	NY
San Jose/Santa Clara WPCP	143	CA0037842	San Jose	CA
Phoenix 91st Ave WWTP	140	AZ0020559	Phoenix	AZ
VILLAGE CREEK STP	139	TX0047295	Arlington	TX
NEORSD Easterly WWTP	131	OH0024643	Cleveland	OH
New York (C) - Bowery Bay WPCP	129	NY0026158	Astoria	NY
MDWASD Central District WWTF	127		Miami	FL

Central WWTP - Dallas	124	TX0047830	Dallas	TX
New York (C) - Hunts Point WPCP	122	NY0026191	Bronx	NY
Indianapolis - BELMONT WWTP	120	IN0023183	Indianapolis	IN
LEMAY WWTP	114	MO0025151	St. Louis	MO
BISSELL POINT WWTP	111	MO0025178	St Louis	MO
WEST POINT WWTP	110	WA0029181	Seattle	WA
MSD - MORRIS FORMAN STP	98	KY0022411	Louisville	KY
New York (C) - Jamaica WPCP	96	NY0026115	Jamaica	NY
Columbus Southerly WWTP & Sewers	96	OH0024741	Lockbourne	OH
69th Street Plant	96	TX0096172	Houston	TX
			North Miami Beach	
MDWASD North District WWTP	95	FL0032182	Philadelphia	PA
PHILADELPHIA WATER DEPT (SE)	95	PA0026662	Puerto Nuevo-Bayamon WWTP	PR
			Sabana Seca	
New York (C) - Coney Island WPCP	93	NY0026182	Brooklyn	NY
NEW ORLEANS EAST BANK	92	LA0038091	New Orleans	LA
MDWASD South District WWTP	92		Miami	FL
Nashville - Central WWTP	92	TN0020575	Nashville	TN
Memphis N. Maynard C. Stiles STP	90	TN0020711	Memphis	TN
Clark County Water Rec Dist AWT	89	NV0021261	Las Vegas	NV
OCSD WRP No. 1	88	CA0110604	Fountain Valley	CA
R M CLAYTON WPCP	88	GA0039012	Atlanta	GA
New York (C) - Owls Head WPCP	87	NY0026166	Brooklyn	NY
Monroe (Co) Frank E Van Lare STP	87	NY0028339	Rochester	NY
Joint Meeting of Essex & Union - CSO/STP	85	NJ0024741	Elizabeth	NJ
Toledo Bay View Park WWTP & Sewers	85	OH0027740	Toledo	OH
San Jose Creek WRP	84	CA0053911	Whittier	CA
WYANDOTTE WWTP	81	MI0036072	Wyandotte	MI
K.C. BLUE RIVER STP	81	MO0024911	Kansas City	MO
Southeast WPCP	80	CA0037664	San Francisco	CA
East Bay MUD Main WWTP	80	CA0037702	Oakland	CA
Columbus Jackson Pike WWTP & Sewers	80	OH0024732	Columbus	OH
Westchester (Co) Yonkers Joint STP	79	NY0026689	Yonkers	NY
Akron WWTP & Sewers	79	OH0023833	Akron	OH
Southside WWTP - Dallas	79	TX0047848	Dallas	TX
SAND ISLAND WWTP	78	HI0020117	Honolulu	HI
Bergen County UA-Little Ferry WPCF - CS/CSO/STP	75	NJ0020028	Little Ferry	NJ
WILMINGTON STP	75	DE0020320	Wilmington	DE
HENRICO REGIONAL WWTP	75	VA0063690	Henrico	VA
Fresno-Clovis Regional WRF	75		Fresno	CA
BROWARD CNTY N. DIST REG	73	FL0031771	Pompano Beach	FL
Dayton WWTP & Sewer System	72	OH0024881	Dayton	OH

Onondaga (Co) Metro Syracuse STP	71	NY0027081	Syracuse	NY
Memphis S. T. E. MAXSON WWTP	71	TN0020729	Memphis	TN
King County South Treatment Plant	70	WA0029581	Renton	WA
