

July 15, 2026

MIR-26-22

## Explosion aboard Sludge Vessel *Hunts Point*

On May 24, 2025, about 1020 local time, the sludge vessel *Hunts Point* was moored at the North River Wastewater Treatment Plant on the Hudson River, in New York, New York, when an explosion occurred aboard the vessel (see figure 1 and figure 2).<sup>1</sup> One crewmember was killed, and three crewmembers sustained minor injuries. No pollution was reported. Vessel damage was estimated to exceed \$10 million.



**Figure 1.** *Hunts Point* on July 7, 2018, before the explosion. (Source: Frank Joniak, shipspotting.com)

<sup>1</sup> (a) In this report, all times are eastern daylight time, and all miles are statute miles. (b) Visit [nts.gov](https://www.nts.gov) to find additional information in the [public docket](#) for this NTSB investigation (case no. DCA25FM045). Use the [CAROL Query](#) to search investigations.

---

**Casualty Summary**

---

|                             |                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Casualty type</b>        | Fire/Explosion                                                                                        |
| <b>Location</b>             | Hudson River, North River Wastewater Treatment Plant, New York, New York<br>40°49.39' N, 073°57.53' W |
| <b>Date</b>                 | May 24, 2025                                                                                          |
| <b>Time</b>                 | 1020 eastern daylight time (coordinated universal time -4 hrs)                                        |
| <b>Persons on board</b>     | 6                                                                                                     |
| <b>Injuries</b>             | 1 fatal, 3 minor                                                                                      |
| <b>Property damage</b>      | \$10 million est.                                                                                     |
| <b>Environmental damage</b> | None                                                                                                  |
| <b>Weather</b>              | Overcast, visibility 10 mi, winds northwest 12.7 mph, air temperature 64°F, water temperature 56°F    |
| <b>Waterway information</b> | River                                                                                                 |

---



**Figure 2.** Area where the *Hunts Point* was moored at the North River Wastewater Treatment Plant when the explosion occurred, as indicated by a circled X. (Background source: Google Maps)

# 1 Factual Information

## 1.1 Background

The 288.7-foot-long liquid cargo vessel (sludge vessel) *Hunts Point* was built in 2014 by Bollinger Shipyard and was owned and operated by the New York City Department of Environmental Protection (NYC DEP).<sup>2</sup> The *Hunts Point* was one of five sludge vessels in the Marine Section of the NYC DEP that transported liquid sludge each day from six wastewater treatment facilities to the Wards Island Wastewater Treatment Plant, located on the East River in New York, New York. The *Hunts Point* had six cargo tanks and could transport up to 140,000 cubic feet (1 million gallons) of liquid sludge as cargo. Internal deep well pumps within the *Hunts Point* cargo tanks were used to move the sludge from the vessel to the dewatering facility.

Each tank had a radar level gauge and a pressure gauging system to measure the level of the cargo within the tanks. In addition, to reduce the smell associated with the sludge, the vessel had an odor-control air system that removed the air from each tank and sent it through a charcoal filter to exhaust vents, located on the king post near the bow.<sup>3</sup> The *Hunts Point* had gas detectors on the cargo deck area and throughout the vessel to notify the crew of a high concentration of flammable gas. There were also flammable-gas detectors located at NYC DEP facilities that processed wastewater/sewage.

The *Hunts Point* and other NYC DEP vessels were not regulated or inspected by the US Coast Guard because they were not engaged in commercial operations or carrying dangerous cargo (sludge is not considered a dangerous cargo). The NYC DEP provided safety oversight.

---

<sup>2</sup> (a) The NYC DEP is responsible for protecting the public's health by managing the city's water supply, air quality, hazardous waste, and noise pollution. As part of this mission, DEP treats over a billion gallons of wastewater daily at 14 treatment facilities within the New York's five boroughs. See [Department of Environmental Protection](#). (b) *Liquid sludge* is the residual solid or semi-solid organic material that remains after wastewater has been treated. Sludge produces gases that are flammable, including methane, hydrogen sulfide, ethane, and ammonia. After sludge is transported to the dewatering facility, it is put through a centrifuge, which removes much of the remaining water and results in a solid treated material that can be used for agricultural purposes.

<sup>3</sup> A *king post* is a vertical post, typically used to support a cargo ship's cargo-handling boom.

