

# LUDLOW PARK RESIDENTS ASSOCIATION MEETING

YONKERS JOINT WRRF  
THURSDAY APRIL 4, 2019

A presentation by the Department of  
Environmental Facilities

Vincent Kopicki, P. E. Commissioner

# Yonkers Joint O&M Management Team

## Jagdish Mistry P. E.

- Director Wastewater Treatment
- 813-5437

## John Lennon

- Supervisor of Plant Operations
- 231-2852

## Jeff Bryant

- Plant Superintendent
- 231-2847

## Erwin Vazquez

- Supervisor of Maintenance
- 231- 2850

# Yonkers Joint WRRF

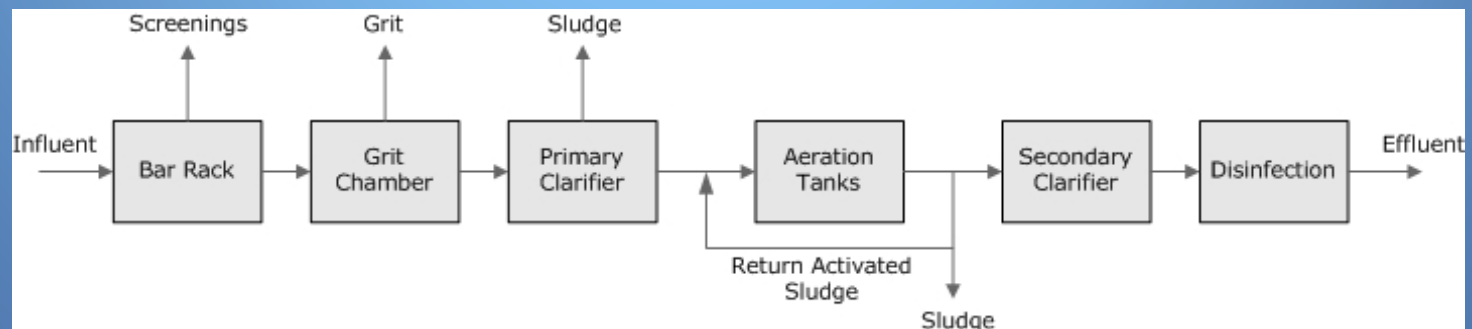
- The Yonkers Joint Water Resource Recovery Facility was originally constructed in 1931 with primary treatment upgrades in 1961 and secondary treatment upgrades in 1979.
- Originally designed to treat an average daily flow of 93 million gallons a day (MGD), has a hydraulic capacity of 330 MGD, and is permitted by the New York State Department of Environmental Conservation to treat up to 120 MGD based on a 12 month rolling average.

# Yonkers Joint WRRF

- The facility serves a tributary population of approximately 510,000, which includes the cities of Mt. Vernon, New Rochelle, White Plains, and Yonkers; the towns of Bedford, Greenburg, Mt. Pleasant, Mt. Kisco, New Castle, and North Castle; and the villages of Ardsley, Briarcliff Manor, Bronxville, Dobbs Ferry, Elmsford, Hastings, Irvington, Pleasantville, Scarsdale, Sleepy Hollow, Tarrytown, and Tuckahoe.



# Yonkers Joint WRRF Treatment Process



# Odor Remediation Project – SY009

## Phase I, \$9.6 Million

- Screen and Grit Building HAVAC and Odor Control, including Ludlow Street Pump Station Odor Control.
- Operational. Substantial Completion March 19, 2014.

## Phase II, \$9.8 Million

- HVAC System upgrades to Blower and Administration Building, including new boilers.
- Operational. Substantial Completion June 13, 2017.

# Odor Remediation Project – SY009

## Phase III, \$7.3 Million

- Odor control for Primary Access Bldg & South Pumping Station, HVAC systems in several other buildings.
- Approximately 95% Complete, projected completion in June 2019.

# Odor Remediation Project – SY009

## Phase IV \$ 5.0 Million

- Secondary Sludge Thickening Building and HVAC upgrades.
- Design essentially complete, requires updating from DAF upgrades.
- Project will begin in 2020.

