## **Director of Compliance and Innovation Report**

## November 15, 2023

### Plant Loading, CSO Report, and Director's Notes

## **Plant Influent Report:**

Biochemical Oxygen Demand, 5-Day (Avg. 45415 lbs/day)

Total Suspended Solids (Avg. 65939 lbs/day)

Average Daily Flow (26.18 million gallons/day)

Maximum Daily Flow (43.85 million gallons/day)

71 percent of design 64 percent of design 35 percent of design

Plant Influent Total Monthly Flow (million gallons) for September 671.68 Estimated Unbilled Total Monthly Flow (million gallons) 56.78 Total Monthly Precipitation (inches) 0.91

## **Plant Effluent Report:**

<u>Parameter</u>	Report Frequency	<u>Permit</u>	<u>Reported</u>	<u>Violations</u>
		<u>Limits</u>	<u>Values</u>	
CBOD₅, mg/L	Mo./Wk. Avg	20/40	2/3	0
TSS, mg/L	Mo./Wk. Avg	25/45	4/6	0
NH <sub>3</sub> -N, mg/L	Mo. Avg/Daily Max	1.5/3.0	0.39/0.56	0
DO, mg/L	Mo. Avg/Wk. Avg/Daily Min	6.0/4.5/4.0	7.20/6.60/6.29	0
pH, S.U.	Daily Min/Max	6.0/9.0	7.84/8.08	0
Total Nickel, mg/L	Mo. Avg	0.0381	0.014	0
Cl <sub>2</sub> Residual, mg/L	Daily Max	0.05	< 0.011	0
Fecal Coliform	Daily Max	400	93	0
CFU/100mL				

## **CSO Report:**

Location	Events	Est. Total Duration of Discharges (hrs.)	Discharge (million gallons)
Oakland Avenue (Outfall 003)	3	8.2	2.25
Lincoln Park (Outfall 004)	0	0	0
McKinley Avenue (Outfall 007)	4	13.8	6.8
Seventh Ward (Outfall 008)	2	5.9	20.37

## **Director's Notes:**

#### **Disinfection Season:**

The disinfection season ended on October 31 with no violations due to equipment breakdowns or staff. The one reported violation was due to industrial pass through. This is two years in a row where the staff and equipment have performed well. District Operators and Maintenance staff are in the process of winterizing the system.

## **Land Application Program:**

Land application started on November 2 and currently 3.75 m gallons of biosolids have been applied.

## **Compliance Reporting:**

In accordance with the requirements of our NPDES permit the SDD has submitted the Capacity, Management, Operations, & Maintenance Plan to the State.

## **USEPA Draft Sampling Narrative:**

District staff received a letter from the USEPA explaining their intent to start a POTW Influent Study with the following goals.

- 1) Identify industrial users discharging wastewater containing PFAS.
- 2) Collect data of PFAS concentrations from domestic influent.
- 3) Characterize PFAS from both Industries and domestic sources.
- 4) Collect data on adsorbable organic fluorine concentrations.
- 5) Better understand PFAS pass through to biosolids and effluent.

The full narrative from USEPA is attached.

## Operations, Laboratory, and Pretreatment Activity Reports - October/November 2023

#### **Operations Activities:**

Normal operational activities were conducted as prescribed by standard procedures or in response to conditions within the plant. These include operating, monitoring, and adjusting facility equipment, performing process control testing, records keeping, and coordination with the other departments to realize optimal performance of the Plant.

- 1) Digester #2- Operators have removed all the sludge that they can. Maintenance will finish pumping sludge but have experienced high methane levels in the attic space creating a safety concern. We will pump the remaining sludge out as soon as possible.
- 2) Digester #3- Digester has been put back online after making manufacturers recommended adjustments. The oil leak reappeared after 3 days and we are waiting for instructions from the manufacturer.
- 3) Digester # 4 is off line do to a leak in the sludge tubes. After further investigation we have found that the sludge tubes are showing some wear and may need to be replaced.
- 4) Operations staff continue to actively address PMs as time, workload, and staff levels allow.

- 5) Blower usage has still been remaining the same. At the start of November, the usage has started to decrease due to the flushing of the system and decreased loadings.
- 6) Operations staff are currently in the process of taking the Disinfection System off line for the season.
- 7) We have started mixing (90 hrs.) of the East lagoon for land app.

#### **Laboratory Activities:**

#### **Routine:**

A total of 2,121 analyses were performed in the laboratory during the month of October 2023.

Monitoring of treatment plant, industrial users, and receiving stream samples for compliance purposes and process monitoring continued. Laboratory personnel continued to perform additional background nutrient monitoring to help fully characterize the nutrient loading on the plant.

#### **Non-Routine:**

- 1) The SDD laboratory continued to send samples of raw influent twice a week throughout the month of October 2023 for the "COVID-19 in Wastewater" study funded by the Illinois Department of Public Health. A Zoom call was held on October 6, 2023, with the study participants and the researchers to discuss the results of the study thus far. An increase in COVID levels has been observed across the state.
- 2) Keith Richard served as a judge for the lab event at the WEFTEC 2023 Operations Challenge on October 2, 2023. There were teams from eight countries competing in the challenge.
- 3) The quarterly sampling of the groundwater monitoring wells was conducted at the South Sludge Lagoons and Wyckles Lagoons during the second week of October 2023.
- 4) The SDD laboratory analyzed nineteen stormwater samples during October 2023 for the Lake Decatur Watershed monitoring study. The SDD is providing in-kind laboratory analysis of samples collected at the study's three monitoring sites after significant storm events.
- 5) Keith Richard, Ashley Bailey, and Tim Gorden attended the Illinois Association of Water Pollution Control Operators (IAWPCO) Central Regional Conference in Champaign on October 17, 2023. During the conference, Keith was elected Secretary of the IAWPCO Central Region.
- 6) Lab and Pretreatment staff gave a tour of the plant to a Millikin University biology class on October 18, 2023.

