UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

IN THE MATTER OF) PETITION FOR OBJECTION
Clean Air Act Title V Permit For))
DRUMMOND COMPANY's) Permit No. 4-07-0001-04
ABC COKE PLANT	
Final Title V/State Operating Permit)
In Jefferson County, AL)
)
Issued by the Jefferson County Department)
of Health)

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF TITLE V PERMIT NO. 4-07-0001-04 FOR DRUMMOND COMPANY'S <u>ABC COKE PLANT</u>

Pursuant to Clean Air Act § 505(b)(2) and 40 CFR § 70.8(d), Gasp petitions the Administrator of the United States Environmental Protection Agency ("EPA") to object to a reissuance of proposed Title V Operating Permit for the Drummond Company's ABC Coke Permit, Permit Number 4-07-0001-04. The permit was issued by the Jefferson County Department of Health ("JCDH"). A copy of the proposed permit is attached as Exhibit A.

BACKGROUND

ABC Coke has been in operation for over 100 years and is the largest merchant producer of foundry coke in the United States and Mexico.¹ It heats and pressurizes coal to burn off impurities and produce coke, a fuel that is stronger than coal. The plant consists of 132 coke ovens and operates twenty-four hours per day, seven days per week, 365 days per year.² Drummond Company, the owner of the plant, whose revenue in 2018 was \$2.8 billion, was ranked #165 in a list of the largest privately-held companies in America, and #2 largest privately-held company in Alabama.³ One of Drummond's top executives was recently convicted of bribing a sitting legislator in order to keep the area around ABC Coke from being listed on the

¹U.S. ENVIRONMENTAL PROTECTION AGENCY [hereinafter EPA], *Site Inspection Report, South Tarrant Neighborhood Site, Tarrant, Jefferson County, AL, EPA ID No. ALN0004043036*, July 11, 2016, at 3, <u>http://www.aldailynews.com/wp-content/uploads/2018/10/2016.07.11-EPA-SI-Report-South-Tarrant-Neighborhood-Site-report-only.pdf</u> (last visited June 3, 2019); *see also*, Library of Congress, Alabama By-Products Company, Coke Plant, Highway 79 (Pinson Valley Parkway), Tarrant City, Jefferson County, AL, <u>https://www.loc.gov/item/al0916/</u> (last visited June 3, 2019).

² Complaint ¶ 57, United States v. Drummond Co., Inc., No. 2:19-cv-240-AKK (Feb. 8, 2019 N.D. Ala.), Doc. 1. ³ FORBES, *America's Largest Private Companies List - #165 – Drummond* (Oct. 24, 2018),

https://www.forbes.com/companies/drummond/#5bf208c726fc.

Superfund National Priority List.⁴ ABC Coke is located within one mile of a predominantly African-American neighborhood, less than a mile from Tarrant Elementary School. The JCDH issued Drummond's initial Title V permit for ABC Coke (Permit No. 4-07-0001-01) on November 21, 2003.

There were 72 comments on the draft permit issued in July of 2018; all the comments voiced concerns regarding the permit. The Southern Environmental Law Center ("SELC") and Gasp provided comments to JCDH on the draft permit issued in July of 2018. A copy of SELC and Gasp's comments are attached as Exhibits B and C. JCDH's response to comments is attached as Exhibit D.

EPA and JCDH filed a complaint and proposed consent decree with Drummond that was filed with the Northern District of Alabama on February 8, 2019, three months after the close of public comments.⁵ The complaint addresses alleged violations of the Clean Air Act. Specifically, the complaint alleged that Drummond violated NESHAP requirements for Subpart L by failing to inspect and adequately operate its benzene recovery/destruction control systems (pursuant to 40 C.F.R. § 61.132), monitor (pursuant to 40 C.F.R. § 61.133(c)), and maintain records (pursuant to 40 C.F.R. § 61.138(a)(1)); violated NESHAP requirements in Subpart V pertaining to equipment leaks (violating 40 C.F.R. §§ 61.242-6(a)(1), .242-1(d), .242-4(a), .242-7(c)(2), .242-7(h)(3),.245(b)(1), .246(b)(1), and .246(e)(1)); violated NESHAP requirements for Subpart FF regarding benzene operations for failure to determine annual waste quantity of benzene (in violation of 40 C.F.R. §61.355(b)), failing to report benzene waste streams in TAB reports and failing to submit TAB reports (violating 40 C.F.R. §§ 61.355(a) and 355(b)(2)(i)), and committing other operation and monitoring violations (pursuant to 40 C.F.R. §§ 61.341, .346(a)(1), .346(A)(2), .347(a)(1), .347(a)(2)); and finally violated Subparts L, V and FF of 40 C.F.R. § 61, which constitutes a violation of its Title V permit and thus a violation of Section 502(a) of the CAA, 42 U.S.C. 7661a(a).

TIMELINESS

Jefferson County Department of Health sent this permit to EPA on March 1, 2019.⁶ The 45 days for EPA to review the permit expired on April 14, 2019. This Petition is filed June 13, 2019, which is within 60 days following the end of EPA's 45-day review period, as required by Clean Air Act ("CAA") § 505(b)(2). The Administrator must grant or deny this petition within 60 days after it is filed.⁷ If the Administrator determines that the permit does not comply with the

⁴ Steven Mufson, *The Betrayal: How a Lawyer, a Lobbyist, and a Legislator Waged War on an Alabama Superfund Cleanup*, WASH. POST, (Apr. 25, 2019), available at <u>https://www.washingtonpost.com/national/health-science/the-betrayal-how-a-lawyer-a-lobbyist-and-a-legislator-waged-war-on-an-alabama-superfund-</u>

cleanup/2019/04/24/834087ae-4c1a-11e9-9663-00ac73f49662 story.html?utm term=.594975afa693.

