UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
AIR AND RADIATION DIVISION
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MEMORANDUM OCT 2 9 2013

SUBJECT: Inspection of KCBX Terminals Company, Chicago, Illinois

FROM: Bonnie Bush, Environmental Engineer
Air Enforcement and Compliance Assurance Branch (MI/WI)

THRU: Sarah Marshall, Chief SM
Air Enforcement and Compliance Assurance Branch (MI/WI)

TO: Files

Date of Inspection: September 30, 2013

U.S. EPA Representatives: Bonnie Bush, Environmental Engineer
Katharina Bellairs, Environmental Engineer

Facility Representatives: Brandon Walker, Environmental Health & Safety Manager
Mike Estadt, South Plant Manager

Company Description:

Plant Location: 3259 East 100th Street (North Plant) and 10740 South Burley Avenue (South Plant), Chicago, Illinois, 60617
Primary Contact: Brandon Walker, Environmental Health & Safety Manager
Phone Number: 773.978.8518

Purpose of Inspection: To evaluate for compliance with the Clean Air Act and Illinois State Implementation Plan (SIP) as a follow-up to citizen concerns. This was an unannounced inspection.

Background: The Southeast Environmental Task Force (SETF) is a community organization based in the southeast part of the City of Chicago. SETF contacted EPA Region 5's Office of Enforcement and Compliance Assurance to express concerns about stockpiles of petroleum coke (petcoke) being stored at KCBX Terminals. Citizens living near the facility complain of black

dust on the siding of their homes and blowing in the air. The inspection was conducted to evaluate KCBX for compliance with its Federally Enforceable State Operating Permit (FESOP), the Clean Air Act, and the Illinois SIP and observe for fugitive dust issues, both actual and potential. EPA previously inspected the 100th Street plant on May 10, 2012.

Entry Procedures: We (Bonnie Bush and Katy Bellairs) arrived in the area of the 100th Street plant about 10:15 AM. We first drove around the facility, observing it from the residential area across the Calumet River east of the facility. At that time, we were aware of the existence of only the 100th Street plant. We entered the 100th Street plant at 10:45 AM, identified ourselves via intercom, and were told to come to the office. We were greeted in the office by Brandon Walker, and we presented our credentials.

Initial Interview Information: I explained the purpose of the inspection (see above) and that EPA had received some citizen complaints about dust. Mr. Walker asked if the citizens were complaining about the "North or South Plant," and in this way we learned that KCBX also owns and operates a facility on the east side of the Calumet River and 7 blocks south of the 100th Street plant, known as the South Plant. I told Mr. Walker that we would like to first hear a history of the plant and description of the operations, followed by a walk-through of the facility, and after the walk-through, review records required to demonstrate compliance with their Illinois Environmental Protection Agency (IEPA) air permit. Ms. Bellairs stated that if any information they provided was Confidential Business Information, they should identify that, and we would treat it accordingly.

The following interview information was provided by Mr. Walker. KCBX is owned by Koch Minerals, and they employ about 40 people at the two plant sites. The North Plant operates 24 hours per day, 7 days per week, 52 weeks per year. The South Plant operates a day shift only, 7 days per week. Both plants are "transhipment" facilities that receive and ship out "wettable" dry bulk materials, mostly coal and petcoke. KCBX purchased the North Plant property from Calumet Terminal. KCBX purchased the property that is the South Plant from DTE in December 2012; it is the site of the old Acme/LTV Steel plant. The South Plant shares an address with 2 other companies, one being Calumet Terminal. The South Plant has received only petcoke since it was purchased. Mr. Walker denied knowledge of the source of the petcoke, saying it may come from a nearby refinery.

The North Plant receives petcoke via barge, rail, and transport truck and coal via rail. The South Plant receives petcoke via rail currently and may receive it via barge in the future; the South Plant receives no coal. With respect to shipping materials out, coal leaves the North Plant via marine vessel (laker), truck, and very rarely by rail. Petcoke is shipped from the North Plant via marine vessel and very rarely by rail. Petcoke is shipped from the South Plant via marine vessel.

There is a "Fugitive Particulate Operating Program" for the North Plant based on a plan from Chicago Fuels Terminal. They are drafting a new fugitive dust plan for the South Plant FESOP. The fugitive program for the North Plant includes use of water cannons on stockpiles, a water truck to water down roads or other areas reachable by the water truck and not reachable by water cannons, a truck wash at the truck exit of the property, spray bars at conveyor transfer points, and application of surfactant (an encrusting agent) to inactive piles. The water truck is used to apply

the surfactant. When the crust is broken for loading, water sprays are used. The South Plant, while operational, is still in a construction phase. There will be 40 water cannons, 2 water trucks, spray bars at transfer points, and surfactant application. Street sweeping is done at both terminals, and KCBX uses a contractor to sweep Hunter Street outside the facility (note: on return to the EPA office, I was unable to locate Hunter Street on a map). There is a residential area west of the North Plant.

Ships are loaded at the North Plant with an arm loader or chute loader at the marine loading facility, a covered operation, and the cover extends into the ship holds. They try to cover as much of the barge loading operation as possible. At the South Plant, they try to keep the material transfer point inside the ship. Rail cars are loaded with front end loaders, with material brought to the loading site with trucks or portable conveyors, and water is applied during loading. Trucks are loaded with front-end loaders usually Monday through Friday and occasionally Saturdays. Rail unloading occurs in the shaker house at the North Plant, where the off-loaded material goes into a hopper that feeds conveyors to either barges, stockpiles, or the truck pad. Portable conveyors used throughout the North Plant are not covered and do not have water sprays at transfer points. Truck loading is done on the truck pad; water spraying is done depending on the moisture content of the incoming material.