ERIE CITY STP	69	PA0026301	Erie	PA
Patapsco WWTP	67	MD0021601	Baltimore	MD
Chattanooga Moccasin Bend WWTP	65	TN0024210	Chattanooga	TN
COLUMBIA BLVD. STP	65	OR0026905	Portland	OR
New York (C) - 26th. Ward WPCP	64	NY0026212	Brooklyn	NY
LAS VEGAS AWT	62	NV0020133	Las Vegas	NV
New York (C) - Tallman Island WPCP	61	NY0026239	Queens	NY
New York (C) - Red Hook WPCP	60	NY0027073	Brooklyn	NY
OKC-NORTH CANADIAN WWT	60	OK0036978	Oklahoma City	OK
RICHMOND WWTP	60	VA0063177	Richmond	VA
TACOMA CENTRAL STP #1	60	WA0037087	Tacoma	WA
D.C. Tillman WRP	59	CA0056227	Van Nuys	CA
Camden County MUA - CS-CSO/WWTP	59	NJ0026182	Camden City	NJ
Dos Rios WWTP	58	TX0077801	San Antonio	TX
NCSD #3 - Cedar Creek STP	57	NY0026859	Wantagh	NY
Stockton Regional WWCF	55	CA0079138	Stockton	CA
HARTFORD WPCF	53	CT0100251	Hartford	CT
NCSD #2 - Bay Park STP	53	NY0026450	East Rockaway	NY
PAPILLION WWTP	53	NE0112810	Omaha	NE
WALNUT CREEK STP	53	TX0046981	Austin	TX
Howard F Curren AWT	51	FL0020940	Tampa	FL
GRAND RAPIDS WWTP	50	MI0026069	Grand Rapids	MI
East Central Regional WWTP	50	FL0041360	West Palm Beach	FL
Indianapolis SOUTHPORT WWTP	49	IN0023183	Indianapolis	IN
SOUTH BEND WWTP	48	IN0024520	South Bend	IN
Oneida (Co) Oneida Co. WPCP	48	NY0025780	Utica	NY
ALBUQUERQUE #2 PLANT	48	NM0022250	Albuquerque	NM
FIELDS POINT WWTF	48	RI0100315	Providence	RI
Salado Creek WWTP	46	TX0052647	San Antonio	TX
JACKSON POTW, SAVANNA STREET	46	MS0024295	Jackson	MS
WATER RECLAMATION PROJECT	45	VA0024988	Centreville	VA
Springfield Wastewater System	45	MA0101613	Agawam	MA
Spokane Riverside Park POTW	44	WA0024473	Spokane	WA
FLINT WPCF	43	MI0022926	Flint	MI
MCMINNVILLE WWTP	43	OR0034002	Mcminnville	OR
NEUSE RIVER REGIONAL WWTP	42	NC0029033	Raleigh	NC
MADISON MSD STP	41	WI0024597	Madison	WI
EAST BANK PLANT	41	LA0066630	Jefferson	LA
WICHITA WWTP #1 + #2	41	KS0043036	Wichita	KS
LBVSD, ATHERTON PLANT	40	MO0101087	Independence	MO

FORT WAYNE WPCP	40	IN0032191	Fort Wayne	IN
Wilson Creek WWTP	40	TX0088633	Mckinney	TX
JEFFERSON CO VALLEY CREEK WWTP	40	AL0023655	Bessemer	AL
DELCORA CHESTER STP	40	PA0027103	Chester	PA
HOLLYWOOD WPCP	40	FL0026255	Hollywood	FL
IEUA Regional Plant No.1	39	CA8000409	Chino	CA
Central Contra Costa WWTF	39	CA0037648	Martinez	CA
WLSSD REGIONAL WWTF	39	MN0049786	Duluth	MN
MWMC - EUGENE/SPRINGFIELD STP	39	OR0031224	Eugene	OR
BUCKMAN STREET STP	38	FL0026000	Jacksonville	FL
OCUD/South WWTF	38		Orlando	FL
Upper Blackstone Abatement District	37	MA0102369	Millbury	MA
ALEXANDRIA STP	37	VA0025160	Alexandria	VA
Youngstown WWTP & Sewer System	37	OH0028223	Youngstown	OH