#### **Pretreatment Activities:**

#### **Pretreatment - General Activities:**

- 1) Pretreatment personnel monitored ten commercial and industrial users (IU) during October 2023. One industry site inspection took place during October.
- 2) A permit renewal packet was sent to HR Ewell.
- 3) There were no renewed wastehauler permits issued this month.

#### **Pretreatment Ordinance - Verbal Notices:**

The SDD issued a total of 4 Verbal Notices to **Primient** in October 2023:

- 1. 10/6/2023 Primient was issued a verbal warning for exceeding their Daily BOD limit of 24,350 lbs on 9/29, 9/30, and 10/1 (3 violations).
- 2. 10/13/2023 Primient was issued a verbal warning for exceeding their Daily BOD limit on 10/2, and for exceeding their 10-day average maximum BOD limit of 16,148 lbs from 10/1 to 10/9 (8 violations)
- 3. 10/17/2023 Primient was issued a verbal warning for exceeding their daily maximum BOD limit on 10/12 (1 violation)
- 4. 11/1/2023 Primient was issued a verbal warning for exceeding their daily BOD limit on 10/18 and 10/19, and their 10-day moving average limit from 10/19 to 10/25 (8 violations)

## **Pretreatment Ordinance - Warning Notices (WN):**

Warning Notice 23-003 was issued to **Septic Specialists** for discharging without a manifest and for failing to notify an operator before discharging.

Warning Notice 23-004 was issued to **Primient** for BOD limit exceedances. Following subsequent violations, district personnel are planning to adjust the penalty structure of Executive Order 18-003 in November.

Warning Notice 23-005 was issued to **ADM** for pH excursions from the West Plant.

## **Pretreatment Ordinance - Notices of Violation (NOV):**

No Notices of Violation were issued during October 2023.

#### **Pretreatment Ordinance - Executive Orders:**

No Executive Orders were issued during October 2023.

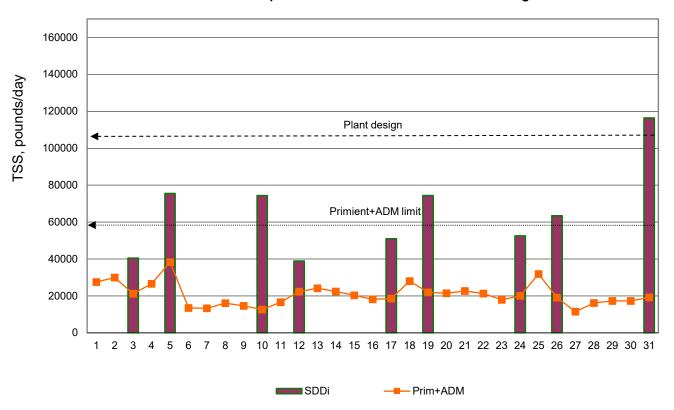
#### **Pretreatment Ordinance - Penalty Assessments:**

The following industrial penalties were assessed for October 2023:

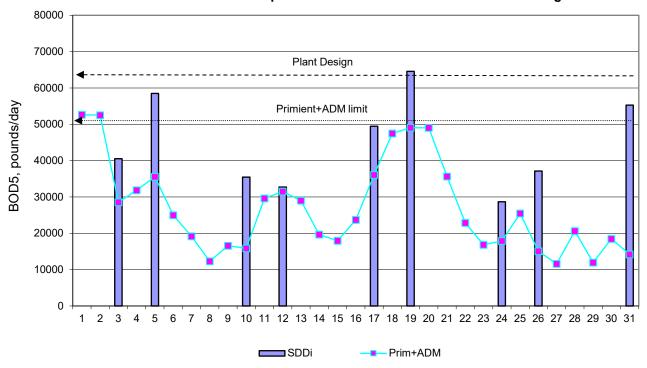
1) Primient \$329,500 2) ADM \$2,000

## **Plant Operating Graphs:**

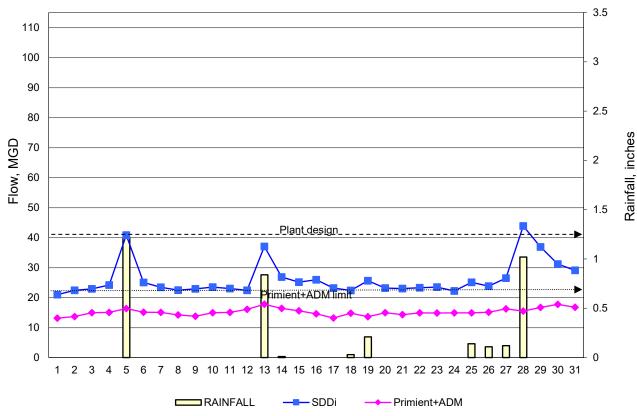
TSS Comparison: SDD Inf Primient+ADM Discharges