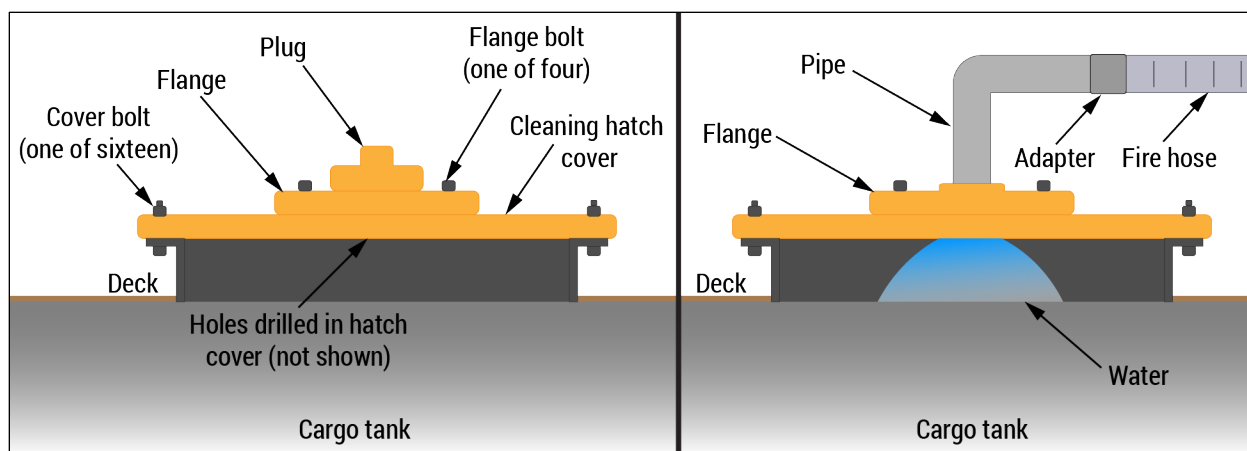
## 1.2 Event Sequence

On May 24, 2025, about 0818, the *Hunts Point* departed the Wards Island Wastewater Treatment Plant, where it was normally docked when not in operation, with a crew of six, including a master, chief engineer, assistant engineer, a mate, and two able seamen. The vessel was en route to the North River Wastewater Treatment Plant (also in New York) to load about 100,000 cubic feet of liquid sludge, a transit that would take about 2 hours.

When the vessel departed Wards Island, about 40,000 cubic feet of cargo evenly distributed cargo remained in the cargo tanks from the previous day's operation due to time constraints at the facility and the consistency of the sludge. Because sludge remained within the tanks, it had become too viscous for the vessel's cargo pumps to move it from the tanks to the facility. To reduce the thickness and make the sludge easier to pump, the crew had to complete a process called "innage reduction," wherein they used water from the dockside fire main hydrant connection or from the vessel's fire pump to add water via a fire hose into each of the six tanks. The vessel's permanent crewmembers told investigators that the last time the tanks required water to be added was about 2020.

As designed, each tank had a cleaning hatch cover with 16 bolts. To perform the innage reduction process, all 16 bolts securing each of the six covers would have to be removed and a crewmember would have to add water with the fire hose at each tank, one at a time. Shortly after the vessel was built in 2014, the chief engineer, who had been sailing on *Hunts Point* since it started operating, modified the cleaning hatch cover of each cargo tank to reduce the time required to add water during the innage reduction process. He drilled multiple holes into the center of each cleaning hatch cover to direct water into the tank. A carbon steel, four-bolt, 2.5-inch NPT (female) threaded flange was secured to the hatch cover over the drilled holes and fitted with a threaded pipe plug.

The alteration changed the innage reduction process. To complete innage reduction using the modified hatch covers, each cover's pipe plug was removed, a fabricated 2.5-inch external pipe was threaded into the flange, and a fire hose was connected to the pipe via an adapter (see figure 3). This enabled water to be directly sprayed into each tank, via a fire hose connection, without the need to remove the hatch cover. When not in use, the flange opening was secured with the pipe plug. The *Hunts Point* was the only NYC DEP vessel with this specialized modification to the cleaning hatch covers.



