



**HUNTS POINT WATER POLLUTION CONTROL PLANT**  
**Draft Environmental Impact Statement**  
**Public Hearing**  
**April 12, 2007**



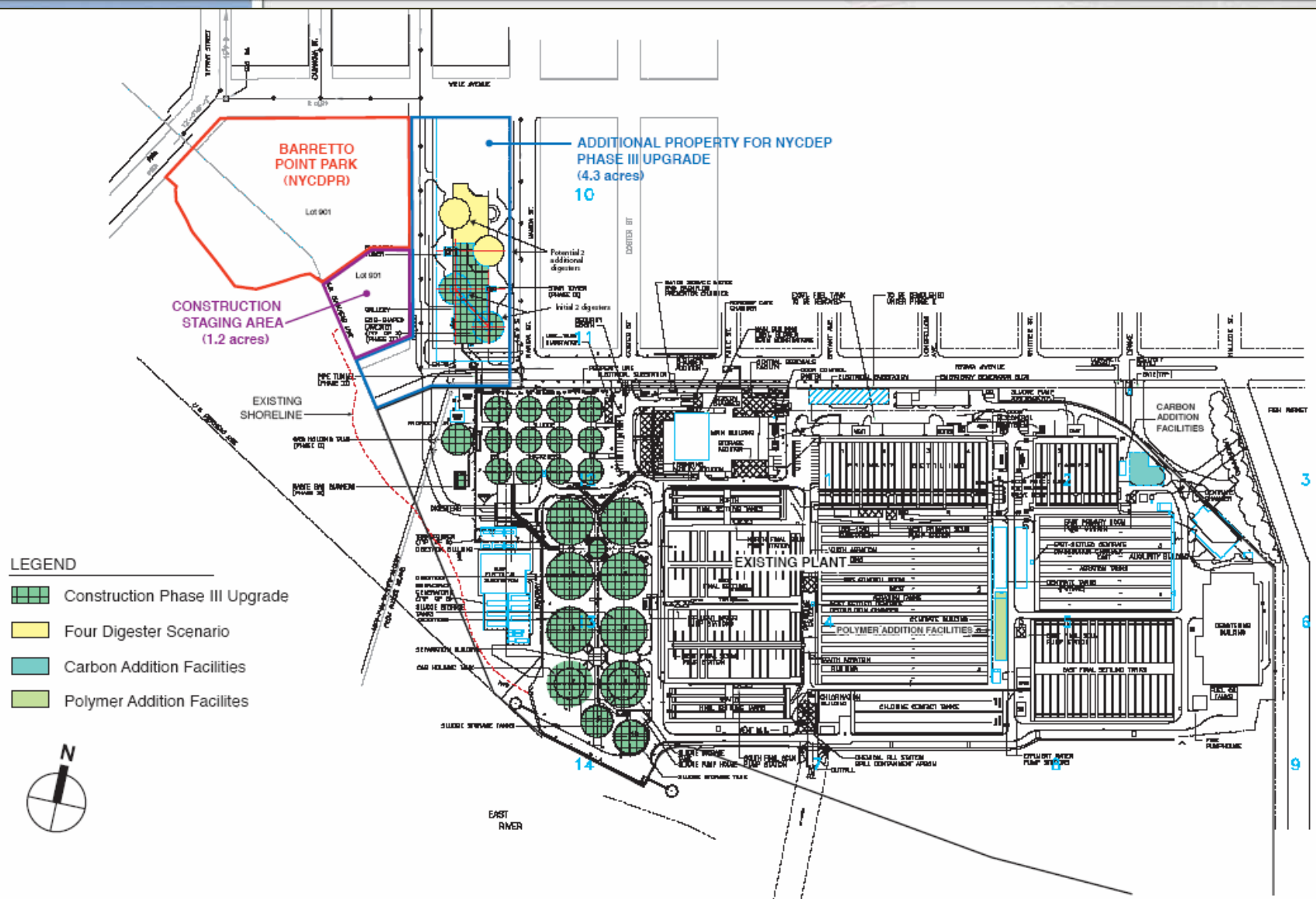
# Environmental Impact Statement Process



- **Draft Environmental Impact Statement (EIS) completed: December 19, 2006**
- **Determines impacts of the project based on City Environmental Quality Review (CEQR) Guidance Manual**
- **Written comment period: December 19, 2006- April 23, 2007**
- **Final EIS: July 2007**
- **DEIS supports two ULURP actions: site selection of 4.3 acres for Hunts Point WPCP Phase III Upgrade and mapping of Barretto Point Park**
- **DEIS is available on NYCDEP's website at: [www.nyc.gov/dep](http://www.nyc.gov/dep)**



# Project Site





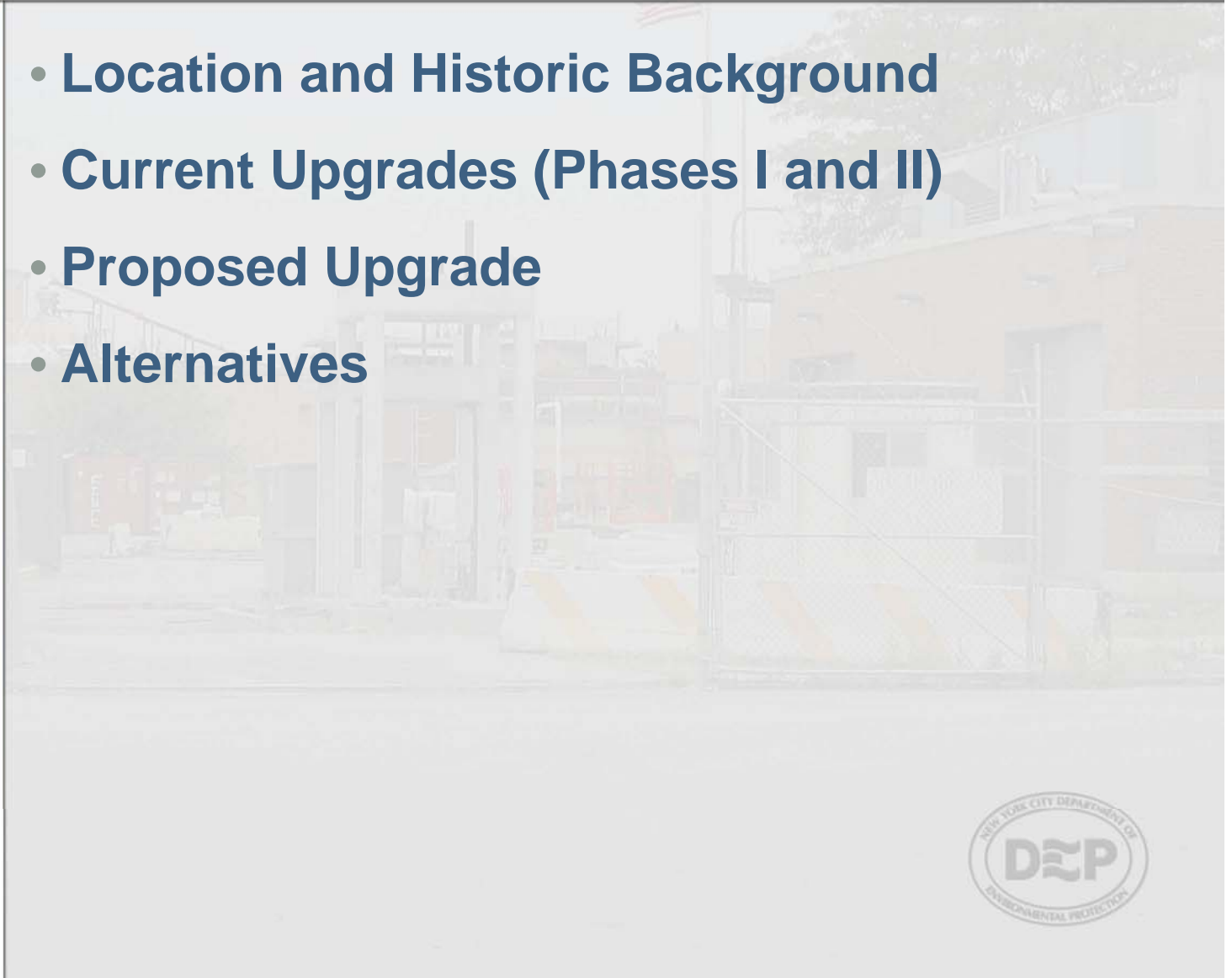
# Hunts Point WPCP Phase III Upgrade Project Description

