

SECURING CLEANUP FROM ASHES AT THE PUMA ENERGY CARIBE SITE

Office of Site Remediation Enforcement

Introduction

In the early morning hours of October 23, 2009, a fire and explosion rocked a petroleum refinery, storage, and distribution facility in Bayamón, Puerto Rico (Bayamón facility or facility), discharging 30 million gallons of petroleum into storm water channels, on-site surface water bodies, neighboring wetlands, and off-site waters leading to San Juan Bay. The explosion also injured several people, damaged neighboring businesses and homes, adversely impacted local wildlife, and significantly disrupted air and highway travel into San Juan.

The cleanup costs from the fire led the facility's owner, Caribbean Petroleum Corporation (Capeco), to file for bankruptcy and sell the facility and its gas stations across Puerto Rico. Seeing an opportunity to advance environmental compliance through the bankruptcy, an Environmental Protection Agency (EPA) Region 2 enforcement team integrated several enforcement tools into a package of settlement agreements to facilitate the sale of the facility and the gas stations. This effort ensured that the environmental response action at the facility continued without interruption through bankruptcy, new ownership, and redevelopment. As a result, the EPA is ensuring that cleanup and enforcement priorities are met, while the new owner is redeveloping the facility and gas stations into state-of-the-art, environmentally safe facilities that will provide meaningful benefits to Puerto Rico's citizens.

BACKGROUND ON THE CARIBBEAN PETROLEUM REFINING FACILITY



The City of Bayamón lies in the northeast region of Puerto Rico's main island, approximately 15 miles southwest of the capital of San Juan. Capeco owned and operated the 179-acre Bayamón facility as a petroleum refinery from 1955 to 2000, and then as a storage and distribution facility for petroleum products until 2010.

The City of Bayamón is located close to Puerto Rico's capital of San Juan and the Luis Munoz Marin International Airport.

The Bayamón facility currently houses a tank farm with approximately 40 aboveground fuel storage tanks and has areas for fuel processing and wastewater treatment. Hazardous wastes managed at the site over the years include primary and secondary sludge, slop oil emulsion solids, and benzene wastewater regulated under the Resource Conservation and Recovery Act (RCRA) and a corresponding 1995 Administrative Order on Consent (AOC). Although the fuel storage and distribution

Economic Importance

The Bayamón facility is one of the largest oil storage and distribution facilities in Puerto Rico. It is the only facility that can load and unload by barge and directly transport fuel to San Juan's airport and two power plants. Without it, the area could go no longer than five to seven days without a barge shipment of fuel.

facility is located in an industrial area, it is adjacent to wetlands and within 2 miles of San Juan Bay. Las Lajas Creek and several other surface water bodies pass through the facility prior to entering into the bay.

In addition to the Bayamón facility, Capeco owned and operated more than 160 gas stations with underground storage tanks (USTs) across Puerto Rico until 2010. In 2008, EPA inspected Capeco's gas stations and found leaking USTs and other compliance and corrective action violations at over 50 gas stations.

FIRE AND EPA'S RESPONSE



The October 23, 2009 fire and explosion at the Bayamón facility damaged numerous petroleum storage tanks and significantly impacted the surrounding community.

The fire and explosion at the Bayamón facility occurred during a routine transfer of petroleum to a storage tank. The tank's automated overfill prevention system failed and operators did not monitor a backup mechanical gauge. As the fuel spilled, it vaporized and spread across the facility until it reached an ignition source. The resulting fire and explosion impacted 32 of the 40 storage tanks at the facility, causing 30 million gallons of petroleum to spill and damaging asbestos-wrapped infrastructure on the storage tanks.

The disaster significantly impacted the community surrounding the facility. The shockwave from the explosion registered 2.8 on the Richter scale and

damaged homes and businesses. A neighboring community and prison were evacuated as a precautionary measure. The Luis Munoz Marin International Airport changed flight landing patterns to avoid the 25,000 foot high smoke plume coming from the facility, and a section of Interstate PR-22, the most utilized commuter corridor in San Juan, closed for nearly three days, resulting in lost revenue for local businesses.