Before going into the site, we requested to review records after the site drive-through, including records of moisture content, visible emissions readings, any emission testing in the last 5 years, and deviation reports. Mr. Walker stated that if we wanted copies of records, there would first have to be an internal "QA/QC" process.

Facility Drive-through: At 11:35 AM Mr. Walker began driving us around the North Plant in a KCBX vehicle, after we reviewed safety information and procedures. We observed stockpiling of petcoke in the form of shot coke. Mr. Walker stated KCBX receives sponge coke as well. There are 19 water cannons at the North Plant. We observed the marine arm loading facility (no vessel was docked at the time.) We drove to the railcar shaker house and walked into the building. Railcars were lined up inside the building, but no unloading was occurring as it was the lunch hour. The shaker house holds up to 4 gondola cars. They are unloaded by opening a hatch in the bottom of each car so that the material can fall into the hopper below ground. The cars are then shaken to remove all material. We left the shaker house and then drove past the truck pad and the truck wash. We spent about 15 minutes observing a coal barge in the distance being unloaded by a clamshell shovel. We could see steam rising from the coal pile, and once we saw black fugitives rising from the stockpile when the clamshell released a load. Ms. Bellairs did not take visible emissions readings due to our distance from the operation and the fact that our position was noncompliant with Method 9 with respect to sun position. There were occasions of transient opacity but nothing sustained.

At 12:15 we returned to the North Plant office, where we met Mike Estadt, the operations manager of the South Plant. We had a brief discussion with Mr. Estadt about the purpose of our visit and the nature of the citizen complaints. We again mentioned record review and provided Mr. Walker with a list of records required by the FESOP that we wanted to review. Mr. Walker then informed us that before we could see the records, he had to have KCBX attorneys review

them for "QA." We returned to the parking lot with Mr. Walker and followed him to the South Plant parking lot in the government vehicle.

At 12:45 we commenced a drive-through of the South Plant, riding with Mr. Walker in the KCBX vehicle. The South Plant is on the property previously occupied by Acme Steel and LTV Steel and co-located with Calumet River Terminal, a much smaller transhipment operation than KCBX. Only coal was being stockpiled at this site when KCBX purchased it. We could see Beemsterboer in the distance, another transhipment facility. Part of the LTV coke plant was being demolished at the time of our visit. We observed more water cannons, which were being constructed at the time of the visit. We drove past a retention pond which is and will be used to provide water for the cannons. We saw the rotary dumper (a rail dumping facility) which accommodates one rail car at a time for unloading. It is not yet operational. It will unload each rail car by turning it upside down and emptying the material contents into a hopper. The rotary dumper is equipped with a small baghouse. Mr. Walker attempted to drive us to a location where we would be able to leave the vehicle to see the inside of the rotary dumper, but terrain conditions and water cannon construction activities prevented this. Mr. Walker stated the baghouse will pull negative pressure on the entire building. We observed the new bottom dump rail unloading area, equipped with a completely covered conveyor. Mr. Walker believed the rotary dumper will start operating within a year; a joint operating and construction permit has been issued.

Closing Interview: At 1:30 PM, we went into the South Plant office. Mr. Estadt was waiting for us, and with him we viewed a video on the SETF web site of a fugitive dust event at KCBX. The video is dated December 21, 2011. Mr. Estadt stated that some of the equipment visible in the video was dismantled as early as 2001 and that the latest date that equipment seen in the video was still on site was in 2009. Mr. Estadt also stated that KCBX would likely have been unable to operate water cannons in December.

We returned to the parking lot, where we had further discussion with Mr. Walker about record review. Mr. Walker repeated that KCBX had procedures he had to follow, including a "QA" review of the records before we could review them. He stated that this "QA" review would take a few days to a few weeks. I stated that the FESOP clearly states that the records we wanted to review are required by the permit to be readily available for review by inspectors from either IEPA or U.S. EPA, and that we wanted to review the records on site without obtaining copies. Mr. Walker said he was aware of the permit requirement but nonetheless, he had to follow the KCBX "QA" procedure. He assured me he would email me the documents as soon as possible, but he would not commit to a deadline. (Note: he emailed the records on 10/4/13, during the government shutdown.)

Departure: We left the South Plant at 2:15 PM. We then drove down an alley behind houses located adjacent to the plant to the east; the alley was between the houses and the South Plant. We did not observe black material on buildings or vehicles as we drove along. There were two citizens working in a garage, and we identified ourselves and stopped to speak with them. They stated that their property does become covered with black material frequently. Ms. Bellairs left them a business card, and we requested that they contact EPA if and when there are incidents of blowing dust from the stockpiles.

Documents Requested

- All test results from the last 5 yr. for VEs, PM, SO2, CO, NOx, VOM, moisture
- Annual reports required by permit ¶13.b.ii for the last 3 yrs.
- Moisture content records required by permit ¶ 14.a.i.B. & C., a.ii.
- Deviation reports required by permit ¶20a. for the past 5 years, including event depicted in December 2011 Youtube video on the SETF web site

Documents Obtained/Reviewed: None

Attachments: Inspection notes of Ms. Bush and Ms. Bellairs are in the case file.