Leon Creek WWTP	36	TX0052639	San Antonio	TX
TULSA NORTHSIDE WWT	36	OK0026221	Tulsa	OK
LOHMEYER REG. WWTP	36		Fort Lauderdale	FL
SPRINGFIELD SW WWTP	35	MO0049522	Springfield	MO
NEORSD Westerly WWTP	35	OH0024660	Cleveland	OH
Nashville - White's Creek WWTP	35	TN0024970	Nashville	TN
ATLANTIC W P C F	35	VA0081248	Virginia Beach	VA
Sims Bayou WWTP	35	TX0062201	Houston	TX
MSD Little Miami Drainage Basin	34	OH0025453	Cincinnati	OH
Carolina Regional WWTP	34	PR0023752	San Juan	PR
New York (C) - Port Richmond WPCP	34	NY0026107	Staten Island	NY
ALLENTOWN CITY STP	34	PA0026000	Allentown	PA
Hillebrandt WWTP	34	TX0046990	Beaumont	TX
HOPEWELL REGIONAL WWTP	34	VA0066630	Hopewell	VA
Riverside Regional WQCP	34	CA0105350	Riverside	CA
Niagara Falls (C) WWTP	33	NY0026336	Niagara Falls	NY
Decatur Sanitary District	33	IL0028321	Decatur	IL
DES MOINES METRO WRA WWTP	33	IA0044130	Des Moines	IA
Southwest - Houston	33	TX0062995	Houston	TX
BATON ROUGE SOUTH WWTP	33	LA0036412	Baton Rouge	LA
Roberto Bustamante WWTP	33	TX0101605	El Paso	TX
SOUTH AUSTIN REGIONAL STP	33	TX0071889	Austin	TX
N KY SD1 - DRY CREEK STP	32	KY0021466	Erlanger	KY
UTOY CREEK WWTP	32	GA0039012	Atlanta	GA
SOUTH RIVER WWTP	32	GA0039012	Atlanta	GA
MUSKEGON CO METRO STP	32	MI0027391	Muskegon	MI
ROCK CREEK STP	32	OR0029777	Hillsboro	OR
Los Coyotes WRP	32	CA0054011	Cerritos	CA
MISSOURI RIVER STP	32	NE0036358	Omaha	NE

Truckee Meadows Water Reclamation Facility	32	NV0020150	Reno	NV
Rahway Valley SA - CS/CSO/STP	32	NJ0024643	Rahway	NJ
COBB COUNTY SUTTON WPCP	32	GA0026140	Smyrna	GA
Canton WWTP & Sewer System	31	OH0024350	Canton	OH
Atlantic County UA WWTF CS/STP	31	NJ0024473	Atlantic City	NJ
Everett WWTP	31	WA0024490	Everett	WA
SALT LAKE CITY	31	UT0021725	Salt Lake City	UT
Greater Lawrence Sanitary District	31	MA0100447	North Andover	MA
Tucson Water Reclaimed Plant	31		Tucson	AZ
Fall River Public Works Department	31	MA0100382	Fall River	MA
Western Virginia Water Auth. WWTP	31	VA0025020	Roanoke	VA
NEW HAVEN EAST SHORE WPCF	31	CT0100366	New Haven	CT
AUGUSTA WWTP	31	GA0037621	Augusta	GA
KUWAHEE WWTP	30	TN0023582	Knoxville	TN
Phoenix 23rd Ave WWTP	30	AZ0020559	Phoenix	AZ
Alvarado WWTF	30	CA0037869	La Mesa	CA
Iron Bridge Regional WRF	30	FL0037966	Oviedo	FL
SOUTH COLUMBUS WPCP	30	GA0020516	Columbus	GA
ROCK RIVER W.R.D.	30	IL0027201	Rockford	IL
WARREN WWTP	30	MI0024295	Warren	MI
Green Bay MSD - Combined	30	WI0020991	Green Bay	WI
MSD - DEREK R GUTHRIE WWTP	30	KY0078956	Louisville	KY
SALEM WILLOW LAKE STP	30	OR0026409	Salem	OR
POINT WORONZOF, JOHN ASPLUND WWTP	30	AK0022551	Anchorage	AK
