

R. Baker & Son Completes Air Improvement Project at New Jersey Waste-to-Energy Plant

R. Baker & Son recently completed a rigging and demolition project at Covanta Essex, New Jersey's largest energy from waste incineration power station. The Baker team was tasked with removing several electrostatic precipitators (ESPs) and spray dry scrubber systems to make way for three new state-of-the-art fabric filter baghouses. The project is part of a voluntary agreement between Covanta, the Port Authority of New York and New Jersey, and the Department of Environmental Protection to modernize pollution controls at the facility.

The 27 year-old Covanta facility is located in Newark adjacent to the New Jersey Turnpike. It processes 2,800 tons of municipal solid waste each day from twenty-two municipalities in Essex County and parts of Manhattan. Combustion of this waste generates about 65 megawatts of electricity daily. The facility also recovers ferrous and non-ferrous materials for recycling.

Following the removal of the ESPs and scrubbers, installation of the baghouses commenced and the project was completed in late 2016. The new baghouses, box-like structures equipped with large, cylindrical fabric filters, are more efficient than the old ESPs, with up to 99.9% particle collection efficiency. This has been demonstrated by recent stack tests that showed significant reductions in particulates, metals and other pollutants.

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One of the facility's nine 30,000 lb. humida frame sections is lifted from inside the unit following removal of the roof. An 18,000 lb. duct section removed from the front of the ESP is hoisted over the new baghouse.



The lower half a 26,000 lb. front transition wall is carefully detached from the structure.

Quality Award Winners: The Entire Crew!

This quarter's Quality Award is presented not to an individual but the entire crew presently working at the Brooklyn Army Terminal. Through their concerted and continual dedication to safety, the Baker team consistently achieved a score of 100% on all unannounced safety inspections conducted by project safety managers and engineers from Hunter Roberts Construction Company every 8 to 10 days.

The audit assesses the crews as they perform the Daily Start Card, which outlnes work tasks and adherence to the DTP (Daily Task Plan) in order to verify that they are following strict safety protocols.

Safety Inspectors checkoff list includes (but is not limited to) confirmation that crews are donning proper (PPE) Personal Protective Equipment, work areas are properly safed off, workers are obeying the Fall Protection OSHA rules, all workers are OSHA trained and certified in their respective trades, aware of evacuation plans, all tools and equipment are inspected daily, lock-out/tag-out is completed, inspected fire extinguishers and water is available in close proximity, hot permits obtained before

utilizing torches, SDS sheets are available, etc.

Biweekly HRCC safety reports are submitted to the company Vice President David Baker, the reports revealed perfect scores on all inspections conducted during the ongoing BAT project.

Congratulations to all crew members for a job well done!

WPA Posters: Work Safety Then vs. Now!

More than 2.000 posters were produced between 1936 and 1943 to publicize various Work **Projects Administration (WPA)** programs, including many promoting health and safety. Nowadays, WPA job safety posters are highly collectible and interesting to look at, but it's probably not advisable to follow some of the questionable safety practices pictured in some of them. The gloveless riveter depicted in the one of the ironic Work With Care posters from 1936 is, alas, working not-so-carefully, leaning his hardhat-less, goggle-free face just inches from the tip of his rivet gun. Another worker is seen swinging a large pickaxe with bare hands, eyes and head surely an accident waiting to happen. Fortunately, other WPA posters had much better messaging, such as the Save Your Eyes

artwork seen here urging workers to "use your goggles".







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Meet Dockwise Vanguard, World's Largest Heavy Lift Ship

The sight of a ship moving across the horizon with a massive oil rig or Navy destroyer sitting atop its deck is, to say the least, a remarkable one. Semi-submersible heavy-lift ships, also known as float-on/float-off, or flo/flo ships, are primarily used by the oil industry to move offshore rigs to their drilling sites and to transport yachts, ships, and other outsized cargo. They can also serve as floating dry dock facilities, allowing offshore inspection and maintenance of ships and oil rigs with minimal interruption to operations.



Flo/flo ships are characterized by their long, low, flat well deck situated between a forward pilot house and an aft machinery space. Floating cargo is loaded by flooding ballast tanks and maneuvering the load into position, then pumping out the tanks to allow the ship's deck and its cargo to rise above the water's surface. Currently, the largest heavy lift ship in the world is the Dockwise Vanguard. With a flat, bow-less deck measuring 275 meters long and 70 meters wide, Dockwise Vanguard can accommodate cargoes that weigh up to 117,000 tons and are longer and wider than the deck itself.

Check out this video of the Largest Heavy Lift Ship in the World.

R. Baker & Son Committed to Safety Through VPP

With The Outrigger now in its 10th year and hundreds of articles behind us, longtime readers are well aware that safety always has been, and always will be, our #1 priority. One of the ways we demonstrate our commitment to safety is through our participation in more than a dozen VPP Star and VPP Merit construction projects.

The Premier Global Safety and Health Organization OSHA's Voluntary Protection Program (VPP) was established 35 years ago to recognize and partner with businesses and worksites that demonstrate excellence in occupational safety and health through implementation of effective prevention programs and maintain exemplary illness and injury rates that are well below national averages. OSHA statistics show that the average VPP worksite has a lost workday incident rate that is 52% below the average for its industry. VPP offers two levels of certification (Star, the highest level, and Merit) and three types of certification (Site-Based for fixed worksites or long-term construction, Mobile Workforce for general contractors or specialty subcontractors, and Corporate, for large organizations). R. Baker & Son mostly participates in site-based and Mobile Workforce projects.

Caught Working Safely: Con Ed Commends **Baker Worker For Going Above and Beyond**

Last October, as a Consolidated Edison EHS Project Specialist made his usual rounds at an ongoing project at Con Ed's 59th Street Generating Facility, he noticed something unexpected. R. Baker & Son demolition crew member Burham "Ricky" Greaves wearing a respirator as he worked, despite the fact that it was not required for the task at hand. In fact, Ricky Greaves regularly wears a half-face respirator with OG/AV/P filter on projects as an added precaution. The EHS specialist reached out to R. Baker & Son to say that Greaves would be formally honored by Con Edison. "As a cancer survivor", he wrote, "I am particularly concerned with dust inhalation on my projects, and your worker should be commended for his added effort." Ricky was recognized by both Con Ed and R. Baker & Son with commendations and several tokens of appreciation for going above and beyond in his dedication to personal health and safety.

