

# Welcome!

## DELCORA Wastewater Tunnel Project Public Meeting September 21, 2022



### JOIN US! **DELCORA** **PUBLIC MEETING**

Come learn about the proposed DELCORA  
Wastewater Tunnel Program and permitting process.

Sept. 21, 2022 | 6:00 PM | Chester City Hall - Council Chambers

*\*This meeting will also be livestreamed on The City of Chester  
Facebook page: [www.facebook.com/cityofchester](https://www.facebook.com/cityofchester)*

WASTEWATER TUNNEL PROJECT

DELCORA

# Meeting Purpose

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## DELCORA IS LISTENING

We've been working to hear what the residents of Chester are concerned about.

## DELCORA IS TAKING ACTION

DELCORA is acting to address those concerns through investments and improved communication.

## WHAT'S NEXT?

Residents have a voice in this project through the permitting process and continued communication with DELCORA.



# THE DELCORA TUNNEL

means  
CLEANER CHESTER  
WATERWAYS  
and  
FEWER TRUCKS

*Clean waterways for Chester =  
Recreation + Economic Growth*



# Chester Community Concerns (so far...)

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There are concerns that as a result of the tunnel project, Chester is taking more waste from other communities



There are concerns that DELCORA's air emissions will increase as a result of the tunnel project



There are concerns around the tunnel construction and operation



There are concerns that DELCORA's treatment plant stinks



There are concerns that there was no financial benefit to the City of Chester as a result of the tunnel project.



There are concerns that DELCORA was not communicating with Chester residents in a way that gets to them





Concern #1: There are concerns that, as a result of the tunnel project, Chester is taking more waste from other communities

# What Does DELCORA Do?

**DELCORA**  
**Main Treatment Plant**  
Removes solids and harmful bacteria



Home Sewage  
Business Waste  
Rainwater



Sludge removed  
for processing

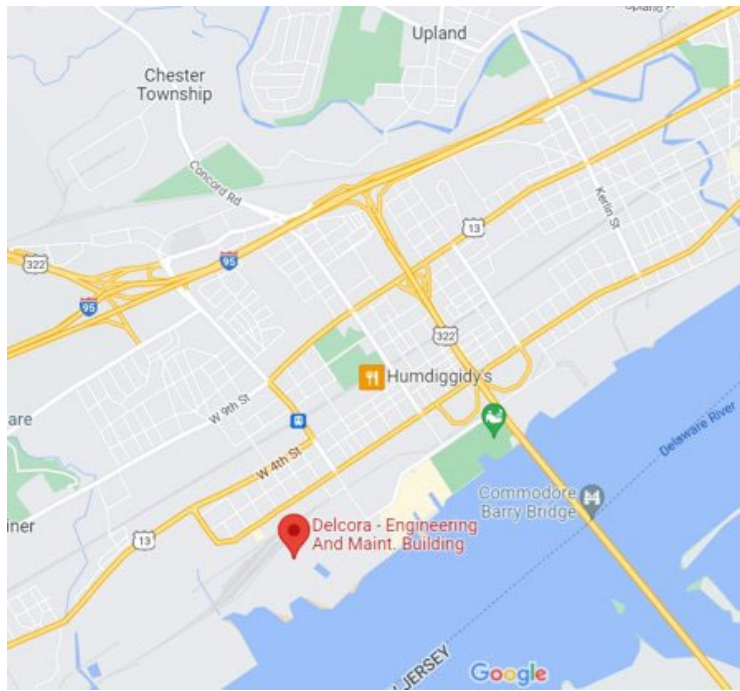


95% of water – disinfected  
and stripped of solids –  
returns to Delaware River





# Intro to DELCORA's Wastewater Plant & CSOs





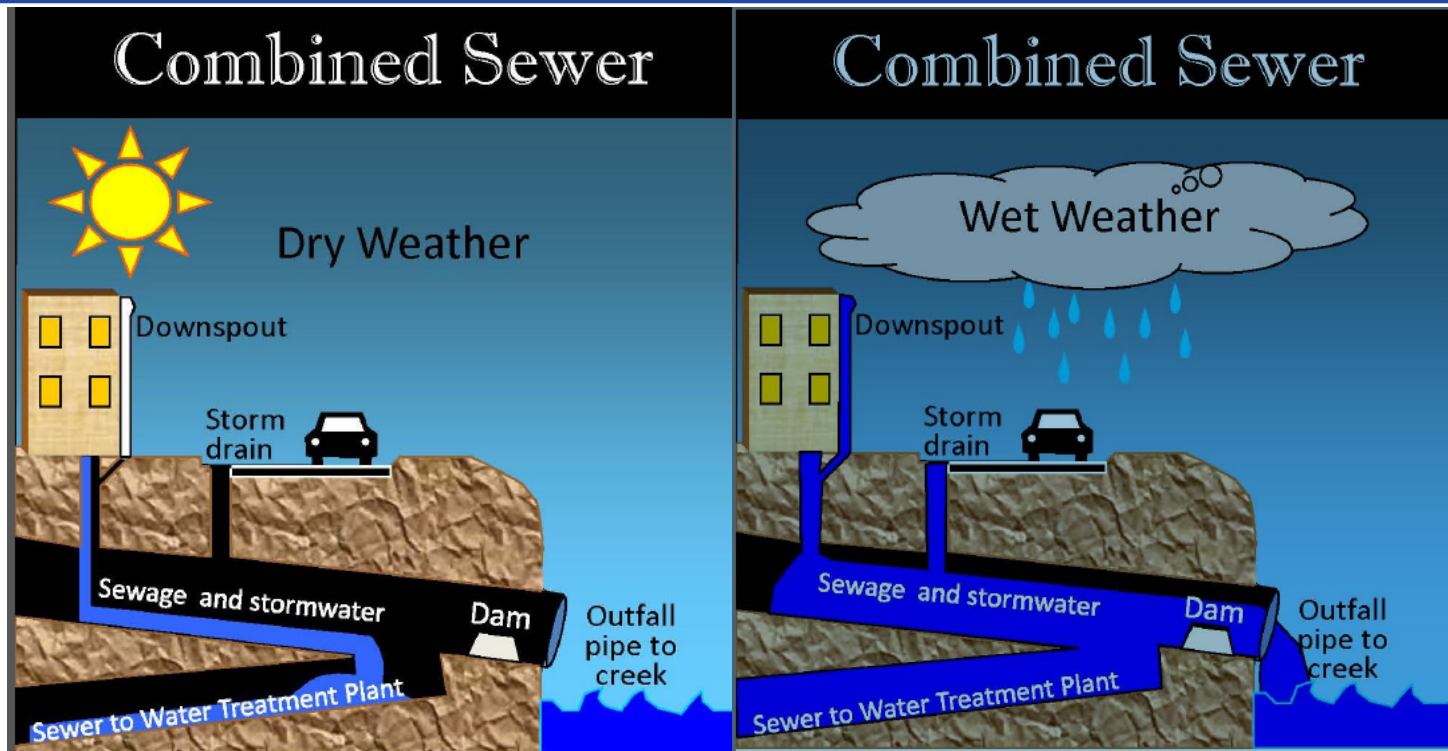
# There are 25 CSO Discharges within Chester City

As PA's Oldest City, it's the only DELCO municipality with CSOs



# What is a CSO?

## A “Combined Sewer Overflow” (Dry vs. Wet Weather)



Source: City of Alexandria,  
<https://www.alexandriava.gov/uploadedFiles/tes/oeq/CSSPermitInfoMeetingandPublicHearingPresentation08052013.pdf>