**Matthew Osit P.E., Chief**

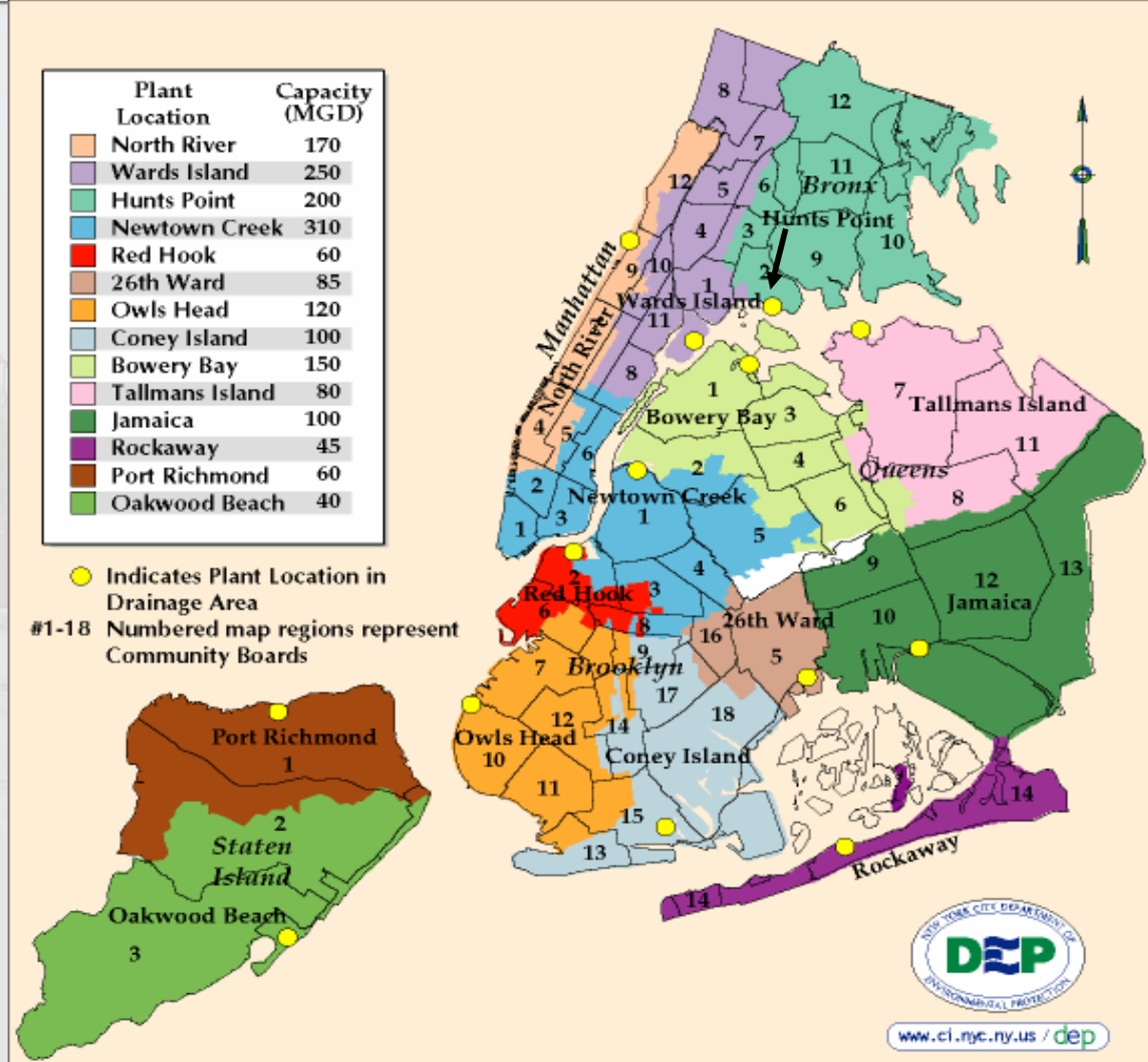


# Project Description Overview

- **Location and Historic Background**
- **Current Upgrades (Phases I and II)**
- **Proposed Upgrade**
- **Alternatives**



# Drainage Areas NYC Water Pollution Control Plants



# Hunts Point Water Pollution Control Plant

- **Initial construction: 1950**
- **Provides public health benefits and ensures waterbodies are not degraded by:**
  - **Treating raw sewage before it is discharged to waterbodies**
  - **Removing sludge for reuse**



# Phase I and Phase II Upgrades

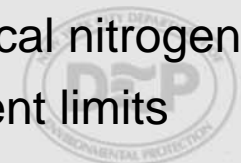


- **Phase I Upgrade**

- 2002-2007
- Objective: IMPROVE WATER QUALITY THROUGH CAPTURE AND TREATMENT OF STORMWATER
  - Maximize capture of wet weather flow to meet Consent Order mandates

