

New Jersey Department of Transportation
Bureau of Research

Technical Brief



Impact of EPA 2012 Commercial Pump-Out Regulations - Implementation

This study investigated how the EPA 2013 Vessel General Permit (VGP) would affect maritime commerce in New Jersey. Data were solicited from various agencies and analyses were performed to investigate what may impact New Jersey maritime operations; and what New Jersey needs to do to prepare for the new VGP requirements.

Background

With the 2008 VGP expiration date approaching, US EPA had issued the 2013 VGP. Discharge requirement and administrative changes in the 2013 VGP require the vessel owners and operators to comply. As a result, the VGP new requirements will impact the commercial vessels operating in the NY/NJ Harbor and Delaware River.

Research Objectives and Approach

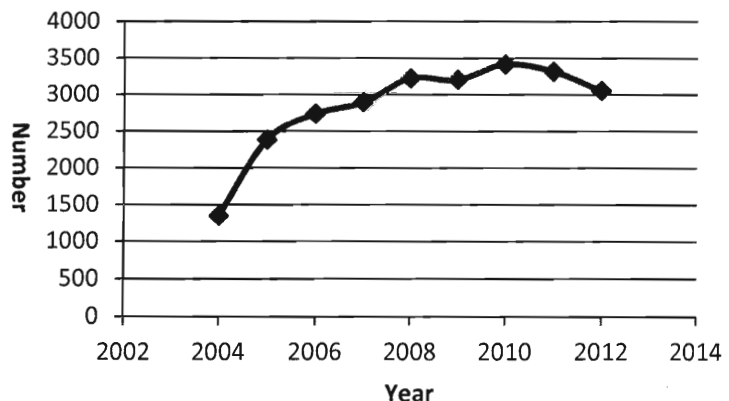
In order to study the impact of the VGP, data were collected from US EPA, US Coast Guard, and other agencies and analyzed. Meetings for stakeholder committee were held to discuss related issues and recommendations are made.

Findings

The main findings of this study are:

- Three major changes in 2013 VGP requirements from 2008 VGP: (1) numeric effluent limitations for ballast water, (2) discharge effluent requirements for non-ballast water discharges such as oil to water interfaces, fish hold effluent, and exhaust gas

New Jersey Vessels Arrival



974.90
W333
2014
c.1

- scrubber effluent, and (3) administrative reports.
- EPA VGP database has 71,008 vessels filed Notice of Intent in 2012, which had increased from 57,173 vessels in 2011 in the previous study in 8 types of vessels. Only 23,707 vessels out of 71,008 have onboard treatment facility for few selected discharges.
- USCG 2012 data indicates that over 4,300 commercial vessels arrive in New Jersey annually. The busiest ports/terminals are Newark, Elizabeth, Bayonne, and Paulsboro.
- Though, 491 tug boats operates in New York City (Total 663 in New York), but only 16 tug boats runs in New Jersey according to TESA data.
- RITA provides information on the ferries. There are 44 ferries that use 15 marine terminals in New Jersey. 8.8 million passengers made 5,846 trips in New Jersey in 2010. Over 88% of the passenger commuted between New Jersey and New York City, the rest traveled from central Jersey to Pennsylvania or Delaware.
- Clean Water Act controls sewage (black water) discharged from vessels by regulating the Marine Sanitation Devices (MSD) that treats or holds the sewage, and through the establishment of No Discharge Zones.
- There are 5 discharges zones in New Jersey; they are Manasquan River, Navesink River, Shark River, Shrewsbury River, and Barnegat Bay, that prohibits the discharge of treated and untreated vessel sewage.
- The CWA requires a certified operable MSD on every vessel with an installed toilet operating on U.S. navigable waters.
- 170 pump-out facilities for recreation vessel sewage exist in New Jersey, which were built under the Clean Vessel Act (CVA).
- Concerns related to onboard ballast water treatment facility include available space, power, safety, and monitoring.
- There is no onshore ballast water storage and treatment facility in New Jersey.

For More Information Contact:

NJDOT Project Manager:	Priscilla Ukpah
	609-530-5157
	Priscilla.Ukpah@dot.state.nj.us
Principal Investigator:	Hsin-Neng Hsieh and Taha Marhaba
	Department of Civil and Environmental Engineering New Jersey Institute of Technology
	973-596-5859
	hsieh@njit.edu

A final report is available online at: <http://www.state.nj.us/transportation/refdata/research/>. If you would like a copy of the full report, send an e-mail to: Research.Bureau@dot.state.nj.us.

Impact of EPA 2012 Commercial Pump-Out Regulations - Implementation
NJDOT Research Report No: FHWA-NJ-2014-007