UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

VIA ELECTRONIC MAIL
RETURN RECEIPT REQUESTED

John Thompson
VP & General Manager
Delek Companies
P.O. Box 453
356 South Levee Road
Krotz Springs, LA 70750
John.Thompson@delekus.com

Re: Finding of Violation under the Clean Air Act – Alon Refining Krotz Springs, Inc.

Dear Mr. Thompson:

The U.S. Environmental Protection Agency (EPA) has identified Alon Refining Krotz Springs, Inc. (ARKS) as having violated the Clean Air Act (CAA) and the regulations promulgated thereunder. The attached Finding of Violation (FOV) is issued to ARKS for violations of the CAA, 42 U.S.C. § 7401 *et seq.*, at the Krotz Springs Refinery in Krotz Springs, Louisiana. EPA is issuing this FOV based on information described in detail below that represents specific violations of applicable National Emission Standards for Hazardous Air Pollutants.

Section 113 of the Act, 42 U.S.C. § 7413, gives the EPA several enforcement options to resolve these violations, including issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, or bringing a judicial criminal action.

Please note the opportunity for ARKS to request a conference with EPA to present information on the identified violations in the FOV, efforts it has taken to comply, and the steps it will take to prevent future violations. A conference should be requested within ten (10) business days following receipt of the FOV.

As detailed in the FOV document, please direct any request to confer to Providence Spina, Attorney Advisor, at spina.providence@epa.gov or (202) 564-2722. Any technical questions may be directed to Patrick Foley, Environmental Engineer, at foley.patrick@epa.gov.

Sincerely,

SPARSH KHANDESHI 2023.08.18 16:20:58 -04'00'

Sparsh S. Khandeshi, Acting Director
Air Enforcement Division
Office of Civil Enforcement

Encl.: Finding of Violation (FOV)

cc: Anita Junker, Alon Refining Krotz Springs
Jessica Leger, Alon Refining Krotz Springs
Patrick Foley, AED
Providence Spina, AED
Josh Zaharoff, AED
Steve Thompson, EPA Region 6
Sarah Frey, EPA Region 6
Angela Marse, LDEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:	)	
	)	
Alon Refining Krotz Springs, Inc.	)	
Krotz Springs, Louisiana	)	**FINDING OF VIOLATION**
	)	
Proceedings Pursuant to	)	
the Clean Air Act	)	
42 U.S.C. § 7401 et seq	)	

FINDING OF VIOLATION

This Finding of Violation (FOV) is issued to Alon Refining Krotz Springs, Inc. (ARKS) for violations of the Clean Air Act (CAA or the Act), 42 U.S.C. § 7401 *et seq.,* at its petroleum refinery located in Krotz Springs, Louisiana (the Facility). Specifically, the United States Environmental Protection Agency (EPA) believes that ARKS has violated the National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries, 40 C.F.R. Part 63, Subpart CC.

This FOV is issued to inform ARKS of the violations set forth below.

Statutory and Regulatory Background

1. The purpose of the CAA is to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. CAA Section 101(b)(1), 42 U.S.C. § 7401(b)(1).

A. Clean Air Act Section 112 and National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries

2. Section 112 of the Act requires EPA to identify categories and subcategories of major sources of hazardous air pollutants (HAPs), and to establish emission standards requiring the maximum degree of reduction in emissions of HAPs that EPA determines is achievable through the application of measures, processes, methods, systems or techniques including, but not limited to, the enclosure of systems or processes to eliminate emissions, and design, equipment, work practice, or other operational standards. 42 U.S.C. §§ 7412(c)(1)-(2), (d)(1)-(2).

3. EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) Source Categories for Petroleum Refineries on August 18, 1995. See 60 Fed. Reg. 43,260, located at 40 C.F.R. Part 63, Subpart CC (NESHAP Subpart CC). Following a residual risk and technology review, EPA promulgated a revised rule on December 2, 2015. See 80 Fed. Reg. 75,178.

4. NESHAP Subpart CC applies to certain petroleum refining process units and to related emission points located at a plant site that is a major source as defined in Section 112(a) of the CAA and that emit or have equipment containing or contacting one or more of the HAPs listed in Table 1 of NESHAP Subpart CC. 40 C.F.R. § 63.640(a).

