



## BUCKEYE CARIBBEAN TERMINALS, LLC

*Celebrating 125 Years of Service*  
1886-2011

Carretera 901 Km 2.7  
Bo Camino Nuevo  
P.O. Box 186  
Yabucoa, Puerto Rico 00767-0186

February 14, 2013

**# 7008 1300 0001 5253 9644**

**Certified Mail**

Mr. Jose Rivera  
US Environmental Protection Agency  
Caribbean Environmental Protection Division  
City View Plaza, Suite 7000  
#48 165 Rd. Km 1.2  
Guaynabo, PR 00968-8069

Dear Mr. Rivera:

Re: **Status Report of Compliance Evaluation Inspection  
Buckeye Caribbean Terminals LLC, Yabucoa, Puerto Rico  
NPDES Tracking Number PR0000400**

Reference is made to EPA Compliance Evaluation Inspection Review letter, received by Buckeye Caribbean Terminals (BCT) on March 28, 2012. BCT hereby is providing a status report to the findings of the inspection performed by EPA on September 23, 2011.

### **FINDING CONCERNING THE INSPECTION**

**EPA Finding:** 1) Removal of Sediments from the East and West API Oil/Water Separators – BCT indicated in its November 11, 2011 letter that approximately 60.7 cubic yards of oil-contaminated sediments will be removed from both Separators. Please provide an update of the removal of sediments from both Separators. Please include a copy of the waste transportation manifest, if final removal of sediments has been completed.

**BCT Status:** The East API: clean-up was completed previously.  
The West API: clean-up was completed previously.

**EPA Finding:** 2) Removal of Sludge from the 3-Cell and 2-Cell API Oil/Water Separators – BCT indicated in its November 11, 2011 letter that approximately 511 cubic yards of oil-contaminated sludge will be removed from both Separators. Please provide an update of the removal of sludge from the both Separators.

Please include a copy of the waste transportation manifest, if final removal of sludge has been completed.

**BCT Status:** *The Refinery 2-Cell API sludge removal activities were completed and reported previously.*

*The Refinery 3-Cell API The activities to clean up the 3-Cell started on August 30, 2012. The solids/wastewater mixture accumulated at the separator was transferred with a trash pump to the Southern Aeration Basin for treatment. The solids/wastewater mixture has a high carbon content that will be used as food and treated within the Southern Aeration Basin as planned. Up to date we have completed 100 % of Cell C which was the cell with the majority of the sediments (75% of the total). During this reporting period we also completed the cells A B & C head work clean up. Cell A was found with minimum to no sludge, Cell B has minimum sludge not affecting the operation. Please note that this unit will be cleaned again as part of the demolition process. Waste water operator continues with the maintenance and oil skimming process. We consider this task completed.*

**EPA Finding:** 3) Removal of Vegetation from the Process Wastewater Treatment Plant South Bio-Reactor – BCT indicated in the November 11, 2011 letter that 50 percent of the vegetation removal was completed. Please provide and update of the vegetation removal, and quantity removed, if available.

**BCT Status:** *The vegetation of the South Bio-Reactor removal was completed.*

**EPA Finding:** 4) Sludge Drying Beds – BCT indicate in the November 11, 2011 letter that one of the five sludge drying beds was cleaned and placed into operation. No further action is required concerning this finding.

**BCT Status:** *West drying bed is being maintained and is operationally ready.*

**EPA Discharge Monitoring Reports exceedances:** Phenolic compound and copper exceedances on outfall serial number 001. BCT must provide a response to the action taken and/or to be taken to address the effluent limit exceedances.

**BCT Status:** *BCT continues the implementation of the action plan proposed. So far actions taken are giving good results preventing exceedances on these two parameters.*

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who

## **Former Shell Refinery Demolition Plan**

### **Phase I - Current Wastewater Treatment Plant Operations**

When operational, the refinery processed between 75,000 and 85,000 barrels per day of crude oil to produce various chemical products. Operations of the process units in the Refinery Area ceased on July 15, 2008; however, a portion of the facility continues operating as a petroleum bulk station and terminal. The facility was sold to Buckeye on December 2010. As part of the sale agreement, Buckeye agreed to operate the Refinery's wastewater treatment system (WWTS) through dismantlement of the refinery units, removal of the sewer system, and any corrective action activities within the refinery footprint, if necessary.

Wastewater treatment facilities are located in both the Refinery and Tank Farm areas. The principal WWTS located at the Refinery is designed to treat waters from the Refinery Area. The Refinery WWTS includes a series of wastewater units which are designed and operated to manage the three primary types of wastewaters produced at the facility during historic and current operations. These wastewater streams include:

- Clean storm waters from non-industrial areas (clean storm water impoundment system known as Flood Control Pond),
- Refinery process contact wastewater (2-Cell Separator System), and
- Contaminated storm water from the refinery foot print area (3-Cell Separator System).

Clean storm waters from non-industrial areas are collected in the flood control pond (FCP). The storm waters are routed to the FCP through two distinct channels: the west and the east channels. Storm waters in the FCP can be pumped into the wastewater treatment plant or discharged to Santiago Creek through NPDES authorized Outfall 002.

The refinery has two completely segregated sewers system that conveyed wastewater streams to the 2-Cell or 3-Cell Separators to prevent the mixing of contact storm water with refinery

process contact wastewaters. This was a refinery best practice in line with its waste minimization commitment.