New Bedford Wastewater District	30	MA0100781	New Bedford	MA
MCALPINE CREEK WWTP	29	NC0024970	Pineville	NC
North City WRP	29	CA0109398	San Diego	CA
Waco Regional WWTP	28	TX0026506	Waco	TX
VIRGINIA INITIATIVE PLANT	28	VA0081281	Norfolk	VA
KALAMAZOO WWTP	28	MI0023299	Kalamazoo	MI
LOWER POTOMAC STP	28	VA0025364	Lorton	VA
TULSA SOUTHSIDE WWT	28	OK0026239	Tulsa	OK
COLDWATER CREEK WWTP	28	MO0025160	St. Louis	MO
PCRWRD Ina Road WPCF	28	AZ0020001	Tucson	AZ
Colorado Springs Utilities LVSWWTP	27	CO0026735	Colorado Springs	CO
PEORIA STP	27	IL0021288	Peoria	IL
JOHN E EGAN WRP	27	IL0036340	Schaumburg	IL
HAMMOND WWTP	27	IN0023060	Hammond	IN
MISSOURI RIVER WWTP	27	MO0004391	St. Louis	MO
San Bernardino WRP	27	CA0105392	San Bernardino	CA
Encina WPCF	26	CA0107395	Carlsbad	CA
Palo Alto Regional WQCP	26	CA0037834	Palo Alto	CA
JAMES C. KIRIE WRP	26	IL0047741	Des Plaines	IL

Modesto WWTF	26	CA0079103	Modesto	CA
Lynn Water and Sewer Commission	26	MA0100552	Lynn	MA
Brightwater Treatment Plant	25		Woodinville	WA
LAFAYETTE WWTP	25	IN0032468	Lafayette	IN
DEKALB CO-SNAPFINGER CR WPCP	25	GA0024147	Decatur	GA
SAUGET - AMERICAN BOTTOMS REG. STP	25	IL0065145	Sauget	IL
GARY SANITARY DISTRICT	25	IN0022977	Gary	IN
SAGINAW STP	25	MI0025577	Saginaw	MI
HONOULIULI WWTP	25	HI0020877	Honolulu	HI
CEDAR RAPIDS WWTP	25	IA0042641	Cedar Rapids	IA
FOX METRO WATER RECLAMATION DISTRICT	25	IL0020818	Oswego	IL
YCUA WWTP	24	MI0042676	Ypsilanti	MI
Manchester WWTF	24	NH0100447	Manchester	NH
BRIDGEPORT WESTSIDE	24	CT0100056	Bridgeport	CT
Amherst (T) WWTP #16 & Onsites	24	NY0025950	Amherst	NY
New York (C) - Oakwood Beach WPCP	24	NY0026174	Staten Island	NY
SPFLD METRO SD SPRING CREEK WWTP	24	IL0021989	Springfield	IL
TERRE HAUTE WWTP	24	IN0025607	Terre Haute	IN
BUCKLIN PT STP	24	RI0100072	East Providence	RI
ARCHIE ELLEDGE WWTP	24	NC0037834	Winston-Salem	NC
KOKOMO MUN WWTP	24	IN0032875	Kokomo	IN
South Cross Bayou WWTP	23	FL0040436	St. Petersburg	FL
KCK WWTP #1-KP WWTP	23	KS0038563	Kansas City	KS
NAPERVILLE	23	IL0034061	Naperville	IL
Ocean County UA Northern WPCF - CS/STP	23	NJ0028142	Brick Township	NJ
Ocean County UA Central WPCF - CS/STP	23	NJ0029408	Bayville	NJ
STAMFORD WPCF	23	CT0101087	Stamford	CT
DURHAM STP	23	OR0028118	Tigard	OR
RACINE STP	23	WI0025194	Racine	WI
Albany (Co) - ACSD South STP	23	NY0026867	Albany	NY
RIVER BEND RD STP	23		Dalton	GA
ARLINGTON CO WPCP	22	VA0025143	Arlington	VA
Oxnard WWTP	22	CA0054097	Oxnard	CA
WYOMING VALLEY SAN AUTH	22	PA0026107	Wilkes Barre	PA
SHREVEPORT, LUCAS WWTP	22	LA0041394	Shreveport	LA
Lancaster WRP	22		Lancaster	CA
LITTLETON/ENGLEWOOD WWTP	22	CO0032999	Englewood	CO