# Instead of Sewage in the Waterways, DELCORA Effluent Looks Like This:



Untreated

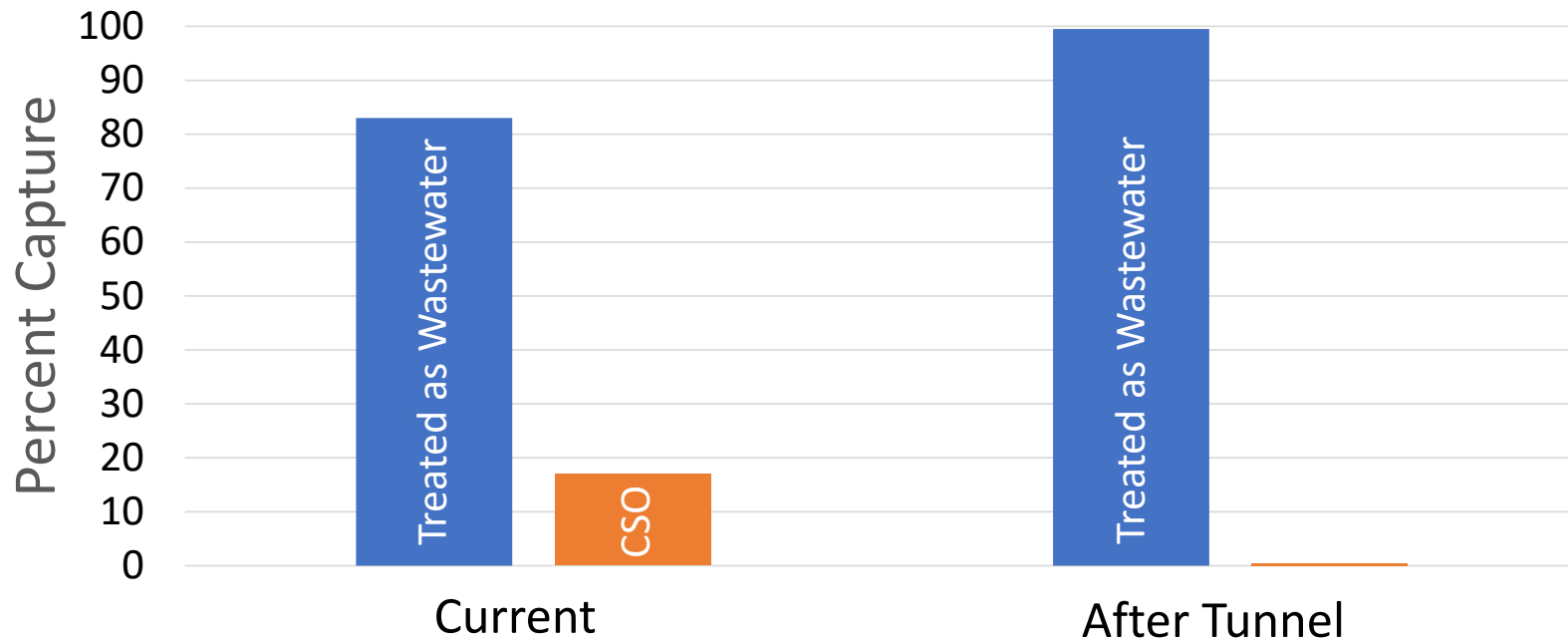


Treated





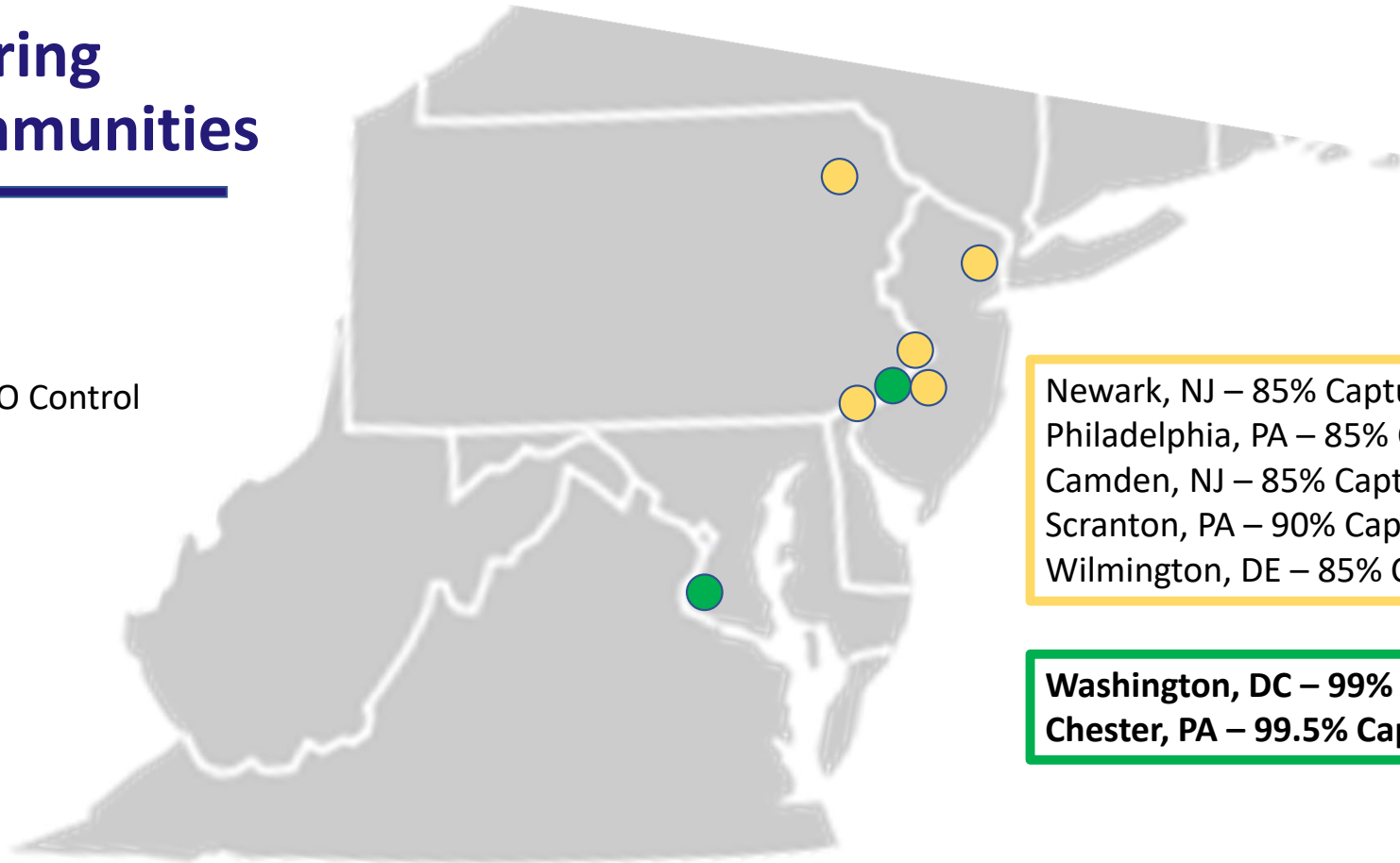
# “Percent Capture” is: Treated as Wastewater VS Untreated CSO



## Neighboring CSO Communities

● No Tunnel

● Tunnel for CSO Control



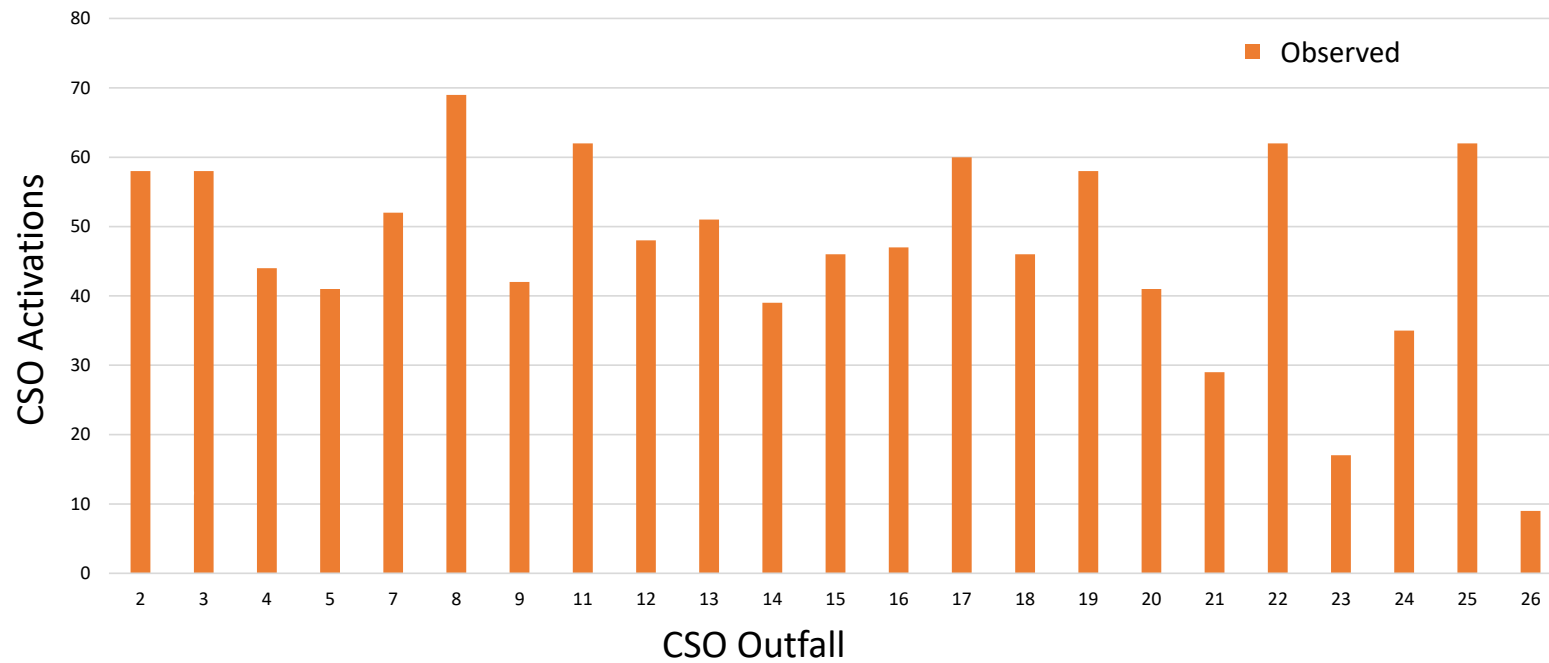
Newark, NJ – 85% Capture  
Philadelphia, PA – 85% Capture  
Camden, NJ – 85% Capture  
Scranton, PA – 90% Capture  
Wilmington, DE – 85% Capture