⁵ Complaint; *see also* Proposed Consent Decree, *United States v. Drummond Co., Inc.*, No. 2:19-cv-240-AKK (Feb. 8, 2019 N.D. Ala.), Doc. 2-1.

⁶ See 42 U.S.C § 7661(d); see also Letter from JCDH to Sarah Stokes of SELC (Mar. 4, 2019) (attached as Exhibit E).

⁷ 42 U.S.C. § 7661d(b)(2).

requirements of the CAA, or fails to include any "applicable requirement," he must object to issuance of the permit.⁸

SPECIFIC OBJECTIONS

The Administrator must object to Drummond's proposed Title V permit for ABC Coke because it does not comply with 40 CFR Part 70. All of the issues discussed below were raised with reasonable specificity in public comments on the draft permit. Issues presented in Section 1 and 2 were not raised during the public comment period, because it was impracticable to raise those issues within the comment period.⁹ In sum, the Administrator should deny the permit because:

- 1. <u>The permit improperly omits requirements applicable to Total Annual Benzene</u> from the coke by-product recovery plant and the public did not have a meaningful opportunity to comment on that omission.
- 2. <u>The permit fails to provide periodic monitoring sufficient to assure compliance.</u>
 - a. All components of the LDAR program must undergo a full audit in order to ensure that they are tagged as the permit requires.
 - b. The Benzene waste stream in the by-product recovery plant must be monitored weekly or daily in order to ensure compliance with the Benzene requirements.
- 3. Drummond's permit application was incomplete.
 - a. Multiple plans referenced in the draft permit are not attached either to the draft permit nor permit application nor are they referenced correctly and thus are not publicly available.
 - b. In violation of 40 CFR Part 70.5, the proposed permit's application lacked sufficient Potential to Emit data to determine whether certain applicable requirements are triggered.
 - i. *The Potential to Emit for BSO, SO2, and NOx from door leaks must be recalculated.*
 - ii. *The Potential to Emit for SO2, NOx, CO, and VOC from soaking must be recalculated.*
 - iii. The Potential to Emit for VOC from flares must be recalculated.
 - iv. The Potential to Emit for SO2 and emissions characterizations from COG fuel gas combustion units were calculated incorrectly because they were based on blanket restrictions.
 - v. The Potential to Emit for particulate emissions from pushing, quenching, and solids materials handling and storage must be recalculated because it is based on averages.
 - vi. The Potential to Emit for NOx from the boilers must be recalculated.
 - c. Drummond's permit application did not include detailed emissions information for all sources of emissions, namely the emergency flares.

⁸ 42 U.S.C. § 7661b(b); *see also* 40 C.F.R. § 70.8(c)(1) ("The [U.S. EPA] Administrator will object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under this part.")

⁹ 42 USC § 7661d(b)(2).

ENVIRONMENTAL JUSTICE

As the draft permit pointed out, "ABC Coke is located in North Birmingham, which has been identified as an environmental justice area."¹⁰ Many of the comments to JCDH refer to this. Meagan Lyle stated "[t]he emissions and exposure to toxic chemicals is disproportionately affecting black and brown communities, and like so many people have said before me, people are dying in North Birmingham."¹¹ Richard Dickerson explained "in the communities surrounding ABC Coke, predominantly poor black communities, people are suffering and people are dying."¹²

Environmental justice provisions like Executive Order 12898 do not impose enforceable duties or responsibilities that are distinct from other regulations. However, in a 2012 partial grant to a petition to object, EPA acknowledged that because "[t]he immediate area around the [permitted] facility is home to a high density of low-income and minority populations and a concentration of industrial activity. . . [f]ocused attention to the adequacy of monitoring and other compliance assurance provisions is warranted in this context."¹³

Such "[f]ocused attention" is also required in this case, in light of the environmental justice concerns and the abuses of government power that have obscured the voices and interests of the population most affected by Drummond.

I. <u>The permit improperly omits requirements applicable to Total Annual</u> <u>Benzene from the coke by-product recovery plant and the public did not</u> <u>have a meaningful opportunity to comment on that omission.</u>

The permit has no requirements to regulate when the Total Annual Benzene from the plant is greater than 10 Mg/yr even though there are federal requirements for this situation. Regulation 40 C.F.R. § 61.357 requires a coke by-product recovery plant to produce a Total Annual Benzene ("TAB") report annually. This section sets forth different requirements based off the amount of TAB quantity for under 1 Mg/year ((b)), under 10 Mg/year ((c) and greater than 10 Mg/year ((d)). After 10 Mg/yr, different regulations kick in, requiring more stringent reporting and potentially requiring the plant to remove the Benzene. The current permit only

¹⁰ JCDH, STATEMENT OF BASIS FOR TITLE V RENEWAL PERMIT – ABC COKE 9 (July 31, 2018) (attached as Exhibit F). According to 2010 local census data to of Jefferson County and Alabama, in all of the State of Alabama, the percent Black or African-American population in 2010 was 26.2%. The percent Black or African-American population in all of Jefferson County in 2010 was 42.0%. *See* U.S. CENSUS BUREAU, PROFILE OF GENERAL POPULATION AND HOUSING CHARACTERISTICS, 2010 DEMOGRAPHIC PROFILE DATA – JEFFERSON CTY., AL. (2010). Racial demographics in proximity to ABC Coke can be divided between 1, 3 and 6 miles from the plant: within 1.0 mile (65.2% Black), 3.0 miles (66.1% Black), and 6.0 miles (57.8% Black) of ABC Coke.