THERESA STREET STP	22	NE0036820	Lincoln	NE
Southern Regional WWTP	22		Boynton Beach	FL
Valencia WRP	22	CA0054216	Valencia	CA
T.Z. OSBOURNE WWTP	22	NC0047384	Mcleansville	NC
FORT SCOTT WWTP	22	KS0095923	Fort-Scott	KS
MRWCPA WWTF	22	CA0048551	Marina	CA

JEFFERSON COUNTY VILLAGE CREEK WWTP	21	AL0023647	Birmingham	AL
WATERBURY WPCF	21	CT0100625	Waterbury	CT
LANCASTER CITY STP	21	PA0026743	Lancaster	PA
Rockland County (Co) SD#1	21	NY0031895	Orangeburg	NY
KENOSHA - WWTP	21	WI0028703	Kenosha	WI
Anderson WWTP	21	IN0032476	Anderson	IN
Albany (Co) - ACSD North STP	21	NY0026875	Menands	NY
Suffolk (Co) SCSD #3 SOUTHWEST	21	NY0104809	West Babylon	NY
South Mesquite Creek WWTP	21	TX0047431	Mesquite	TX
New York (C) - Rockaway WPCP	21	NY0026221	Rockaway Park	NY
S BAYSIDE WWTP	21	CA0038369	Redwood City	CA
LFUCG TOWN BRANCH STP	21	KY0021491	Lexington	KY
SUNNYVALE WWTF	21	CA0037621	Sunnyvale	CA
CHESAPEAKE-ELIZABETH WPCF	21	VA0081264	Virginia Beach	VA
SOUTHEAST WRP	21	TX0106071	Lubbock	TX
Evansville WESTSIDE WWTP	21	IN0032956	Evansville	IN
COBB CO. - SO. COBB WPCP	20	GA0026158	Mableton	GA
Long Beach WRP	20	CA0054119	Long Beach	CA
Little Rock - Adams Field WWTP	20	AR0021806	Little Rock	AR
BOAT HARBOR W P C F	20	VA0081256	Newport News	VA
MISHAWAKA WWTP	20	IN0025640	Mishawaka	IN
ELKHART WWTP	20	IN0025674	Elkhart	IN
Trenton City - Septics/CS/CSO/STP	20	NJ0020923	Trenton City	NJ
BELLINGHAM POST POINT TP	20	WA0023744	Bellingham	WA
Upper Potomac River Comm WWTP	20	MD0021687	Westernport	MD
Somerset Raritan Valley RSA - CS/STP	20	NJ0024864	Bridgewater	NJ
Tonawanda (T) WWTP	20	NY0026395	Tonawanda	NY
BIG CR WPCP	20	GA0024333	Roswell	GA
Hamilton WRF & Sewer System	19	OH0025445	Hamilton	OH
LFUCG W HICKMAN STP	19	KY0021504	Nicholasville	KY
ALBANY Joshua Road WPCP	19	GA0037222	Albany	GA
Binghamton-Johnson City Jt.S Bd.STP	19	NY0024414	Vestal	NY
Rowlett Creek WWTP	19	TX0024686	Garland	TX
DAVENPORT WWTP	19	IA0043052	Davenport	IA
ST JOSEPH WWTP	19	MO0023043	St Joseph	MO
ROCKY RIVER WWTP	19	NC0036269	Concord	NC
Gloucester County UA - CS/STP	19	NJ0024686	West Deptford Twp	NJ
PISCATAWAY WWTP	19	MD0021539	Accokeek	MD
Rowlett Creek WWTP #1	19	TX0047911	Mckinney	TX
MEDFORD STP	18	OR0026263	Central Point	OR
SIOUX CITY WWTP	18	IA0043095	Sioux City	IA
SENECA TREATMENT PLANT	18	MN0030007	Eagan	MN

BUNCOMBE COUNTY MSD WWTP	18	NC0024911	Asheville	NC
PORLAND EAST END WWTF	18	ME0102075	Portland	ME
Macon ROCKY CREEK WPCP	18	GA0024546	Macon	GA
Oceanside WPCP	18	CA0037681	San Francisco	CA
FRWRD South (Main) STP	18	IL0028657	Elgin	IL