- **Phase II Upgrade**

- 2003-2008
- Objective: IMPROVE WATER QUALITY THROUGH NITROGEN REMOVAL
  - Enhanced nitrogen removal via step biological nitrogen reduction facilities to meet Consent Judgment limits





# Odor Control Systems



## Existing Odor Control Systems

- Existing digested sludge transfer box activated carbon system
- Sludge thickener distribution box activated carbon system
- Sludge Storage Tank 10 activated carbon system
- Existing odor control at the dewatering building
  - Four wet scrubber exhausts for the building ventilation systems
  - Two two-stage scrubber exhausts from the centrate ventilation system

## Additional Major Controls to be Implemented by August 2007

- Existing screenings, grit and scum handling equipment will be relocated and exhaust air treated with activated carbon
- Primary settling tank influent channels will be covered and exhaust air treated with activated carbon

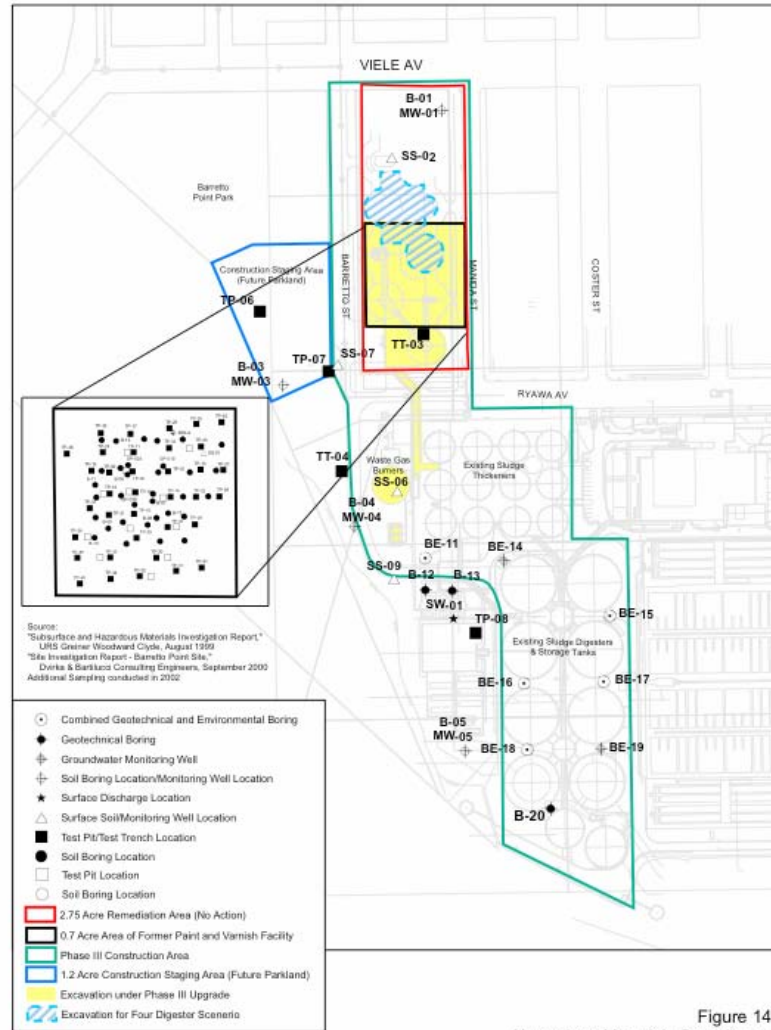
## Phase III

- Odor control for new digesters



# Environmental Remediation

- 2.75 acres to be remediated from mid-2007 to mid-2008
- Includes 0.7 acre excavation of contaminated soils in area of former paint and varnish facility
- During excavation, area will be enclosed in a tent and the air vented through air pollution control equipment