¹¹ See Meagan Lyle, Comment on ABC Coke Draft Title V Renewal Permit (Exhibit D), at 76 (Nov. 15, 2018); see also Alexandria MacKay, *Id.* at 22 ("Pollution from ABC Coke is an environmental justice issue."); Richard Rice, *Id.* at 34 ("[P]ollution form ABC Coke is an environmental justice issue."); Katherine Pearson, *Id.* at 32 ("I have seen evidence that leads me to believe that the lower-income families living near ABC Coke in Tarrant suffer real health problems caused by the pollutants from ABC Coke.").

¹² Richard Dickerson, *Id.* at 67.

¹³ EPA ORDER ON PETITION NO. V-2011-2, In the Matter of United States Steel Corp. – Granite City Work 6 (Dec. 3, 2012), https://www.epa.gov/sites/production/files/2015-08/documents/uss_2nd_response2009.pdf.

gives requirements if the TAB is less than or equal to 1 Mg/yr or less than or equal to 10 Mg/yr,¹⁴ and the Statement of Basis for the permit states that the TAB does not exceed 1 Mg/year.¹⁵

However, this is contradicted by the parties themselves. EPA and the JCDH filed a complaint and proposed consent decree against ABC Coke on February 8, 2019, almost three months after the public comment period had closed. The complaint charges ABC Coke of not correctly reporting its benzene emissions.¹⁶ The complaint states, "[t]he facility had a total annual benzene quantity from waste equal to or greater than 10 megagrams per year because, among other waste streams, the aqueous overflow from the BTX decanter going into the naphthalene sump, and flow from the light oil pad condensate to a dirty water sump, were required to be included in calculation of the TAB."¹⁷ The complaint also alleges that "at all relevant times Drummond has failed to accurately determine the annual waste quantity at the point of generation of each waste stream using one of the methods designated in 40 C.F.R. § 61.355(b)(5)" and that "at all relevant times"¹⁸ Drummond failed to report is benzene waste streams in TAB reports and failed to submit TAB reports required under 40 C.F.R. § 61.357(a)(1) through (3).¹⁹ Additionally, in EPA's Information Sheet for Drummond's Clean Air Act Settlement, EPA states that "EPA and JCBH alleged that Drummond did not identify and include in its TAB calculation all benzene-containing waste water streams and that as a result of the failure to include those waste streams, Drummond miscalculated the TAB to be under 1 Mg/yr when it was actually over 10 Mg/yr, and failed to take actions to properly control, reduce or eliminate the benzene in those streams as required."²⁰

EPA tries to fix this discrepancy between the permit and the complaint by explaining on its website:

EPA recalculated the facility's TAB at approximately 38 Mg/yr by including additional alleged waste streams identified by EPA and the Jefferson County Board of Health (JCBH) during the inspection. Because the TAB exceeded 10 Mg/yr, EPA and JCBH asserted that Drummond was required under Subpart FF to conduct corrective actions to seal up leaking pipes and equipment and to install additional controls. After Drummond completed actions to address some of the more significant concerns such as permanently enclosing an open-ended overflow pipe, several of the additional waste streams identified by EPA and JCBH were no longer relevant to the TAB calculation, thereby reducing the

¹⁴ JCDH, FINAL PERMIT NO. 4-07-0001-04 FOR ABC COKE 56, (Aug. 16, 2018) (permit conditions 34 and 35). ¹⁵ JCDH, DRAFT PERMIT NO. 4-07-0001-04 FOR ABC COKE 5.

¹⁶ Notice of Extension of Public Comment Period for Consent Decree Under The Clean Air Act, 84 Fed. Reg. 16038 (Apr. 17, 2019), <u>https://www.federalregister.gov/documents/2019/04/17/2019-07586/notice-of-extension-of-public-comment-period-for-consent-decree-under-the-clean-air-act.</u>

¹⁷ Complaint \P 63.

¹⁸ *Id.* ¶ 85. It is noteworthy that the Complaint provides that these violations occurred "at all relevant times," while other claims specify specific date ranges. *Compare Id., with Id.* at ¶¶ 88-93. It is reasonable to glean from the Complaint, and Appendix B to the proposed consent decree (Corrective Actions Completed at Facility Prior to Lodging of the Consent Decree), which includes no reference to TAB calculations or reports, that there is not a TAB calculation more recent than that cited in the Complaint.

¹⁹ Complaint ¶¶ 85-87.

²⁰ EPA, EPA IN ALABAMA - INFORMATION SHEET FOR DRUMMOND'S CLEAN AIR ACT SETTLEMENT, <u>https://www.epa.gov/al/drummond-company-clean-air-act-settlement-information-sheet</u> (emphasis added).