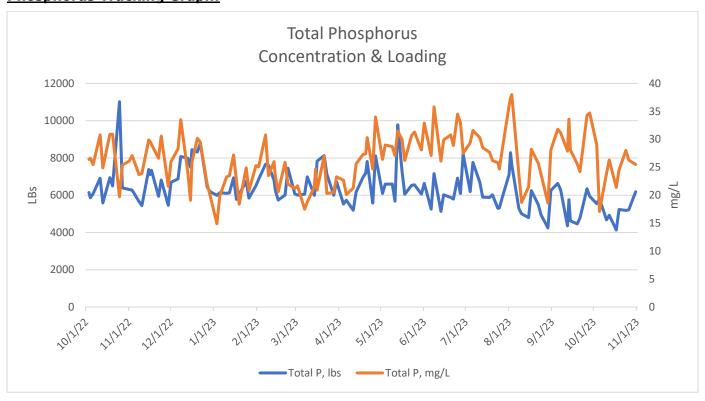
## **BOD Comparison: BOD Inf vs. Primient + ADM Discharges**





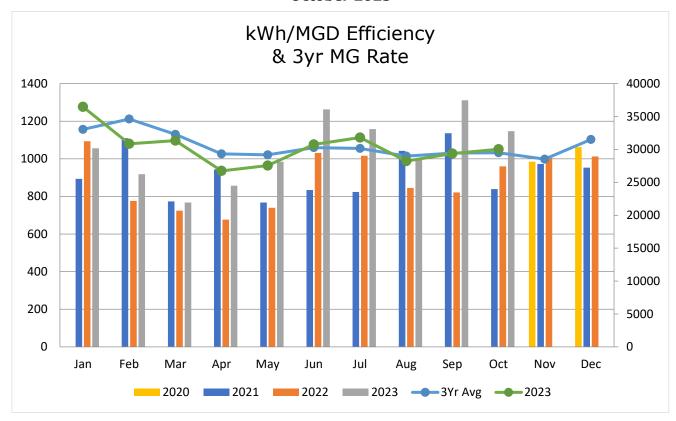


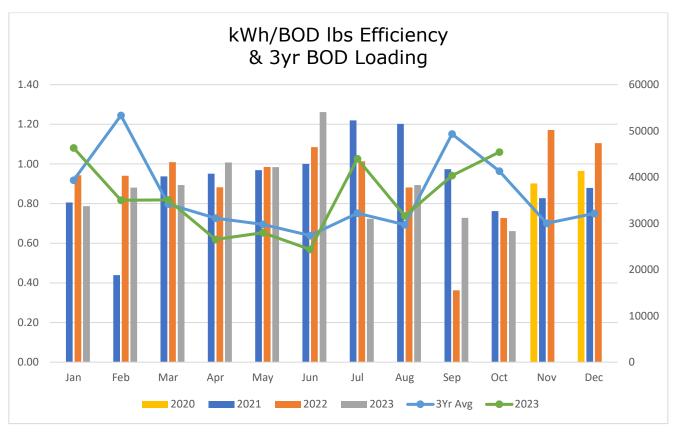
## **Phosphorus Tracking Graph:**



## **Plant Efficiency Graphs:**

## October 2023





# 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 31<sup>st</sup>, 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

- o Is it comingled or sole-sourced?
- o 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
  - o 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
  - o EPA Draft Method 1633
  - o EPA Draft Method 1621
  - Field QC samples
- 1 domestic sample point
  - o EPA Draft Method 1633
  - o EPA Draft Method 1621
  - Field QC samples

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

		Permit		
Facility/Project Name	Flow	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	ОН
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	СО
Central WWTP - TRA	152	TX0022802	Dallas	TX
OCSD WWTP No. 2	151	CA0110604	Fountain Valley	CA
MSD Mill Creek Drainage Basin	151	OH0025461	Cincinnati	ОН
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	ОН
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	МО
BISSELL POINT WWTP	111	MO0025178	St Louis	МО
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	ОН
69th Street Plant	96	TX0096172	Houston	TX
			North Miami	
MDWASD North District WWTP	95	FL0032182	Beach	FL
PHILADELPHIA WATER DEPT (SE)	95	PA0026662	Philadelphia	PA
Puerto Nuevo-Bayamon WWTP	94	PR0023728	Sabana Seca	PR
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	ОН
San Jose Creek WRP	84	CA0053911	Whittier	CA
WYANDOTTE WWTP	81	MI0036072	Wyandotte	MI
K.C. BLUE RIVER STP	81	MO0024911	Kansas City	МО
Southeast WPCP	80	CA0037664	San Francisco	CA
East Bay MUD Main WWTP	80	CA0037702	Oakland	CA
Columbus Jackson Pike WWTP & Sewers	80	OH0024732	Columbus	ОН
Westchester (Co) Yonkers Joint STP	79	NY0026689	Yonkers	NY
Akron WWTP & Sewers	79	OH0023833	Akron	ОН
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	ОН

