

US EPA ARCHIVE DOCUMENT

June 11, 2014

By Electronic Mail

George T. Czerniak
Director
Air and Radiation Division
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Re: KCBX Terminals Company Response to June 3, 2014 Notice of Violation

Dear Mr. Czerniak:

Introduction

I am writing on behalf of my client, KCBX Terminals Company, to provide this initial response to the United States Environmental Protection Agency's (EPA) June 3, 2014 notice of violation (NOV) which alleges violations of the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, and the Illinois State Implementation Plan (SIP). We are looking forward to our proposed June 26th meeting to further discuss the issues contained in the NOV, but nevertheless thought it would be productive to provide our initial response to the NOV in advance of that meeting.

At the outset, we want to emphasize that KCBX remains committed to working with EPA to apply the best science to provide EPA and the public with the best information regarding air emissions associated with KCBX terminal operations. For this reason, KCBX has developed a state-of-the-art source air monitoring program that goes well beyond the scope of the air monitoring program required by EPA in its November 15, 2013 Clean Air Act Section 114 information request. In addition, on its own initiative, KCBX has retained world-renowned air quality and analytical sampling experts (the same experts that EPA has retained on multiple occasions) to secure their unvarnished opinions regarding community impacts, if any, from KCBX terminal operations. Those experts have analyzed and modeled the air monitoring data and have on two occasions collected extensive soil and dust sampling in the neighborhood. KCBX has shared all its data with EPA and in an April 22, 2014 meeting with EPA presented in detail KCBX's experts' findings that air emissions from the KCBX terminal sites were not impacting ambient air quality.

Response to NOV

We have reviewed the NOV and provide below detailed responses to EPA's core allegations. As explained below, EPA has fundamentally misinterpreted the data that serves as bases for its NOV. Accordingly, the facts alleged by EPA do not give rise to a violation of the federal Clean Air Act or the Illinois SIP.

1. Paragraph 18 of NOV Alleges:

KCBX submitted monitoring data to EPA for February 18, 2014 through May 10, 2014, which shows that on April 12, 2014, the northeast PM₁₀ continuous monitor at the North Terminal recorded a 24 hour average of 155 µg/m³, and on May 8, 2014, the northeast PM₁₀ continuous monitor at the North Terminal and the northeast PM₁₀ continuous monitor at the South Terminal each recorded a 24 hour average of 156 µg/m³.

KCBX Response to Paragraph 18:

The majority of PM₁₀ measured on the referenced days originated from sources other than KCBX.

- The readings referenced by EPA were recorded at only 1 of 9 source monitors on April 12, and at 2 of 9 source monitors on May 8.
- Although these monitors were oriented downwind of the piles on those two days, concurrent PM₁₀ concentrations at all of the other KCBX monitors were similar. The similarity of readings across all monitors, even monitors that would not have been affected by the piles on those days, is a strong indication of the effect of off-site sources.
- Moreover, observations of airborne dust from properties adjacent to the KCBX terminals site confirm the presence of other sources of particulate matter.

2. Paragraph 19 of NOV States:

The data from the meteorological station at the North Plant shows that the wind on April 12, 2014 was from the south to south southwest at an average 5.5 mph, and on May 8, 2014 was from the south southwest at an average 5.6 mph, blowing across the South Plant and the North Plant toward the North Plant northeast monitor, which recorded the two values exceeding 150 µg/m³. The data from the meteorological station at the South Plant shows that the wind on May 8, 2014 was from the south southwest at an average 6 mph, blowing across the South Plant toward the South Plant northeast monitor.

KCBX Response to Paragraph 19:

Winds from these directions are consistent with off-site contributions from sources other than KCBX.

- The fact that winds were from the south to southwest is important. Evaluation of the entire monitoring period (not just the two days cited by the EPA) shows that winds from the NW and south are consistent with offsite contributions of PM₁₀ from sources to the NW and south of the KCBX terminals, which include a cement plant, the Beemsterboer properties, a metal recycling facility, and other current or former commercial/industrial land uses.

- In its NOV, EPA misstates the average wind speeds for the two dates in question. On those two days, winds were generally from the south to southwest with an average speed of 5.5-6 meters per second (approximately 13 miles per hour), *not* 5.5-6 miles per hour.

3. Paragraph 21 of NOV States:

On April 23, 2014, KCBX presented information to EPA about the ratio of vanadium to nickel (V:Ni) in the soil in the Chicago area and in petroleum coke. Specifically, KCBX informed EPA that the V:Ni in background soil is about 1 and in petroleum coke ranges from 4 to 12.

KCBX Response to Paragraph 21:

The NOV incorrectly states that information KCBX provided at a meeting with EPA showed that the vanadium to nickel ratio in background soil in the Chicago area is “about 1.”