TAB. EPA and JCBH anticipate that Drummond's actions taken to date, along with additional actions required under the Consent Decree to seal and enclose any remaining leaking equipment and to install additional controls will result in the TAB being reduced below 1 Mg.²¹

This assertion is not stated in the complaint or proposed consent decree, but added as an ad-hoc explanation on the website. The EPA "anticipates" that with Drummond's past actions and "additional actions" required in the future, that Drummond will be below 1 Mg/yr.²² However, this is a speculative prediction. At no point during the 2014 permit renewal nor during the most recent permit renewal in 2019 did Drummond, the EPA, or JCDH offer evidence that its TAB was under 1 Mg/yr. In fact, quite the opposite; the TAB calculation was denied to Gasp on several occasions. Gasp submitted various FOIA requests to EPA and records requests to JCDH for the most recent TAB calculations and TAB reports; however, these requests were not filled.²³ EPA's conclusory statements that repairs made by Drummond and those addressed by the proposed consent decree "will result in the TAB being reduced below 1 Mg" is conjectural. Absent an explanation, the permit is deficient and EPA must object to the permit.

The 2018 Statement of Basis for the permit also asserts that the "actual TAB does not exceed 1 megagram per year, demonstrated by monthly sampling consistent with §61.352(a)(1) and annual recalculation and reporting of the TAB."²⁴ Yet on the other hand, JCDH filed a complaint against Drummond months after this Statement of Basis was released saying just the opposite.²⁵ Then one month later, in its Response to Comments, JCDH said that the plant "was in compliance."²⁶ JCDH provided not only misleading information for ABC Coke's TAB in the Statement of Basis, but they intentionally concealed information about past noncompliance in its Response to Comments. Additionally, the Statement of Basis lacks a current justification for how Drummond is reporting a TAB less than 1 Mg/year. JCDH did not fulfill its requirements under 40 C.F.R.§ 70.7(a)(5) by omitting these critical facts. In a previous petition, the EPA has written, "[T]he Statement of Basis accompanying the permit must include a reasoned explanation..."²⁷ for its requirements. JCDH must give a reasoned explanation, rather than just an assertion, in the

²¹ *Id*.

²² Id.

²³ The final response submitted by EPA to Gasp in request EPA-R4-2018-011363 included a list of attachments, the first of which was a Subpart FF TAB report. However, the report was not attached to the documents first produced. On May 10, 2019, pursuant to follow up conversations with FOIA specialists to receive the missing attachments, EPA sent more responsive documents. Gasp informed the FOIA specialist on May 13, 2019 that the subsequent production still did not include a TAB report or TAB calculations. On May 14, 2019, Gasp received from EPA Subpart FF TAB Calculations that the inspector's collected during their 1990 inspection (Exhibit G). Gasp then requested a more recent TAB calculation, for which the FOIA specialist created a new FOIA request, for which Gasp has not received records. On June 5, 2019 Gasp submitted a records request to JCDH requesting, in part, "The most recent total annual benzene ("TAB") report pursuant to 40 C.F.R. § 61.355(b)(2)(i) that JCDH has on file." Letter from Haley Colson Lewis to Jonathon Stanton (June 5, 2019) (on file with author). JCDH sent instead a "TAB certification form" where ABC Coke "certifies" that their TAB is less than 10 Mg/year (Exhibit H). ²⁴ JCDH, *supra* note 15, at 5.

²⁵ Complaint ¶¶ 85-87, ("the facility had a total annual quantity from waste equal to or greater than 10 Mg/yr.")

²⁶ JCDH, Response to Comment on ABC Coke Draft Title V Renewal Permit (Exhibit D) at 22 (Mar. 1, 2019).

²⁷ EPA, PETITION NO. IV-2015-2, In the Matter of Piedmont Green Power, LLC. 4 (Dec. 13, 2016), https://www.epa.gov/sites/production/files/2016-12/.../piedmont_response2015.pdf.

Statement of Basis²⁸ for why the stricter requirements of greater than 10 Mg/year do not apply to Drummond. EPA has stated on its website that at some point after 2011, the TAB was 38 Mg/year.²⁹ The record contains no evidence supporting the contention that Drummond is, in fact currently not exceeding a 1 Mg/year TAB.

When a petitioner objects to a Title V permit on the basis of the unavailability of information during the public comment period, the petitioner "must demonstrate that the unavailability deprived the public of the opportunity to meaningfully participate during the permitting process . . . To guide this analysis under title V, EPA generally looks to whether the petitioner has demonstrated 'that the alleged flaws resulted in, or may have resulted in, a deficiency in the permit's content."³⁰ The public did not have a meaningful opportunity to comment on Drummond's draft permit because accurate Total Annual Benzene reports, as required under 40 C.F.R. § 61.355(b)(2)(i) were not publically available. Additionally, the complaint filed against Drummond by EPA and JCDH was also not publicly available. EPA has now stated that Drummond is producing Total Annual Benzene over 10 Mg/yr, potentially up to 38 Mg/year, which must be regulated differently than how it is currently regulated in the permit.³¹ Had Petitioner known that Drummond's TAB was actually over 10 Mg/year, the Petitioner would have commented that Drummond should be required to fulfil the requirements of 40 C.F.R. § 61.357(d) and that this regulation should be required in the permit. This information was "necessary to determine the applicability of, or to impose, any applicable requirement" as required by 40 C.F.R. §70.5(c).

Under 42 USC § 7661d(b)(2), Gasp and SELC are not precluded from raising this pertinent issue as a grounds for which EPA must object to the permit. Pursuant to 42 USC § 7661d(b)(2), for a petition to be successful, the petitioner must have raised objections during the comment period "unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period." The general rule of raising objections during the comment period does not apply when "the grounds for such objection arose after" the public comment period. ³² For example, in *In the Matter of Cash Creek Generation, LLC*, EPA considered (and ultimately granted) an objection not raised with reasonable specificity during the public comment process when it was impracticable for Petitioners to raise such claims during the public comment period. ³³ Here, too, it was impracticable for petitioners to raise the claims that the TAB requirement in the permit is insufficient to meet federal regulations.