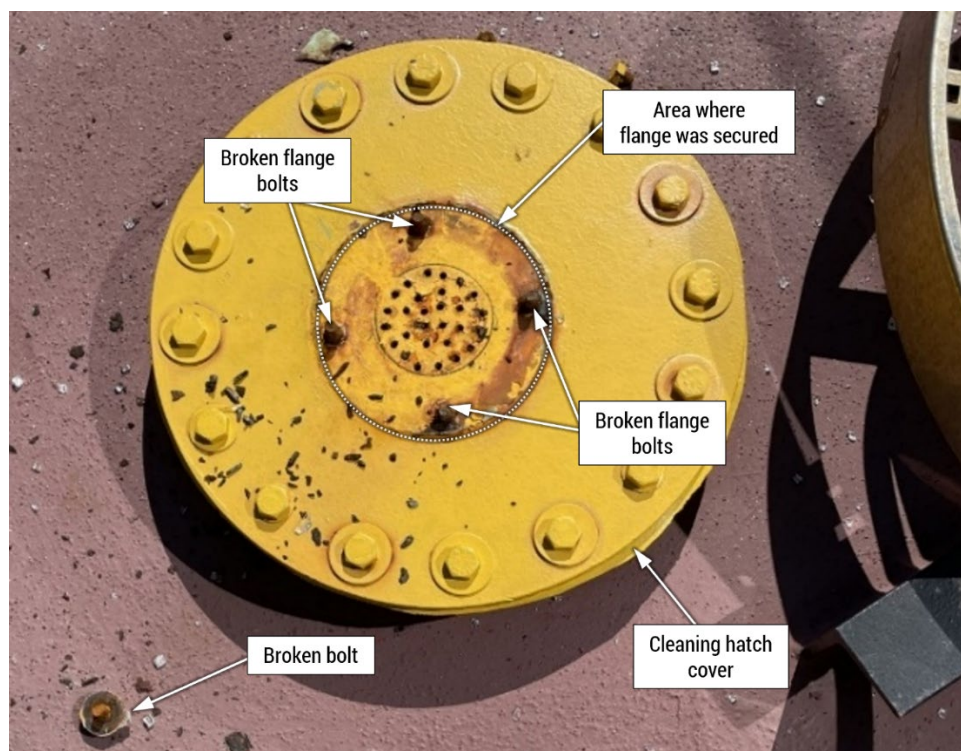
**Figure 3.** Left to right: Simplified diagram showing the typical arrangement for the innage reduction process and the modifications to cleaning hatch cover. (Not to scale9.)

During the first hour of the voyage, the chief engineer was preparing for the innage reduction process, and the assistant engineer was standing watch in the engine room. When the assistant engineer went out on deck at the start of the second hour of the voyage, he noted that, instead of removing the pipe plug, the chief engineer had removed the four flange bolts that were threaded into the cleaning hatch cover for the no. 3 port and starboard, no. 2 starboard, and no. 1 starboard cargo tanks. A majority of the carbon steel bolts on the no. 1 and no. 2 starboard tanks had broken so that the threaded part of the bolt remained in the cleaning hatch covers (the bolts for the no. 3 tanks were stainless steel and undamaged during removal).

The assistant engineer, who normally worked on another NYC DEP vessel, told investigators that he assumed that each plug was rusted in place, preventing them from being removed. He also stated that he assumed the chief engineer's plan was to bring all six flanges to the engine room, where they could mount the flanges in a workbench vice to make it easier to free the plugs.

Before the chief engineer left to take the watch in the engine room, he directed the assistant engineer to remove the flanges that were still attached to the cleaning hatch covers. The assistant engineer attempted to remove the flange for the no. 1 port cargo tank, but all of the bolts snapped, leaving the threaded sections of the bolts in the cleaning hatch cover (see figure 4). The assistant engineer told investigators that the broken bolts had to be removed from the cover so the flange could be attached and secured for the innage reduction process. He stated that the rusted condition of the bolts made removing the broken parts from the hatch very difficult.





**Figure 4.** Cleaning hatch cover for no. 1 port cargo tank postcasualty, showing all four broken flange bolts that partially remained in the cover.