WAUKEGAN STP - NORTH SHORE S.D.	18	IL0030244	Waukegan	IL
Richmond WWTP	18	IN0025615	Richmond	IN
Evansville EASTSIDE WWTP	18	IN0033073	Evansville	IN
Montgomery Co Western Regional WWTP & Sewers	18	OH0026638	West Carrollton	OH
PROCTORS CREEK WWTP	18	VA0060194	Chester	VA
THOMAS P. SMITH WTP	18		Tallahassee	FL
PRESIDENT STREET WPCP	18	GA0025348	Savannah	GA
WESTERN BRANCH WWTP	18	MD0021741	Upper Marlboro	MD
DECATUR DRY CREEK WWTP	18	AL0048593	Decatur	AL
Nashville - Dry Creek WWTP	18	TN0020648	Madison	TN
Fairfield-Suisun WWTP	18	CA0038024	Fairfield	CA
Conserve II	18		Orlando	FL
Lima WWTP & Sewer System	17	OH0026069	Lima	OH
OCUD/Eastern Subregional WRF	17	FL0038849	Orlando	FL
MATTABASSETT WPCF	17	CT0100307	Cromwell	CT
DUBUQUE WWTP	17	IA0044458	Dubuque	IA
Oro Loma WWTF	17	CA0037869	San Lorenzo	CA
Bakersfield WWTP #2	17		Bakersfield	CA
Little Patuxent WWTP	17	MD0055174	Savage	MD
Pensacola Central Water Reclamation	17	FL0559351	Pensacola Beach	FL
MONROE WATER POLL CONTROL CENTER	17	LA0038741	Monroe	LA
MSD, GRAND GLAIZE WWTF	17	MO0101362	Valley Park	MO
Hamilton Township (Mercer) WPCF-CS/Septics/STP	17	NJ0026301	Hamilton	NJ
LYNCHBURG REGIONAL WWTP	17	VA0024970	Lynchburg	VA
NANSEMOND W P C F	17	VA0081299	Suffolk	VA
Scottsdale Water Campus AWT	17		Scottsdale	AZ
WATERLOO WWTP	17	IA0042650	Waterloo	IA
Haskell St WWTP	17	TX0026751	El Paso	TX
TUSCALOOSA WWTP	17	AL0022713	Tuscaloosa	AL
HATTIESBURG SOUTH LAGOON	17	MS0020303	Hattiesburg	MS
Terminal Island WWTP	17	CA0053856	San Pedro	CA
WYOMING WWTP	17	MI0024392	Grandville	MI
SUNRISE STP NO. 3 (Sawgrass)	17		Sunrise	FL
Monmouth Co Bayshore Outfall Auth	16	NJ0024694	Belford	NJ
IBWC Nogales International WTP	16	AZ0025607	Nogales	AZ
Rensselaer (Co) SD#1 WWTP	16	NY0087971	Troy	NY

Brushy Creek Regional WWTP	16	TX0101940	Round Rock	TX
Ten Mile Creek WWTP	16	TX0022811	Ferris	TX
NORTHSIDE/SOUTHSIDE STP	16	VA0060593	Danville	VA
JOLIET - EASTSIDE STP	16	IL0022519	Joliet, City Of	IL
BLOOMINGTON-NORMAL WEST (OLD) STP	16	IL0027731	Bloomington	IL
BATON ROUGE NORTH WWTP	16	LA0036439	Scotlandville	LA
NORTH LAS VEGAS WWTF	16	NV0023647	Sunrise Manor	NV
Middletown WWTP & Sewer System	16	OH0026522	Middletown	OH
SCRANTON SEWER AUTHORITY	16	PA0026492	Scranton	PA
COLUMBIA REGIONAL WWTP	16	MO0097837	Columbia	MO
BILLINGS WWTP	16	MT0022586	Billings	MT
Murfreesboro - Sinking Creek STP	16	TN0022586	Murfreesboro	TN
Lowell Regional Wastewater Utility	16	MA0100633	Lowell	MA
Brockton Dept. of Public Works	16	MA0101010	Brockton	MA
Kankakee River Metropolitan Agency	16	IL0021784	Kankakee	IL
READING AREA FRITZ ISLAND STP	16	PA0026549	Reading	PA