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	ОК0036978	Oklahoma City	ОК
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	СТ
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 AWTP	51	FL0020940	Tampa	FL
GRAND RAPIDS WWTP	50	MI0026069	Grand Rapids	МІ
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	ОН
Leon Creek WWTP	36	TX0052639	San Antonio	TX
TULSA NORTHSIDE WWT	36	OK0026221	Tulsa	ОК
LOHMEYER REG. WWTP	36		Fort Lauderdale	FL
SPRINGFIELD SW WWTP	35	MO0049522	Springfield	МО
NEORSD Westerly WWTP	35	OH0024660	Cleveland	ОН
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	ОН
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	ОН
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	СТ
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	ОК
COLDWATER CREEK WWTP	28	MO0025160	St. Louis	МО
PCRWRD Ina Road WPCF	28	AZ0020001	Tucson	AZ
Colorado Springs Utilities LVSWWTP	27	CO0026735	Colorado Springs	СО
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	МО
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	СТ
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	СТ
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	СО
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	СТ
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	ОН
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
			West Deptford	
Gloucester County UA - CS/STP	19	NJ0024686	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
PORTLAND 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	ОН
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	ОН
OCUD/Eastern Subregional WRF	17	FL0038849	Orlando	FL
MATTABASSETT WPCF	17	CT0100307	Cromwell	СТ
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	МО
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	ОН
SCRANTON SEWER AUTHORITY	16	PA0026492	Scranton	PA
COLUMBIA REGIONAL WWTP	16	MO0097837	Columbia	МО
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	ОН
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.AGlendale 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 OFWEST 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	ОН
GWINNETT CROOKED CREEK STP	14	GA0026433	Norcross	GA
Findlay WWTP & Sewer System	14	OH0025135	Findlay	ОН
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	МО
CROSS CREEK WWTP	14	NC0023957	Fayetteville	NC
Springfield WWTP & Sewer System	14	OH0027481	Springfield	ОН
Lucas Co Maumee River WWTP	14	OH0034223	Waterville	ОН
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	МО
Texarkana South Regional WWTP	14	TX0101800	Texarkana	TX
Westside Treatment Facility	14	WA0024350	Vancouver	WA

## Sanitary District of Decatur Nutrient Program Management Report

## **November 15, 2023**

During the month of October District personnel attended meetings with members of the Black & Veatch Team to affect progress in nutrient reduction planning and activities.

Currently, activities continue to surround the gathering and sharing of data and information so that all parties can assist in how to move the projects forward as efficiently as possible. In the month of September, the District continued to gather and forward all requested industrial special sampling lab results and plant performance data as requested by the B&V.

B&V has continued the development of their full facility model, continued to develop aged infrastructure evaluation, and as well as continued to assistance with construction phase services of the Frac Tank Pilot Study including leading the construction progress meetings. B&V has received comments from SDD on the Industrial Pretreatment Program Analysis and worked to incorporate these comments into the final report.

Below you will find a list of the actual meetings conducted in chronological order. The information covers the subject, date, and agenda items of each meeting. Additional information related to any of these meetings or specific agenda items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

## **Nutrient Reduction Program Meetings Conducted during October 2023**

<u>Subject</u>	<u>Date</u>	<u>Agenda</u> <u>Items</u>
Review SDD Industrial Pretreatment Program Analysis	10/17/2023	Objective: Provided an overview of the draft Industrial Pretreatment Program Analysis
Review Meeting TM 4 Solids Handling Evaluations	10/19/2023	Objective: Review the updated TM 4 Solids Handling Evaluations prior to SDD's detailed review.
Nutrient Program Management Bi-weekly Meeting	10/25/2023	Objective: Provided Status Update on Program Tasks  1. Frac Tank Pilot 2. Power BI 3. Pretreatment Program Update 4. PDOP/Annual Progress Report 5. Watershed Services 6. Aging Infrastructure 1. WRRF Upgrade Plan
Fermentation Reactor Pilot Construction Progress Meeting	10/26/2023	<ol> <li>Submittal Status</li> <li>Status of Owner Supplied         Equipment</li> <li>Request for Information</li> <li>Work Change Directive / Change         Orders</li> <li>Pay Applications</li> <li>Construction Schedule/Activities</li> <li>Additional Questions / Discussion</li> <li>Next Meeting</li> </ol>

# Sanitary District of Decatur Watershed Management Report

#### November 15, 2023

During the month of October District personnel attended meetings with members of the Black & Veatch and Geosyntec Teams to affect progress in meeting the NARP requirements as listed in the NPDES permit as well as moving forward on the formation of a future watershed workgroup for the Middle Sangamon River.

Recent activities pertained to items necessary to complete the NARP Study. Foremost in these efforts included Geosyntec continuing their Instream modeling efforts and the development of baseline scenarios as well as potential watershed management scenarios and alternatives. This month focused on the review of the model and receiving District feedback.

Below you will find a list of the meetings conducted. The information covers the subject, date, and agenda items of each meeting. Black & Veatch provided a written summary. Additional information related to any of these items can be supplied to the Board upon request including meeting minutes and documentation used during the meeting as it is all being stored as part of the permanent record.

#### Watershed Management Meetings Conducted during October 2023

Subject	<u>Date</u>	Agenda Items
Instream Model and Baseline Scenario Discussion		Objective: Discussed the initial results of the Instream Model and discussed baseline scenarios.
Watershed Services Bi-weekly Meeting	10/18/2023	Review Instream Model status     Review initial results of baseline scenario at 0.5 mg/L TP



November 6, 2023

Sanitary District of Decatur (SDD) 501 Dipper Lane Decatur, IL 62522 Nutrient Program Manager BV Project No. 411502

Attention: Don Miller, P.E., Director of Engineering

Subject: SDD Nutrient Program Management

September Monthly Progress Update (October 1, 2023 – October 31, 2023)

Dear Mr. Miller:

This letter summarizes the work associated to the SDD Nutrient Program Management project for services from October 1, 2023, through October 31, 2023.

- 1. Program Management, Administration, and Coordination
  - Conducted bi-weekly program conference calls to update progress and discuss key issues.
  - Provided Monthly Project Update.
  - Provided ongoing management of the project including program management, preparation/monitoring of the program schedule and budget as well as program administrative duties.
  - Updated Power BI dashboard with most recent plant monitoring data.

