

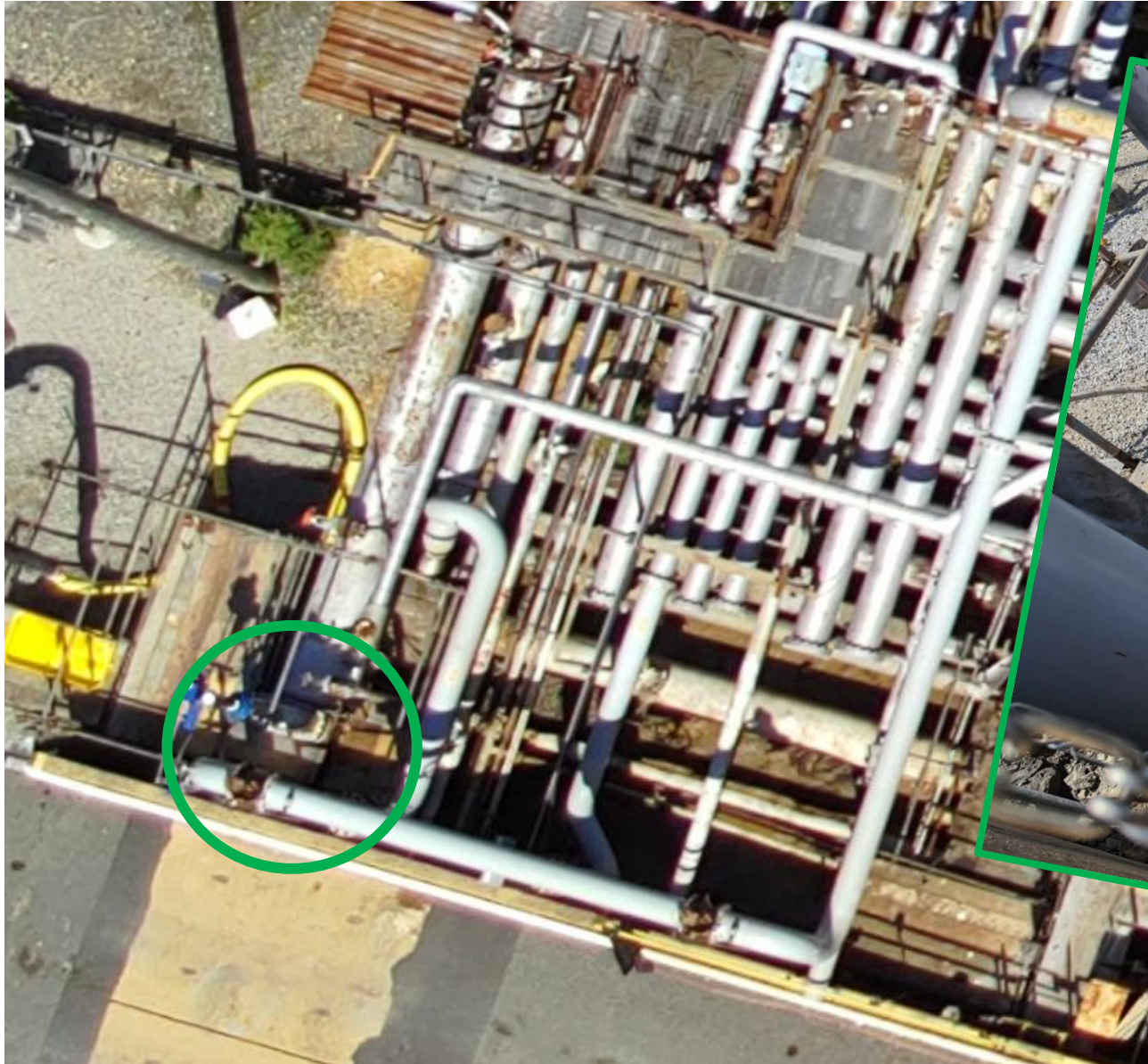
Delaware City Refinery

Crude Oil Spill

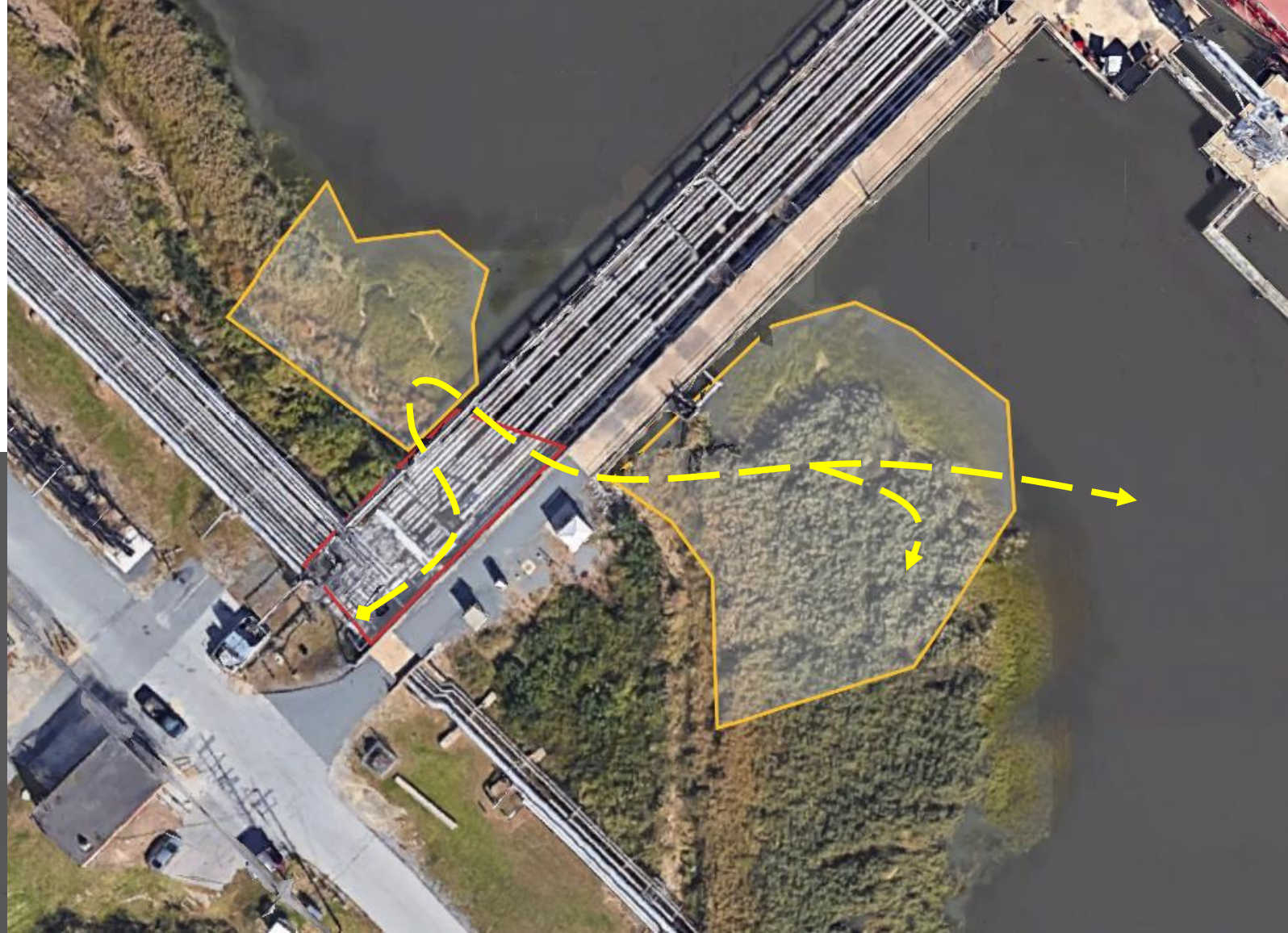
May 29th 2024



Source Location



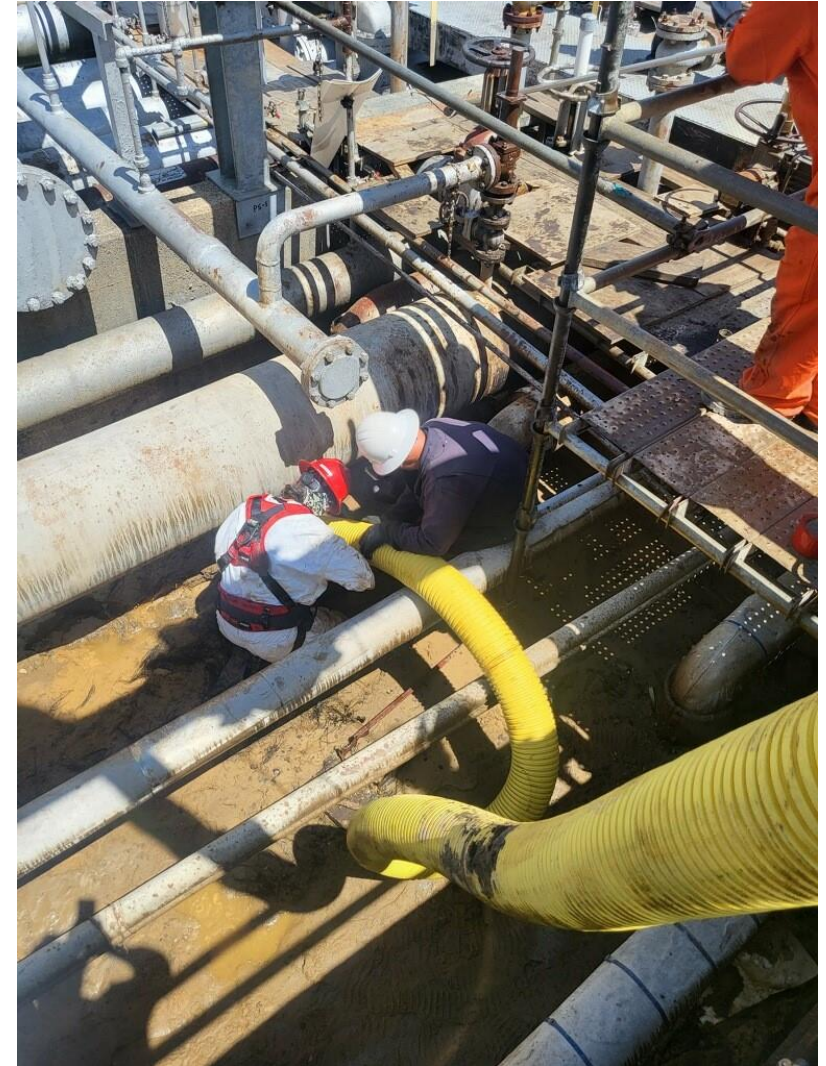
Impacted Areas



* Yellow polygons represent areas in which oiled invasive species was cut back for disposal.

** Red polygon represents oiled area beneath pipe rack.

Vactor Operations



Impacted Vegetation South of Pier 2



Impacted Vegetation South of Pier 2



Impacted Vegetation North of Pier 2



**Impacted
Vegetation
North of
Pier 2**



Pier Structures/Intertidal Rip-Rap



June 7th, 2024



July 9th, 2024

Potentially Impacted Spartina Grass



May 29th, 2024



July 7th, 2024

Spartina Regrowth!



Phragmites Grass Regrowth



