DIRECT ASSISTANCE PROGRAM

CASE STUDY

Improving Sustainability and Climate Resiliency in the South Bronx

Hunts Point Service Station (HPSS) is a family owned auto repair and service station that has been in business in Bronx, NY since 1958. HPSS is known for their dedicated staff of trained technicians that strive for excellence in every one of their repairs.

Challenge

Climate change is creating new risks for residents and workers in New York City (NYC), particularly in low-income communities. Storm surge and flooding from severe weather events such as Hurricane Sandy can result in the release of toxic substances used at industrial firms, increasing the risk of human exposure. HPSS is located in a storm surge zone of NYC and uses chlorinated solvents for parts cleaning which are classified as being both a health and an environmental hazard. Reducing the risks associated with operations in these storm surge zones was a priority.

Solution

As part of a grant funded by the Environmental Protection Agency (EPA) to improve sustainability and climate resiliency in the industrial waterfront of the South Bronx, the New York State Department of Environmental Conservation (NYSDEC), the New York State Pollution Prevention Institute (NYSP2I), and the New York City Environmental Justice Alliance (NYC-EJA) partnered to promote pollution prevention (P2) and climate adaptation strategies in this waterfront zone. Various criteria including location and potential impact were used to prioritize and select businesses; HPSS ranked high and was selected for one of the implementation projects.

NYSP2I worked with HPSS to identify an alternative parts cleaning system which uses distillation to recycle non-chlorinated solvent. The alternative parts cleaning system would not only result in a significant reduction in the purchase and use of hazardous materials due to the recycling process, it also requires the use of a non-chlorinated solvent which poses fewer human and environmental risks.

Model 110, Satellite Telescoping Mobile Parts Washer by SystemOne[2]

Model 571S On-Demand Parts Washer[1]

Results

Implementation of the alternative parts cleaning system could result in as much as an 83% reduction of hazardous materials use, equating to $2,900/year in material cost savings. The pollution prevention alternatives identified for HPSS support the main goals of the EPA project including pollution prevention, toxics reduction, and climate adaptation. This project will help to contribute to the ongoing effort to transform the South Bronx community and Industrial waterfront into a more sustainable and climate resilient area.

Testimonial

"NYPS2I was committed to the successful implementation of the recycling parts cleaning system by providing responsive support and innovative solutions to the challenges we encountered along the way." **- Fred Donnelly, Owner**

[1] http://systemonetechnologies.com/products/model-571s-39/
[2] http://www.onepartswashersystem.com/100_series.pdf

CHALLENGE

- Reduce the release of toxic substances used at industrial firms to decrease the risks of health and environmental hazards in the storm surge zone in the South Bronx

SOLUTION

- NYSP2I worked with HPSS to identify an alternative parts cleaning system which uses distillation to recycle non-chlorinated solvent

RESULTS

- Alternative parts cleaning system could result in up to an 83% reduction in the use of hazardous materials as well as a realization of up to $2,900 savings annually

NYSP2I PARTNERS

R·I·T Rensselaer University at Buffalo The State University of New York Clarkson University

New York Manufacturing Extension Partnership

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