

Overview of Recent Activities at Noman M. Cole, Jr. Water Recycling Facility

South County Federation Monthly Meeting
September 8, 2026

Department of Public Works and Environmental Services
Working for You!



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September 8, 2026

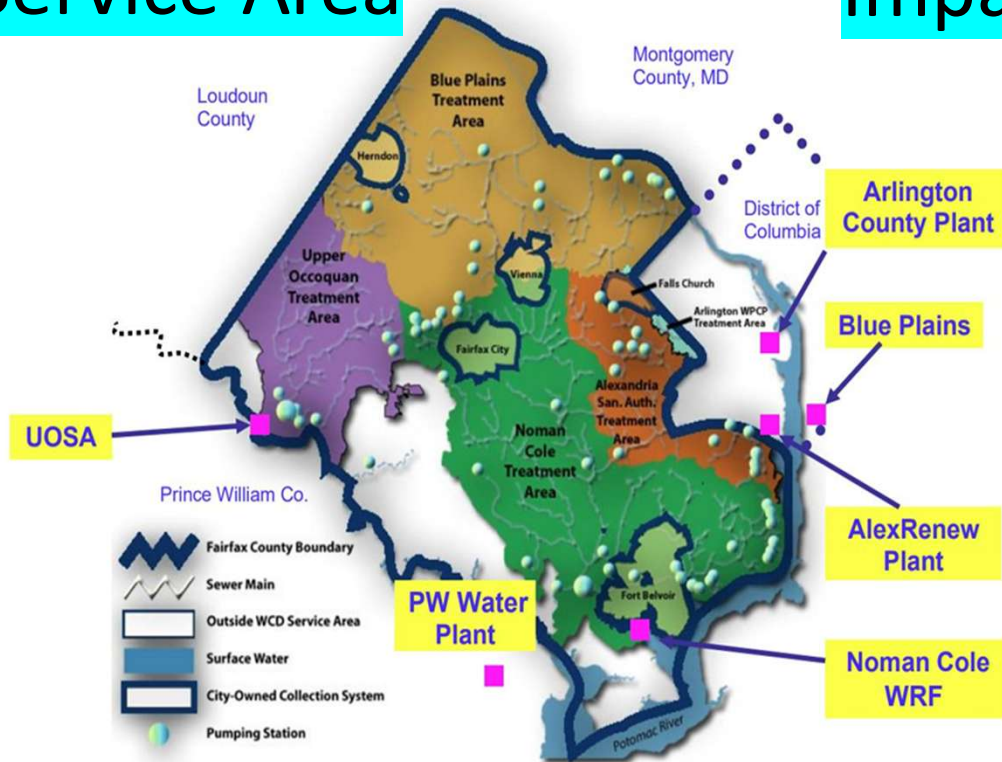
Today's Agenda

- Facility Introduction
- Master Planning
 - Capital Improvement Program
- Odor Control Program
- Reclaimed Water
- Compliance History
- Jobs at Noman Cole
- Questions