Hunts Point WPCP

Figure 14-2  
 Hazardous Materials Sampling and  
 Areas of Proposed Excavation



# Proposed Hunts Point Upgrade – Phase III

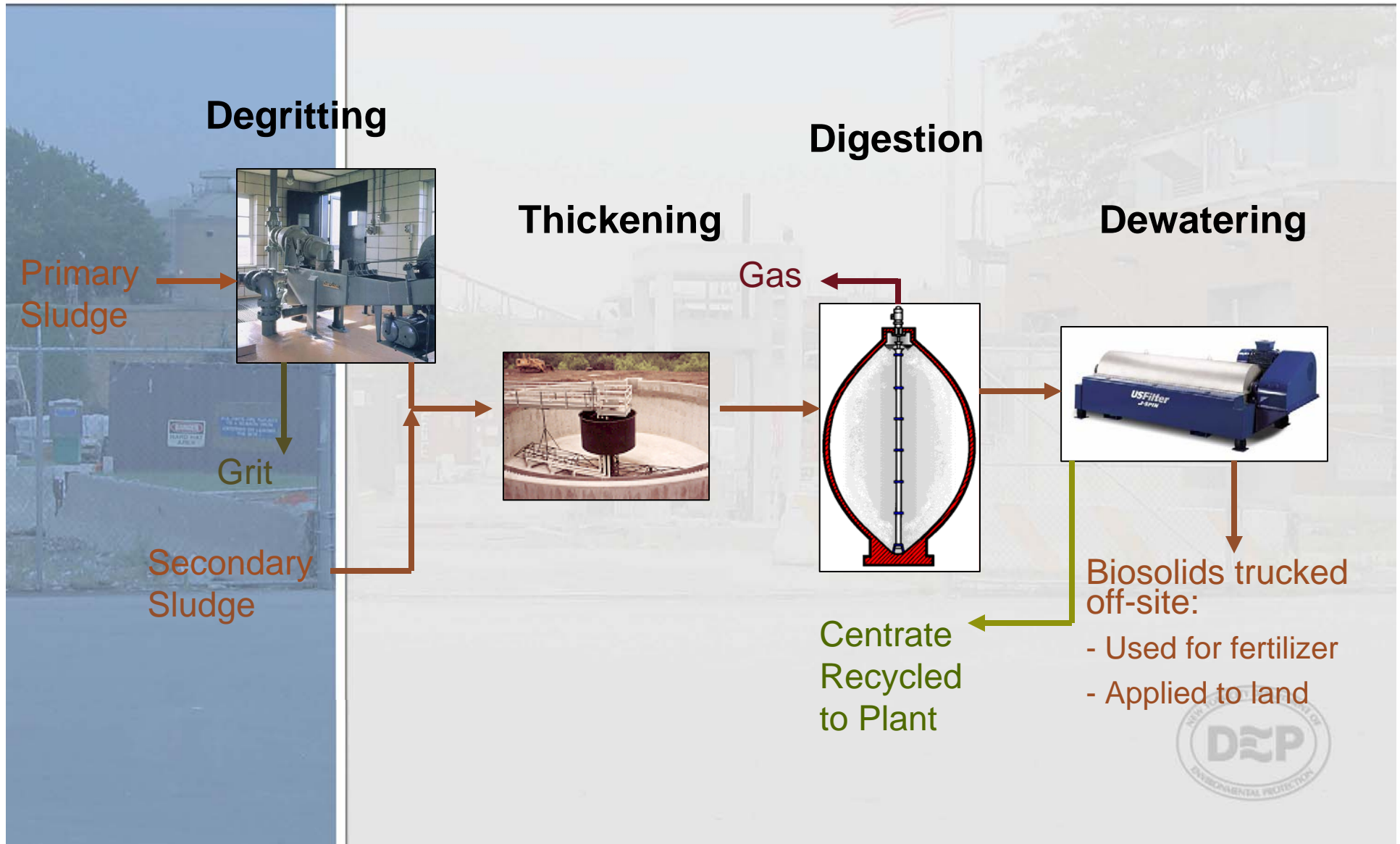
- **2008-2014**

- **Objectives:**

- Improve solids handling
- Replace equipment at end of useful life
- Improve water quality through enhanced nitrogen removal



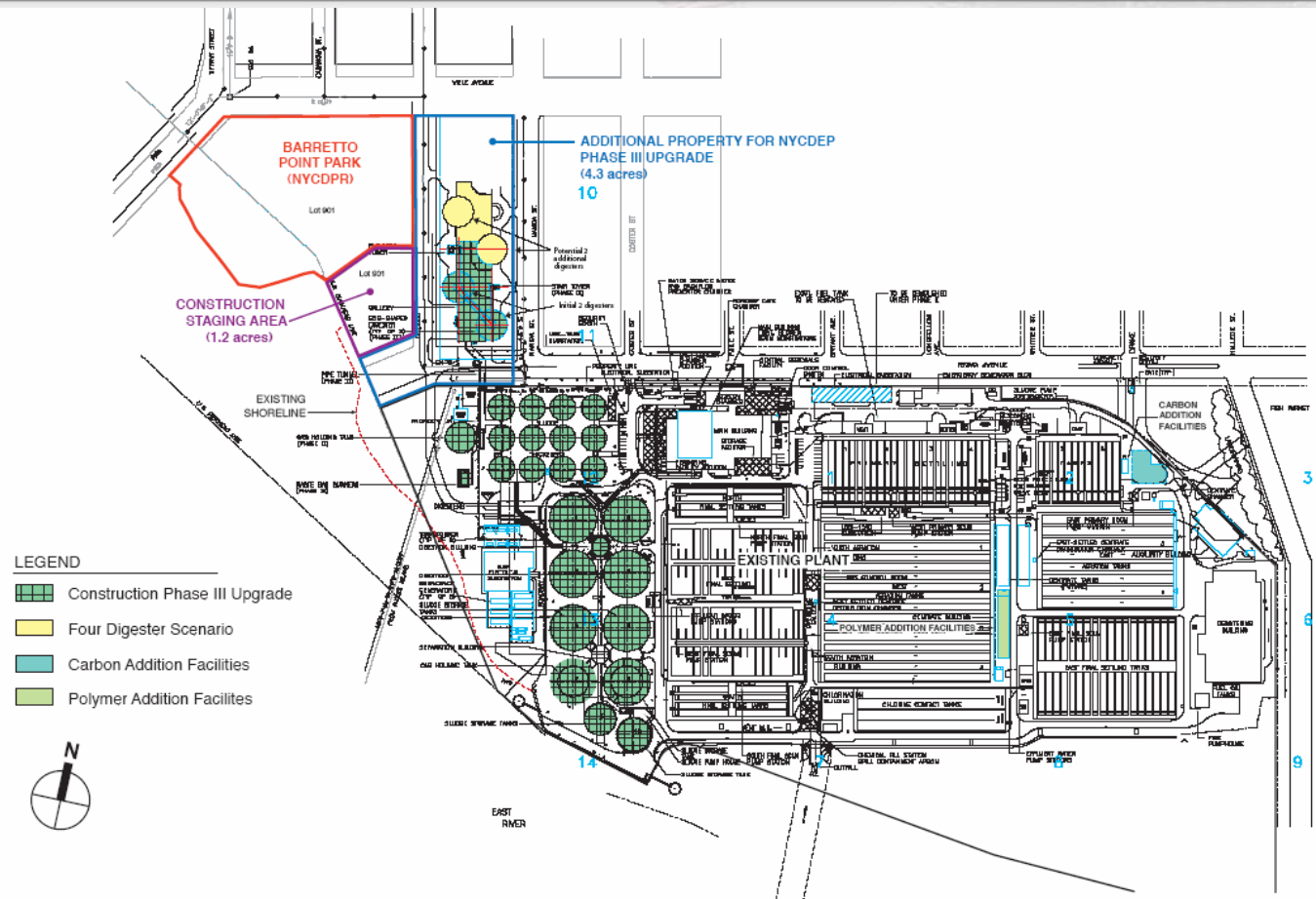
# Solids Treatment Process



# Phase III Upgrade Elements

## Sludge Handling Facilities Improvements

- New egg shaped sludge digester (2 initial – 4 future)
- Renovation of existing digester & storage tanks
- Replacement and enclosure of digester gas flares and holder
- Renovation of sludge thickeners



# Other Proposed Actions in DEIS



- **Nitrogen Removal Enhancements**

- Polymer addition facilities (storage tank and pumps) to control froth
- Carbon addition facilities to enhance nitrogen removal (denitrification)
  - Carbon sources: methanol or ethanol
  - Buried storage tanks and submersible pumps
  - Aboveground canopy and small control building at northeast end of existing plant site



