

LUDLOW PARK RESIDENTS ASSOCIATION MEETING

YONKERS JOINT WRRF MAY 2021

A presentation by the Department of Environmental Facilities

Vincent Kopicki, P. E. Commissioner

Meeting Agenda

- > Introduction
- ➤ Odor Remediation Projects Status
- Other Capital Improvement Projects
- > Yonkers-Joint Annual Performance
- ➤ Odor Control Operational Strategies
- ➤ Odor Complaint Data
- > Questions

Yonkers Joint O&M Management Team

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Nat J. Federici, P. E.

- DeputyCommissioner
 - > 813-5412

Jagdish Mistry P. E.

- Director,
 Wastewater
 Treatment
 - > 813-5437

John Lennon

- > Plant Superintendent
 - >231-2847

Erwin Vazquez

- > Supervisor, Maintenance
 - > 231-2850

Thomas Niciu

- > Supervisor, Plant Operations
 - >231-2845

Yonkers Joint WRRF



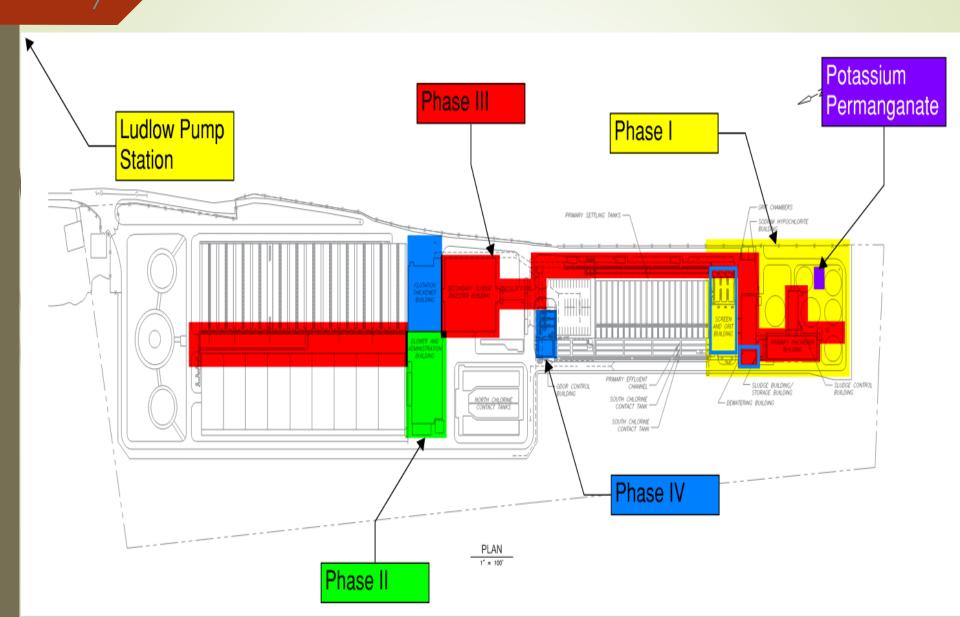
Yonkers-Joint WRRF Odor Remediation Projects (SY009)

Phase	Project Scope	Cost	Project Status
I	Screen & Grit Building HVAC & Odor ControlLudlow Street Pump Station Odor Control	\$ 9.6 M	Completed & Operational
II	 HVAC System Upgrades to Blower & Administration Building New Boilers 	\$ 9.8 M	Completed & Operational
III	 Odor Control for Primary Access Building & South Pumping Station HVAC Systems Upgrade in several other buildings 	\$ 7.3 M	Construction Complete; Start-up On-going; Anticipated 2 nd Quarter 2021 for Operation
IV	- Secondary Sludge Thickener Building & HVAC Upgrades	\$11.5 M	Design Complete by 2 nd Quarter 2021; Construction Start 3 rd Quarter 2021; Construction Duration 24 months

Yonkers-Joint WRRF Odor Remediation Projects (SY009) (cont.)