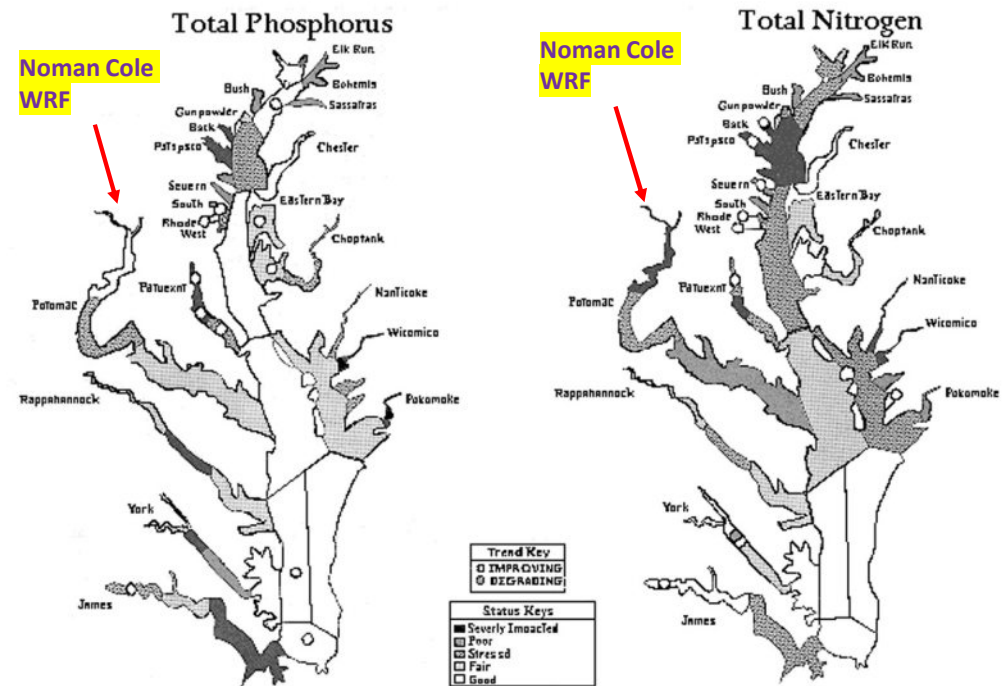


Facility Introduction

Service Area



Impaired Water of Chesapeake Bay

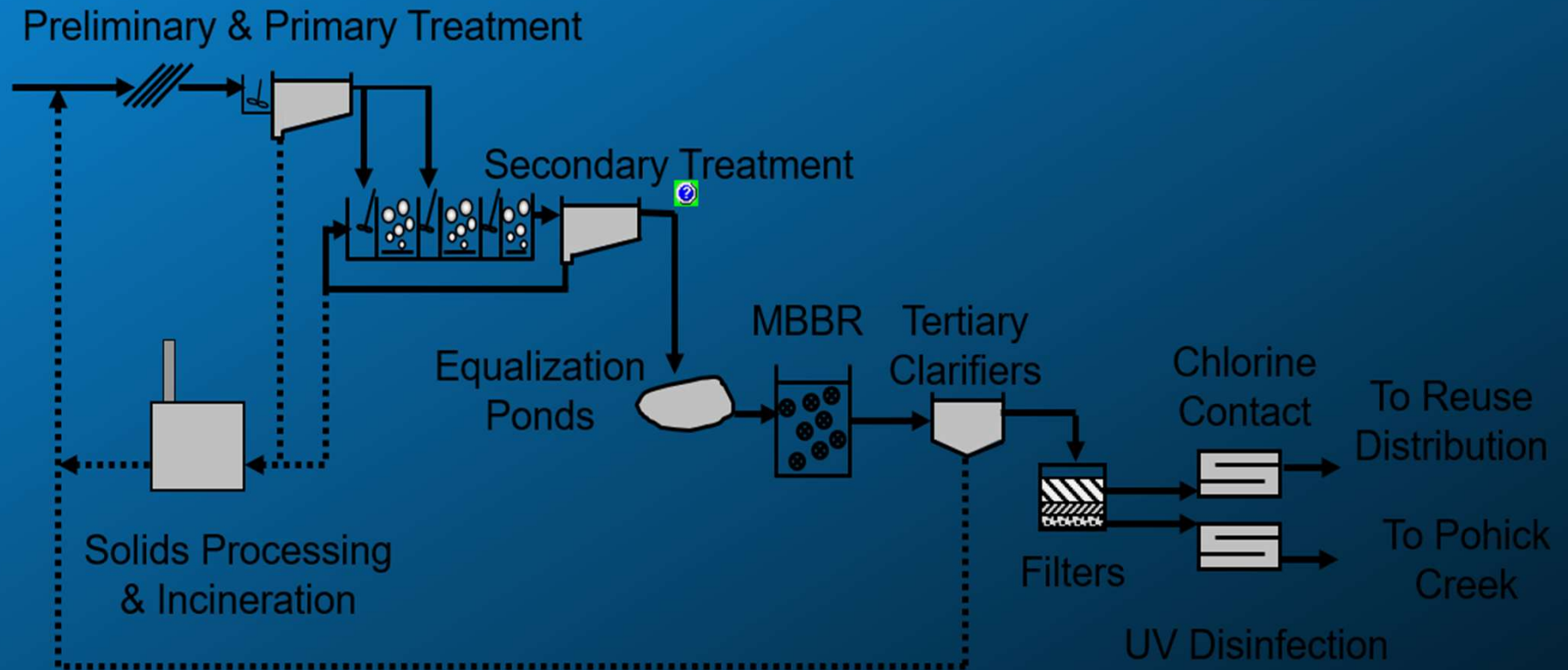


Facility Intro

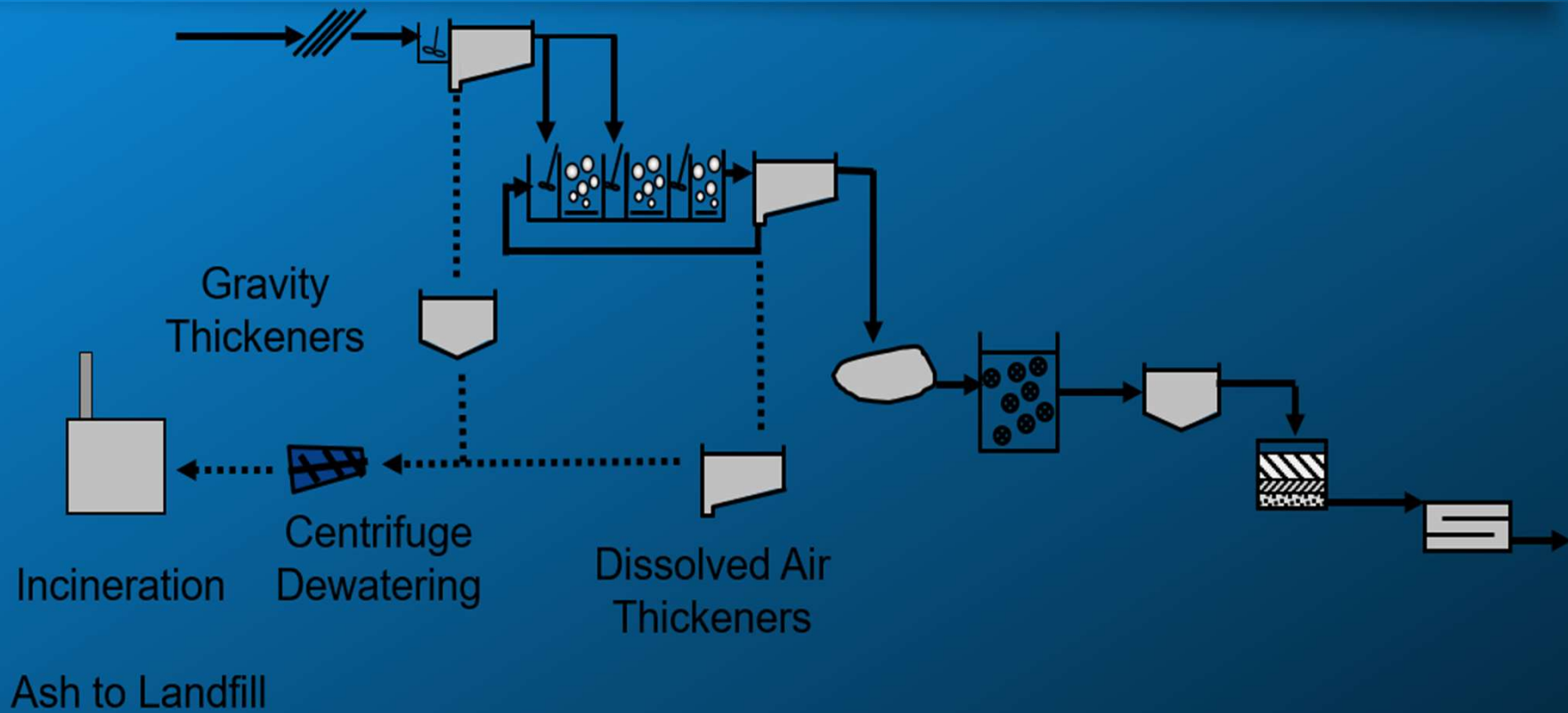
- Noman Cole serves 425,000 homes and businesses
- Capacity 67 MGD, Daily Flows 42 MGD
- Wet weather flows
- Reclaim 2 MGD
- Operates 365 days a year, 24/7
- VPDES and Title V Air Permit