## Phase V

- Consultant odor study.
- Report scheduled to be complete by June 2019.



# Other Construction Projects

## DAF Upgrade

- Replacement of DAF Thickeners with new Gravity Belt Thickeners and related equipment.
- Construction started December 2017
- Approximately 66% complete
- Project completion date: December 2019

## Grit System Upgrade

- Refurbishment of Grit Removal System with redundancy additions
- Planned completion November 2019
- Job currently in Submittal Phase

# Other Construction Projects

## Sandy Repair Phase II-2

- Repair and rewire site lighting and related electrical work
- Replace wiring for tank collection systems
- Construction started July 2016
- Approximately 90 % complete
- Projected completion date: July 2019

# Other Construction Projects

## Sandy Repair Phase II-3

- Replace and rewire interior lighting. Install new Potassium Permanganate system
- Construction started May 2017
- Approximately 95% complete
- Projected completion date: May 2019

# Other Construction Projects

## Sandy Repair Phase III

- New motors, wiring, and controls for basement sump system and Primary Digester Process
- Construction started June 2016
- Approximately 97 % complete
- Projected completion date: May 2019

# Other Construction Projects

## Engine Replacement Project

- Multi phase project to replace engine driven blowers with Turbo Blowers (Phases II & III) and ADG Engines (Phase IV). Will include various other related upgrades to secondary system.
- Phases II & III construction started December 2018 with a planned completion date of December 2020.
- Phase IV (final phase) design 50% complete, with a project completion by the end of 2019.



# Other Construction Projects

## Sluice Gate Project

- Replacement of sluice gates in Secondary System.
- Design complete, construction will begin in 2020.

## Secondary Treatment Area Upgrades

- Refurbishment of various small systems in secondary area
- Design 60% complete.

# Other Construction Projects

## Vulnerability Work

- Design improvements for storm resiliency
- Protect the WRRF for FEMA 500-year flood storm even.
- Study complete and being evaluated.

## Future Projects

- Plant wide electrical and lighting upgrades.

# Annual Performance Report

YONKERS JOINT WASTEWATER TREATMENT PLANT								YEARLY PERFORMANCE REPORT			Page 1	
MONTH	FLOW THROUGH PLANT ( mgd )	Suspended Solids			Biochemical Oxygen Demand			SLUDGE CAKE REMOVED			SEWAGE	
		Inf Mg/ L	Eff Mg/ L	PLANT % Rem	Inf Mg/ L	Eff Mg/ L	PLANT % Rem	WET TONS	PERCENT SOLIDS	DRY M-TONS	SCREENINGS LBS	GRIT CU.YDS.
Apr '18	93	120	14	88	101	10	90	1,954	27.7	493	38,000	140
May '18	82	140	11	92	113	8	93	2,578	28.2	660	48,000	160
Jun '18	67	158	8	95	125	7	95	2,589	25.7	605	48,000	140
Jul '18	66	144	6	96	118	6	95	2,647	24.8	596	50,000	160
Aug '18	85	144	8	94	103	8	93	2,846	27.5	712	48,000	180
Sep '18	93	129	6	95	101	6	94	2,589	28.5	738	48,000	140
Oct '18	89	123	6	95	104	7	94	2,830	28.4	730	46,000	140
Nov '18	104	111	6	95	88	5	94	3,794	25.9	893	44,000	140
Dec '18	108	94	9	91	70	6	92	2,936	26.5	707	46,000	100
Jan '19	109	97	10	90	70	8	89	2,679	27.1	661	38,000	140
Feb '19	93	102	11	89	83	11	86	2,106	28.2	539	32,000	160
Mar '19	96	109	12	89	83	11	86	1,973	27.8	499	36,000	100
<b>Ave</b>	90	123	9	88	97	8	90		27.2			
<b>Max</b>	109											
<b>Total</b>	1,086							31,520		7,832	38,000	140