### 2. Pretreatment Program Update

- Continued to evaluate special sampling data
- Continued to update the full facility process model with the industrial special sampling results.
- Prepared for and met with SDD staff to provide an overview of the Industrial Pretreatment Program Analysis
- Began to incorporate review comments to finalize the Industrial Pretreatment Analysis Report.
- 3. Phosphorus Discharge and Optimization Plan (PDOP)
  - No Services were completed this period.

### 4. Watershed Support Services

- Conducted bi-weekly progress update meeting.
- Geosyntec provided a summary and discussion of their completed Instream model for the NARP Study.
- Geosyntec continued to identify watershed management scenarios and next steps for the Instream modeling efforts.
- Continued initial planning efforts for the Watershed Group formation development.

#### 5. WRRF Upgrade Plan

- Aged Infrastructure Evaluation
  - i. Continued to developed rehabilitation and replacement costs.
  - ii. Developing rating score for each asset evaluated to determine criticality and timing of upgrades.
  - iii. Continued summarizing structural assessments and incorporate into overall aging infrastructure evaluation.
- Plant Facility Evaluation
  - Continued detailed modeling efforts to evaluate and provide whole plant process model simulations related to the alternatives identified for nutrient removal.
  - Continued development of upgrades needed for each unit process to meet nutrient limits. Multiple plant loading scenarios are considered to identify costs for ADM and Primient.
- 6. Pilot and Demonstration Testing
  - Continued to review for contractor submittals
  - Prepared for and conducted the Construction Progress Meeting with Burdick (Contractor).

FRAC TANK PILOT PROJECT S	CHEDULE
MILESTONE/ACTIVITES	DATE
Bi-weekly Construction Progress Meetings	August – December 2023
Early Receipt of Pre-purchased Equipment  Primary Sludge Pumps  Big Bubble Mixing  Frac Tank	November 2023
Substantial Completion (pending equipment delivery times)	December 2023
Final Completion	January 2023

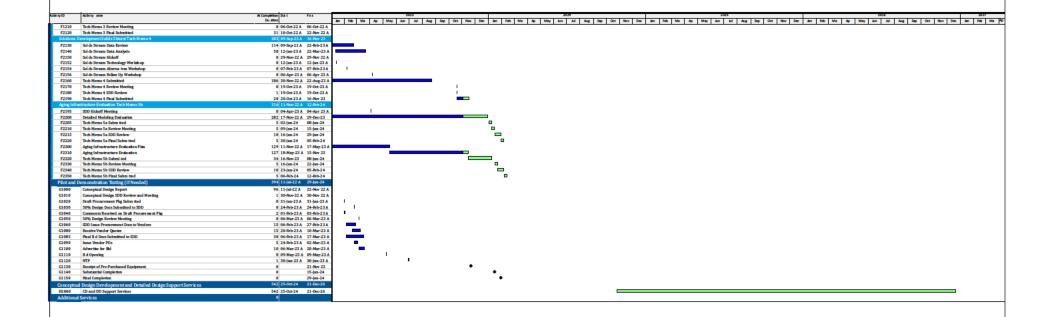
Please feel free to contact me with any questions, comments or if you need additional information. Sincerely,

Diane Grossenheider, P.E. Project Manager, Black & Veatch

Enclosure(s): SDD Nutrient Program Manager Schedule and Anticipated Cost Forecast