Washington, DC – 99% Capture  
Chester, PA – 99.5% Capture



# Q: What is DELCORA doing to address these CSOs in Chester's waterways?

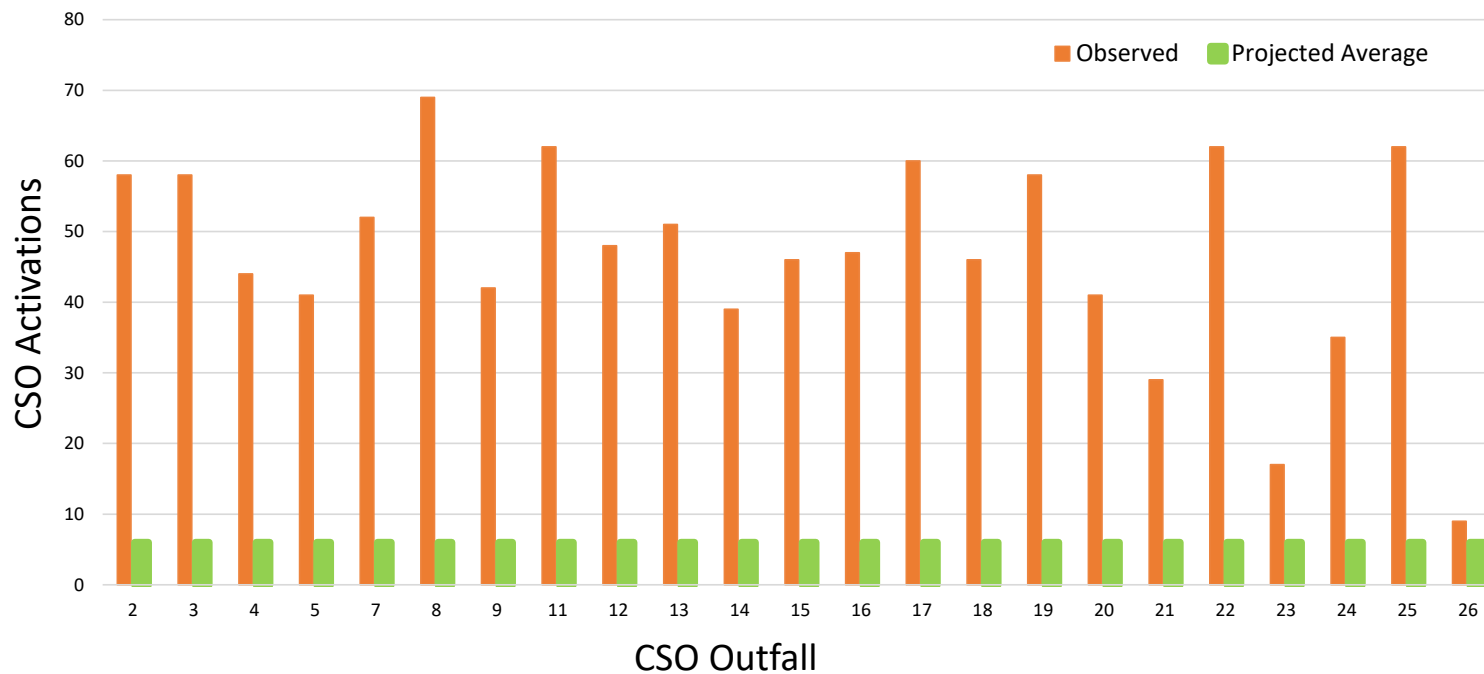
CSO Activation by Outfall [Cumulative 2021]





# A: DELCORA plans to connect the CSOs to the planned wastewater tunnel to bring activations to <6 per year

CSO Activation by Outfall [Cumulative 2021]





## Concern #2: Tunnel Construction & Operations

# Three Concerns Regarding Tunnel Construction and Operation

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There are concerns that the tunnel will leak sewage into the waterways and contaminate them.



There are concerns that Chester residents will be displaced or will have their homes taken from them to make room for this tunnel.