5. "The owner or operator of an existing source who is unable to comply with" NESHAP Subpart CC may request an extension of up to one year to come into compliance. 40 C.F.R. § 63.6(i)(4)(i)(A). Requests must be made in writing to the appropriate authority at least 120 days prior to the compliance date. "Nonfrivolous requests submitted under [40 C.F.R. § 63.6(i)] will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied." 40 C.F.R. § 63.6(i)(4)(i)(B).

B. **NESHAP Subpart CC Fenceline Monitoring Requirements**

6. NESHAP Subpart CC requires the owner or operator of a covered source, by January 30, 2018, to conduct air sampling along the facility property boundary (fenceline monitoring) and analyze the samples for benzene. See 40 C.F.R. § 63.658(a)-(b); NESHAP Subpart CC Table 11. Passive air monitors must be located around the facility property boundary in accordance with 40 C.F.R. § 63.658(c), and a sample from each monitor must be collected every fourteen (14) days (sampling period). 40 C.F.R. § 63.658(e)(1). Owners or operators must begin reporting fenceline monitoring results after obtaining 12 months of data. 40 C.F.R. § 63.655(h)(8).

7. Within 45 days of the completion of each sampling period, the owner or operator must determine whether the fenceline benzene concentrations are above or below the action level for benzene. 40 C.F.R. § 63.658(f). The first step in making this determination is to determine the facility impact on the benzene calculation (Δc) by calculating the difference between the highest and lowest sample results for benzene concentrations during the sampling period, in accordance with 40 C.F.R. § 63.658(f)(1). Next, after the first 12 months of monitoring, the owner or operator calculates the annual average Δc based on the average of the 26 most recent 14-day sampling periods. 40 C.F.R. § 63.658(f)(2). Finally, the owner or operator compares the annual average Δc to the action level for benzene. 40 C.F.R. § 63.658(f)(3).

8. The NESHAP Subpart CC action level for benzene is 9 micrograms per cubic meter ($\mu g/m^3$) on an annual average basis. 40 C.F.R. § 63.658(f)(3). If the annual average Δc for benzene is less than or equal to 9 $\mu g/m^3$, the concentration is below the action level. If the annual average Δc for benzene is greater than 9 $\mu g/m^3$, the concentration is above the action level, and the owner or operator must conduct a root cause analysis and corrective action in accordance with 40 C.F.R. § 63.658(g). 40 C.F.R. § 63.658(f)(3).

9. NESHAP Subpart CC requires that within 5 days of determining that the action level has been exceeded, and no longer than 50 days after the completion of the 14-day sampling period, the owner or operator must initiate a root cause analysis to determine the cause of such exceedance and determine appropriate corrective action. The root cause analysis and

initial corrective action analysis must be completed, and initial corrective actions taken, no later than 45 days after determining there is an exceedance. 40 C.F.R. § 63.658(g).

10. If, upon completion of the corrective action analysis and initial corrective actions, the Δc for the next 14-day sampling period for which the sampling start time begins after the completion of the corrective actions is greater than 9 $\mu g/m^3$ or if all corrective action measures identified require more than 45 days to implement, the owner or operator must develop a corrective action plan that describes the corrective action(s) completed to date, additional measures that the owner or operator proposes to employ to reduce fenceline concentrations below the action level, and a schedule for completion of these measures. 40 C.F.R. § 63.658(h). The owner or operator shall submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the Δc value for the 14-day sampling period following the completion of the initial corrective action is greater than 9 $\mu g/m^3$, or if no initial corrective actions were identified, no later than 60 days following completion of the initial corrective action analysis. *Id.*

Findings of Fact

11. ARKS owns and operates the Krotz Springs Refinery, located at 256 South Levee Road Hwy 105, Krotz Springs, Louisiana 70750 (the Facility).

12. The Facility contains one or more petroleum refining process units and related emissions points identified in 40 C.F.R. § 63.640(c), making it a source subject to NESHAP Subpart CC.

13. The Facility is a major source of HAPs as defined in Section 112(a) of the CAA, 42 U.S.C. § 7412(a).

14. The Facility emits or has equipment containing or contacting one or more of the HAPs listed in Table 1 of NESHAP Subpart CC.

15. On October 2, 2017, ARKS submitted a request to the Louisiana Department of Environmental Quality (LDEQ) for a one-year extension to start fenceline monitoring at the Facility.