²⁸ See Id. ("[T]he EPA has pointed out in numerous orders that ... general assertions or allegations did not meet the demonstration standard."); see also Id. at 11 ("[T]he Statement of Basis accompanying the permit must include a reasoned explanation for why the monitoring approach selected...").

²⁹ EPA, *supra* note 20.

³⁰ EPA, ORDER ON PETITION NO. IV-2010-4, In the Matter of Cash Creek Generation, LLC. 9, https://www.epa.gov/sites/production/files/2015-08/documents/cashcreek response2010.pdf.

³¹ Complaint \P 63.

³² 42 USC § 7661d(b)(2) (2019).

³³ EPA, ORDER ON PETITION NOS. IV-2008-1 & IV-2008-2, In The Matter Of Cash Creek Generation, LLC., 2009 WL 7513857, at *10 (Dec. 15, 2009), <u>https://www.epa.gov/sites/production/files/2015-</u>08/documents/cashcreek response2008.pdf.

II. <u>The permit fails to provide periodic monitoring sufficient to assure</u> <u>compliance.</u>

EPA's regulations in Part 70 consist of both "periodic" and "umbrella" monitoring rules and describe the steps permitting authorities must take to fulfill the monitoring requirement under CAA section 504(c).³⁴ The periodic monitoring rule provides that where an applicable requirement does not itself, "require periodic testing or instrumental or noninstrumental monitoring," the permit-writer must develop terms directing "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit."³⁵

The "umbrella" monitoring rule, 40 C.F.R. § 70.6(a)(3)(C), backstops this requirement by making clear that permit writers must also correct "a periodic monitoring requirement inadequate to the task of assuring compliance."³⁶ This "gap-filler" makes doubly clear that adequate monitoring is required.³⁷ EPA has since affirmed, in a post-*Sierra Club* Title V petition ruling, that these requirements are quite rigorous, making clear that permit writers must develop and "supplement monitoring to assure . . . compliance" on the basis of an extensive record.³⁸

The determination of whether monitoring is adequate in a particular circumstance generally is a context-specific determination. The monitoring analysis should begin by assessing whether the monitoring required in the applicable requirement is sufficient to assure compliance with permit terms and conditions. Some factors that permitting authorities may consider in determining appropriate monitoring are: (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring, process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities. ³⁹ The preceding list of factors provides the permitting authority with a starting point for its analysis of the adequacy of the monitoring.

A. All components of the LDAR program must undergo a full audit in order to enforce the requirement that they must be tagged.

³⁹ EPA, ORDER ON PETITION NO. IV-2015-14, In The Matter Of Tennessee Valley Authority, Bull Run, Clinton, Tennessee 9 (Nov. 10, 2016), <u>https://www.epa.gov/sites/production/files/2016-</u>

³⁴ See 40 C.F.R. §§ 70.6(a)(3)(i)(A), 70.6(a)(3)(i)(B), 70.6(c)(1); see also Sierra Club v. EPA, 536 F.3d 673 (D.C. Cir. 2011) (hereinafter *Sierra Club*) (setting forth the steps and reiterating the necessity to supplement monitoring requirements).

³⁵ 40 C.F.R. § 70.6(a)(3)(i)(B).

³⁶ *Sierra Club*, 536 F.3d at 675.

³⁷ *Id*. at 680.

³⁸ *In re United States Steel Corp.*, Petition No. V-2009-03, 2011 WL 3533368, at *5 (Jan. 31, 2011). ("The rationale for the monitoring requirements . . . must be clear and documented in the permit record," and adequate monitoring is determined by careful, content-specific inquiry into the nature and variability of the emissions at issue).

^{11/}documents/tva_bull_run_order_granting_petition_to_object_to_permit_.pdf.

 $[\]frac{1}{40}$ *Id.* at 7.

Under the LDAR program for the by-product recovery plant, all pumps and valves in light liquid service, valves and pressure relief devices in gas service, open-ended valves, sampling connections, flanges and connectors in VOC service are required to be identified with a weatherproof tag.⁴¹ Yet the proposed consent decree shows that 700 or more of these components were not tagged or properly in the database.⁴² Drummond "commenced" tagging them in 2017, but was not finished at the time of the filing of the complaint in February 2019.⁴³ The permit contains no provisions that will ensure that all such components will be promptly tagged and identified and therefore be subject to the provisions of the LDAR program. In order to ensure that this threshold provision is met, the permit should require one thorough baseline audit or review of all refinery components as well as a requirement to identify any additional new components that are added as part of any physical change at the facility.

This comment was not made during the comment period because it was "impracticable" to do so.⁴⁴ The consent decree had not been released, which revealed that hundreds of parts of the LDAR system had not been properly tagged.⁴⁵ Neither the current draft consent decree nor the permit ensures that all components throughout the plant will be found, properly tagged, and subject to the LDAR program. "The likelihood of a violation of the requirements" is a factor that EPA must consider when reviewing monitoring in the permit.⁴⁶ There is no monitoring that ensures compliance with this requirement in the permit.