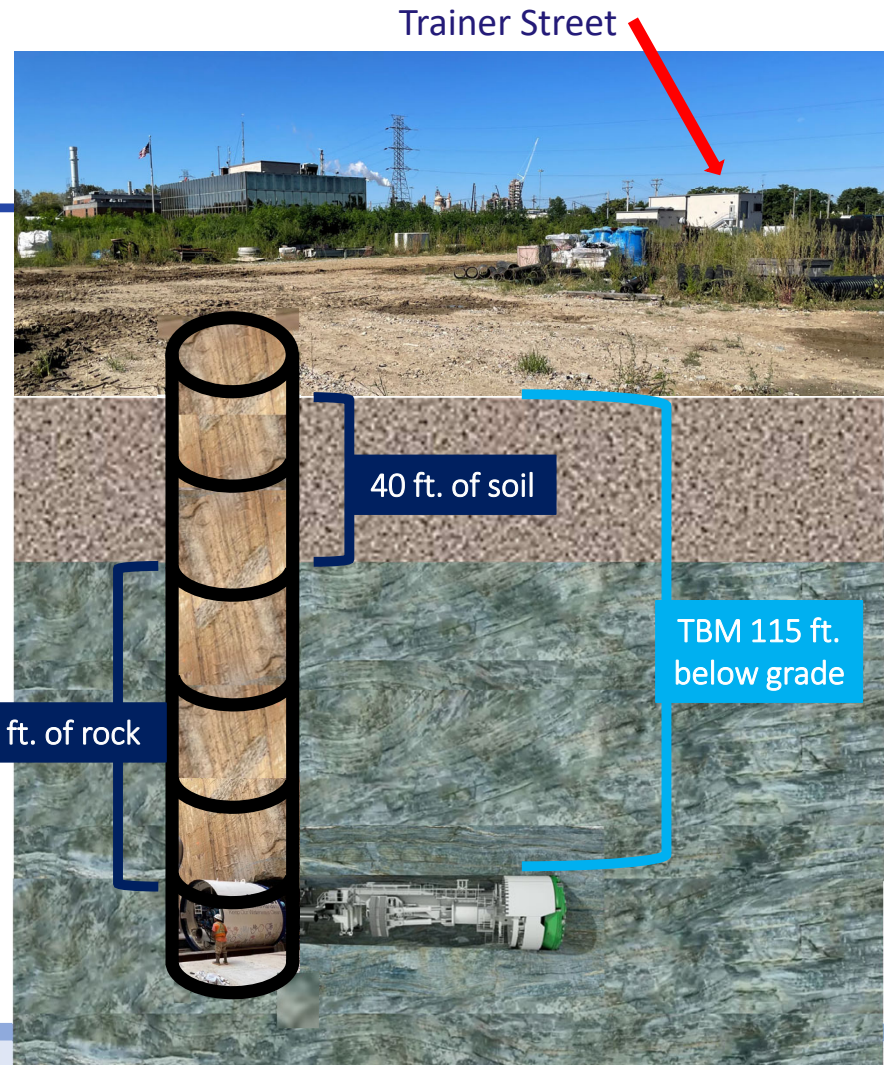


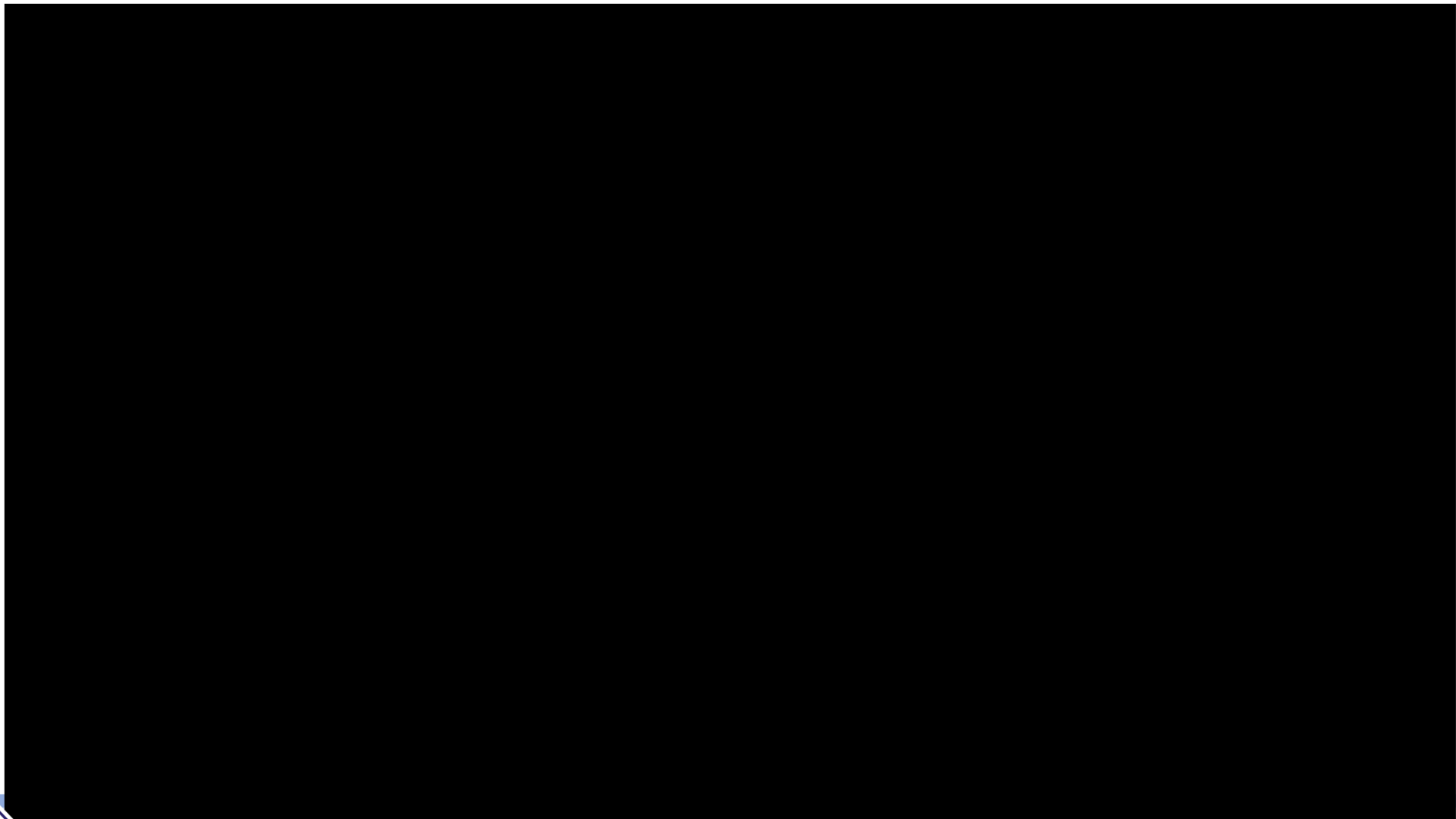
There are concerns that the tunnel construction will impact homes.