June 3rd, 2024



July 7th, 2024

Lessons Learned

Vegetation Removal:

- Large volume of remaining oil was clinging to grass and trapped in dense vegetation.
- Obtained approval from appropriate Area Committee members.
- Incorporated Wetland Scientist so ONLY invasive Phragmites grass was removed.
- Crews placed plywood down when cutting to minimize damage to substrate.
- Vegetation removal was followed by high volume, low pressure flushing of impacted area.
- Plan to be included as Vegetation Removal Annex in updated ACP.

Vactor Operations:

- Pipe rack elevation from ground beneath only 2-3' so use of hand tools would have been difficult.
- CG requested use of Vactor machine to vacuum oiled soil beneath pipe rack area.

Consultations:

- Effective Endangered Species Act (ESA Section 7) consultations were conducted through USFWS/NOAA using iPAC tool and CG D5 guidance.
- Effective National Historic Preservation Act (NHPA Section 106) consultations were conducted through DE State Historic Preservation Office (SHPO).

Recovery Totals

- Estimated 20 BBLS of crude oil discharged
- 785 BBLS of oil water recovered containing an estimated 350 gallons of oil via skimming/vac operations
- Seven roll-off containers (175 cu. Yds) of oiled sorbent/grasses (three filled with oiled sorbents/four filled with oiled grasses).
- No observed impact to wildlife

Questions?



CWO Josh Miller
CG Sector Delaware Bay
Incident Management Division
Joshua.K.Miller@uscg.mil