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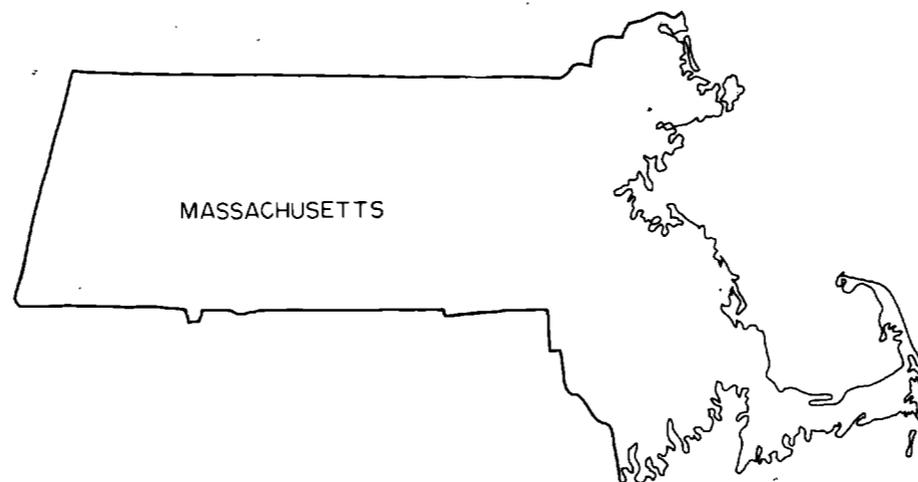
# Historical Analysis Municipal Wastewater Treatment, Clarks Cove, New Bedford, Massachusetts

Copy #1  
Superfund Records Center  
SITE: New Bedford  
BREAK: 174  
OTHER: 25743



SDMS DocID 25743

prepared for  
EPA Region 1  
and OERR



Site: \_\_\_\_\_  
Bank: \_\_\_\_\_  
Other: NF 17

~~11-1-57~~  
New Bedford  
Harbor

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MD#1  
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# **Historical Analysis Municipal Wastewater Treatment, Clarks Cove, New Bedford, Massachusetts**

by

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## CLARKS COVE

### Introduction

PCB contamination of the waters around New Bedford, Massachusetts including New Bedford Harbor, Clarks Cove and Buzzards' Bay has been recorded by EPA Region I Enforcement Division.

The PCBs are believed to have originally been used by two local companies in the manufacture of electrical capacitors: Aerovox Corporation and Cornell-Dubilier. Aerovox is located on the west bank of the Acushnet River, north of the hurricane barrier. Cornell-Dubilier is located on the west shore of New Bedford Harbor, four blocks south of the hurricane barrier.

PCB contamination of offshore sediments has been linked to the locations of the manufacturing facilities and 13 Municipal Sewer System overflow outfalls, all situated along the western shores of the Acushnet River and New Bedford Harbor, and along the eastern shore of Clarks Cove.

Discharges into the sewage system have also contaminated the Municipal Sewage Treatment plant, where EPA Region I reports that sludge is incinerated. PCBs are reportedly emitted from a smokestack at the plant, and are present in the resulting ash. Offshore sediments around the discharge points of the Sewage Treatment Plant itself also show high levels of PCBs.

Officials in EPA Region I Enforcement Division have requested that the EPA-Environmental Photographic Interpretation Center (EPIC) conduct a historical photographic study of the New Bedford Municipal Sewage Treatment Plant and Clarks Cove. The results of this study will aid EPA Region I Enforcement Division in their continuing effort to investigate PCB contamination in the New Bedford area.



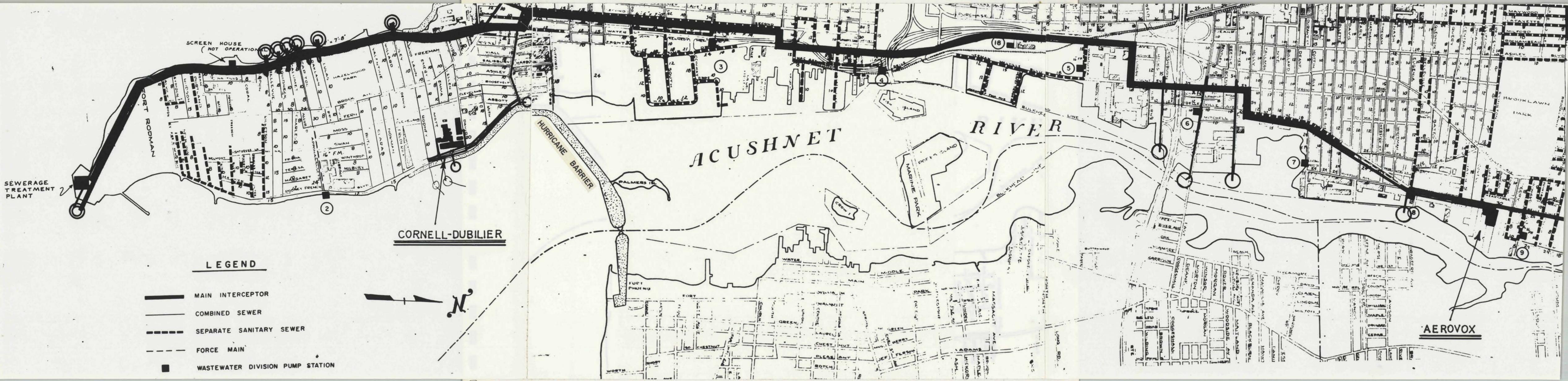


### Sewer System Map

This map was provided to EPA by the City Engineering Office in New Bedford, Massachusetts.