The EPA and the Coast Guard immediately responded to the fire, explosion, and spill by conducting perimeter air monitoring and water sampling and by providing technical assistance to Capeco. The EPA addressed the environmental threats of hazardous waste contamination to the soil, groundwater, and surface water bodies as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly referred to as Superfund) action, including removing a number of aged and deteriorated drums which contained numerous hazardous substances. The Coast Guard addressed threats of petroleum contamination to the Bayamón harbor and port. After the emergency response, the EPA issued a unilateral administrative order (UAO) under the Oil Pollution Act (OPA) to Capeco to cleanup residual contamination.

"EPA's been at the Capeco facility from day one, providing oversight of the cleanup and ensuring that the community is protected, and now we're taking it upon ourselves to get the job done. Delays serve no useful purpose."

- Judith Enck, EPA Regional Administrator

BANKRUPTCY PROCEEDINGS AND COLLABORATION WITH PURCHASER

In August 2010, Capeco filed a Chapter 11 bankruptcy petition and also sought to liquidate its assets. That December, Puma Energy Caribe LLC (Puma Energy), a global mid-stream retail and wholesale oil company interested in expanding its operations in the energy sector, was authorized through the bankruptcy proceeding to purchase Capeco's assets, including the Bayamón facility and 147 of Capeco's gas stations, including many with leaking USTs.

Coordination among the debtor, the creditors' committee, Puma Energy, the Department of Justice (DOJ), and the EPA ensured an uninterrupted cleanup at the facility. The EPA gathered information from the Environmental Quality Board (EQB) -- the agency responsible for overseeing UST corrective action in Puerto Rico -- and worked with EQB on site investigation and cleanup oversight. Prior to the hearing approving the sale of Capeco's assets, the DOJ notified the Bankruptcy Court that cooperation in the ongoing cleanup activities would be expected of a purchaser and, as a result, the court conditioned its authorization of the sale on Puma Energy entering into settlement agreements with the EPA. Under these agreements, Puma Energy consented to perform cleanup work under CERCLA and the OPA at the Bayamón facility. Puma Energy also consented to perform cleanup and compliance work under RCRA at its newly acquired gas stations.

ADDRESSING PURCHASER CONCERNS THROUGH SETTLEMENT AGREEMENTS

Concerns about perceived liability and uncertainty about the nature and extent of contamination and cleanup roles and responsibilities may deter prospective purchasers from acquiring contaminated properties. Under CERCLA and RCRA, the United States may enter into a settlement agreement with a prospective purchaser to address these concerns and uncertainty, thereby ensuring that protective cleanups, revitalization, and reuse can take place. For the Bayamón facility, the EPA and DOJ entered into several agreements with Puma Energy that provided liability relief and certainty in exchange for Puma Energy's agreement to conduct the cleanup work properly.

Puma Energy signed an AOC to complete the cleanup work that EPA ordered Capeco to perform under the OPA in response to the fire and spill. Puma Energy also signed a CERCLA Bona Fide Prospective Purchaser (BFPP) Doing Work Agreement to complete the CERCLA cleanup work begun by the EPA after the fire and spill. Under the BFPP agreement, the United States provided Puma Energy with a covenant not to sue under CERCLA for existing contamination and released any existing liens and waived its right to place future liens on the facility so long as Puma Energy complied with the agreement. The



Puma Energy agreed to make environmentally beneficial improvements to approximately 147 gas stations acquired from Capeco.

agreement further outlined Puma Energy's CERCLA cleanup work responsibilities at the Bayamón facility and memorialized the company's obligation to continue to comply with

BFPP requirements during site ownership. In addition to the requirement that the purchaser take "reasonable steps" to prevent releases of contaminants on its property, the CERCLA's BFPP protection also mandates, among other requirements, that the purchaser make all appropriate inquiries into previous ownership and uses prior to purchasing the site, and provide full cooperation and access to those authorized to conduct cleanup work after purchasing the site.