#### Project: Nutrient Program Management - 110623 Activity area A1000 NTP A1010 Nick Off Meeting Minutes A1020 Nick Off Meeting Minutes A1030 SDD B1 Weekly Program Progress Calls - Theeslays A1040 SDD Monthly Program Progress Meeting Minutes A1050 Cont Fore cas to 0 18-Reb-22 A 18-Reb-22 A 1 24-Reb-22 A 24-Reb-22 A 1217 01-Mar-22 A 21-Dec-26 1217 01-Mar-22 A 21-Dec-26 1217 01-Mar-22 A 21-Dec-26 1208 15-Mar-22 A 21-Dec-26 Monthly Progress Updates - First Monday of Month Monthly Board of Trustees Meetings Industrial Water Rud Ries Meetings 1214 04-Mar-22 A 21-Dec-26 1212 08-Mar-22 A 21-Dec-26 1202 22-Mar-22 A 21-Dec-26 778 10-jun-22 A 02-jul-25 ent Program Update 5 10-jun-22 A 17-jun-22 A 29 20-jun-22 A 29-jul-22 A 140 29-Aug-22 A 30-Mar-23 A 4 27-Mar-23 A 30-Mar-23 A 202 13-jun-22 A 21-jul-23 A 21 24-jul-23 A 21-Aug-23 A Data Co lection/Request Evalua Ion Characterize Waste water Discharge Waste water Discharge Characterization Meeting Pretreatment Program Update Draft Report Sat SDD Review Pretreatment Analysis Draft Review Meeting Stakeholders Meeting 40 22-Aug-23 A 17-Oct-23 A 0 17-Oct-23 A 17-Oct-23 A 0 31-jan-24 31-jan-24 20 30-Oct-23 A 28-Nov 23 528 06-jun-23 A 02-jul-25 assurancers Meeting Protreatment Program Update Phai Report Sahm tied Semi-Annual Industrial User Meeting (Quarterly) as Discharge and Optimization Plan (PDOP) 251 01-Mar-22 A 24-Reb-23 A SDD Worlehop 1 05-May-22 A 05-May-22 A Deep We I Injection Analysis Industrial User Worlehop(x) PDOP Draft Submitted 73 03-Aug-22 A 14-Nov 22 A 0 16-Dec-22 A 16-Dec-22 A 137 09-May-22 A 18-Nov 22 A PDOP Draft Review PDOP SDD Draft Review PDOP Draft Review Meeting Prepare Final PDOP Plnal PDOP Submitted PDOP Plna Report Submitted to IEPA 2 21-Nov-22 A 22-Nov 22 A 0 30-Nov-22 A 30-Nov 22 A 63 23-Nov-22 A 24-Reb-23 A 0 24-Reb-23 A 20 27-Reb-23 A 24-Mar-23 A 231 09-Reb-22 A 18-Dec-26 Data Review and Analysis QAPP SDD Review Meeting Size Visit Pinal Mon toring Plan 229 09-Reb22 A 04-Jan-23 A 78 09-Reb22 A 27-May-22 A 0 24-May-22 A 24-May-22 A 1 24-May-22 A 24-May-22 A 135 09-Reb22 A 18-Aug-22 A PREA Mee leg Deploy for Sampling (not needed) Water shed Group P formation Water shed Group P methigs SDD Public Water sh d Me etings (as needed) 0 22-jun-22 A 22-jun-22 A 0 22-jun-22 A 22-jun-22 A 315 31-Aug-22 A 20-Nov 23 773 29-Nov-23 18-Dec-26 773 29-Nov-23 10-Dec-26 D1090 1028 12-Sep-22 A 30-Sep-26 1209 09-Mar-22 A 16-Dec-26 Process Date for Model Input Process Date for Model Input Develop and Cal brate Model Sensitivity A nalysis QA/QC Inputs QA/QC outputs 76 03-lul-23 A 18-0a-23 A 64 03-Aug-23 A 18-0e-23 A 64 03-Aug-23 A 01-Nov 23 A 15 12-0e-23 A 01-Nov 23 A 16 03-Nov-23 A 28-Nov 23 N1050 Identify Sonarios N1060 Develop Inputs N1070 Rus Sonarios and Post Process N1080 Internal Discussion and Consideration N1090 C Iest Discussion and Considerations 62 17-jul-23 A 22-in8-24 52 17-jul-23 A 11-0er-23 A 55 12-0er-23 A 91-0er-23 25 04-0er-23 99-jan-24 10 10-jan-24 23-jan-24 22 24-jan-24 22-Reb-24 42 25-jan-24 22-Mar-24 43 25-Mar-24 22-May-24 N1120 Coordinate and Develop Schedule N1130 NARP Draft Submitted 42 23-May-24 23-Jul-24 22 24-Jul-24 22-Aug-24 20 23-Aug-24 20-Sep-24 22 23-Sep-24 22-0d-24 419 06-Feb-23 A 24-0d-24 25 06-Feb-23 A 10-Mar-23 A 409 06-Reb-23 A 12-Sep-24 15 13-Sep-24 03-Oct-24 Pinal Fins bi ity Stady Submitted Semi Annual Progress Reports insive WRRF Upgrade Plan Confirm Current Influent Flows and Characteristic 31 18-Reb-22 A 01-Apr 22 A 31 18-9ab-22A 01-Apr 22 A 0 15-Mar-22 A 15-Mar-22 A 0 15-Mar-22 A 15-Mar-22 A 11 15-Mar-22 A 29-Mar-22 A 37 15-Mar-22 A 05-May-22 A 7 06-May-22 A 17-May-22 A Technology Enaluation Workshop (Wriep #1) On Size Condition Assessment Establish Current and Future Drivers Tech Memo 1 Submitted Tech Memo 1 Review Meeting Tech Memo 1 Plnai Submitted 0 24-May-22 A 24-May-22 A 0 24-May-22 / 26 27-Feb-23 A 03-Apr 23 / F1125 Post Aerobic Digestion TM Submitted 47 30-Jun-22 A 06-Sep-22 A Comprehensive Technology List and Baseline Analysis Liqu d Stream Technology Streening Worlehop (Whiop #2) Wonkshop M Insins Liqu d Stream A ternatives Analysis 27 29-Mar-22 A 05-May-22 A 75 05-May-22 A 19-Aug-22 A 75 u5-943y-22 A 13-jul-22 A 36 30-jun-22 A 13-jul-22 A 36 30-jun-22 A 19-Aug-22 A 26 22-Aug-22 A 28-Sep-22 A 0 29-Sep-22 A 29-Sep-22 A 128 30-Sep-22 A 03-Apr 23 A Liqu d Stream Evaluation Review Workshop (Wrisp #3 Virtual) Tech Memo 2 Submitted Tech Memo 2 SUDD Review Tech Memo 2 SDD Review Tech Memo 2 Review Meeting Tech Memo 2 Final Submitted Potential P lot Alternatives Bealsonie 25 24-jun-22 A 29-jul-22 A 54 11-jul-22 A 23-Sep-22 A 83 27-May-22 A 23-Sep-22 A F1200 Tech Memo 3 SDD Review 7 26-Sep-22 A 05-Oct-22 A Actual Work Milestone Page 1 of 2 BLACK & VEATCH Remaining Work