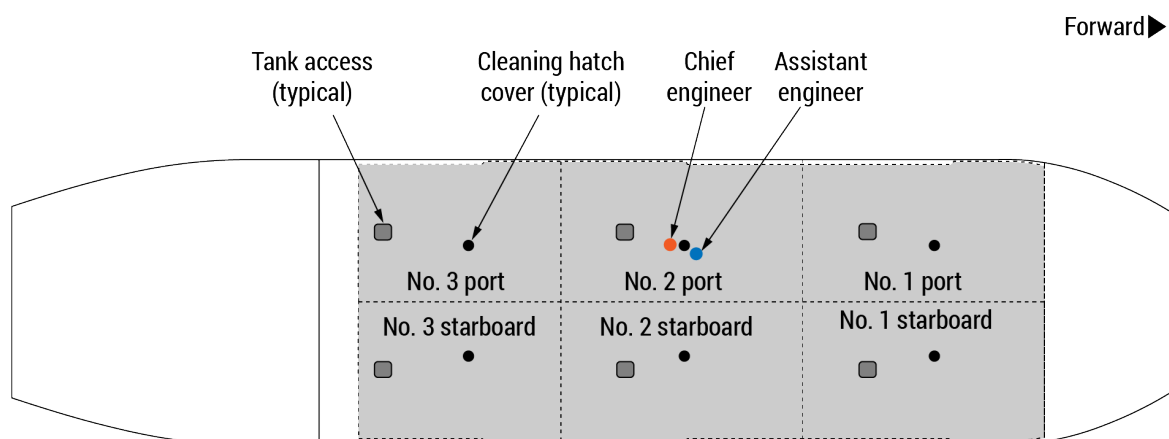
While the assistant engineer continued to work on removing the bolts, the vessel docked, starboard side to the North River Wastewater Treatment Plant, about 0954. The mate and the two able seamen worked with facility personnel to attach the loading hose from the facility to the cargo tank pipe manifold. The mate and the two able seamen then went to the cargo control room, located on the main deck, to monitor the loading.

In preparation for cargo operations, the crew turned on the odor control air system for all of the cargo tanks. In addition, they started the ballast pump to remove water from the vessel's ballast tanks as the cargo (sludge) was being loaded. Once these tasks were completed, the facility started to load sludge into the no. 1 port and starboard cargo tanks.

As cargo operations proceeded, the assistant engineer and chief engineer met in the cargo control room, and the chief engineer directed him to go to the engine room to get a pipe wrench and locking pliers. The chief engineer informed the assistant engineer that he was going to his stateroom; the assistant engineer went to the engine room to retrieve the tools.

The master, who normally worked on another DEP vessel, departed the wheelhouse and went to the galley after cargo operations began. While there, he saw the chief engineer heading out on deck carrying various tools, including a propane torch. (The master later told investigators that the torch was the type used for plumbing.) According to the master, he spoke to the chief engineer as he walked by and told him twice not to use the torch out on deck. The master told investigators that the chief engineer did not respond to him the first time but did respond, "Ok" the second time.

As the assistant engineer was about to head back to the main deck, the master stopped him and spoke to him about the chief engineer using the torch out on deck. The master asked the assistant engineer to remind the chief engineer not to use the torch by the cargo tanks. After the assistant engineer went out on deck, he saw the chief engineer sitting cross-legged aft of the cleaning hatch cover for the no. 2 port cargo tank (see figure 5). The assistant engineer approached and then squatted over no. 2 port cargo tank cleaning hatch cover by the chief engineer and removed a broken bolt with the locking pliers. As the assistant engineer was removing the broken bolt, he saw the chief engineer light the torch and start to heat one of the other broken bolts. A second or two after the chief engineer started to heat the broken bolt, a yellow flame appeared above the holes that had been drilled into in the cleaning hatch cover.



**Figure 5.** Simplified layout of the *Hunts Point* main deck showing the cargo tanks and approximate location of the chief engineer and the assistant engineer before the casualty.

After seeing the flame, the assistant engineer heard a "whistle" noise and then a rumbling noise from within the cargo tank no. 2 port. This prompted him to move away from the hatch cover by dropping backward to his right and rolling to the deck

(starboard direction) toward the centerline of the vessel. The master and other crewmembers, who were in the house located aft on the vessel, heard a “hissing” noise and felt the vessel vibrate. About 1020, an explosion occurred in the no. 2 port cargo tank.

Following the explosion, there was no fire; however, sludge burst out of the tank and covered the assistant engineer and the exterior of the vessel. The crew went out on deck to investigate and found that the deck above the no. 2 port cargo tank had expanded upward during the explosion. The assistant engineer was located by the crew, injured but conscious. The chief engineer could not be found on deck.