16. On October 26, 2017, LDEQ responded to ARKS's extension request, stating, among other things, that the initial request "does not presently contain sufficient information for LDEQ to make a determination" and requiring Alon Krotz to "describe the circumstances unique to [the Facility] that would preclude or hinder compliance" with NESHAP Subpart CC by the compliance date of January 30, 2018.

17. On November 30, 2017, ARKS submitted a follow-up letter to LDEQ purporting to describe the unique circumstances at the Facility that would support an extension of the NESHAP Subpart CC compliance date. These circumstances included that ARKS "believes it cannot accurately site its monitors and collect samples" because it could not

confirm any potential benzene emissions from shipping and dock traffic along the river adjacent to the Facility. LDEQ did not respond to ARKS' follow-up letter.

18. ARKS deployed passive air monitors around the Facility fenceline in January 2018, with monitors at 30 locations, and began conducting biweekly benzene fenceline monitoring. It did not provide the monitoring results to LDEQ.

19. In the 14-day sampling period ending on March 13, 2018 and for all of the next twenty three 14-days sampling periods, up to and including the period ending January 29, 2019, the two-week benzene Δc exceeded 9 $\mu g/m^3$.

20. Had ARKS reported the results of its sampling starting in January 2018, it would have reached the end of its 26th sampling period on January 29, 2019 and the annual average benzene Δc would have exceeded the action level of 9 $\mu g/m^3$.

21. ARKS did not initiate a root cause analysis nor initial corrective actions at the Facility in connection with the annual average benzene Δc calculated for the sampling period ending on January 29, 2019, nor for the subsequent sampling periods until January 27, 2020.

22. Rather than report the results from January 2018, the first benzene fenceline monitoring results that ARKS reported to LDEQ were from January 2019. ARKS reported to LDEQ that the Facility had deployed passive air monitors around its fenceline, with monitors in 30 locations.

23. Monitors 2, 2.5, and 3 at the Facility are located near to Dock 1 and the marine vapor recovery unit (VRU). Monitor 2.5 is the monitor nearest to Dock 1.

24. The Facility completed a 14-day sampling period ending on January 27, 2020, which the Facility reported as its 26^{th} sampling period of fenceline monitoring.

25. ARKS reported that it received the results of its 26^{th} sampling period of fenceline monitoring at the Facility on or about February 21, 2020, showing an annual benzene Δc of 24.2 μg/m3, exceeding the action level of 9 μg/m3.

26. In the 14-day sampling periods ending on January 27, 2020 and immediately afterwards, Monitor 2.5 registered the following benzene concentrations:

    a. 9.4 $\mu g/m^3$ for the sampling period ending on January 27, 2020. This was the highest reading of any monitor at the Facility for that period.

    b. 15.7 $\mu g/m^3$ for the sampling period ending February 11, 2020. This was the second-highest reading of any monitor at the Facility for that period.

    c. 7.8 $\mu g/m^3$ for the sampling period ending February 24, 2020. This was the third-highest reading of any monitor at the Facility for that period.

d. 11.1 μg/m^3 for the sampling period ending March 9, 2020. This was the highest reading of any monitor at the Facility for that period.

e. 29.1 μg/m^3 for the sampling period ending March 23, 2020. This was the highest reading of any monitor at the Facility for that period.

f. 107 μg/m^3 for the sampling period ending April 6, 2020. This was the highest reading of any monitor at the Facility for that period.

27. In a letter to LDEQ on December 18, 2020, ARKS stated that "[i]n early 2020, the issue has [sic] become almost strictly monitoring point 2.5 with some high [benzene] results" at the Facility.

28. ARKS initiated a root cause analysis and initial corrective actions at the Facility in response to the annual benzene Δc for the period ending January 27, 2020, and completed them on or about April 6, 2020, according to the corrective action plan that ARKS submitted to LDEQ on June 15, 2020. ARKS did not identify root causes or corrective actions specific to the high benzene concentrations registered at Monitor 2.5 or the other monitors near Dock 1 at the Facility at this time.

29. The annual benzene Δc exceeded the action level of 9 μg/m^3 and the two-week benzene Δc exceeded 9 μg/m^3 for each of the five 14-day sampling periods from the period ending on February 11, 2020 through the period ending on April 6, 2020.