According to this map both Aerovox Corporation and Cornell-Dubilier are linked to the Municipal Sewage Treatment plant by the sewage system.

Thirteen combined sewage/storm sewer overflow outfalls can be seen on this map. As the sewer system reaches its maximum capacity, untreated sewage may be released from these outfalls. Seven of the outfalls empty into New Bedford Harbor; four of these empty north of the hurricane barrier. The remaining six outfalls empty into Clarks Cove.



SCREEN HOUSE  
(NOT OPERATIONAL)

SEWERAGE  
TREATMENT  
PLANT

**LEGEND**

-  MAIN INTERCEPTOR
-  COMBINED SEWER
-  SEPARATE SANITARY SEWER
-  FORCE MAIN
-  WASTEWATER DIVISION PUMP STATION

**CORNELL-DUBILIER**

ACUSHNET RIVER

HURRICANE BARRIER

**AEROVOX**

Analysis of Photograph Taken April 10, 1962

Clarks Cove

The Municipal Sewage Treatment Plant had not yet been built at the time this photograph was taken.

Six of the ten possible outfalls labeled on the photograph are at the approximate location of those shown on the sewer system map (p. 5). The photograph does not indicate whether or not the underground main interceptor line and/or any of the storm sewer lines pictured on the map existed in 1962. Therefore, on the date of this photograph, no direct link can be established between Cornell-Dubilier and Aerovox and outfalls along the shore of Clarks Cove.

No outfall was visible on the north end of Clarks Cove along the seawall.

Site Descriptions

1. A small cut in the shore and faint discoloration of the water near the shore are seen here.
2. A small cut in the bank is visible here.
3. A large cut in the shore and offshore sediments appears here. This is probably a major outfall.
4. A possible pipe can be seen on the shore here.
5. A cut in the shore is visible here.
6. A possible pipe is visible here.
7. A small concrete abutment visible on the shore here may be an outfall point.
8. A small cut in the bank and slight discoloration of the water offshore are visible here.
9. A small concrete abutment is also visible here.
10. An object, possibly a section of pipe, and a possible channel in the offshore sediments can be seen here.



CLARKS COVE

APRIL 10, 1962

APPROX SCALE 1:15,000

Analysis of Photograph Taken September 17, 1966

Sewage Treatment Plant Site

As of the date of the photography the New Bedford Municipal Sewage Treatment Plant has not been built. The future site of the plant is annotated on the photo.



FORT RODMAN  
MILITARY RESERVATION

THE  
MUNICIPAL  
TREATMENT

SEWAGE TREATMENT PLANT SITE

SEPTEMBER 19, 1966

APPROX SCALE 1:2,100

Analysis of Photograph Taken February 27, 1974

Sewage Treatment Plant

The New Bedford Municipal Sewage Treatment Plant was constructed sometime between 1966 and 1974 (see photo, page 9). It is located on a piece of land that was constructed at the tip of the peninsula that separates Clarks Cove from New Bedford Harbor.

Area A

Area A contains one building. There is no sign of the incinerator that is supposedly on site to burn sludge (see Introduction).

Area B

Area B contains six tanks. The four large round tanks are probably clarifiers, and the two small rectangular tanks are probably chlorine contact basins.

Area C

Area C is a depression containing light-toned mounded material. A well-defined dirt road enters the area from the north.

No discoloration is visible in the water offshore from the plant. This may be due to the nature of the photography, however, rather than a lack of discharging.

It should be noted that this plant is small compared to sewage treatment plants that serve communities of comparable size to New Bedford. It possibly handles only a small portion of the city's wastewater. Or, perhaps, it is providing only minimal processing to a larger portion of the wastewater output of the city.



NEW BEDFORD  
HARBOR

NEW BEDFORD MUNICIPAL  
SEWAGE TREATMENT PLANT

CLARKS COVE

LEGEND

--- AREA BOUNDARY

SEWAGE TREATMENT PLANT

FEBRUARY 27, 1974

APPROX SCALE 1:4,200

Analysis of Photograph Taken February 27, 1974

Clarks Cove

This photograph shows the Sewage Treatment Plant, which has been built since 1966.

The overlay shows the location of nine of the combined sewer/storm sewer overflow outfalls shown on the Sewer System Map (p. 5). No plumes or discoloration can be seen in water at any of these outfalls. This may be due to the nature of the photography, however, rather than a lack of discharging.



NEW BEDFORD HARBOR

N

NEW BEDFORD MUNICIPAL  
SEWAGE TREATMENT PLANT

CLARKS COVE

LEGEND

⊖ COMBINED SEWAGE/STORM  
SEWER OVERFLOW OUTFALLS

CLARKS COVE

FEBRUARY 27, 1974

APPROX SCALE 1:11,100

Reference Section

Aerial Photographs

<u>Date</u>	<u>Source</u>	<u>Approximate Original Scale</u>	<u>EPIC Frame Number</u>
April 10, 1962	National Oceanographic Survey	1:15,000	3062, 3063
September 17, 1966	National Oceanographic Survey	1:19,700	3067, 3068
February 27, 1974	United States Geological Survey	1:24,000	2-62

U.S.G.S. Topographic Map

<u>Date</u>	<u>Type</u>	<u>Original Scale</u>
1977	7 1/2-minute topographic map New Bedford South, Mass.	1:25,000