Overall Plant Schematic

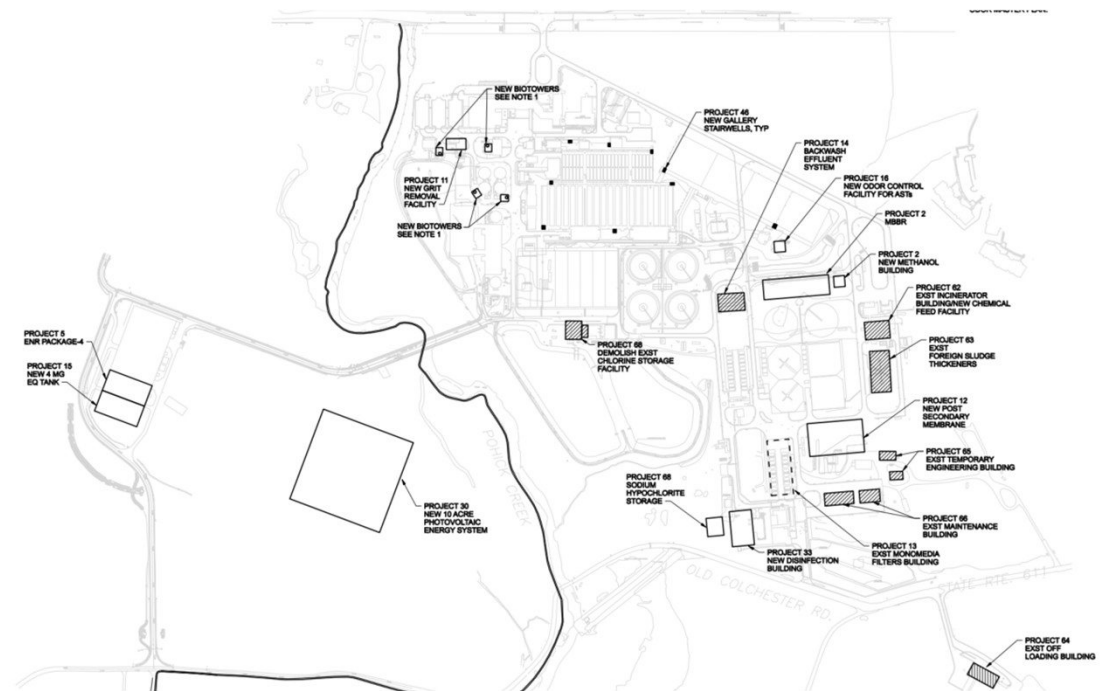


Overall Plant Schematic

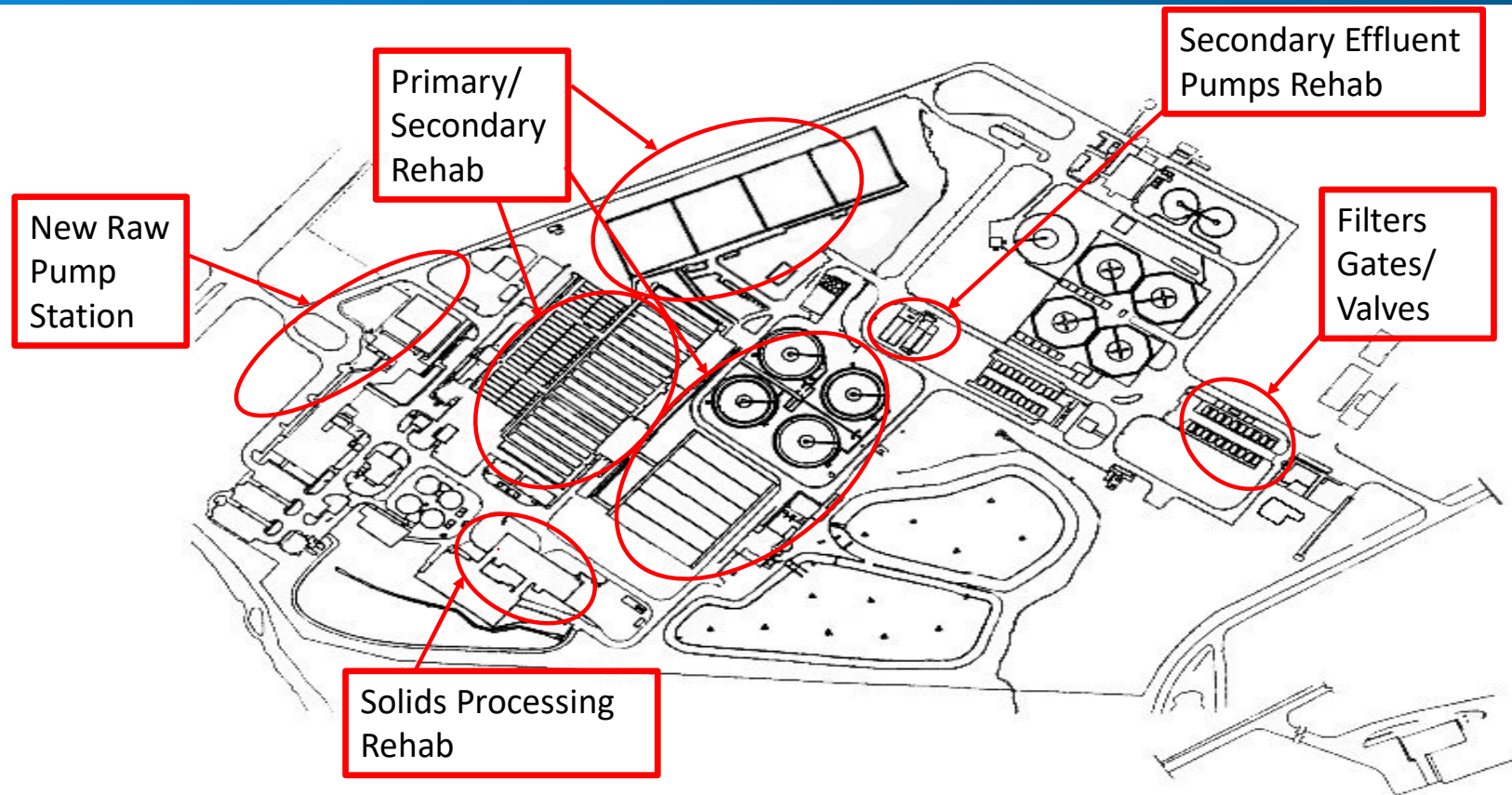


Master Planning

- Facility Master Plan
 - 20-year Planning period
 - 2009 , followed by 2014 & 2026 update
- Asset Management Program
 - Asset Inventory
 - Condition Assessment
 - Business Risk Exposure Scoring
- Capital Improvement Plan
 - Regulatory Compliance, Risk Reduction, Capacity, Health, Safety, and Security, Capacity, Financial Stewardship, Environmental Stewardship, Community and Customer
- Planning → Study → Design → Bid
Construction → Online



What is being constructed?



Raw Wastewater Pump Station



Front Entrance Modifications

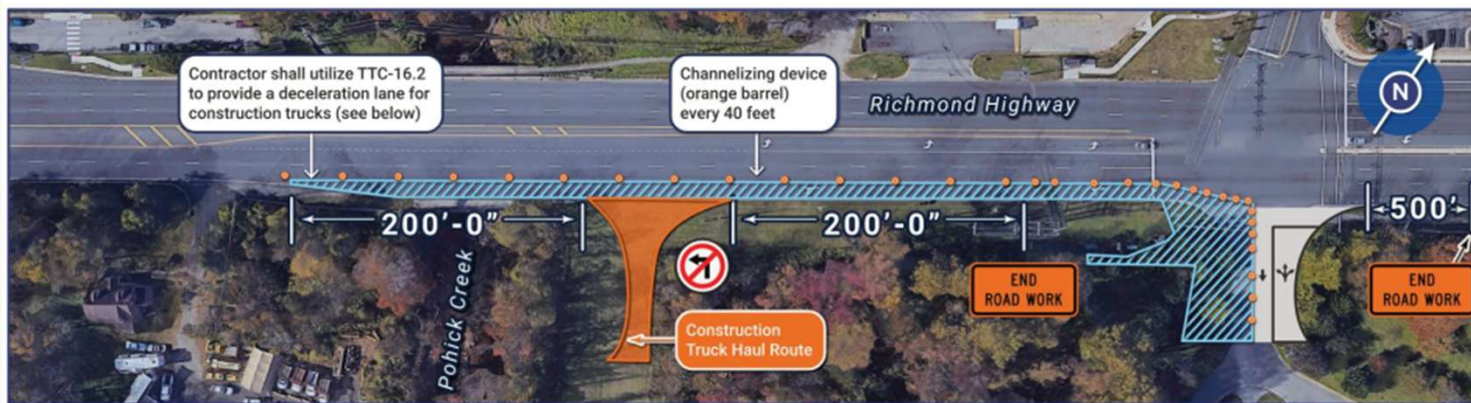
ANTICIPATED TRUCK TRAFFIC IMPACTS FOR PROJECT DURATION (2025-2030)



Raw Wastewater Pump Station

MAINTENANCE OF TRAFFIC REQUIREMENTS

Working Hours for Project Duration (2025-2028)



DECELERATION LANE TRAFFIC CONTROL



Overview of Recent Activities at Noman Cole Plant

Richmond Highway Screening



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Richmond Highway Screening



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Richmond Highway Screening



Overview of Recent Activities at Noman Cole Plant

Solids Processing Phase III



Induced Draft Fan



Combustion Air Blower



Center Shaft Motor



Propane Tank



Sludge Storage Tanks & Odor Unit



Other Construction Projects



Secondary Effluent Pumps Replacement



Primary Secondary Sustaining Rehabilitation



Odor Control Program

Fairfax County spends more than 1 Million annually in Odor Control Operating Cost

- 8 Carbon Scrubbers
- 4 Biotowers
- 4 Wet Scrubbers & Afterburner
- Tank Covers
- Chemical Addition



Odor Control Program Timeline

- Odor control infrastructure
- Odor Control Master Plan
- Recommended Projects Implementation
- Odor Control Master Plan Update – 2 D/T
- New Projects Identified/ Implemented
- Future Planning