# Introduction to Tunneling

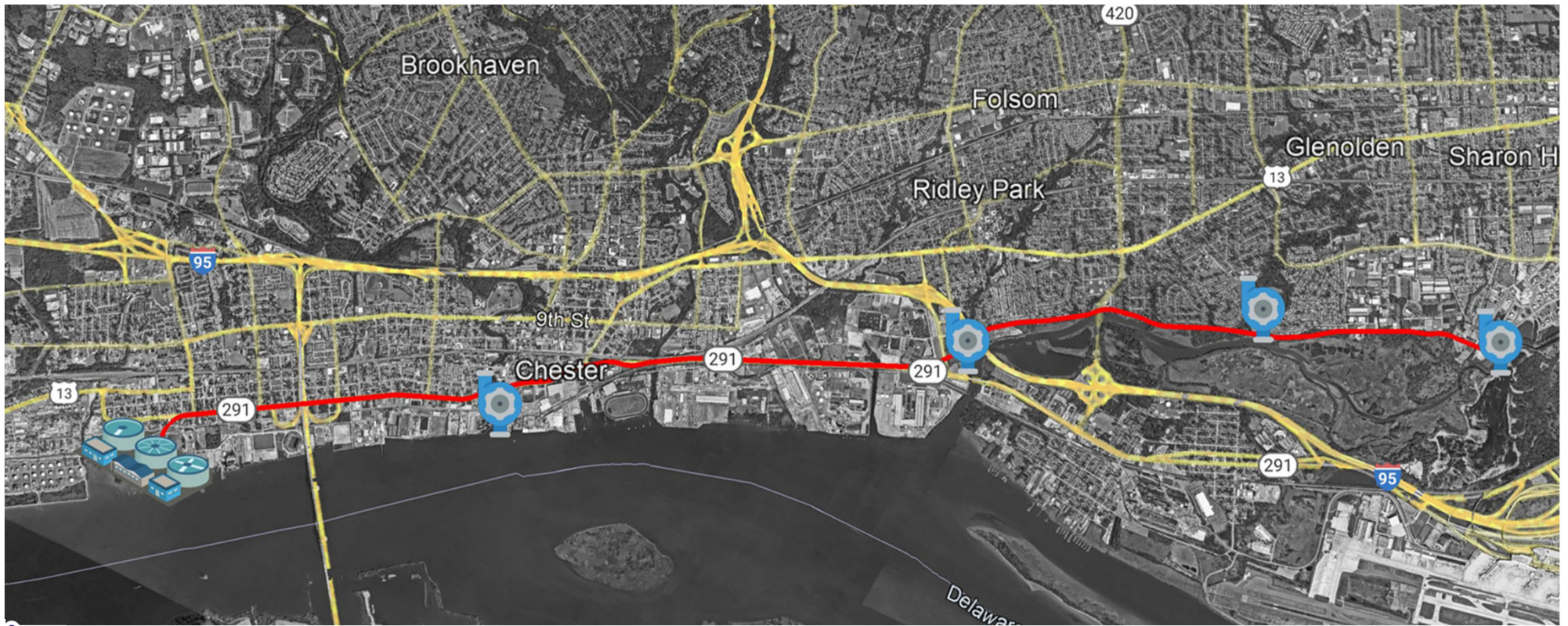
## Meet "Hazel" the TBM





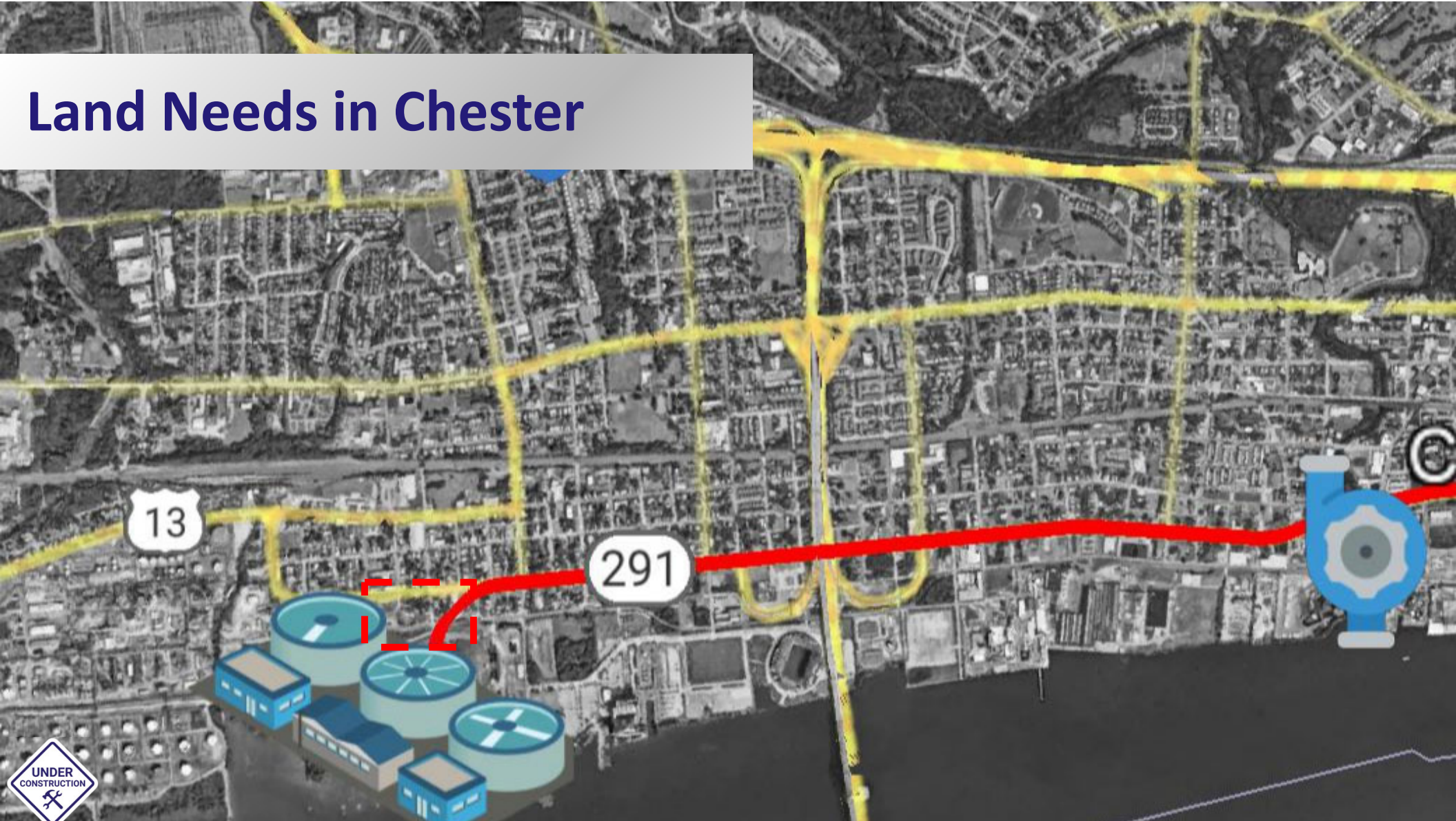


# Tunnel Alignment





# Land Needs in Chester



13

291

C

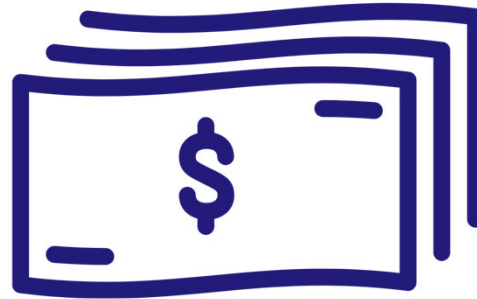




# Land Needs in Chester







Concern #3: There are concerns that there was no financial benefit to the City of Chester as a result of the tunnel project.

# Cost Impact

- Redirecting investment from Philadelphia to Chester and DELCO
- If we don't send DELCO waste to Philadelphia, DELCORA will be able to manage rate increases because Philadelphia is getting more expensive

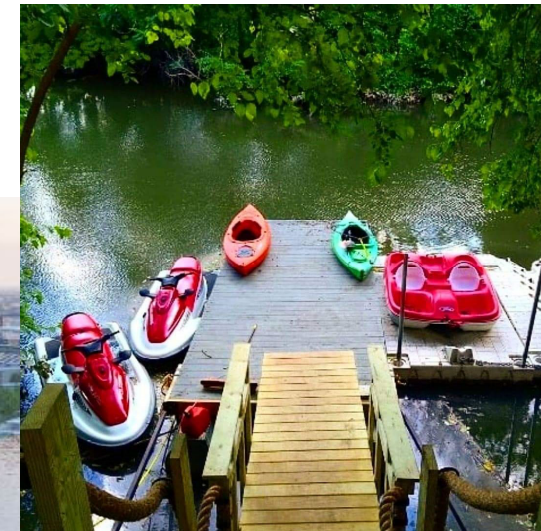


# THE DELCORA TUNNEL

means  
CLEANER CHESTER  
WATERWAYS  
and  
FEWER TRUCKS



Source: <https://www.delcotimes.com/2022/08/21/preparation-work-begins-on-new-chester-riverfront-development-plan/>



*Clean waterways for Chester =  
Recreation + Economic Growth*

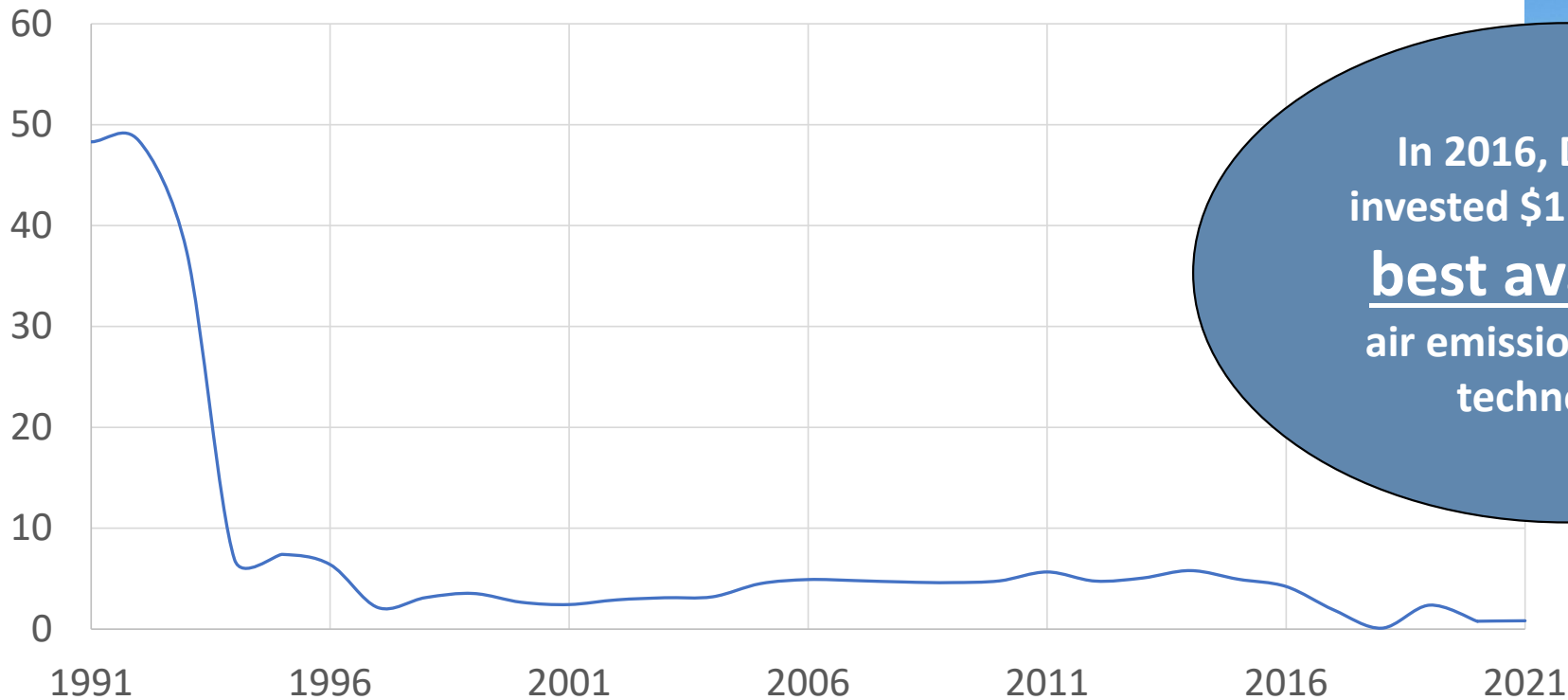




Concern #4: There are concerns that DELCORA's air emissions will increase as a result of the tunnel project

