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**DEP Announces the Commissioning of the *Red Hook* Sludge Vessel**

**NYCDEP Launches Newest Tanker in Fleet that Transports Sludge in New York City**

The New York City Department of Environmental Protection (DEP) today announced the commissioning of the sludge vessel *Red Hook*, a state-of-the-art tanker responsible for transporting sludge within the New York City harbor. Acting Commissioner Steven W. Lawitts led a commissioning ceremony held at the Wards Island Wastewater Treatment Plant dock. The *Red Hook* vessel is the newest addition to the agency's marine fleet and is the third active vessel dedicated to transporting over two million gallons of sludge per day.

"As we enter the 100th year of record-keeping, it is heartening to know that local water quality – as measured by oxygen and bacteria levels – is better than at any point in past 100 years," said Acting Commissioner Lawitts. "DEP is a partner with Mayor Bloomberg's Office of Long-Term Planning and Sustainability in the goal of making 90% of New York City's waters suitable for boating and fishing. Today's commissioning of the *Red Hook* reminds us of this mission and of the crucial work performed at the City's 14 wastewater treatment plants and on its fleet of sludge vessels."

The *Red Hook* sludge vessel was built over a three-year period in Brownsville, Texas by Keppel AmFELS. Once completed, it took seven days to make its way to New York City, arriving on November 19, 2008. The vessel has recently completed post-delivery dry-dock inspections and adjustments at the Brooklyn Navy Yard and is ready for service. Each six-person crew consists of a captain, chief engineer, assistant engineer, mate and two mariners. Crews work a 40-hour week divided into 14, 13, and 13 hour shifts. The *Red Hook* is slightly over 350 feet long, about 53 feet wide, with a depth of slightly over 21 feet. It has eight storage tanks with 150,000 cubic foot capacity equivalent to 1.2 million gallons. The *Red Hook* weighs over 2,098 long tons and is designed to travel at 12.75 knots or approximately 15 miles per hour. On a typical week, each vessel makes 14 round trips and visits eight wastewater

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treatment plants.

Sewage sludge is the bulk of the residual material removed during the wastewater treatment process. Eight of the 14 wastewater plants have dewatering facilities and six do not. DEP vessels transport liquid sludge from the remaining six plants not served by onsite dewatering facilities to those eight wastewater treatment plants with dewatering facilities to complete the process. First, the raw sludge is “digested” in oxygen-free tanks where it is heated and mixed for several days. This digestion process stabilizes the sludge by converting much of the organic material into water, carbon dioxide and methane gas. The “digested” sludge is what is then transported by sludge vessels. After arriving at a dewatering facility, the sludge is then sent to centrifuges, which remove much of the water. This material is then either composted, limed, or heat dried before it is land applied, consistent with Federal and receiving-site requirements. DEP and its contractors process the City’s sewage sludge into a beneficial product that is land applied as a fertilizer. The wastewater treatment plants use physical, chemical and biological processes to remove on average more than 90% of the organic material in the sewage.

Sludge vessels have been a part of the City’s sludge transportation and disposal system since the late 1930s. For almost a century, the primary means of disposing of this sludge was dumping it at sea. The Federal Work Projects Administration (WPA) funded and built the first three motorized sludge vessels. In 1987 ocean dumping was moved from the 12-mile site to a 106-mile site. As a result, the operation of the vessels was changed to an in-harbor operation that pumped sludge to four newly constructed City owned ocean-going barges for disposal to the 106-mile site. In 1988, Congress passed the Ocean Dumping Ban Act, which established a timetable forbidding ocean disposal of sewage sludge at sea by June 30, 1992. Although ocean disposal ended in the early 1990s, its sludge vessels are still transporting cargo.

DEP uses the fleet of three vessels to transport over 300,000 cubic feet of liquid sludge on a typical operating day, which is equivalent to 2.24 million gallons. The *Red Hook* joins the *Newtown Creek* and the *North River* in DEP’s sludge vessel fleet. In 2007, the *Owls Head*, one of the DEP sludge vessels, was retired after more than 50 years in service. The sludge vessels are named after wastewater treatment plants. Previously vessels in the fleet were the *Tallman Island*, the *Wards Island*, the *Coney Island*, and the *Bowery Bay*.

As part of its responsibilities, DEP operates and maintains 14 municipal wastewater treatment plants that treat more than 1.3 billion gallons of wastewater generated each day by the residents and businesses within the five boroughs. Overall, DEP manages the City’s water supply, providing more than 1.2 billion gallons of water each day to more than 9 million residents throughout New York State through a complex network of nineteen reservoirs, three controlled lakes and 6,200 miles of water pipes, tunnels and aqueducts. DEP is also responsible for managing storm water throughout the City and treating wastewater at 14 in-City wastewater treatment plants. DEP operates and maintains 95 pumping stations to convey sewage and stormwater to the treatment plants. DEP carries out federal Clean Water Act rules and regulations, handles hazardous materials emergencies and toxic site remediation, oversees asbestos monitoring and removal, enforces the City’s air and noise codes, bills and collects on City water and sewer

accounts, and manages city-wide water conservation programs.