# Construction Schedule

## Barretto Point Environmental Site

**Remediation:** 2007-2008

## Existing Digester Rehab and Polymer Addition

**Facilities:** 2008 - 2009

## Existing Sludge Thickener and Gas Facility

**Upgrade:** 2008 - 2011

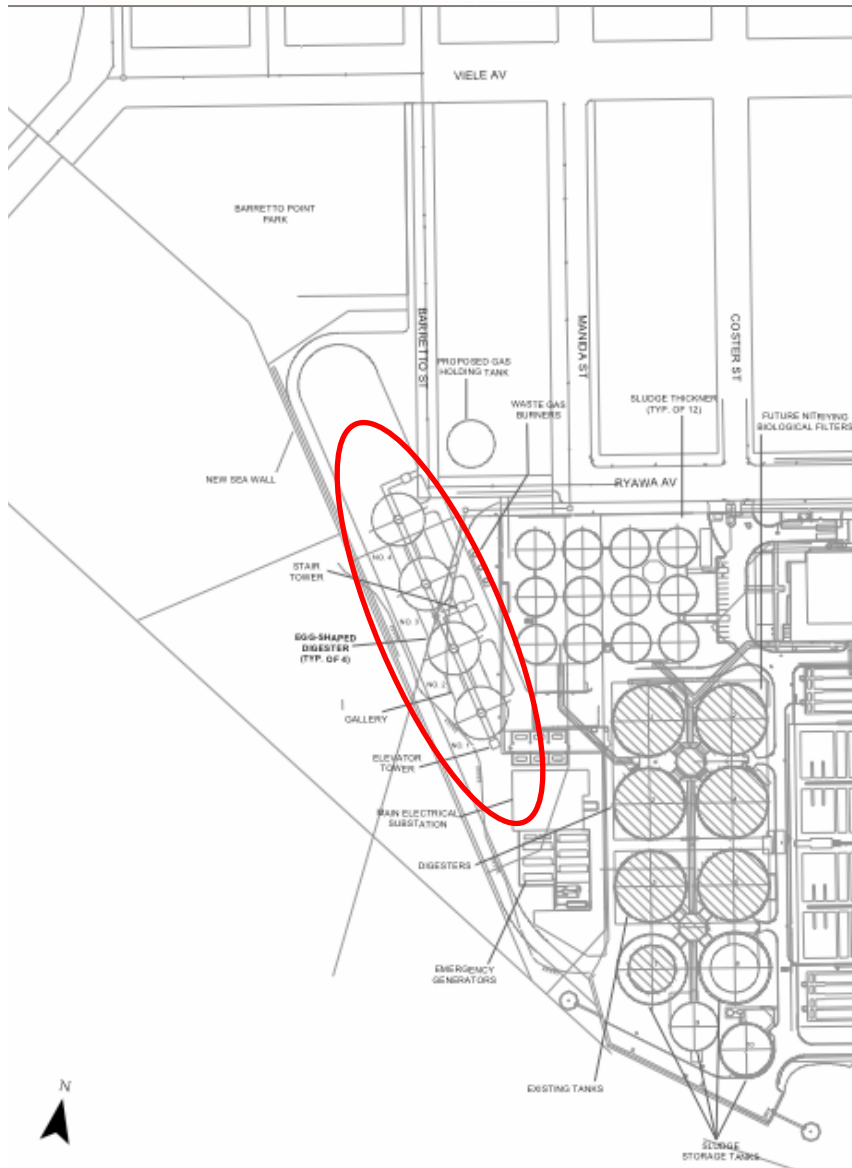
## Two Egg Shaped Digesters and Carbon Addition

**Facilities:** 2010 - 2014

## Two Additional Egg Shaped Digesters: Future



# Site Alternative 1 – Along Waterfront



## Pros

- Reduces presence adjacent to park.
- Reduces noise impacts on park during construction.
- Provides for additional space at the plant to meet future needs.

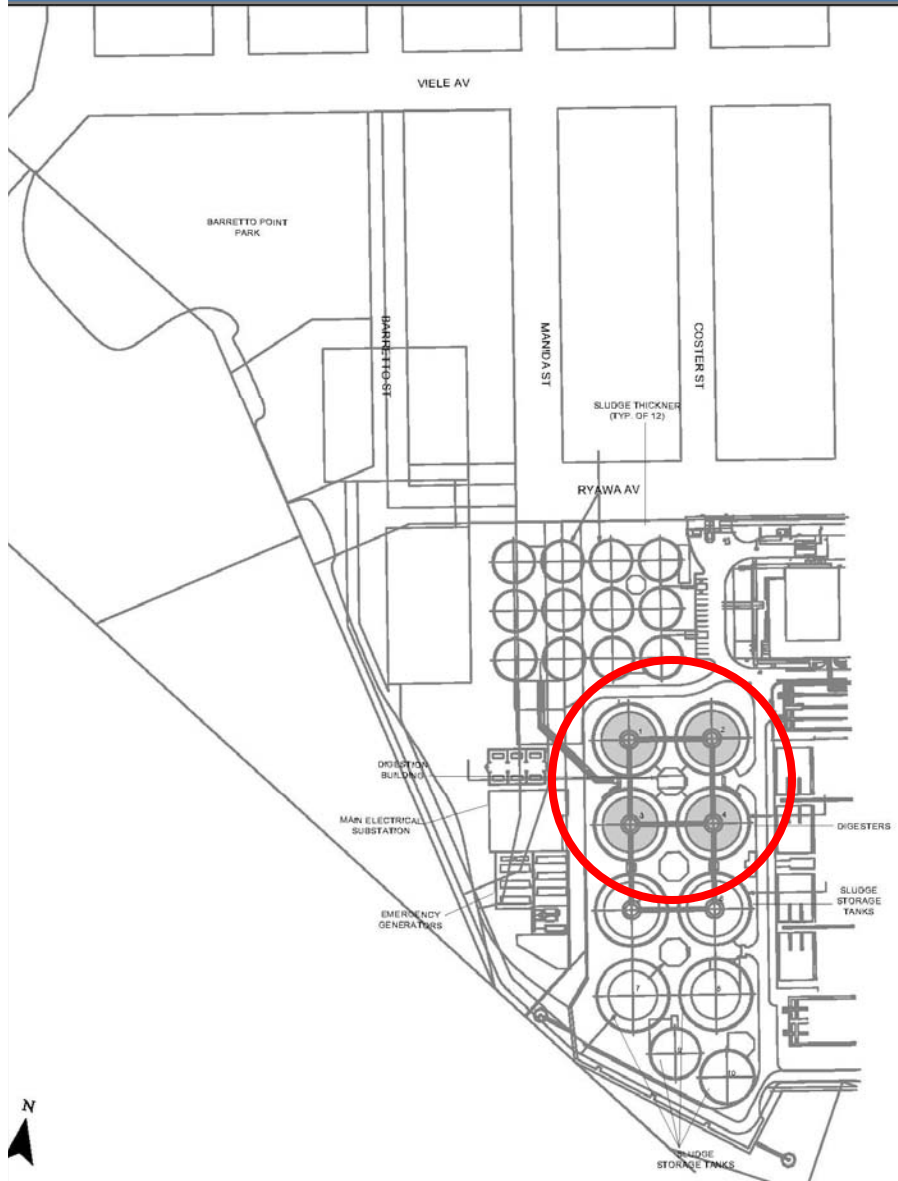
## Cons

- Filling of open water required.
- Requires difficult NYSDEC - USACE permitting process.
- Increases potential for flooding problems.
- Would affect waterfront views from the park.
- Higher cost.
- Requires relocation of utilities.