# DELCORA has a history of improving emissions, including those affecting public health.

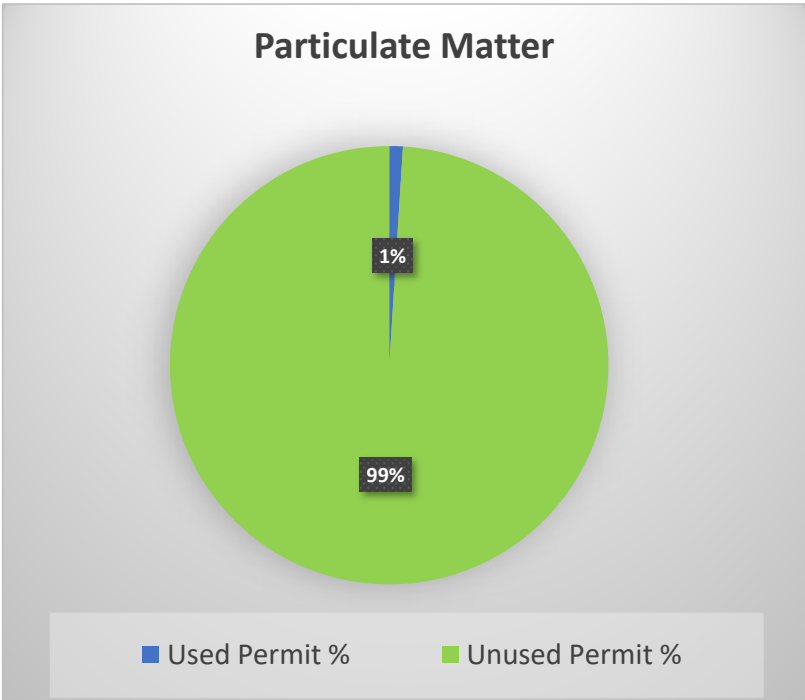
Particulate Matter in tons (1991-2021)



In 2016, DELCORA invested \$11.4M in the best available air emissions control technology.

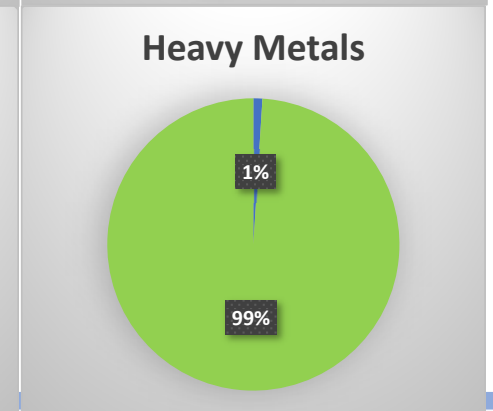
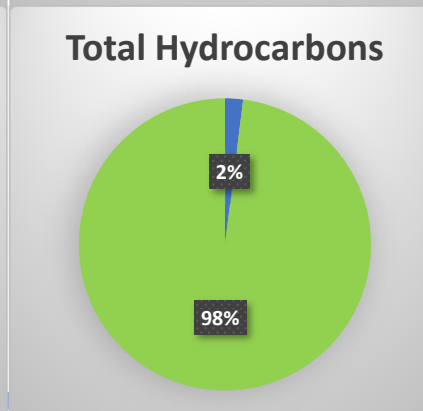
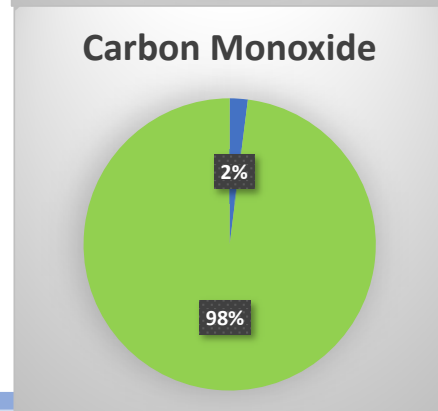
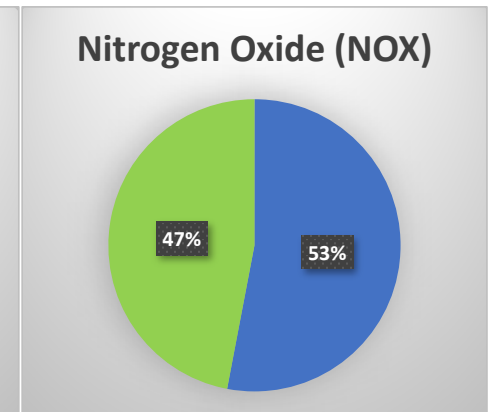
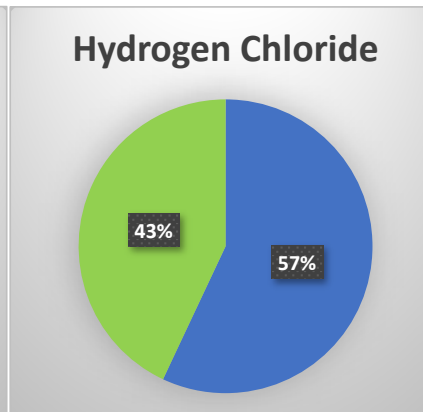
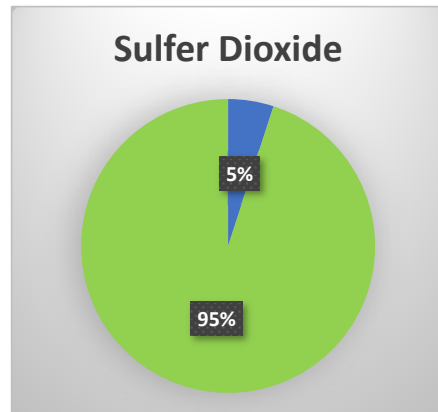
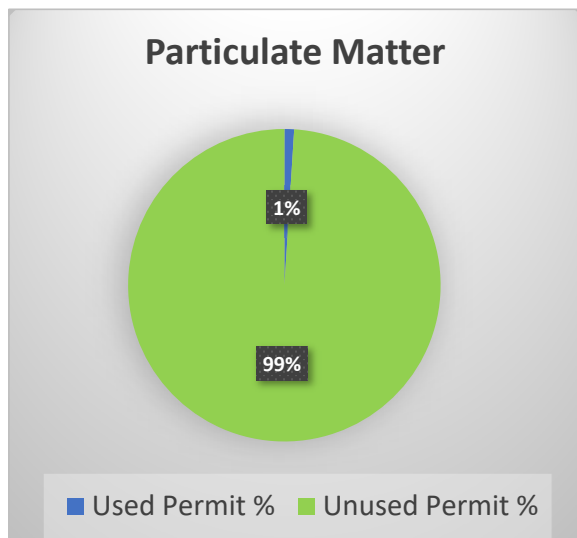