The master notified the dispatch at the NYC DEP office. He requested that the NYC DEP notify the New York City Fire Department and the Coast Guard Sector New York Command Center of the explosion and that the chief engineer was missing. The North River facility personnel stopped cargo operations and assisted the *Hunts Point* crew with searching for the missing chief engineer.

Before the arrival of the fire department at 1030, the chief engineer was found between the concrete dock and a wooden fender located on the starboard side of the vessel. The chief engineer was declared dead at the scene by the responding New York City Fire Department paramedics. The assistant engineer, master, and an able seaman sustained minor injuries and were transported to the hospital.

## **1.3 Additional Information**

### **1.3.1 Damage and Postcasualty Examination**

After the explosion, Coast Guard and National Transportation Safety Board investigators boarded the vessel to examine the damage. The no. 2 port cargo tank expanded upward about 4 feet during the explosion (see figure 6).





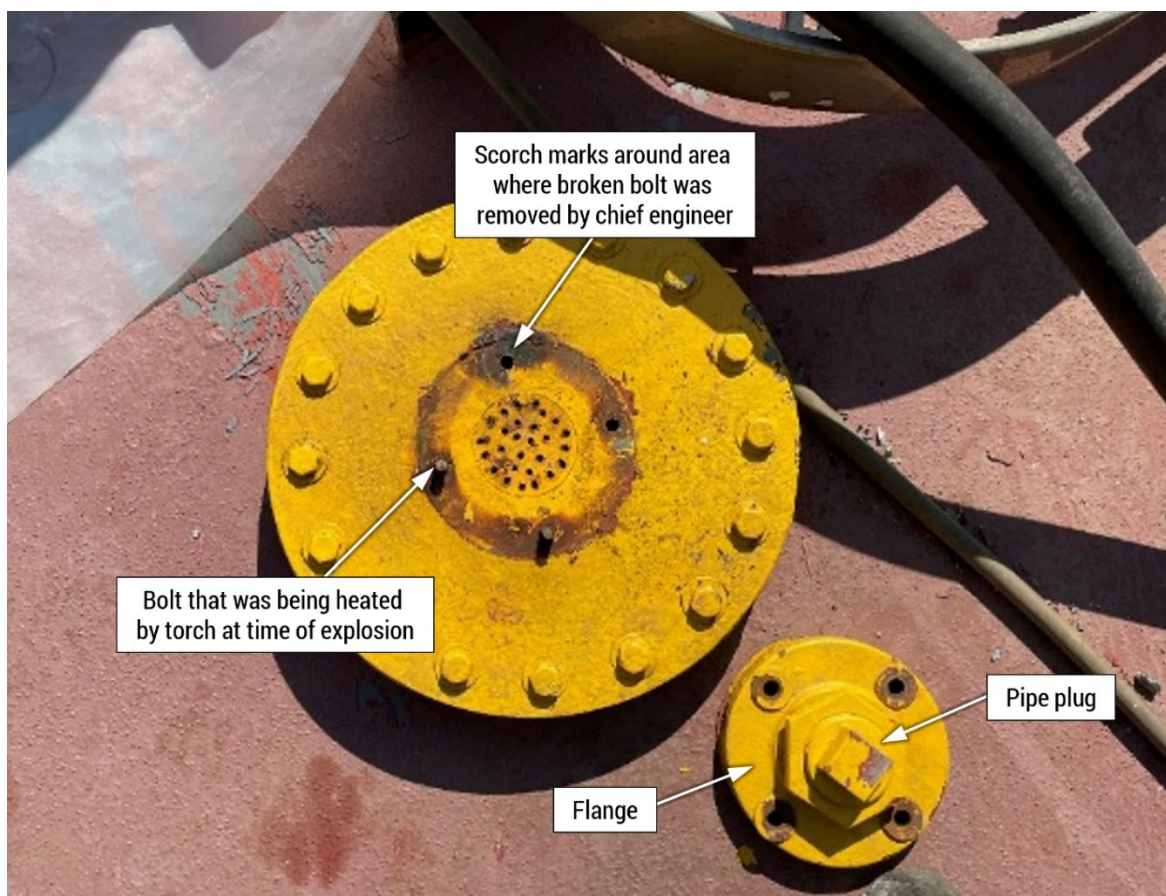
**Figure 6.** Left to right: Structural damage to the *Hunts Point* no. 2 port cargo tank from the interior and the exterior, following the May 24, 2025, explosion. (Source: NYC DEP)

The hatch cover for the submersible cargo pump for the no. 2 port cargo tank was blown into the Hudson River and was not recovered. The spill valve for the no. 2 port cargo tank was blown off the piping. There was also extensive damage to the cargo piping system as well as to raised catwalks and stairs in the area where the explosion occurred (see figure 7).