30. ARKS did not initiate any further root cause analysis nor initial corrective actions at the Facility in light of the results from the 14-day sampling periods ending on February 11, February 24, March 9, March 23, and April 6. ARKS therefore did not identify root causes or corrective actions specific to the high benzene concentrations registered at Monitor 2.5 or the other monitors near Dock 1 at the Facility at these times.

31. The Facility completed a 14-day sampling period ending on April 20, 2020, which was the 14-day sampling period after the completion of all initial corrective actions.

32. ARKS reported that it received the results of the 14-day sampling period at the Facility ending on April 20, 2020 on April 30, 2020.

33. In the 14-day sampling periods ending on April 20, 2020 and the four 14-day sampling periods immediately afterwards – i.e. those ending May 4, May 18, June 1, and June 15 – Monitor 2.5 registered the highest benzene concentrations of any monitor at the Facility for each period. The results were as follows:

a. 83.9 μg/m3 for the period ending April 20, 2020.

b. 114 μg/m3 for the period ending May 4, 2020.

c. 79.7 μg/m3 for the period ending May 18, 2020.

d. 62.9 μg/m3 for the period ending June 1, 2020.

e. 63.1 μg/m3 for the period ending June 15, 2020.

34. The annual benzene Δc exceeded the action level of 9 $\mu g/m^3$ and the two-week benzene Δc exceeded 9 $\mu g/m^3$ for each of the five 14-day sampling periods from the period ending on April 20, 2020 through the period ending on June 15, 2020.

35. ARKS did not initiate any further root cause analysis nor initial corrective actions at the Facility in light of the results from the 14-day sampling periods ending on April 20, May 4, May 18, June 1, and June 15. ARKS therefore did not identify root causes or corrective actions specific to the high benzene concentrations registered at Monitor 2.5 or the other monitors near Dock 1 at the Facility at these times.

36. ARKS submitted a corrective action plan for the Facility to LDEQ on or about June 15, 2020. Among other measures, the plan included obtaining an optical gas imaging (OGI) camera and using additional monitoring devices in order to seek to "identify other potential sources." It further contained a proposal to install a system of continuous VOC monitors with data recorders, which included monitoring near to Monitor 2.5 and the other monitors near Dock 1. ARKS did not identify corrective actions specific to the high benzene concentrations at Monitor 2.5 or at the other monitors near Dock 1 in the corrective action plan.

37. The annual benzene Δc exceeded the action level of 9 $\mu g/m^3$ and the two-week benzene Δc exceeded 9 $\mu g/m^3$ for each of the six 14-day sampling periods following the submission of the corrective action plan on or about June 15, 2020, i.e. from the period ending June 30, 2020 through the period ending on September 8, 2020.

38. In the 14-day sampling periods ending on June 15, 2020 and immediately afterwards, Monitor 2.5 registered the following benzene concentrations:

a. 63.1 $\mu g/m^3$ for the sampling period ending on June 15, 2020. This was the highest reading of any monitor at the Facility for that period.

b. 30.3 $\mu g/m^3$ for the sampling period ending June 30, 2020. This was the highest reading of any monitor at the Facility for that period.

c. 2.9 $\mu g/m^3$ for the sampling period ending July 13, 2020.

d. 31.2 $\mu g/m^3$ for the sampling period ending July 27, 2020. This was the highest reading of any monitor at the Facility for that period.

e. 2.1 $\mu g/m^3$ for the sampling period ending August 10, 2020.

f. 26.0 $\mu g/m^3$ for the sampling period ending August 25, 2020. This was the highest reading of any monitor at the Facility for that period.

g. 35.2 $\mu g/m^3$ for the sampling period ending September 8, 2020. This was the highest reading of any monitor at the Facility for that period.

39. In July 2020, the Facility changed its marine VRU procedures to allow barges to depressurize upon arrival at Dock 1, according to a December 18, 2020 letter to LDEQ.

40. On September 10, 2020, the Facility identified a leak via leak detection and repair (LDAR) audio, visual, and olfactory (AVO) inspection near to Dock 1. The Facility repaired the leak by September 14, 2020, according to its December 18, 2020 letter to LDEQ.

41. In September 2020, the Facility's 14-day average benzene Δc fell below 9 $\mu g/m^3$ for the first time since the Facility deployed passive air monitors around its fenceline, and remained below 9 $\mu g/m^3$ for the subsequent 14-day sampling periods.