## Project: Nutrient Program Management - 110623



#### SANITARY DISTRICT OF DECATUR - NUTRIENT PROGRAM MANAGEMENT 2022 2024 COST FORECAST BV Project Number: 411602

Incremental		2022 02	2022 03	2022 04	2022 05	2022 06	2022 07	2022 08	2022 09	2022 10	2022 11	2022 12	2023 01	2023 02	2023 03	2023 04	2023 06	2023 06	2023 07	2023 08	2023 00	2023 10	2023 11	2023 12	2024 01	2024 02	2024 03	2024 04	2024 05	2024 06	2024 07	2024 08	2024 09	2024 10	2024 11	2024 12	2922 otal 2	123 otal 20	24 otal
		13,683			168,336		28 ,217	100,6 8	85,219	109,725	91,822	91,820	20 ,625	175,033	18 ,839	230,195	181 219	171, 12		126, 72		158,090	126, 72	125, 65	77 238	65,537	65,537	81916	65,539	65,537	81,920	65 532	65,537	81,918	65,532		1,789 82		862,22
	Actuals	16,72			5 ,608		125,355	1 5,679		118,381	9 ,677	105,5 3			152,2 7		138 917			116,87	1168 5																97 636		
	Forecast	16,72	60,631	77,995	5 ,608	81,865	125,355	1 5,679	112,979	118,381	9 ,677	105,5 3	155,812	179,053	152,2 7	155,630	138 917	1 2,510	137,166	116,87	1168 5	136,508	117,209	103,377	83 501	66,310	6 ,310	70 383	58,311	96,268	109,890	93 50	100, 98	109,888	93,50	109 862	97 636	1652,1 7	,056,229
	Planned	.631	18.580	25171	20.169	2016	25213	20.168	20 170	25.211	20169	20.167	20.050	17.010	1701	21.263	17.010	17.012	21.267	17.010	17 012	21.263	17.012		20 303	17.228	17.228	21 532	17.228	17 228	21.535	17 226	17 226	21.535	17.226	19.689	219 822		
Task 1 Program Mont	Actuals	7,906				20,16	25,213	20,166	20,170	25,211	20,169	20,167	9.295	17,010	1701	21,253	18.00	17,012	19.376	5,868	17 012	21,263	17,012	17,012	20 303	17,220	17,220	21 532	17,220	17,220	21,030	17 220	17,220	21,535	17,220	19 009		133, 39	225,100
Task 1 Programmyrs	Fo scant		2,198		3,303	2,115	3,760	38	5103	3,173	9,058	320	9,295	8 708	21 586	22, 75		15,276		5,868	5 103	7,355	9.000	9,000	9,000	12,000	10,000	10,000	10,000	10,000	21.535	17 226	17.228	21 535	17.226	10.680	7 875		175 30
	70 0000	.,	2,100	Spress	4,040	2,110	2,100	10.0	0,100	9,119	*,000	praise	*,0***	4,144	21 000	88, 10	10, 00	10,610	10,010	4 (444	0,100	1,000	8,000	*,000	8 000	12,000	14,000	10.000	,	10,000	21,000	11 220	11,220	21,000	11,000	15 005	7 0.0	101, 00	
	Planned	1.726	15,177	2.250	17.29	10.680	30.576	19.616	5.192	6, 91	5.192	5.192					1					-		-													159 386		-
Task 2 Pretreatment Program Update	Actuals	7,000		705	70	70	235	-	353	30	30	1, 50	.250	.715	8 238	7.625	2 330	0.696	9,115	16.8 0	31 810	3.618															5.3	129,236	-
Opare	Fo ecast			705	70	70	235		353	30	30	1, 50	,250	,715	8 238	7,625	2 330	0,696	9,115	16,8 0	31 810	3,618	6,000	6,000	6000	6,000	6,000										5 3	1 1,236	18,000
																																							_
Task 3 Phosphorus D scharge	Planned	536	3,756	,69	7,073	26,718	5,977	,881	,879	6,099	,577	,879	6,7 8	5,656	5,213	5,665	536	,531	5,665	,533	531	5,668	,533	,531													7 369		-
and Optim zation	Actuals		1,290	3,755	3,508	1.613	235	.6 5		8,100	10.9 8	3.898	.760		1.0 5						$\overline{}$																6.721		_
	Fo ecast		1,290	3,755	3,508	1,613	235	,6 5	8,731	8,100	10,9 8	3,898	,760	6,665	1,0 5							-		-													6 721	12, 70	-
	I manage of		61.631																						7597														
Task Wa ershed Support	Planned Actuals	6,790		17,107	28.8 1	193,891	5.297	5 .170	18,250	22,817	18,253	3 319	16,385	,569 ,931	31,212	1,260	29 712	29,705	13,980	29,712	9 006	20.78	29,709	29,707	7 597	6, 6	6, 6	8 059	6, 3	6, 8	8,059	6, 6	6, 6	8,062	6, 6	7 369		258,229	8 ,257
Services	Fo ecast				28.8 1		5,297			, 30	12,003	3 319			31,212	1,250	2718			21,228		20,76	20.700	20.707	7.507	6. 6	6. 6	8.060		6. 8	8.059		6. 6	8.052		7.000	309 67		1.00
	FO SCHIE	90	1 ,009	17,200	20,0 1	21,000	9,087	911, 0	30,307	30	12,003	שונ, כ	10,380	,931	31,212	1,200	2710	24,000	13,900	21,220	9 045	20,70	29/09	29,101	1,001	0, 0	0, 0	0 000	0, 3	O, O	9,039	0, 0	0, 0	0,002	0, 0	7 309	309 07	200, 30	9,207