Through a groundbreaking Prospective Purchaser Agreement (PPA) addressing RCRA Subtitle I, the United States provided Puma Energy with a conditional covenant not to sue under RCRA. The PPA also addressed leaking USTs at the Puma Energy-acquired gas stations. In exchange for the covenant not to sue, Puma Energy agreed to make environmentally beneficial improvements that went beyond the regulatory requirements at the approximately 147 gas stations.

For more information about the EPA's cleanup enforcement program, see http://www2.epa.gov/enforcement/waste-chemical-and-cleanup-enforcement

ENVIRONMENTAL AND COMMUNITY BENEFITS

Puma Energy carried out inspections and completed the work at the gas stations with UST compliance and cleanup violations and improved emergency control systems by upgrading automated tank gauges and overfill alarms. Puma Energy is continuing to use the Bayamón site as an oil storage and distribution facility and has reinstalled the underground stormwater system damaged in the 2009 explosion and fire. Puma Energy is currently maintaining this system within the adjacent wetland area to prevent any discharge of oil into nearby navigable waterways.

Puma Energy took over the CERCLA and OPA cleanup work initiated by the EPA for the facility by removing asbestos contaminated material; evaluating soil contamination; and demolishing structures without releasing asbestos. The EPA had removed oil contaminants from secondary containment systems, tanks, and pits throughout the facility; demolished tanks; removed contaminated soil; and instituted off-site monitoring for oil sheen migration and water sampling. Puma Energy also assumed Capeco's prior RCRA responsibilities at the facility. These activities included continued assessment and investigation of contamination, removal of asbestos from buildings and soil at the facility, removal of hazardous substances, and demolishing the refinery units. Puma Energy implemented engineering measures to control leaking pipes, provide secondary containment, and control runoff.

EPA Region 2 Underground Storage Tanks Team Leader Dennis McChesney commended Puma for carrying out a "tremendous amount of work in a short amount of time."

An estimated 230,000 tons of non-hazardous waste including petroleum-contaminated soil, over 1,310 tons of hazardous waste, and 15,000 tons of scrap metal and asbestos material have been cleaned up at the facility. In

addition, the environmental remediation work uncovered a previously unfound source of a known groundwater plume. Further investigation by Puma Energy revealed that unused, underground utility lines were the source of the contamination, and these were removed and appropriately disposed of.

For Puma Energy, the acquisition of Capeco's assets was an opportunity to promote corporate social responsibility—a combination of protecting the environment, educating communities, and increasing social consciousness. Puma Energy developed a Corporate Responsibility Plan for Puerto Rico, and in 2011 contributed over \$150,000 to the local community. Approximately 300 direct and indirect jobs were generated by the cleanup project in Puerto Rico.

CONCLUSION

The redevelopment of the Bayamón facility and the gas stations across Puerto Rico illustrates how partnership with industry can be an integral part of a comprehensive cleanup enforcement approach and can prove crucial in transforming contaminated sites from distressed assets into worthwhile investments. By using settlement agreements, the EPA was able to satisfy enforcement priorities, bringing a nearly two-decade-old response action and fire-related cleanup to completion. At the same time, the agreements provided liability protection and certainty to the purchaser, allowing the new owner to prepare the site for its planned reuse. Today, through continued on-site collaboration with Puma Energy, the EPA has ensured that the petroleum storage and distribution facility and nearly



Continued on-site collaboration between Puma Energy and the EPA has helped bring the Bayamón facility into environmental compliance (9/2013 Puma Energy photo).

all of the underground storage tanks at the gas stations have been brought into environmental compliance. The facility is operating at approximately 85 percent capacity and it is anticipated that the facility will return to full operational capacity by mid-2014.

For further facility-specific information, see the EPA Region 2 site page at http://www.epa.gov/region02/waste/fscpr.htm