# Site Alternative 2 – Existing Digester Site

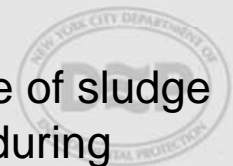


## Pros

- Reduces presence adjacent to park and eliminates significant visual impact.
- Reduces noise impacts on park during construction.

## Cons

- Longer construction (8 yrs vs. over 11 years).
- Significantly more difficult construction:
  - Existing digesters must remain in operation during construction.
  - Very tight area.
  - Temporary piping and power connections
  - Safety hazard due to welding near active digesters.
- Layout does not facilitate potential future needs at the plant.
- Higher cost.
- Would not meet beneficial reuse of sludge requirements for land disposal during construction.



The background image shows an industrial facility, possibly a water treatment plant, with a large blue semi-transparent overlay. In the upper right, an American flag flies on a tall pole against a cloudy sky. The facility includes various structures, pipes, and a fenced area in the foreground. The text is centered over the blue overlay.

# Draft Environmental Impact Statement Overview

**Esther Siskind, Assistant Commissioner**



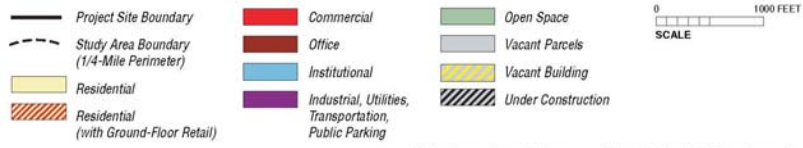
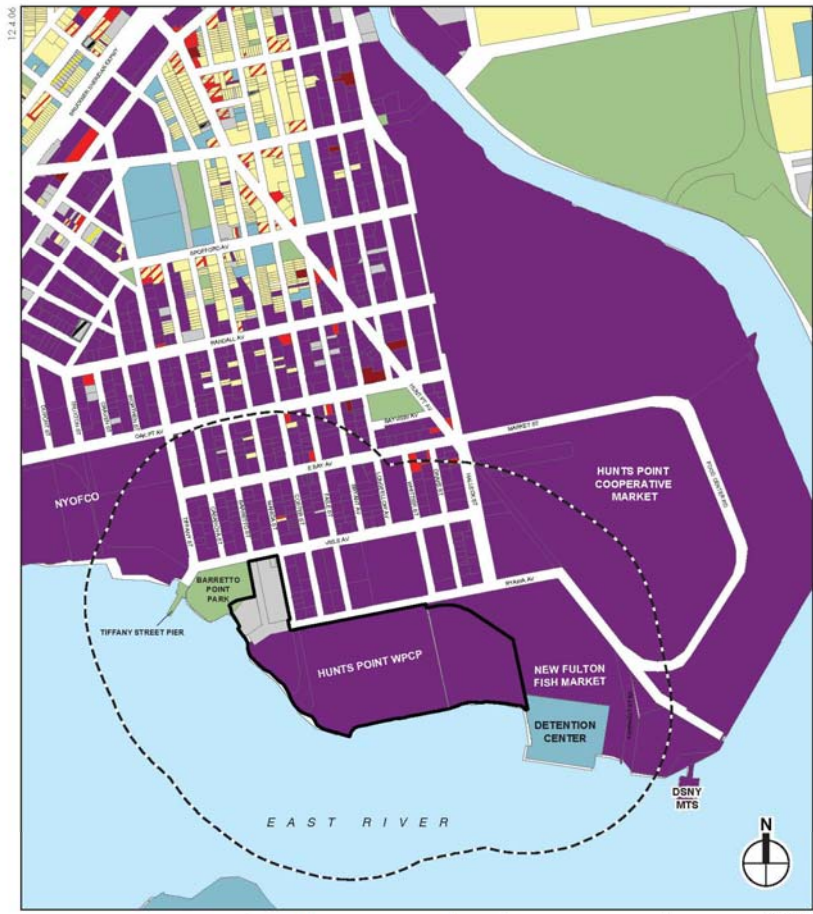
# DEIS Overview



- Land Use
- Socioeconomic
- Visual & Shadows
- Historic Resources
- Waterfront Revitalization
- Traffic
- Criteria Air Pollutants
- Volatile Organic Compounds
- Odors
- Noise
- Infrastructure
- Energy
- Hazardous Materials
- Water Quality
- Natural Resources
- Construction
- Public Health
- Environmental Justice
- Alternatives
- Mitigation