Phase	Project Scope	Cost	Project Status
IV (expanded from original Phase V report)	 Upgrade Primary Scrubbers Exterior 2, 3, & 4 Replace blowers & Nozzles Re-coat Exterior FRP Sludge Loading Bay Improvements Increase airflow & install duct registers New Scale and slab/pipe gallery Replace Primary Settling Tank Scrubbers A, B, and C Grit Wash down system 	Included in the \$11.5M	Design @ 90%; Anticipated Design Completion 2 nd Quarter 2021; Construction Start 3 rd Quarter 2021; Construction Duration 24 months
IV (newly expanded, as a result of recent investigati ons)	 Installation of a 3/8" Secondary Screens to address frequent tank outages Installation of a pump w/jetting system to run periodically to minimize grease build-up Replacing CSO Facility carbon unit ductwork with larger ductwork & re-direct to system scrubber stack Modification to odor control ductwork at the Blower & Administration Building 	TBD	Design being incorporated into 90%; Anticipated Design Completion 2nd Quarter 2021; Construction Start 3rd Quarter 2021; Construction Duration 24 months

Odor Remediation Projects Footprint



Yonkers-Joint WRRF Other Capital Construction Projects		
Project Scope	Project Status	
 Sludge Thickening Upgrade DAF Thickeners replaced with Gravity Belt Thickeners 	Anticipated Completion by mid-2021	
 Grit System Upgrade Grit Removal System Refurbishment w/added redundancy 	Anticipated Completion by 3 rd Quarter of 2021	
 Engine Replacement Project Replace 2 Existing Engines (to run on ADG and/or Natural Gas) 	Anticipated Construction start June/July 2021	
- Sluice Gate Project	Anticipated Construction	

- Replace Sluice Gates in Secondary System Secondary Treatment Upgrades Various Systems Refurbishment in Secondary Treatment Area
 - Vulnerability Work ~ Infrastructure Hardening
 - Storm Resiliency Improvements (protection to FEMA 500-yr storm)
 - **Future Projects**
 - Plant-wide Electrical & Lighting Upgrades

start by 3rd Quarter, 2021

Design at 60% Complete

Study Completed;

Design RFP Drafted

Study Completed; RFP by June

Bio. Oxy. Demand

(BOD)

Influent

mg/L

Suspended Solids

Influent

mg/L

Effluent

mg/L

Month &

Year

Apr-20

May-20

Jun-20

Jul-20

Aug-20

Sep-20

Oct-20

Nov-20

Dec-20

Jan-21

Feb-21

Mar-21

Minimum

Maximum

Average

Average

Flow, MGD

Suspended

Solids %

Removal

Allilual	remormanc	e Kepurt

Annual	Periormance Report	
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Yonkers Joint WWTP Performance Report (September 2020 - March 2021)

Effluent

mg/L

BOD %

Removal

Wet Tons

Metric

2,163

2,533

2,372

2,541

2,702

2,191

3,181

2,598

2,573

2,392

1,687

2,185

1,687

3,181

2,418

Sludge Cake

% Solids

25.8

26.1

25.4

25.3

25.0

26.3

23.4

25.0

24.2

25.8

25.4

26.6

23.4

26.6

25.4

Grit Cubic

Yard.

Screenings,

Lbs

62,000

84,000

62,000

44,000

54,000

48,000

48,000

44,000

84,000

57,429

Dry Tons

Metric

nual Performance Repor	rt
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Re-focused Odor Control Operational Strategies

- ➤ Operational/Plant Staff Implemented Odor Remediation Actions
 - > Best management practices implemented for tank maintenance & clean-out

(Already Implemented)

- ➤ Includes greasing & removing sludge/floatables/residuals from the tanks prior to removing covers.
- Maintaining minimum water levels in out-of-service aeration tanks (2'-4') and keeping minimum aeration to keep water fresh.
- ➤ Coordinating and scheduling tank draining and cleanout activities when meteorological conditions are more favorable to not perceiving odors offsite.

(To Be Implemented by July 2021)

- Installation of stop logs in the cross channel used for step feeding to keep channel from stagnating, developing septic conditions, & emitting odors
- ➤ The Secondary Sludge Digester Building Roof has been observed to bubble during wet conditions from the cracks as well as in the panel joints. The backing plates of the panel joints are being removed and neoprene seals are being added.

Ludlow Park Residents Association Meeting <u>Complaints from April 2020 to March 2021</u>

Month	Total No. of Complaints	No. of Days per Month	Correlated w/ Plant Activity
Apr. 2020	1	1	1
May 2020	11	6	9
Jun. 2020	12	8	3
Jul. 2020	7	7	4
Aug. 2020	17	12	15
Sep. 2020	31	14	26
Oct. 2020	11	9	11
Nov. 2020	2	2	2
Dec. 2020	0	0	0
Jan. 2021	0	0	0
Feb. 2021	0	0	0
Mar. 2021	2	2	0
Totals	94	61	72

 $Note: Additional\ O\&M\ Best\ Management\ Practices\ Implemented\ Starting\ December\ 2020.$