The 2-Cell Separator received process wastewater from process areas which include the refinery process water, refinery steam stripper bottoms, and refinery laboratory. The 2-Cell Separator also received water from the clean storm water impoundment system and adjacent terminal. Water from the 2-Cell Separator was pumped first to a dissolved air flotation (DAF) unit and then to the equalization tanks.

The 3-Cell Separator receives contaminated storm water runoff from the refinery foot print area, water from the lime pit basins, and storm water from the intermediate tanks area. The 3-Cell Separator can also receive water from the FCP and the adjacent terminal. No refinery process wastewater has historically been conveyed to the 3-Cell Separator. Water from the 3-Cell Separator is pumped directly into the equalization tanks.

Water from the equalization tanks is gravity fed to the two aeration basins (bio reactors) for aggressive biological treatment. After treatment in the aggressive biological treatment unit, the treated water flows to the clarifier, where bio solids settle, and clear water (effluent) overflows. During refinery operations, clarified water was pumped to the tank farm on its way to the NPDES permitted Outfall 001 into the Yabucoa Bay. The oil collected in both the 2-Cell and 3-Cell Separators, as well as those collected in the DAF unit, were sent to two skimmed oil tanks. In these tanks, oil and water were further separated, with water returning back to the 2-Cell Separator and oil being reprocessed in the crude process unit.

Historically, the solids removed in both the 2-Cell and 3-Cell Separators were thickened and pre-treated before passing through a plate and frame filter press. Water filtrate was returned back to the 2-Cell or 3-Cell Separators, and the solid cake was collected into a container and disposed of off-site. Bio solids settled in the bottom of the clarifier (Return Activated Sludge-RAS) is continuously returned to the aeration basins to help maintain a balanced population of microorganisms. Occasional wasting of solids from the Clarifier (Waste Activated Sludge-WAS) to the Digester was performed, based on the desired RAS at the Aeration Basins. In the

digester, organic materials were stabilized and the solids volume was substantially reduced. After adequate digestion (approximately 15-20 days) sludge was transferred to the sludge drying beds, where water was filtrated by gravity through a sand bed and evaporated with sunlight. Water filtrate was sent back to the two equalization tanks for processing. Sludge cake at the sludge drying beds was put into containers and disposed of off-site.

### **Phase II - Wastewater Treatment Plant Operations during Demolition Activities**

The refinery area is currently idle and slated for demolition. As part of the overall demolition activities, the refinery units will be removed first, followed by demolition and removal of all concrete pads and aboveground foundations. The underground sewer and drainage system will then be decontaminated by pressure washing the interiors of piping and removed, any releases identified to subsurface soils within the refinery footprint will undergo corrective actions to meet applicable cleanup standards, and ultimately upon our submission and approval of a modified permit application, the WWTS will be decontaminated by pressure washing the interiors of tanks, separators, and piping and demolished. Demolition activities are tentatively scheduled to begin in the first quarter of 2013 and completed by the end of 2015.

During all demolition activities, a Storm Water Pollution Prevention Plan (SWPPP) will be implemented to control impacts to storm water runoff and to the WWTS, including dust control and control of construction debris. During demolition of the refinery area, any /rinsate residual fluids from refinery units, tanks, piping, vessels, and concrete within the process areas will be sent to the WWTS for treatment. Equipment requiring cleaning or decontamination prior to removal from the site will be washed at the wash rack and those wash waters will be sent to the 2-Cell Separator. Only pressurized water will be used for cleaning activities at the wash rack.

Measures will be required of the demolition contractor to protect the WWTS and FCP by covering/protecting catch basins within process areas during demolition activities. As part of obtaining a demolition permit for the site, the demolition contractor will be required to prepare and submit a storm water protection plan utilizing best management practices to protect the WWTS and FCP. In addition, the demolition contractor will be prevented from sending any fuel, hydrocarbon liquids, solids, or sediments to the WWTS or FCP during demolition activities.

Rinsate streams to the WWTS during demolition will contain the same type of constituents the WWTS was designed to manage and that entered the WWTS during the refinery operations, however at much reduced levels. It is expected that approximately 10,000 gallons will be generated per day during the demolition activities. .

The WWTS will be demolished last per submission and approval of a modified NPDES permit application. A demolition plan for the WWTS will be developed and will include decontamination of all WWTS units, disposal of all materials and wash waters per regulatory requirements, and closure of the units followed by demolition as part of the modified permit application.

### **Phase III - Proposed Site Drainage Design and Grading Plan – After Demolition**

After all demolition activities are completed, the refinery foot print site will be graded and vegetated and only storm water runoff will go to the permitted outfall 002.

In the proposed drainage design and grading plan, the storm water drainage system for the non-contact areas will continue to be utilized without modification from its current operation. Clean storm waters from non-contact areas are currently collected in the flood control pond (FCP) via the west and the east drainage channels. Storm waters in the FCP will continue to be discharged to Santiago Creek through NPDES authorized Outfall 002.

After site dismantling, demolition, and corrective actions, the former refinery process areas will no longer utilize the current underground piping system (which will be removed during demolition). The former refinery foot print area will be vegetated and graded to a new proposed north-south drainage ditch which will convey storm water from this vegetated area to the FCP. A sedimentation erosion control plan and a storm water protection plan utilizing best management practices will remain in effect until the vegetation has been fully established to protect the FCP. The existing 30,000 gpm pump at the FCP will continue to be used for pumping storm water from the FCP.

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