Odor Dispersion Modeling



Odor Control Program

Primary Tank Aluminum Covers



Odor Control Program

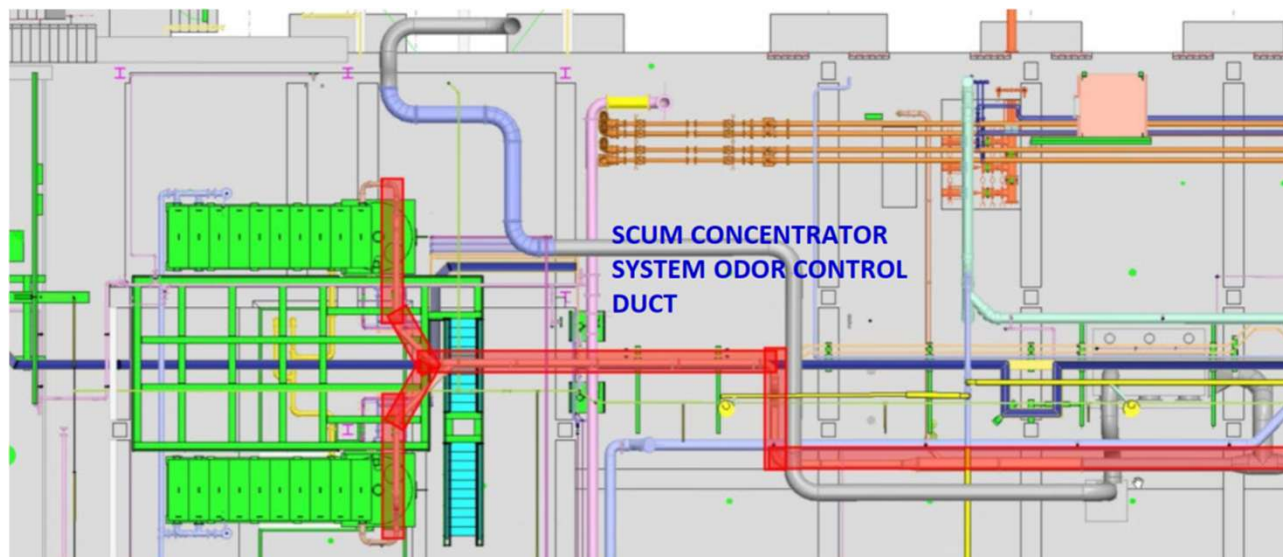


Gravity Thickeners



Sludge Storage Tanks

Odor Control Program



Concentrated Scum Odor Control

Overview of Recent Activities at Noman Cole Plant

Odor Control Program

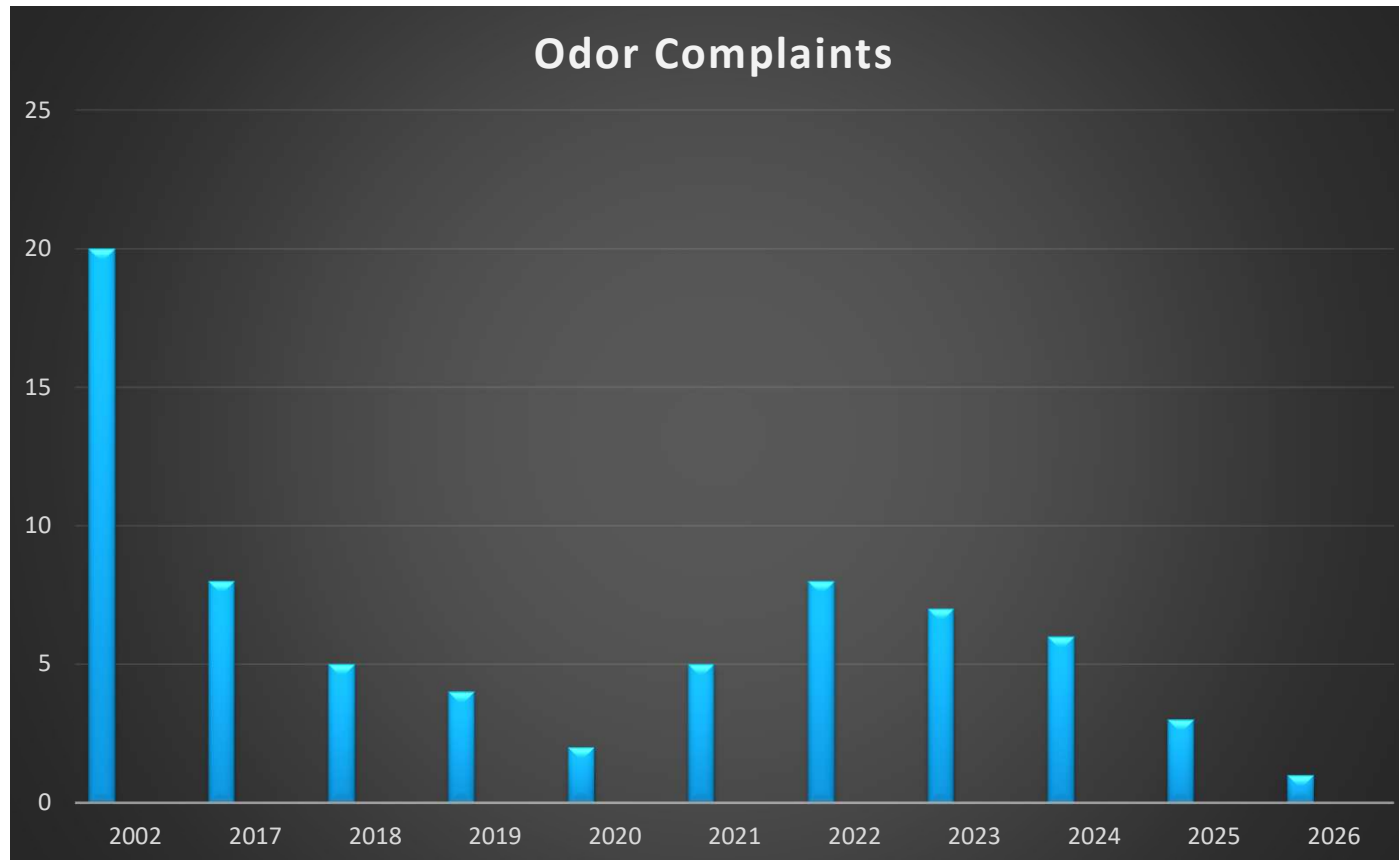


Equalization Tanks



Accotink Sewer