- KCBX collected soil data and other measures of background levels of vanadium and nickel in soil in the Chicago area presented to EPA show average background V:Ni ratios of between 1.2 and 2.5, not 1.
- Data presented by KCBX to EPA confirm that a pet coke signature would be much higher than the ratios found by EPA – *i.e.*, in the range of 4.0, which EPA itself references in its NOV. This means that there is no signature for pet coke found by EPA in its wipe samples.

4. Paragraph 22 of NOV States:

On May 20, 2014, EPA received results from the preliminary wipe sampling conducted on April 17, 2014. The wipe samples from five of the eleven locations sampled showed the presence of both vanadium and nickel, with V:Ni in excess of 1 in several instances.

KCBX Response to Paragraph 22:

All of the V:NI ratios reported by EPA are well within the ranges determined by the United States Geological Survey and the State of Illinois (and confirmed by KCBX sampling) to represent background levels in urban areas of Chicago. Using either EPA's or the much more comprehensive study done by Dr. David MacIntosh of Environmental Health & Engineering, there is no evidence of pet coke or coal in the surrounding community.

- Only one sample collected in the vicinity of KCBX North had detectable levels of both V and Ni (with a ratio of 1.0), which is consistent with background levels found throughout the Chicago area, and does not represent a signature for pet coke.
- Four samples collected in the vicinity of KCBX South had detectable levels of both V and Ni, with ratios of 0.7, 1.1, 1.4 and 1.7; these ratios are consistent with

background ratios of those compounds in the Chicago area, and as with KCBX North, none of those samples show a signature for pet coke.

- All of EPA's values of V:Ni are within the ranges of ratios seen previously in soil samples collected by KCBX, US Geological Survey (USGS) and incorporated into state Tiered Approach to Corrective Action Objectives (TACO) regulations; and
- None of the values measured by EPA were within the range of values measured for coal and pet coke samples from the KCBX facilities as presented to EPA, which show median V:Ni values of 3.8 and 3.5, respectively. The ranges were 1.9-9.4 for coal and 3.0-4.4 for pet coke.

5. Paragraph 23 of NOV States:

The V:Ni at the sampling locations was highest at the location closest to KCBX and decreased as distance of the sampling location from KCBX increased.

KCBX Response to Paragraph 23:

There is *no* consistent evidence of higher V to Ni ratios closer to the KCBX Terminals. Both V and Ni were detected in only 5 of the 11 samples. Some sample locations closer to the KCBX terminals had lower concentrations of V and Ni than sample locations farther away from the terminals. Neither element was detected in 4 of the 11 samples, and V but not Ni was detected in 2 of the 11 samples, indicating that V and Ni levels were very low in those locations. The V:Ni relationship is indeterminate when one or the other element is non-detect. Thus, the relationship of V:Ni with distance asserted by EPA is actually interspersed with numerous samples when the element concentrations were so low that a ratio could not be determined.. Even if the relationship with distance asserted by EPA was correct, the important point is that all of EPA's ratios are well within the ranges determined by the United States Geological Survey and the State of Illinois (and confirmed by KCBX) to represent background levels in urban areas of Chicago.

- This statement can relate only to KCBX South since only 1 of the samples collected in the vicinity of KCBX North had detectable levels of both V and Ni, and the ratio of those values (1.0) reflected background.
- The highest ratio of 1.7 was found at sample 7A. But the adjacent sampling site and another site nearby on the same street (samples 4A and 5A) had V and Ni levels below detection. All three of these locations are approximately 70 m from the property line of the KCBX South site.
 - *These findings are consistent with V and Ni ratios at background levels (where measureable) and are consistent with a finding that the South Terminal is not a notable source of those metals.*

- Sample 8A was non-detect, and it is closer to the South Terminal than the site in sample 13A, which had detectable V and Ni (although the ratio was below background).
- Samples 10A and 11A were collected likely less than 30m apart from each other, and they show the greatest difference between any pair.

KCBX's On-Site Monitors are Not Ambient Monitors

For the reasons set forth in our May 21, 2014 letter, and in 40 C.F.R. Part 58, the KCBX on-site monitors cannot be ambient air monitors. The KCBX monitors are not located in "ambient air" because they are located within the fence line on private KCBX property to which the general public does not have access. To the extent EPA might assert that the monitoring data provides some indication of PM₁₀ levels in the ambient air in the surrounding ambient air, that data is not an appropriate legal basis for determining whether there has been an exceedance of the PM₁₀ NAAQS.

Conclusion

In summary, the allegations contained in the NOV do not establish violations of the CAA or the Illinois SIP. We are providing this information to you in advance of our proposed June 26th meeting, so that we can continue to productively discuss the meaning of the air monitoring and dust wipe sampling data taken to date and provide any necessary clarifications.

Thank you for your consideration of this additional information.

Sincerely,

/s/ Adam M. Kushner
Adam M. Kushner

Partner
adam.kushner@hoganlovells.com
(202) 637-5724

cc: Nicole Cantello, EPA Region 5