B. The Benzene waste stream in the by-product recovery plant must be monitored weekly or daily.

The complaint reveals that the Benzene waste stream is not being monitored enough to ensure compliance. The JCDH and EPA state in the complaint, "At all relevant times, Drummond has failed to accurately determine the annual waste quantity at the point of generation of each waste stream \dots "⁴⁷ Condition 1.C of the permit for the by-product recovery plant states that "Title V monitoring will be accomplished by measuring the flow rate, using the procedures of § 61 .355(b), and the Benzene concentration of *each* waste stream entering the unit *at least once per month* by collecting and analyzing one or more samples using the procedures specified in § 61 .355(c)(3)."⁴⁸ In light of the past non-compliance, the facility must conduct at least weekly or even daily sampling of the flow rates and Benzene concentrations of each waste stream. This data, once collected at high frequency for some period of time (six months or a year) can then be used to reduce the frequency of sampling if appropriate depending on the variabilities of flow and Benzene concentrations – i.e., waste streams with high variability would continue to be monitored at high frequency. Over the years, there has been great variability of the TAB at the plant; EPA purports to have recorded Total Annual Benzene at 38 Mg/yr, but now is

⁴¹ JCDH, *supra* note 26, at 37; *see* JCDH, FINAL PERMIT NO. 4-07-0001-04 FOR ABC COKE, (Aug. 16, 2018) at 41 (condition 7).

⁴² Proposed Consent Decree B-1.

⁴³ *Id*.

⁴⁴ See 42 U.S.C. § 7661d(b)(2).

⁴⁵ Proposed Consent Decree B-1.

⁴⁶ EPÅ, ORDER ON PETITION NO. IV-2015-14, *supra* note 39, at 9.

⁴⁷ Complaint ¶ 85.

⁴⁸ JCDH, FINAL PERMIT NO. 4-07-0001-04 FOR ABC COKE, (Aug. 16, 2018) (condition 1.c).

claiming that it may be 1 Mg/yr.⁴⁹ A once-per-month sample would not provide any assurance that the underlying variability is captured and therefore that the TAB is "accurately determined."

This comment was also not made during the comment period because it was "impracticable" to do so.⁵⁰ The complaint and attached consent decree were promulgated in February, after the close of comments.

III. Drummond's permit application was incomplete.

Under 40 C.F.R. § 70.7(a), a permit can "be issued only if all of the following condition has been met: (i) The permitting authority has received a complete application for a permit" "An application may not omit information needed to determine the applicability of, or to impose, any applicable requirement^{"51} A draft permit must include all applicable emission limits and standards and must also include all monitoring, reporting and recordkeeping requirements to assure compliance with those standards.⁵² Citizens possess the right to enforce federally enforceable provisions under the CAA.⁵³

A. Multiple plans in the draft permit are not attached either to the draft permit nor permit application nor are they referenced correctly and thus are not publicly available.

The EPA should object to the permit because all plans referenced throughout the permit are not appropriately incorporated by reference into the permit. The referenced plans throughout the permit are not attached to the permit or readily available, nor are they sufficiently described. EPA has emphasized that incorporation by reference is "appropriate where the cited requirement is part of the public docket or is otherwise readily available, clear and unambiguous, and currently applicable."⁵⁴ In order for incorporation by reference to be used in a way that fosters public participation and results in a Title V permit that assures compliance with the Clean Air Act, it is important that:

> (1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of a document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation.⁵⁵

⁴⁹ EPA, *supra* note 20.

⁵⁰ See 42 U.S.C. § 7661d(b)(2).

⁵¹ 40 C.F.R. § 70.5(c).

⁵² 42 U.S.C. §§ 7661a(a), 7661c(a); 57 Fed. Reg. 32,250, 32,251 (July. 21, 1992) (EPA final action promulgating the part 70 rule). ⁵³ See 42 U.S.C. §7604.

⁵⁴ EPA ORDER ON PETITION NO. V-2009-3, *supra* note 38, at 43.

⁵⁵ *Id.* (citation omitted).

Gasp commented that none of the following plans, referenced in the draft permit, were attached to the draft permit or permit application.⁵⁶ That remains the case with the final permit, as shown by Table 1 below.

Plan	Page, Condition
SSM Plan	34, G.4.
	67, 20
	70
	74, 3
	79, 20, 21
	88, 28, 29 (B.2, B.3,
	B.4.)
	89, C
	90, C.1., C.8.
Operation &	68
Maintenance	69
("O&M") Plans	80, B
	81, B.5
	86, 25
	87, 26 (C.2.a)
Emissions	29, 33
reduction plans	
Emission control	77, 16
work practice	
plan	
Work practice	67
plan for coke	77, 16
oven battery	
Work practice	70
plan for soaking	85, 24
Source test plan	82, E.3

TABLE 1: Plans listed in the ABC Coke Permit

JCDH generally responded to this and similar public participation concerns regarding the incomplete permit application by including a few sentences describing each plan.⁵⁷ However, even after discussing each of these plans, the public is still unsure about such threshold questions as the general requirements of the plan and which version of a plan is required. And even if JCDH's description is adequate in its comments, a description and version still is required on the face of the permit. EPA has granted a petition to object when the plans incorporated by reference and not attached to the permit did not specify the version applied or include a general description of the plan in the permit. EPA writes that the incorporation by reference "is ambiguous and leaves room for misinterpretation and misunderstanding about what exactly is required

⁵⁶ Gasp, Comment on ABC Coke Draft Title V Renewal Permit (Exhibit C), at 14 (Nov. 15, 2018).

⁵⁷ JCDH, *supra* note 26, at 111-12.

