Figure 5-1. Newark Bay Study Area Current Valid USACE Issued Permits as of 1 Oct. 2006
Figure 5-2. Newark Bay Study Area
Current Applications or Pre-Applications
Before USACE as of 1 Oct. 2006

Dredging Contract Areas

Maintenance Dredging
- Port Newark & Port Newark
  Pierhead Channels

HDP Dredging
- Arthur Kill 41' Area 1
- Arthur Kill 41' Area 2/3
- S-KVK-2 50'
- S-NB-1 50'
- S-NB-2 50'
- S-E-1 50'
- Pre-application
  Honeywell Dredging
- Goethals Bridge Modernization
- Arthur Kill 41' Area 1
- Arthur Kill 41' Area 2/3
- S-KVK-2 50'
- S-NB-1 50'
- S-NB-2 50'
- S-E-1 50'

Pre-application
- Honeywell Dredging
- Goethals Bridge Modernization
- Application #2006-00107-J1
  Catellus Urban Renewal North Ave I and II
  Stormwater Outfall and Wetland Mitigation
- Application #2006-00245-J2
  Hudson County Dept. of Engineering
  Reconstruct Bulkhead, Rip-Rap and Pipes
- Application #2006-00285
  NBG Group
  Structures / Pier

Responsible POC S. Schumach x8417
MIKE3 results presented for individual model cells
*Sediment chemistry evaluation not performed for HDP channels, which are indicated in gray, see text.
Figure 5-4
2,3,7,8 TCDD in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment
Total PCBs (mg/kg)
Depth Weighted Estimate
- < 0.05
- 0.05 to 0.5
- 0.5 to 1
- 1 to 2
- > 2

Figure 5-5
Total PCBs in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment
DDTs (mg/kg)
Depth Weighted Estimate
- < 0.01
- 0.01 to 0.05
- 0.05 to 0.1
- 0.1 to 0.2
- > 0.2

Dredge Areas

DDTs (mg/kg)
Surface Sediments
- < 0.01
- 0.01 to 0.05
- 0.05 to 0.1
- 0.1 to 0.2
- > 0.2

Impact Areas

Figure 5-6
DDTs in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment
Benzo(a)pyrene (mg/kg)
Depth Weighted Estimate

- < 0.4
- 0.4 to 0.7
- 0.7 to 1.5
- 1.5 to 3
- > 3

Dredge Areas

Benzo(a)pyrene (mg/kg)
Surface Sediments

- < 0.4
- 0.4 to 0.7
- 0.7 to 1.5
- 1.5 to 3
- > 3

Impact Areas

Figure 5-7
Benzo(a)pyrene in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment
Mercury in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment

**Dredge Areas**

- Mercury (mg/kg)
  - Depth Weighted Estimate
  - < 1
  - 1 to 2
  - 2 to 4
  - 4 to 8
  - > 8
  - Dredge Areas

**Surface Sediments**

- Mercury (mg/kg)
  - Depth Weighted Estimate
  - < 1
  - 1 to 2
  - 2 to 4
  - 4 to 8
  - > 8

**Impact Areas**

- Mercury in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment

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**Figure 5-8**

Mercury in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment
Chromium in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment

**Figure 5-9**

Chromium in the sediments of Newark Bay under current conditions: Thiessen polygons, cumulative assessment.