# Land Use



Hunts Point WPCP

Existing Land Use — Hunts Point Peninsula  
Figure 2-2

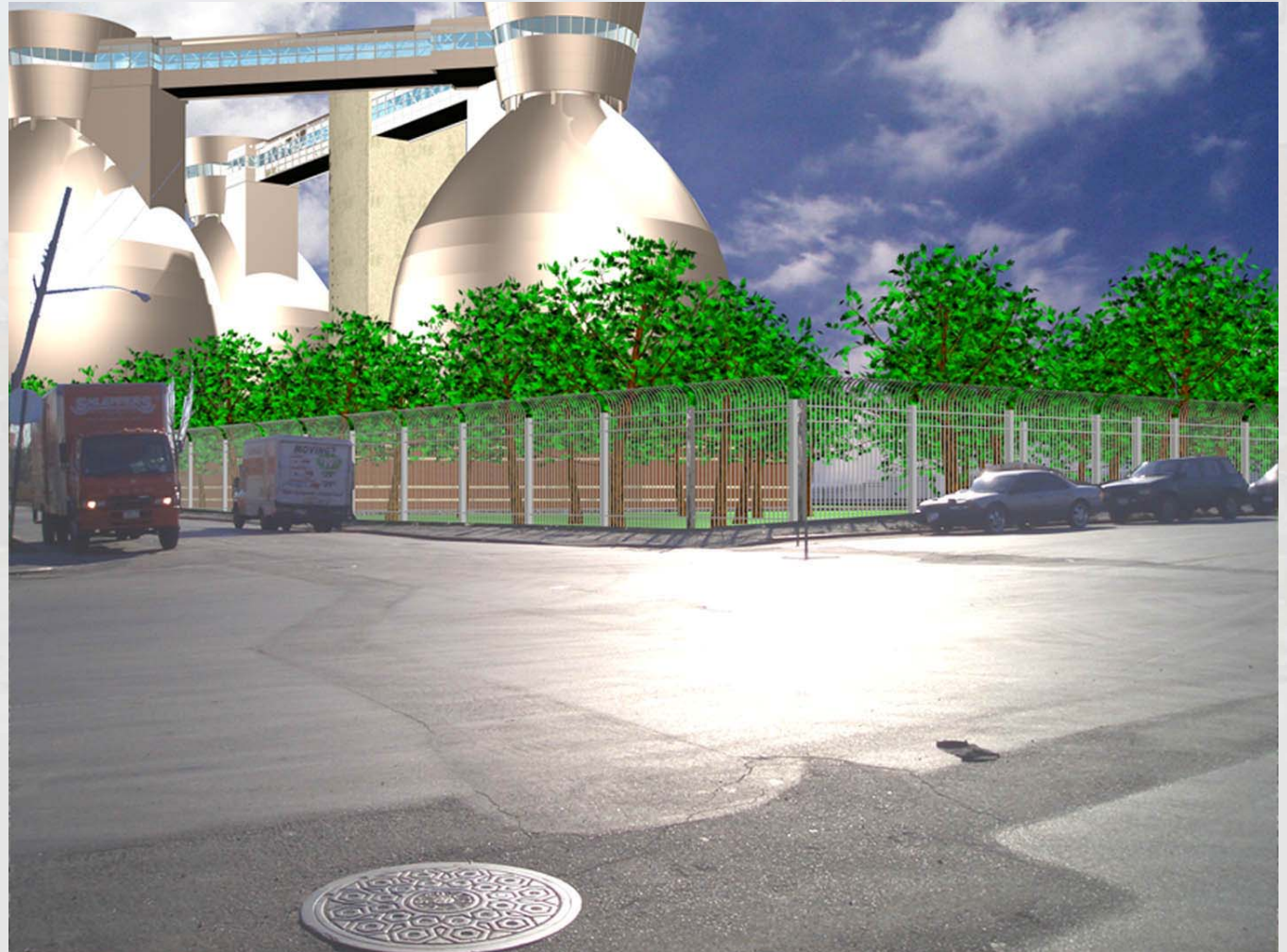


# View from Barretto Point Park

- 130 feet tall
- Significant visual impact.
- Visual impact limited to views east from the park.
- No waterfront views affected.
- Park designed concurrently to transition from industrial area to waterfront.
- Community participation, working with architect, to design exterior.



# View from Viele and Manida



# Shadows on Barretto Point Park

- Limited duration in early morning hours.
- Disappear from park no later than 9:45 am to 10:15 am.
- Remainder of day, park would be in full sun.
- Shadows would affect Manida St. in late afternoon.

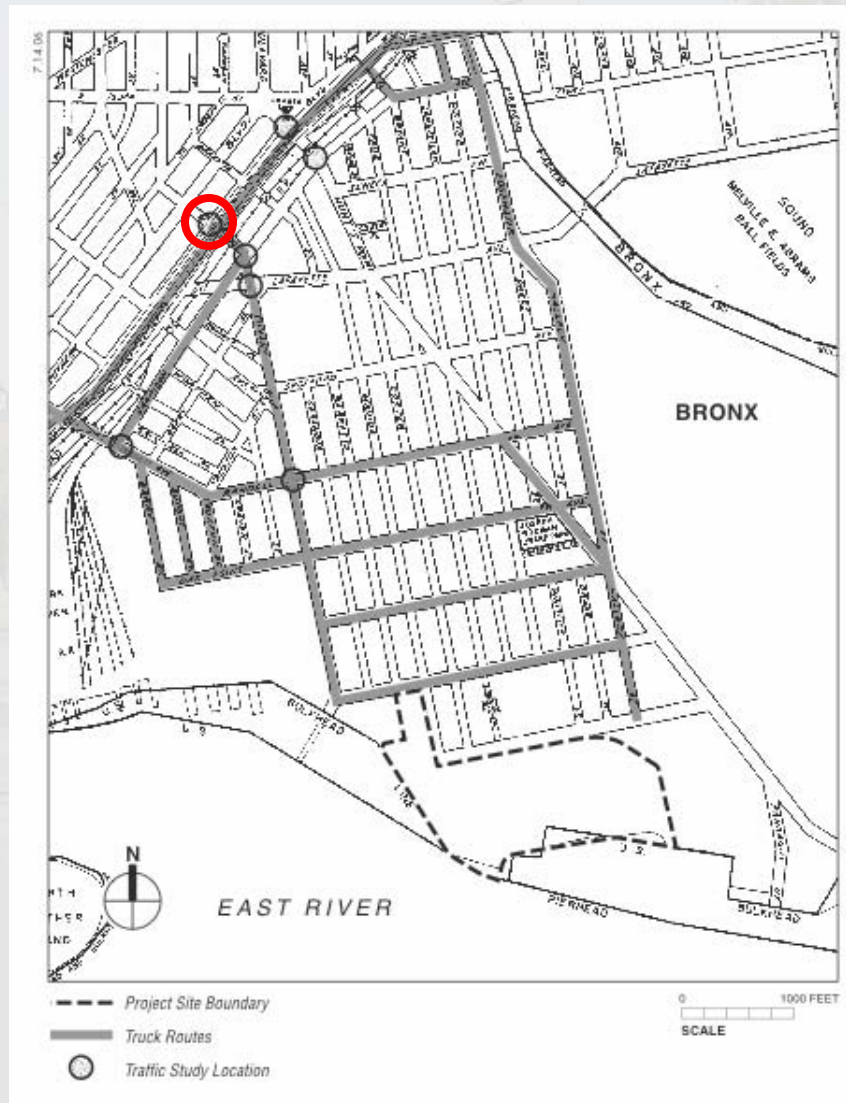


Hunts Point WPCP

Shadow Diagram  
March 6 Analysis Day  
Figure 4-19

# Construction Impacts – Traffic

- **During peak construction period (6 months):**
  - 42-51 trucks during the peak construction day;
  - 9 trucks in the peak construction hour.
- **During most of the construction period, trucks would be much more limited:**
  - 2-10 trucks per day.
- **Significant traffic impact at Tiffany and Bruckner Blvd.**
- **Will work with NYCDOT to mitigate impact through traffic signal timing.**





# Construction-Related Noise Impacts



- Temporary adverse noise impacts in Barretto Point Park for 1.5 years during digester construction and another quarter later in construction
- No impacts during weekends when park most fully utilized
- No impacts at nearest residence
- NYCDEP will:
  - Implement a noise mitigation plan consistent with requirements in revised Noise Control Code
  - Construct a noise wall between site and Park