Odor Control Program



Odor Control Program

Future Plans

- Complete On going Construction
 - Surface wasting in Aeration Tanks
- Hire Odor Control Consultant
 - Locate Remaining Odor Sources
 - Odor Dispersion Model
 - Propose Projects for Next 10 Years
- Design & Construct Projects
 - Sludge dewatering building

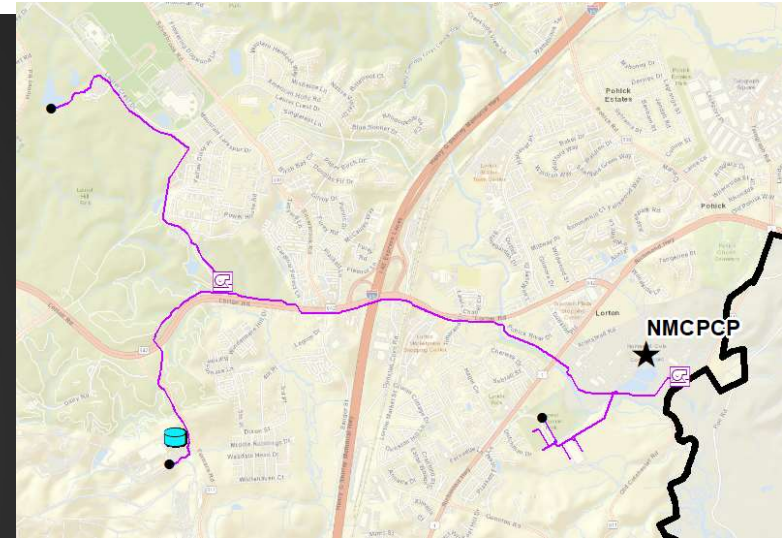
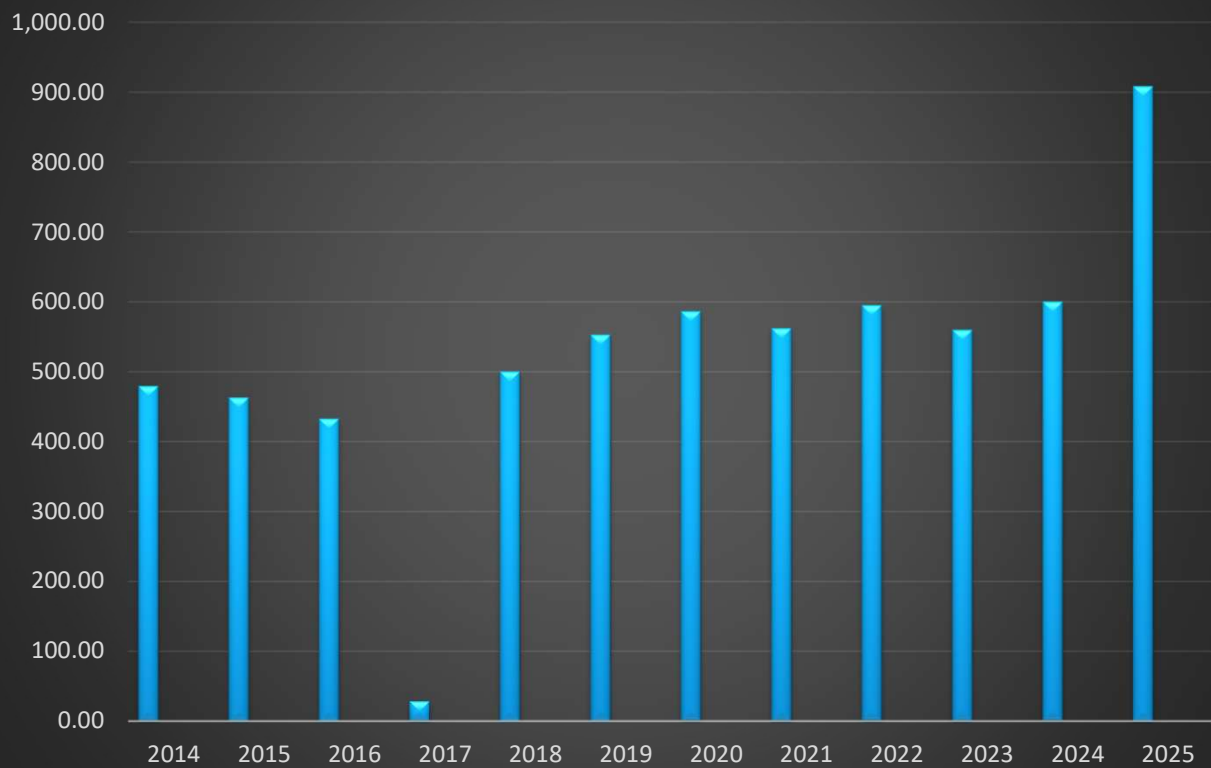
Odor Complaints