[T]his can create difficulties for all parties, including those who enforce the permit. The ambiguous incorporation also greatly hinders meaningful public participation."⁵⁸

JCDH refers to EPA's "White Paper for Streamlined Development of Part 70 Applications" throughout its response to comments.⁵⁹ However, JCDH neglects to refer to the more recent *White Paper 2*, which directly speaks to the availability of the plans in Table 1 above that are incorporated by reference into the permit. "White Paper 2" states that if the permittee is not going to attach the plans, EPA *requires* JCDH to provide more detail regarding the above plans incorporated by reference into the permit.⁶⁰ The draft permit should (1) specifically identify each plan, (2) provide descriptive information such as the title or number of the plan and the date of the plan be included so that there is no ambiguity as to which version of a plan is being referenced; and (3) the plans incorporated by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation.⁶¹

JCDH also addressed generally the availability of plans by highlighting the requirements of JCDH to provide all relevant supporting materials to the public under 40 C.F.R. §70.7(h).⁶² The Department did provide these plans requested by Petitioners. However, JCDH's production of records upon request by Gasp is separate and apart from its obligation to ensure that all requirements are clear and that emission limits and operational requirements are included on the face of the Title V permit. This is to ensure that requirements are clear to the enforcement agency and to all the public, not just Gasp. EPA must object to the permit, as the plans referenced throughout the draft permit are not attached, nor do they specify each version, the date of the plan, or a general description of each plan.

B. In violation of 40 CFR Part 70.5, the proposed permit's application lacked sufficient Potential to Emit data to be able to determine whether certain applicable requirements are triggered.

The permit application lacks sufficient Potential to Emit data for the permitting authority to determine whether certain requirements are appropriately applied to this facility. Without complete information in the permit application, a permitting authority cannot determine whether certain requirements such as the New Source Review Program are triggered. Regulation 40 C.F.R. § 70.5(c)(3)(i)-(viii) requires the following emissions-related information in the application:

(i) All emissions of pollutants for which the source is major, and all emissions of regulated air pollutants. A permit application shall describe all emissions of regulated air pollutants emitted from any emissions . . . (iii) Emissions rate in tpy and in such terms as are necessary to establish compliance consistent with the applicable standard reference test method . . . [and] (v) Identification and description of air pollution control equipment

⁵⁸ EPA PETITION NO. V-2009-3, *supra* note 38, at 44. <u>https://www.epa.gov/sites/production/files/2015-08/documents/uss_response2009.pdf</u>.

⁵⁹ JCDH, *supra* note 26, at 102, 111, 118-19, and 121.

⁶⁰ EPA PETITION NO. V-2009-3, *supra* note 38, at 35.

⁶¹ *Id.* at 37.

⁶² JDCH, *supra* note 26, at 113, 117.

and compliance monitoring devices or activities (vi) Limitations on source operation affecting emissions or any work practice standards, where applicable, for all regulated pollutants at the part 70 source . . . (viii) Calculations on which the information in paragraphs (c)(3 (i) through (vii) of this section is based.⁶³

This information must be "sufficient to evaluate the subject source and its application and to determine all applicable requirements."⁶⁴ Further, applications cannot omit "information needed to determine the applicability of, or to impose, any applicable requirement."⁶⁵

The Potential to Emit analysis is faulty. i.

JCDH repeatedly cites to the "White Paper for Streamlined Development of Part 70 Permit Applications" to explain its more "qualitative" analysis.⁶⁶ This EPA white paper is a twenty-three year old, non-binding memo which was promulgated even before the Title V program was launched, to support the premise that "precise emissions estimates are not needed."⁶⁷ However, this white paper applies only to initial permits, not to renewals of permits, and especially not for those permittees renewing for the fourth time: "The EPA is issuing this guidance to enable States to take immediate steps to reduce the costs of preparing and reviewing *initial* part 70 permit applications."⁶⁸ This document's purpose was to clarify "confusion" for applicants, especially since many of the Clean Air Act regulations had not been written and several applicants' did not have monitoring data on which to base their emissions data.⁶⁹ The White Paper itself states the document was not intended to apply long-term: "The EPA strongly urges States to allow sources to take *near term* advantage of the flexibility provided by this paper, particularly during the initial implementation phase of the program."⁷⁰ This document is not relevant for this particular permit, since Drummond has had three previous Title V permits (across 18 years) to determine more accurate emissions calculations at ABC Coke. In any case, the White Paper also says that "more accurate data are preferred if they are readily available . . . The applicant may also use other estimation methods (materials balance, source test, or continuous emissions monitoring (CEM) data) when emission estimates produced through the use of emission factors are not appropriate."⁷¹

Correct emissions data are important for modeling for NAAQS compliance, evaluation of risk impacts, and for determining a proper baseline for new source review (NSR). JCDH says that previously, "some limits were established to prevent changes at ABC Coke from triggering NSR by preventing any additional emissions from exceeding the pollutant specific thresholds for the prevention of significant deterioration (PSD) program and/or the non-attainment new source

 ⁶³ 40 C.F.R. §§ 70.5(c)(3)(i)-(viii).
 ⁶⁴ 40 C.F.R. § 70.5(a)(2).
 ⁶⁵ 40 C.F.R. § 70.5(c).

⁶⁶ JCDH, *supra* note 26, at 102, 111, 118-19, and 121.

⁶⁷ U.S. E.P.A., White Paper for Streamlined Development of Part 70 Permit Applications (July 10, 1995), at 1 [hereinafter "EPA White Paper"]

 $^{^{\}overline{68}}$ Id. at 2 (emphasis added).

 $^{^{69}}$ *Id.* at 5.

⁷⁰ *Id.* at 2 (emphasis added).