**Figure 7.** Damage to vessel following the May 24, 2025, explosion. Left to right: Hatch to the no. 2 port cargo tank submersible pump covered in plastic, with hatch cover shown missing. Deformed cargo piping on deck.

During the postcasualty exam of the vessel, investigators found that, for each of the six cargo tank cleaning hatch covers, the rusted pipe plugs appeared frozen or rusted in place within all of their flanges. Investigators also found burn/scorch marks on the cargo tank no. 2 port cleaning hatch cover (see figure 8). The assistant engineer told investigators these burn marks had not been on the cover before the casualty. He stated that they were from a broken bolt that the chief had removed by heating before the assistant engineer's return.



**Figure 8.** No. 2 port cargo tank cleaning hatch cover after the explosion, showing burn/scorch marks indicating area where a broken bolt was removed and where a bolt was being heated by the torch when the explosion occurred.

### 1.3.2 Cargo Information and Protection

The sludge carried by DEP vessels was treated to remove methane gas and stabilize the sludge by converting much of the material into a substance that was 97% water and 3% solids. According to the NYC DEP Bureau of Wastewater Treatment data sheet on "Sewage Sludge and Sewage Sludge Vapor," the treated sludge still presented several potential health hazards. These hazards included bacteria, viruses, and parasites; eye and respiratory irritants; oxygen displacement

within the tanks due to the collection of sludge vapors; and the presence of flammable gases within the sludge vapors. The flammable gases produced by the treated sludge included methane, ethane, ammonia, and hydrogen sulfide (see table 1).

**Table 1.** Common properties of flammable gases produced by treated sludge.

| Name of Gas      | Common Properties                                                         | Specific Gravity<br>(air = 1) | Explosive Range<br>(% by volume in air) |
|------------------|---------------------------------------------------------------------------|-------------------------------|-----------------------------------------|
| Methane          | Colorless, odorless, tasteless, non-poisonous, flammable, explosive.      | 0.55                          | 5.0–15.0                                |
| Hydrogen sulfide | Rotten egg smell in small concentration, colorless, flammable, explosive. | 1.19                          | 4.3–46.0                                |
| Ethane           | Colorless, odorless, tasteless, non-poisonous, flammable, explosive.      | 1.05                          | 3.1–15.0                                |
| Ammonia          | Flammable, noticeable odor.                                               | 0.59                          | 16.0–25.0                               |

The data sheet also stated, “Adherence to policies designed to eliminate the risk of a heat source occurring in areas where sewage sludge and vapors are present is mandatory (e.g., Non-Smoking Policy).” All of the crewmembers on the vessel at the time of the explosion, as well as the permanent *Hunts Point* assistant engineer (who was not on board at the time of the casualty), told investigators they were aware that sources of flame were not permitted out on deck. In addition, placards warning of the vessel’s dangerous cargo as well as guidance not to smoke or have open lights were posted on the exterior of the pilothouse forward bulkhead.

To further reduce the risk of igniting the flammable gases contained within the vessel’s cargo tanks, all of the vents for each of the six cargo tanks had a flame screen. A flame screen is designed to cool a flame as it enters the vent, which dissipates it and prevents it from entering the cargo tank, igniting the flammable gas, and causing an explosion.

### 1.3.3 Hot Work Policy

The NYC DEP had procedures for hot work contained within their “Marine Operations Policy and Procedures” that were consistent with the *International Safety Guide for Oil Tankers and Terminals*, the Occupational Safety and Health Administration standards contained within Title 29 *Code of Federal Regulations* 1910.252 and 1915.14, and marine industry practice.<sup>4</sup> According to these procedures, use of any type of torch or welding equipment on the vessel was

<sup>4</sup> See [International Safety Guide for Oil Tankers and Terminals \(ISGOTT 6\)](#). See also [29 Code of Federal Regulations Part 1910](#) and [29 Code of Federal Regulations Part 1915](#).



considered hot work. The hot work procedures required a permit to be completed before beginning any hot work on an NYC DEP Marine Section vessel or facility. The master and assistant engineer were knowledgeable of the policy that required a permit prior to initiating any hot work.