# **Odor Complaint Form YJ-Log 34**

Complaint Received by: JZB2 Date 09-24-2018 Time 16:016 Name of Caller: Phone:

Odor Location: Street Address: City: Yonkers Total Complaints from this address YTD 1

Event: Now Continuous Intermittent Intensity: Strong Medium light Period: 1+HR Less than 1 hour

Odor Type: Raw Sewage Musty Chlorine Chemical Smoke Fecal Gas Other

Describe Complaint: Neighbor Invest.: By: Date Time Complaint Verified: Yes No

Weather: Wind Direction N Wind Speed: mph Temperature: Humidity: Describe Odor:

Complainant Contacted: Yes No Action Taken to investigate:

Result Of Investigation:

Jerome Meter Reading(ppm): Action Taken to Remedy the Complaint:

## **PRIMARY PLANT**

Influent Channel Rate (MGD) Time: Diverted Flow: North Control Structure: Yes No

Screen And Grit Tanks: Tank 1: F 1/2 1/4 E Tank 2: F 1/2 1/4 E Tank 3: F 1/2 1/4 E

Primary Tanks in service: 1 2 3 4 Barscreens in Service 1 2 3 Breezeway Door: Open Closed

Grit Container: F 1/2 E Grease: None Light Medium Heavy

PST Scrubbers: On Off Hypo Pumps: On Off Caustic Pumps: On Off

PRI Thick Scrubbers: On Off Hypo Pumps: On Off Caustic Pumps: On Off

S&G Scrubbers: On Off Hypo Pumps: On Off Caustic Pumps: On Off

3 STAGE SCRUBBERS: On Off Hypo Pumps: On Off Caustic Pumps: On Off Acid Pumps: On Off

## **PRIMARY DIGESTERS/STORAGE TANKS:**

Digesters in Service: 1 2 3 Storage Tank: F 1/2 E Gas Venting: Yes No Doors: Open Closed

CENTRIFUGES: Units: On Off Time of Last Truck: Doors: Open Closed Windows: Open Closed

## **SECONDARY PLANT**

AERATION TANKS AVERAGE D.O.: D Pass: B Pass: Digester Area Normal: Yes No Thickner Area Normal Yes No Gas

Venting: Yes No Total Air Flow: CFM Blowers in operation: 1 2 3 4 5 6

Grease Condition: None Light Medium Heavy

Aeration Tanks in Service: 1 2 3 4 5 6 Final Tanks in Service: 1 2 3 4 5 6 7 8 9

Fence Line H2S Monitors,PPB: H2S: PPB (Station 1) H2S: PPB (Station 2) H2S: PPB (Station 3) H2S: PPB (Station 4)

H2S: PPB (Station 5) H2S: PPB (Station 6) H2S: PPB (Station 7) H2S: PPB (Station 8)

System Response: name="YJ\_MSG" value = "" >

Ludlow Park Residents Association Meeting April 4, 2019  
Complaints from October 2018 to March 2019

2018/2019 Month	Total Number of Compliants	Date of Complaint	Coorelation of Complaint with Plant Event	LPRA On site Neighborhood H2S (Hydrogen Sulfide) Reading, Parts Per Billion
October	3	3	Sludge truck in plant	9
		3	Truck loading bay doors open	
		7	None observed	2
November	1	7	None observed	5
December	0			



**Ludlow Park Residents Association Meeting April 4, 2019**  
**Complaints from October 2018 to March 2019**

2018/2019 Month	Total Number of Compliants	Date of Complaint	Coorelation of Complaint with Plant Event	LPRA On site Neighborhood H2S (Hydrogen Sulfide) Reading, Parts Per Billion
January	1	31	Frozen lines on primary odor control	7
February	2	5	None observed	6
		15	Full sludge truck leaving plant	4
March	6	11	None observed	
		24	Full sludge storage hoppers	2
		24	Full sludge storage hoppers	1
		24	Full sludge storage hoppers	1
		25	None observed	
		29	None observed	2