42. In the 14-day sampling periods following the repair of the leak near Dock 1, Monitor 2.5 showed reductions in benzene concentrations to below 9 $\mu g/m^3$, as follows:

a. 41.9 $\mu g/m^3$ for the sampling period ending September 21, 2020. (Half of this period was prior to the leak repair.)

b. 1.8 $\mu g/m^3$ for the sampling period ending October 5, 2020.

c. 1.1 $\mu g/m^3$ for the sampling period ending October 19, 2020.

d. 3.0 $\mu g/m^3$ for the sampling period ending November 2, 2020.

e. 2.7 $\mu g/m^3$ for the sampling period ending November 16, 2020.

f. 2.1 $\mu g/m^3$ for the sampling period ending November 30, 2020.

43. In June 2021, the Facility's annual average benzene Δc fell below the action level of 9 $\mu g/m^3$ for the first time since the deployment of passive air monitors around the Facility's fenceline.

Violations

44. After installing passive air monitors around the Facility property boundary by January 30, 2018 and beginning to take a sample from each monitor every 14 days, ARKS failed to report the fenceline monitoring results after obtaining 12 months of data, in violation of 40 C.F.R. § 63.655(h)(8).

45. ARKS failed to conduct a root cause analysis or undertake corrective actions after determining that the Facility's annual average Δc for benzene was greater than 9 $\mu g/m^3$ for the sampling period ending on January 29, 2019, and for subsequent sampling periods until January 27, 2020, in violation of 40 C.F.R. § 63.658(g).

46. ARKS further violated the 40 C.F.R. § 63.658(g) requirement to determine and implement, within 45 days, an appropriate corrective action to reduce fenceline benzene concentrations below 9 $\mu g/m^3$ at the Facility because ARKS determined on February 21, 2020 that its annual average Δc for benzene calculated for the sampling period ending on January 27, 2020 was greater than 9 $\mu g/m^3$, but failed to conduct a root cause analysis or undertake corrective actions to address the benzene concentrations at Monitor 2.5 and other monitors near Dock 1, despite repeated 14-day sampling period results indicating that Monitor 2.5 regularly measured benzene concentrations that were above the action level and were the highest benzene concentrations at the Facility.

47. ARKS further violated 40 C.F.R. § 63.658(g) by failing to conduct a root cause analysis or initiate corrective actions to address the benzene concentrations at Monitor 2.5 and other monitors near Dock 1 within 50 days of the ends of the 14-day sampling periods ending on February 11, February 24, March 9, March 23, April 6, April 20, and May 4, 2020.

48. ARKS violated the 40 C.F.R. § 63.658(h) requirement to develop a corrective action plan with additional measures to reduce fenceline benzene concentrations at the Facility below 9 $\mu g/m^3$ and submit the plan within 60 days because ARKS determined on April 30, 2020 that the annual average Δc for benzene calculated for the sampling period ending on April 20, 2020 was greater than 9 $\mu g/m^3$, but failed to identify corrective actions to address the benzene concentrations at Monitor 2.5 and at other monitors near Dock 1, and a schedule to complete such actions, in the corrective action plan submitted on June 15, 2020, despite repeated 14-day sampling period results indicating that Monitor 2.5 regularly measured benzene concentrations that were above the action level and were the highest benzene concentrations at the Facility.

Enforcement

The EPA's investigation into this matter is continuing. The above information represents specific violations that EPA believes, at this point, are sufficiently supported by evidence to warrant the allegations in this FOV. The EPA may find additional violations as the investigation continues. Section 113(a)(3) of the Act, 42 U.S.C § 7413(a)(3), provides the Administrator with several enforcement options to resolve these violations, including issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action.

Opportunity to Confer

ARKS may, upon request, confer with EPA. The conference will enable ARKS to present evidence bearing on the finding of violations, on the nature of the violations, and on any efforts it

may have taken or proposes to take to achieve compliance. ARKS has a right to be represented by counsel. A request for a conference must be made within ten (10) days of receipt of this FOV. Please contact Providence Spina, Attorney Advisor, at spina.providence@epa.gov or (202) 564-2722, to request a conference. Any technical questions may be directed to Patrick Foley, Environmental Engineer, at foley.patrick@epa.gov.