# Criteria Air Pollutants



- **Hunts Point WPCP Air Emission Sources**
  - Boilers, Waste Gas Burners, and Emergency Generators.
  - The plant uses digester gas to meet 48 percent of the total plant's heating needs.
  - Natural gas, fuel oil, and electricity purchased from utilities provide the rest of the plant's energy needs.
  - The entire upgraded plant would meet federal and state standards for:
    - SO<sub>2</sub>
    - NO<sub>2</sub>
    - CO
    - PM<sub>10</sub>



# PM<sub>2.5</sub> Background Information



- **This type of particulate matter is most inhaleable.**
- **City-wide Sources:**
  - vehicle exhaust;
  - residential home heating;
  - boilers and generators;
  - chemical and manufacturing processes;
  - construction activities; and
  - natural sources.
- **Hunts Point Sources:**
  - boilers;
  - waste gas burners; and
  - emergency generators.
- **The entire City is out of compliance with the new federal PM<sub>2.5</sub> standards. The City is developing implementation plans to come into compliance.**



# PM<sub>2.5</sub> Impact Analysis

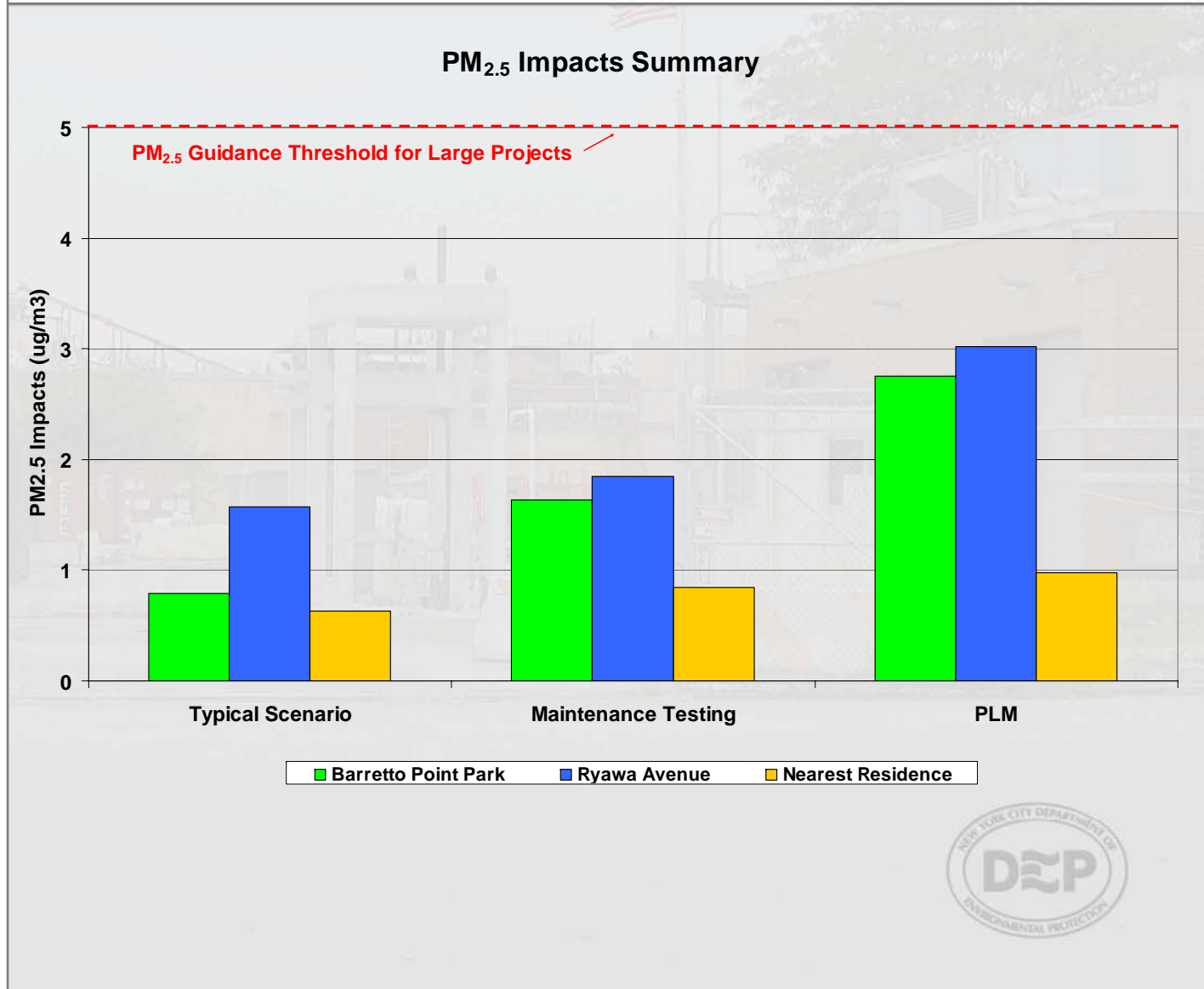


- **Six 2000 kw and one proposed 500 kw emergency generators**
- **Several generator operating scenarios:**
  - **Typical Scenario**
    - No emergency generators operating
  - **Maintenance Testing**
    - 2 hours per generator per month=14 hours per month
  - **Potential Voluntary Participation in Peak Load Management Program (PLM)**
    - Voluntary program to assist in preventing blackouts on peak energy demand days (plant partially taken off the electric grid)
    - June 1-September 30 between 11 AM to 7 PM
    - Up to 15 days/year, 6 hours/day



# PM<sub>2.5</sub> Impacts Summary

- Current New York State (NYS) threshold for individual project is 5 ug/m<sup>3</sup>
- Plant will readily meet this threshold under all scenarios.
- NYS is revising standard downward in August 2007.
- Only operating scenario affected by new threshold will be PLM program (up to 15 days).
- DEP is evaluating use of ULSD and other approaches to limit exposure during PLM program.



# Odor Impacts



- **Hydrogen sulfide (H<sub>2</sub>S) is an odorous pollutant generated by sewage.**
- **Readily meets both 10 parts per billion (ppb) H<sub>2</sub>S State standards at fenceline and 1 ppb H<sub>2</sub>S environmental review guidance value at sensitive receptors including:**
  - Barretto Point Park;
  - residences; and
  - detention center.
- **At Proposed Greenway:**
  - Greenway is along fenceline of plant – very difficult to ensure no odors.
  - Peak level is 2.44 ppb worst case hour.
  - During daylight hours, very few per year will exceed 1 ppb.
  - Small area affected.