	Planned		9.208	122.98	89. 7	32.035	35. 65						623	52,898	52,900	66,121	52 900	52.898	66.12	52.898	52 898	66.12	52,868	52,898	31 626	26.835	26.636	335 1	26 635	26.833	33.5 1	26 833	26.835	335 6	26.833	30.666	289 138	621,557	350,759
Task 5 Comprehensive WRRF Upgrade Pan	Actuals	7.879	2.53	53.7 5	16,778	36.223	7 878	81.756	59, 61	2.065	7.29	28.6 3	60,035	67.250	653.5	116.523	71.27	21.8	67.268	59.559	.179	76,856					-										91.25		
Opgrade Pan	Fo ecast	7,879	2,53	53,7 5	16,778	36,223	7 ,878	81,756	59, 61	2,065	7,29	28,6 3	60,035	67,250	65,3 5	116,523	71 27	2,1 8	67,288	59,559	,179	76,856	5,000	30,000	31 626	26,835	26,835	33,5 1	26 835	26,833	33,5 1	26 533	26,835	33,5 6	26,833	30 666	91 25	752, 5	350,759
																																					-		
	Planned	-	-		-	-	-		-		-			3,570	3,670	,590	3 670	3,570	,590	3,670	3 670	,590	3,670	3,670	278	3,632	3,632	536	3,63	3,630	,538	3 632	3,630	,538	3,632	,1 9	-	3,130	7, 61
Task 6 Feasibility Study	Actuals													775	1,126					1,120	16.8	-															-	,670	_
	Fo ecast				-	-	-		-		-			775	1,128					1,120	168	-	2,500	3,670	278	3,632	3,632	,536	363	3,630	,538	3 632	3,630	,538	3,632	,1 9	-	10,8 0	7, 61
	The same of														101. 7							5 .736	3.789		13. 3	11.397	11.397	1.27	11 399		1.27	11 397	11,300			13 027			
Task 7 Plot and Demonstrat or	Planned Actuals	-	-	•	1710	213,988	16 ,168	37,728	37,728	9,107	3,331	3,331	105,773	91,229	101, 7	5 ,736	3 787	3,787	5 ,736	3,789	3785	5 ,736	3,789	3,767	13, 3	11,397	11,397	1,27	11 399	11,399	1,27	11 397	11,399	1,27	11,397	13 027	589 381 7 572	725, 08 283,253	1 8,987
Teeting	Fo scant	$\overline{}$	_	$\overline{}$	1,710	300	900	760	2,7 5	20,170	1 ,935	32,91	61,070	86,010	23,090	7,7 0	,190	7,000	27, 00	12,200	25 000	27,095	26,000	26.000	26,000	11 707	44 907	1 2 7	44 300	11.300	1 2 7	11 307	11 700	1 3 7	11 207	13.007		333,253	180.003
	PO BORRE	_		_	1,710	300	800	700	4,1 5	20,170	1 ,000	32,91	91,079	00,010	23,090	1,7 0	,190	7,000	27, 00	12,200	25 000	21 (095	25,000	25,000	25 000	11,397	11,007	1,27	11 389	11,200	1,27	11 397	11,389	127	11,297	13 027	7 372	333,233	100,003
	Planned								-		-		-	$\overline{}$	$\overline{}$	${}^{-}$	$\dashv$	$\overline{}$	-	-	$\neg$	$\rightarrow$	$\neg$		$\rightarrow$	$\rightarrow$	-	$\dashv$		37.958	27,970	27 970	3 .960	27.970	27,970	3 962		-	219,760
Task 8 Conceptual Design Dev_DO Support	Actuals												-		-			-			-									_1,000			- /400	2.,510				-	
Dev_DD Support	Fo ecast														-	-	$\neg$	-			-		-		-			-		37,958	27,970	27 970	3 ,960	27,970	27,970	3 962	-	-	219,760
																												•											
Cumulative		2022 02	2022 03	2022 04	2022 05	2022 06	2022 07	2022 08	2022 09	2022 10	2022 11	2022 12	2023 01	2023 02	2023 03	2023 04	2023 06	2023 06	2023 07	2023 08	2023 00	2023 10	2023 11	2023 12	2024 01	2024 02	2024 03	2024 04	2024 05	2024 06	2024 07	2024 08	2024 09	2024 10	2024 11	2024 12		023 otal 20	
Planned		13,683				1,025,373		1, 10,238	1, 96, 57	1,606,182	1,698,00	1,789,82	1,29 , 9	2,169, 82	2,35 ,321	258 ,516	2,765 735	2 937,1 7	3,125,7 2	3,252,21		3,536,765	3 663,237	3,789,702	3,8669 0	3932, 77	3,998,01	,079,930	,1 5, 69	211,006	,292,926	358, 58	, 23,995	505,913	,571, 5	,651 926	1,789 82		,651,926
Actuals		16.72			210.157				656,036	77 . 17			1.130. 8							2152.8 5		2. 05.197															97 636		
Fo ecast		16.72	77.55	155,5 9	210,157	272,023	397,378	5 3,057	856,036	77 . 17	869,09	97 .636	1,130, 8	1 309,502	1, 61,7 8	1 617,378	1,756 295	1 898.80	2,035,971	2,152,8 5	2,269 689	2, 06,197	2 523, 06	2,626,763	2,710 28	2776,59	2.8 0.90	2,911,267	2,969 598	3 065,866	3,175,756	3,269 260	3,369,758	3, 795 6	3,573,150	3,683 012	97 636	2 626,783	3,683,012