Hale Avenue RRF	16	CA0107981	Escondido	CA
Monroe (Co) NW Quadrant WWTP	16	NY0028231	Hilton	NY
Pine Bluff WWTP	16	AR0033316	Pine Bluff	AR
Euclid WWTP & Sewer System	16	OH0031062	Euclid	OH
CHAMBERS CREEK	16	WA0039624	University Place	WA
Pecan Creek WWTP	15	TX0047180	Denton	TX
BOCA RATON STP	15	FL0026344	Boca Raton	FL
SANTA CRUZ WWTF	15	CA0048194	Santa Cruz	CA
ANN ARBOR WWTP	15	MI0022217	Ann Arbor	MI
South Essex Sewer District WWTP	15	MA0100501	Salem	MA
NAPA SANIT. DIST WWRF	15	CA0037575	Napa	CA
L.A.-Glendale WRP	15	CA0053953	Glendale	CA
EAST CHICAGO STP	15	IN0022829	East Chicago	IN
BLOOMINGTON STP (SOUTH)	15	IN0035718	Bloomington	IN
NEW ORLEANS W. BANK STP	15	LA0038105	New Orleans	LA
HENDERSON AWT	15	NV0022098	Henderson	NV
SOUTH VALLEY SD (Jordan Basin WRP)	15	UT0025852	Riverton	UT
BOISE, CITY OF--WEST BOISE	15	ID0023981	Boise	ID
HUNTINGTON WWTP	15	WV0023159	Huntington	WV
MONTGOMERY CATOMA CREEK WWTP	15	AL0027863	Montgomery	AL
JANESVILLE WWTP	15	WI0030350	Janesville	WI
INTRENCHMENT CREEK WWTP	15		Atlanta	GA
Longview Main WWTP	14	TX0022217	Longview	TX
NORTH BUFFALO WWTP	14	NC0024325	Greensboro	NC
LOWER MUDDY CREEK WWTP	14	NC0050342	Winston-Salem	NC
HUNTSVILLE SPRING BRANCH WWTP	14	AL0058394	Huntsville	AL
Delta Diablo Sanitation Dist. WWTF	14	CA0038547	Antioch	CA

ARMY BASE W P C F	14	VA0081230	Norfolk	VA
BLUE LAKE TREATMENT PLANT	14	MN0029882	Shakopee	MN
Gary L Kron WRF & Sewer System	14	OH0043559	Mentor	OH
GWINNETT CROOKED CREEK STP	14	GA0026433	Norcross	GA
Findlay WWTP & Sewer System	14	OH0025135	Findlay	OH
Ponce Regional WWTP	14	PR0021563	Ponce	PR
South Central WWTF	14	FL0035980	Delray Beach	FL
CARMEL WWTP	14	IN0022497	Indianapolis	IN
COLUMBUS WWTP	14	IN0032573	Columbus	IN
RAGNONE (DIST.#2) WWTP	14	MI0022977	Montrose	MI
HURON VALLEY WWTP-SOUTH	14	MI0043800	Rockwood	MI
K. C. WEST SIDE WWTP	14	MO0024929	Kansas City	MO
CROSS CREEK WWTP	14	NC0023957	Fayetteville	NC
Springfield WWTP & Sewer System	14	OH0027481	Springfield	OH
Lucas Co Maumee River WWTP	14	OH0034223	Waterville	OH
GRESHAM STP	14	OR0026131	Gresham	OR
APPLETON WWTP	14	WI0023221	Appleton	WI
JAMES RIVER W P C F	14	VA0081272	Newport News	VA
JO CO NELSON COMPLEX WWTP	14	KS0055492	Mission	KS
NORTH SHORE S.D. - CLAVEY RD PLANT	14	IL0030171	Highland Park	IL
Westchester (Co) New Rochelle STP	14	NY0026697	New Rochelle	NY
Hamby WWTP	14	TX0023973	Hamby	TX
Hayward WPCF	14	CA0037869	Hayward	CA
NEW LOWER MERAMEC WWTP	14	MO0127949	St. Louis	MO
Texarkana South Regional WWTP	14	TX0101800	Texarkana	TX
Westside Treatment Facility	14	WA0024350	Vancouver	WA