Odor Hotline:
703 -550 -9740
Ext 1406 – 278



Reclaimed Water

Reclaimed Water Distribution

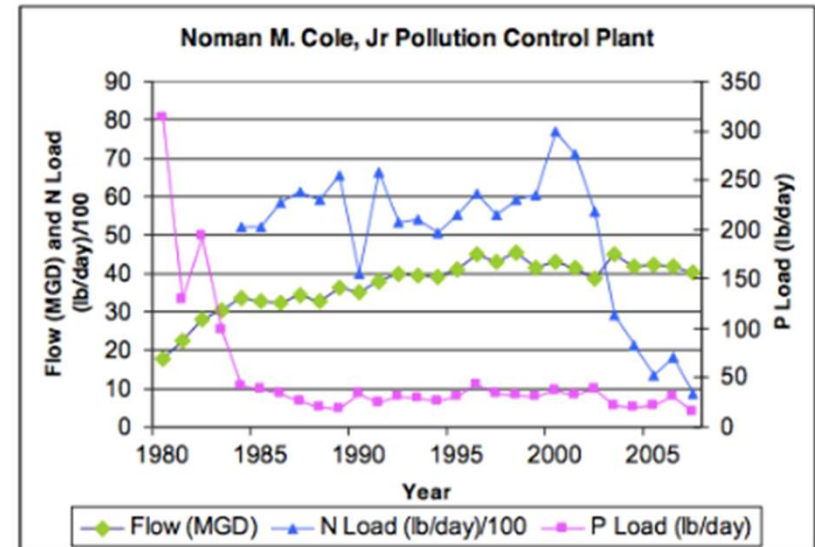


Noman Cole Water Recycling Facility

- Long History of Compliance
- Gunston Cove Monitoring Program
- State Wastewater Awards for safety and Maintenance



2025 Peak Honorees



P= Phosphorus; N= Nitrogen; Flow= The amount of water passed through the plant
As you can see, Phosphorus drops dramatically in the early 1980s, while Nitrogen levels decrease in the mid 2000s.



Jobs at Noman Cole Water Recycling Facility

- 138 Full-Time Employees
- Multiple Trades
- Complex Operation
- 24/7 , 365 Days



Additional Information

For additional information, please contact

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Overview of Recent Activities at Noman Cole Plant

Wildlife at Noman Cole Water Recycling Facility

