

EPA Diesel Emission Reduction Act (DERA)

New York Marine Ferry Engine Replacement Project Summary

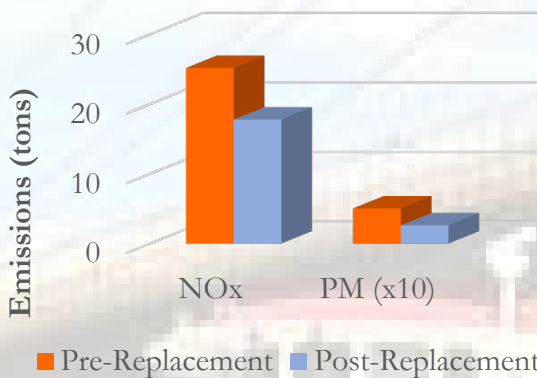
CLF Ventures (CLFV), in cooperation with New York Cruise Lines (NYCL) subsidiary companies New York Water Taxi (NYWT) and Circle Line Sightseeing Yachts, Inc. (CLSY) and the U.S. Environmental Protection Agency (EPA) replaced twelve (12) engines on five (5) ferry vessels with new Tier 3 diesel marine engines. Replacing marine engines with new, cleaner, more efficient Tier 3 models provides significant nitrogen oxide (NOx), particulate matter (PM) and greenhouse gas (GHG) emission benefits.

Project Results

Exhaust emissions from the maritime industry in New York Harbor have disproportionate negative impacts on the local air quality due to the proximity of people and vessels. As estimated by the EPA Diesel Emissions Quantifier, the emission reductions are projected to yield **annual health savings of nearly \$1.0 million** to the people that live and work in near proximity to the piers as well as passengers. Because marine vessels have a very long useful life, the emission reductions and health savings will impact the local airshed for years to come. Additionally, although a small step, the reduction in GHG emissions is beneficial in the context of coastal resiliency and sustainability. By realizing annual fuel-based and Black Carbon-based emission reductions of 310 and 582 tons, respectively this project contributes to the mitigation of climate change and potential rising sea levels.

Project Goals

- ✓ Reduce exposure to diesel exhaust emissions, especially NOx and PM2.5.
- ✓ Target reductions in areas receiving disproportionate impacts from diesel fleets.
- ✓ Target EPA 'Priority Counties'



\$ 1,702,367.52 – Total Project Cost

\$ 697,049.80 – EPA DERA Grants Funds

Capital* Cost-Effectiveness

\$ 22,675/ton NOx

\$ 690,715/ton PM_{2.5}

* Equipment and installation costs

Scheduling and COVID-19

To accommodate vessel scheduling and maintain service levels, the engine replacements by vessel were staggered. Work on the two NYWT vessels began in late 2019 and stretched into mid-2020. The CLSY vessels were significantly delayed because of the COVID-19 pandemic but were completed in 2022. Delays were caused by personnel availability to conduct the work and securing capital resulting from massive revenue shortfalls during the pandemic and in the recovery years since.