According to the NYC DEP policy, the vessel's chief engineer (or any licensed officer designated by the vessel's chief engineer) served as the Permit Authorizing Official for hot work conducted on board a Marine Section vessel. The Permit Authorizing Official was trained to ensure that a hot work permit was fully completed before any hot work was started and that the hot work was conducted in a safe manner. The *Hunts Point* chief engineer, who had been with the NYC DEP for about 33 years, had previously served as a Permit Authorizing Official for hot work conducted on board the vessel. A review of the chief engineer's training record did not show any training that was specific to hot work or the risk of the flammable gases produced by the sludge. Annual field safety training was mandatory for all NYC DEP personnel and was last held in December 2024. The 2024 training was attended by the chief engineer, and it had one reference to the importance of assigning a fire watch before conducting hot work.

### 1.3.4 Postcasualty Actions

After the casualty, the NYC DEP issued an intradepartmental memorandum, dated June 23, 2025, directing all personnel to review and comply with the following procedures and policies from the NYC DEP's "Marine Operations Policy and Procedures":

- 8.5–Hot Work, which contains procedures for obtaining a hot work permit as well as precautionary measures that must be taken for any hot work to be performed on a vessel.
- 8.7–Job Safety Assessment, which provides the process for identifying different types of hazards, risk levels, and precautions to be taken before beginning any type of work.

According to the memo, the purpose of this review was to ensure that all NYC DEP personnel were aware of the dangers associated with the sludge and the risks of conducting hot work without following NYC DEP safety procedures.

In addition, the NYC DEP began removing and replacing the *Hunts Point* hatch covers (while the vessel is undergoing other repairs related to the casualty). Once the repairs are completed, the 16 bolts on the new hatch covers will have to be removed to gain access into the tanks and conduct an innage reduction.

## 2 Analysis

On May 24, 2025, the sludge vessel *Hunts Point* was loading cargo at the North River Wastewater Treatment Plant when an explosion occurred in the no. 2 port cargo tank, resulting in the death of the chief engineer and injuries to three other crewmembers.

Like other NYC DEP sludge vessels, the *Hunts Point* was designed to transport treated sludge from wastewater facilities to the dewatering facility. On the day of the casualty, about 40,000 cubic feet of sludge remained aboard the vessel from the previous day's operation. The remaining cargo was evenly distributed within the six cargo tanks. While the sludge had been treated, it still contained decomposing organic material and produced flammable gases. Any flammable gas the sludge produced would collect within the cargo tanks. As a result, the concentration of these flammable gases would increase the longer the sludge remained within the tanks.

Because the remaining sludge had become too viscous to pump from the cargo tanks, the crew had to perform a process called innage reduction—loosening the sludge by adding water to the tanks. To perform the process, the chief engineer had to remove the pipe plug from the modified cleaning hatch cover on each of the cargo tanks. However, since it had been about 5 years since the innage reduction process had been completed on the *Hunts Point*, all of the pipe plugs (connected to the flange) were rusted and seized, preventing their removal. Instead, the chief engineer removed the flange from each hatch so the pipe plugs could be removed in the machinery shop within the engine room. Once the flanges were removed from the cleaning hatch covers, there was nothing to prevent an ignition source, such as a flame or a spark, from coming into contact with the flammable gas exiting the cargo tanks.