# Performance of DELCORA's Incinerator

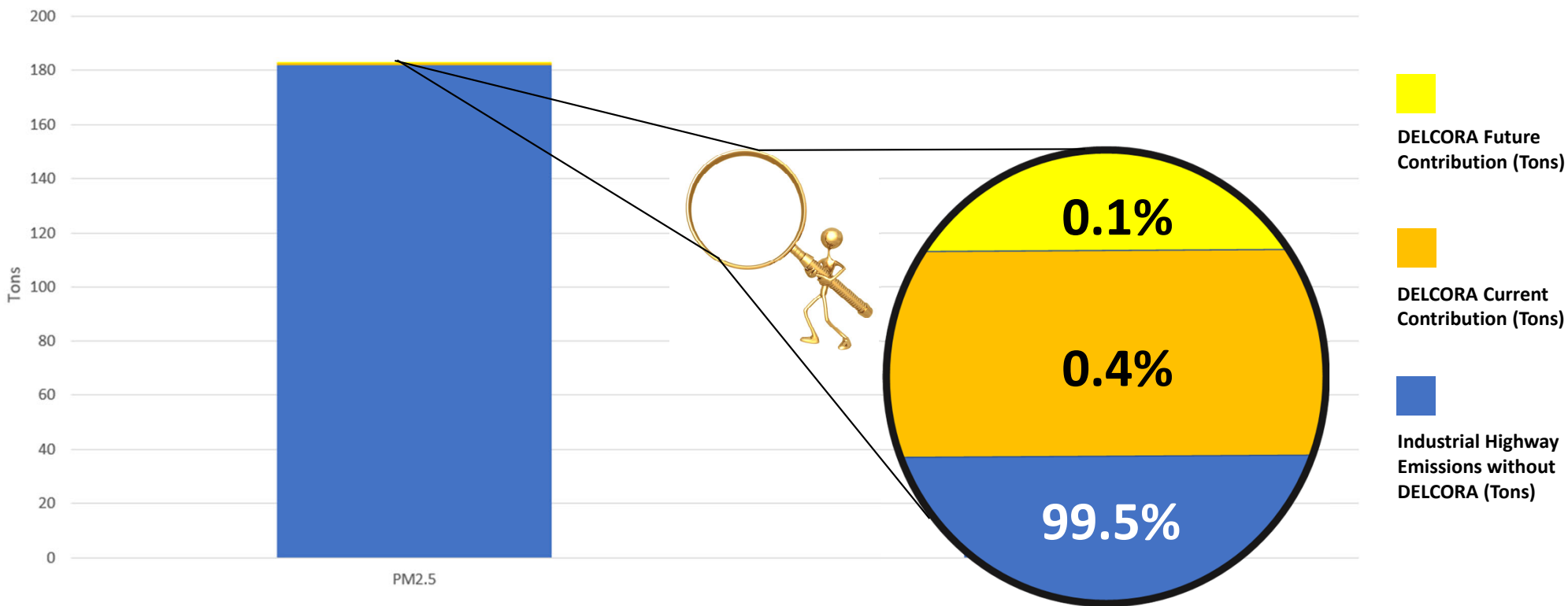




# Permit Compliance of DELCORA's Incinerator

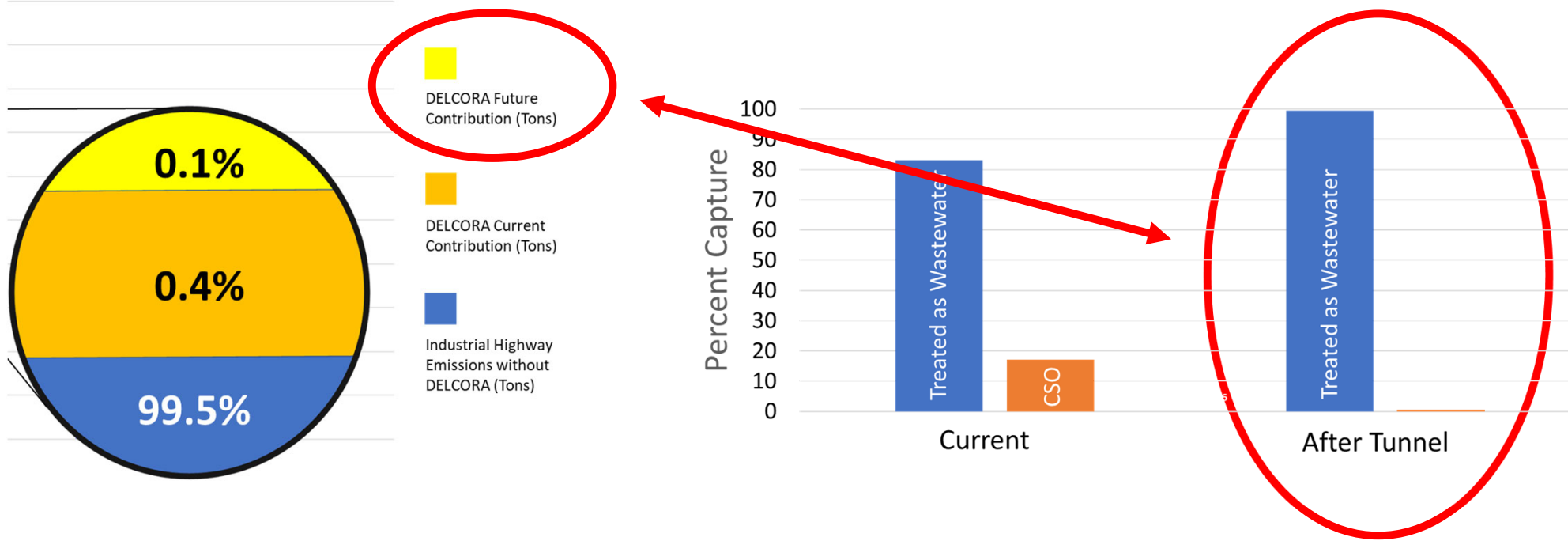


# DELCORA's Contributions to Total Air Emissions Along the Industrial Highway (Marcus Hook to PHL Airport)



SOURCE: [http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/AQ/PBI/Air\\_Emissions\\_Report](http://cedatareporting.pa.gov/reports/powerbi/Public/DEP/AQ/PBI/Air_Emissions_Report)

# Particulate Matter Emissions vs CSO improvements as a result of DELCORA Tunnel





# Why Not Consider Other Technologies Besides Incineration?

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## DELCORA's Commitment:

1. Complete ongoing study for additional emissions control.  
Implement NOX reduction by tunnel completion date (2028)
2. Study and share findings of alternatives to incineration evaluation within 6 months.
  - Consider impact on air quality and emissions
  - Consider cost due to impact on rates





Concern #5: There are concerns that DELCORA's treatment plant stinks

## Recent Improvements at WRTP since March 2022

- Additional air filter at pump station location close to residents
- Odor neutralizer in the air
- Odor sampling outside the fence
- Odor complaint hotline

## Future Improvements in Process

- Finalization of Odor Master Plan expected by end of 2022
- Then, smart investment in long term odor control by 2024



**“Adding ... filter... has reduced the plant’s total odor emissions by 44.6% in only a few months.”**  
– Webster Environmental Assoc.







**Concern #6: There are concerns that DELCORA was not communicating with Chester residents in a way that gets to them**

# How We've Engaged Chester on the ESA Program and LTCP

Date	Meeting
9/21/2022	City of Chester Tunnel Public Meeting #2
8/5/2022	Clean Air Council
6/21/2022	Chester Environmental Partnership Meeting/PADEP
5/25/2022	Chester City Council meeting
5/20/2022	DELCORA Community Day at WRTP
3/21/2022	City of Chester Tunnel Public Meeting #1
2/15/2022	Virtual Tunneling Presentation to Municipal Engineers
2/7/2022	Chester City Council Deliberative Session
10/19/2021	CRCQL/Energy Justice Network meeting
9/22/2021	Listening Session – St. Daniel's United Methodist Church
9/21/2021	Chester Environmental Partnership Meeting

## Open House at DELCORA

On Saturday, May 21, 2022, DELCORA held its community open house. During the open house, the community was able to enjoy some food, ice cream and the kids could jump around on the moon bounce. A tour was available to the community to see firsthand, what DELCORA was all about.

During the tour, the guest was taken through all of the steps. They were told about what happens to the sewage after it leaves our homes. The guest was able to see the different phases prior to the water being cleaned and returned to the Delaware River.

## WHAT DOES DELCORA DO?

DELCORA provides a vital service to protect public health and our waterways. We're responsible for collecting, transporting and treating both sewage and rainwater from DELCORA's service area in a way that protects human health and the environment.

### DELCORA's Treatment Plant



Home Sewage  
Wastewater from  
Businesses Rainwater



Cleans and restores  
water for environment



Fully clean and disinfected  
water returns to Delaware  
River



Below is additional information presented at the open house.

- Currently, we send some of our wastewater to the Philadelphia Water Department (PWD) to be treated. That's the way the system was designed when it was built in the 1970s.
- But using PWD is very expensive - and it's about to get even more costly due to Environmental Protection Agency (EPA) mandates.
- DELCORA has a responsibility to residents and to our community - and we have found a solution that will save ratepayers \$410 million over the next 20 years.