As the chief engineer and the assistant engineer were removing the steel bolts for the flanges at the no. 1 port and starboard and no. 2 port and starboard cargo tanks, several of them broke (due to torsional forces), leaving the threaded part of the bolt within the cleaning hatch cover. The broken sections of the bolts were rusted and difficult to remove, so the chief engineer decided to use a heating torch to facilitate their removal. According to the assistant engineer, the chief engineer successfully removed one of the broken bolts from the no. 2 port cleaning hatch flange using the torch. However, as the chief engineer started to heat a second broken bolt, the assistant engineer saw a yellow flame appear above the holes in the cleaning hatch cover, indicating that the flammable gas existing in the tank had ignited. (It is likely that, during removal of the first broken bolt, the flame of the torch did not come in contact with the flammable gas or the gas was not in a concentration that could be ignited.) Of the four flammable gases produced by treated sludge, only methane was



lighter than air and would have accumulated at the top of the cargo tank. Methane gas can be ignited at about 999°F, and propane torches, like the one used by the chief engineer, can produce flames reaching a maximum temperature of 3,623°F.<sup>5</sup> Therefore, it is likely that methane at the top of the cargo tank was ignited by the torch flame.

The ignition of the methane gas by the torch flame caused a deflagration that expanded within the tank.<sup>6</sup> As the flame front expanded into and within the confined space of the cargo tank, it ignited any remaining flammable gas, causing the temperature and pressure within the cargo tank to grow significantly. At some point after the initiating event, the pressure within the cargo tank exceeded the structural strength of the vessel's tank, resulting in the explosion.

According to NYC DEP policy, use of a torch on deck was considered hot work. NYC DEP policy required a permit to be completed before beginning any hot work on the *Hunts Point*. All crewmembers interviewed were aware of the no smoking and no open flame policy on deck. Additionally, there were placards warning of the vessel's dangerous cargo as well as guidance not to smoke or have open lights, and the master had warned the chief engineer not to use a torch on deck.

A review of the chief engineer's training record did not identify training specific for hot work, and the NYC DEP annual field safety training conducted in 2024 did not discuss hot work procedures (except the need for a fire watch) or the risk of the gases produced by the sludge. Regardless of his training record, based on his previous experience supervising hot work, the chief engineer should have known that using an open flame torch on deck would have been considered hot work that required him to obtain the proper permits and implement safety measures to remove the risk of an explosion. Additionally, the master warned the chief engineer twice not to use the torch out on deck. Despite these warnings, the chief engineer used a torch to heat a broken bolt by an unprotected opening to a tank containing flammable gas. The chief engineer had other tools available that could have removed the broken bolts without the risk of igniting the flammable gas. Had he used any of these tools, the casualty could have been prevented.

---

<sup>5</sup> INCHEM (Internationally Peer Reviewed Chemical Safety Information), "Methane," <https://www.inchem.org/documents/icsc/icsc/eics0291.htm>.

<sup>6</sup> A *deflagration* is the subsonic propagation of a flame front.

## 3 Conclusions

### 3.1 Probable Cause

The National Transportation Safety Board determines that the probable cause of the explosion on board the sludge vessel *Hunts Point* was unapproved hot work being conducted above a tank that contained a cargo that produced flammable methane gas, resulting in the gas igniting and the subsequent overpressurization of the cargo tank.

## Vessel Particulars

| Vessel                     | <i>Hunts Point</i>                                            |
|----------------------------|---------------------------------------------------------------|
| Type                       | Cargo, Liquid Bulk (Sludge vessel)                            |
| Owner/Operator             | New York City Department of Environmental Protection          |
| Flag                       | United States                                                 |
| Port of registry           | New York, New York                                            |
| Year built                 | 2014                                                          |
| Official number            | 120445                                                        |
| IMO number                 | 9648049                                                       |
| Classification society     | American Bureau of Shipping                                   |
| Length (overall)           | 288.7 ft (88.0 m)                                             |
| Breadth (max.)             | 68.9 ft (21.0 m)                                              |
| Draft (casualty)           | 17.9 ft (5.5 m)                                               |
| Tonnage                    | 2,828 GRT                                                     |
| Engine power; manufacturer | 2 × 2,009 hp (1,498 kW); General Electric 6L250 diesel engine |

NTSB investigators worked closely with our counterparts from **Coast Guard Sector New York** throughout this investigation.

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable cause of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for any accident or event investigated by the agency. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)).

For more detailed background information on this report, visit the [NTSB Case Analysis and Reporting Online \(CAROL\) website](#) and search for NTSB accident ID DCA25FM045. Recent publications are available in their entirety on the [NTSB website](#). Other information about available publications also may be obtained from the website or by contacting—

National Transportation Safety Board  
Records Management Division, CIO-40  
490 L’Enfant Plaza, SW  
Washington, DC 20594  
(800) 877-6799 or (202) 314-6551