For more information go to <https://www.delcora.org/>



# How Chester City Council & DELCORA Let the Community Know about THIS Meeting - ONLINE

- Facebook
  - Event Created
  - DELCORA General page
  - DELCORA Chester-focused page
  - Sponsored Ad
- City of Chester
  - Council Chester Facebook Page
- DELCORA Website

City of Chester News and Information  
52m · 🌐


 **Public Community Meeting  
presented by DELCORA**

DELCORA will be discussing the proposed Wastewater Tunnel Program.  
Go to [www.DELCORA.org](http://www.DELCORA.org) for more details and contact information

**When:** Wednesday, September 21, 2022

**Time:** 6:00 PM

**Where:** Chester City Hall  
(Council Chambers – 2<sup>nd</sup> Floor)  
1 E. 4<sup>th</sup> St, Chester, Pa

 **DELCORA**  
Published by Mikayla Ickes · August 29 at 1:01 PM · 🌐

Come learn more about the proposed DELCORA Wastewater Tunnel Project and permitting process at our upcoming public meeting. Join DELCORA on Wednesday, September 21 at Chester City Hall. The meeting will also be livestreamed from [City of Chester News and Information](#). We hope to see you there!

**YOU ARE INVITED TO A  
PUBLIC MEETING**

**WHEN:** Wednesday, September 21, 2022  
**TIME:** 6:00 PM  
**WHERE:** Chester City Hall  
Council Chambers  
1 E. 4th St, Chester, PA

Anyone interested is invited to a public meeting (or watch via Chester City Council Facebook Page) to learn about the proposed DELCORA Wastewater Tunnel Program.

Permits will be discussed. Refer to today's legal notices section or [www.DELCORA.org](http://www.DELCORA.org) for more details and contact information.

**Come to learn about the project  
and permitting process**

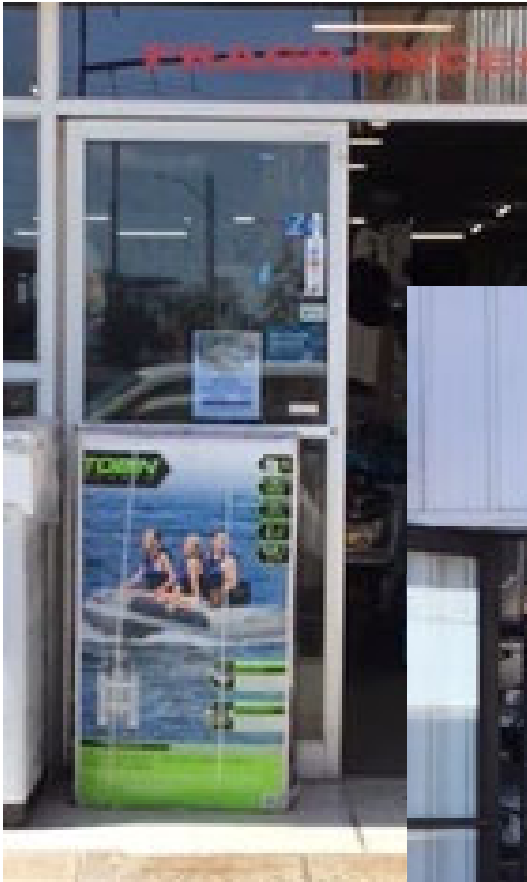






## How Chester City Council & DELCORA Let the Community Know about THIS Meeting – IN THE COMMUNITY

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- 1,668 Door stuffers (paid vendor/professionally placed)
- Direct email to NGO's
- Email to govt. agencies
- Hanging Flyers – business, community/senior centers, senior housing units, churches
- Direct contact to all previous meeting participants that signed-in



## Looking Ahead: DELCORA's Community Outreach Coordinator

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- Meet the newest addition to DELCORA's team

### **Michelle Jackson**

Community Engagement and Outreach Coordinator

Mobile: 445-245-3840

Direct: 610-876-5523 Extension 131

[jacksonm@delcora.org](mailto:jacksonm@delcora.org)





**WHAT'S NEXT?**





# Our Response to Chester Community Concerns



This tunnel means cleaner waterways which is improving the environment for Chester residents

Four underground easements in Chester are being obtained with owner collaboration, no condemnation/taking of land.



Tunnel runs under 291, no vibrations expected to be felt or impact homes during construction

Solid rock and tested technologies will result in no contaminated waterways as a result of a leaking tunnel



The tunnel will invest in Chester instead of Philadelphia and will help to better manage rates.



DELCORA plans for additional emissions control investment and alternatives analysis



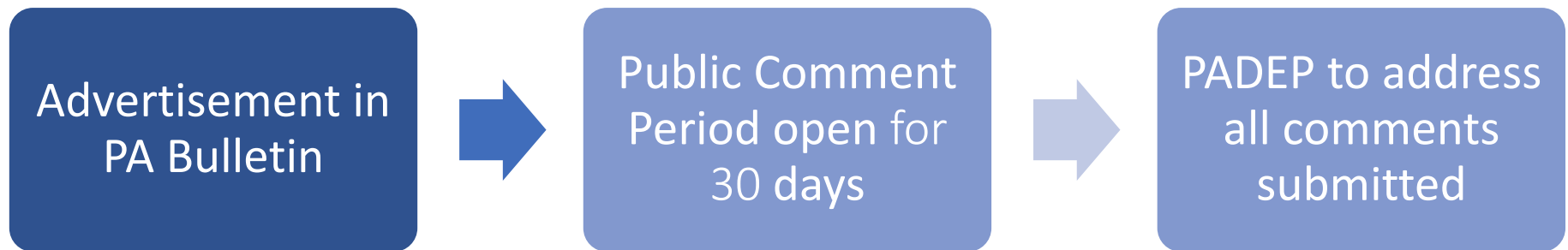
Immediate: hotline, biofilter, neutralizer  
Long-term: odor planning and investment



DELCORA is communicating with Chester residents in a number of ways

## Permitting Pathway

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DELCORA commits to notify the public when comment periods become available on the DELCORA Facebook page

# Pending Permits with Pending Public Comment Periods for DELCORA's Tunnel and CSO Program

Permit Name/Description	Type	Agency	Status
<p>DELCORA Wastewater Tunnel Project PAD230060 (APS ID No. 1066176)</p> <p>Description: Permit for controlling erosion and sediment during construction to minimize impacts to adjacent waterbodies and wetlands.</p>	Land	PA Department of Environmental Protection and Delaware County Conservation District	Under Review
<p>DELCORA NPDES Discharge Permit Amendment Application (PA0027103)</p> <p>Description: Permit for modifying the discharge volume and concentration for the Western Regional Treatment Plant</p>	Water	PA Department of Environmental Protection	Under Review

# Pending Permits with Pending Public Comment Periods for DELCORA's Tunnel and CSO Program

Permit Name/Description	Type	Agency	Status
<p>DELCORA Water Quality Management (WQM) Part II Permit – WRTP</p> <p>Description: A NPDES permit required for construction of sewage and industrial waste treatment facilities, sewage collection systems and pump stations</p>	Water	PA Department of Environmental Protection	Under Review
<p>Delaware River Basin Commission Docket (D-1992-018 CP-4) Modification</p> <p>Description: Approval for parameters to discharge to the Delaware River</p>	Water	Delaware River Basin Commission	
<p>Act 537 Sewage Facilities Planning</p> <p>Description: Municipalities are required to develop and implement comprehensive official plans that provide for the resolution of existing sewage disposal problems, provide for the future sewage disposal needs of new land development, and provide for future sewage disposal needs of the municipality.</p>	Water		





## **IMPORTANT CLOSING INFORMATION:**

- **Community Assistance**
- **How to Contact DELCORA**



# FINANCIAL TROUBLES?

We are here to help.

## CUSTOMER ASSISTANCE PROGRAM

**We have a number of programs available to help customers who are having trouble paying their bill. Please call our Customer Service Department to learn more.**



Contact DELCORA's Customer Service Department at 610-876-5526.

DELCORA

DELCORA

# STAY CONNECTED

We want to hear from you!

- 💧 **Join our new, private Facebook group for residents of Chester**
  - <https://www.facebook.com/groups/delcorachester>
- 💧 **Visit our website and ask a question there**
  - <https://www.delcora.org/contact/contact-us/>
- 💧 **Learn about the Tunnel Project**
  - <https://www.delcora.org/tunnel-project/>
- 💧 **Call Customer Service** at 610-876-5523
- 💧 **Connect with Michelle Jackson, DELCORA's Community Outreach Coordinator**
  - Mobile: **445-245-3840** Office: **610-876-5523 Ext. 131**
  - Email: [jacksonm@delcora.org](mailto:jacksonm@delcora.org)

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**THANK YOU!**