⁷¹ *Id.* at 18.

review (NNSR) program permitting requirements."⁷² However, if emissions estimates are not accurate, then those limits will also be inaccurate. Unless JCDH has reasonable, accurate emissions, it is impossible to determine if NSR would be triggered by physical changes or the changes in operations.

For the large majority of its emissions estimates, Drummond uses AP-42 factors to create Potential to Emit estimates. AP-42 explains, and JCDH agrees, site specific test results are best.⁷³ Even though JCDH has been regulating Drummond for 40 years, it still does not have site specific data to estimate most emissions, so it argues that Drummond has to use AP-42.⁷⁴ This is a perpetual circle; because the Title V has no mechanism for requiring more CEMS and stack testing, Drummond's emission data will always be second tier at best and inaccurate at worst.

Not only does Drummond use AP-42 instead of site-specific data to estimate most of its emissions, but it uses "E" rated factors to plug into AP-42's formulas to get a Potential to Emit estimate. These factors are rated "poor" by the EPA and described as factors where "there may be reason to suspect that the facilities tested do not represent a random sample of the industry."⁷⁵ These poor factors are used to estimate the Potential to Emit from door leaks, charging, as well as for coke oven emissions topside, soaking, pushing, underfire stacks, and flare emissions for a number of compounds including VOC, NOx, Co, SO2, TSP, Butadiene, Hydrogen Cyanide, Arsenic, Mercury, Selenium, Carbon Disulfide, Carbonyl Sulfide, Hydrogen Chloride, Hydrogen Fluoride, Hydrogen Sulfide, Ammonia, Methane, PM10, PM2.5, and Carbon Dioxide.⁷⁶ JCDH does not respond to SELC's comment about the repetitive use of "E" rated factors. The continuous use of the "E" factors makes the entire Potential to Emit calculations speculative.

Further, in its Potential to Emit analysis, Drummond is using some data that is over half a century old. For instance, Drummond attempts to estimate sizes of its particulate matter by relying on particle sized data in AP-42 that was obtained almost 50 years ago.⁷⁷ AP-42 warns that "this particle size…may not represent current practice," yet Drummond uses that old information anyway.⁷⁸ It uses a twenty-year-old stack test to speciate the particulate emissions into the pollutants from charging, soaking, pushing, as well as from underfire stacks.⁷⁹

EPA has objected to a permit in the past for the incorrect and irrelevant use of AP-42. "Before using an emission factor compiled in AP-42, EPA advises users to exercise professional judgment to verify that a particular emission factor is sufficiently representative of emissions

⁷² JDCH, *supra* note 26, at 103.

⁷³ *Id.*; *see also* EPA, AP42, FIFTH EDITION COMPILATION OF AIR POLLUTANT EMISSIONS FACTORS, VOLUME 1: STATIONARY POINT AND AREA SOURCES 1(Jan. 1995) (unequivocally states that site specific test results are more accurate) <u>https://www3.epa.gov/ttn/chief/ap42/c00s00.pdf</u>.

⁷⁴ JCDH *supra* note 26, at 105.

⁷⁵ SELC, Comment on ABC Coke Draft Title V Renewal Permit (Exhibit B) 5 (Nov. 15, 2018) (quoting AP42 Part E).

⁷⁶ *Id.* at 10-18; *see also* Title V Permit Application - ABC Coke [hereinafter Application], Appendix A, Attachment II, 2-3.

⁷⁷ SELC, *supra* note 75, at 6.

⁷⁸ AP-42, *supra* note 73, at 12.2-9, <u>https://www3.epa.gov/ttn/chief/ap42/ch12/final/c12s02_may08.pdf.</u>

⁷⁹ SELC, *supra* note 75, at 15.

from the particular activity or source to which it is to be applied."⁸⁰ While all of the emissions estimates should be recalculated using continuous testing instead of AP-42, the following six issues must be resolved because Drummond did not even use AP-42 or any reliable, cited method for these Potential to Emit estimates.

1. The Potential to Emit for BSO, SO2, and NOx from door leaks must be recalculated.

In order to calculate the BSO (benzene soluble organics) emissions from door leaks, Drummond again uses AP-42, but *omits* half of the AP-42 formula. It neglects the part of the formula that factors in emissions observed on the bench.⁸¹ When raised, JCDH says that Drummond does not observe emissions from the bench, so it decided to omit that part of the formula.⁸² First, Drummond has no justification for piece-mealing parts of the formula it feels are irrelevant. More importantly, Drummond directly ignores the AP-42 formula which directs Drummond "to use a 0.06 in the absence of battery-specific observations of door leaks from the bench."⁸³ Drummond did not explain why ignoring this part of the formula was appropriate. If AP-42 is to be used, it at least must be used correctly.

Second, Drummond should have bench observations to actually understand the percentage of leaks. JCDH says that observing from the bench is "more hazardous" due to "the close proximity of the ovens and the presence of moving equipment."⁸⁴ Other coke plants perform bench observations, or else these observations would not be incorporated into a 2008 AP-42 formula for coke plants.⁸⁵ Drummond did not explain why bench observations at its plant are more hazardous than other coke plants.

Additionally, the SO2 and NOx from the door leaks are miscalculated. In order to calculate SO2 and NOx emissions from door leaks, Drummond decides not to use these poor AP-42 factors but decides to adjust these factors downward using a random proportion. Drummond reasons that these factors were based on a pre-NESHAP stack test. Drummond decides to adjust the SO2 and NOx estimates downward on a factor that is determined by comparing the SO2 and NOx to PM emissions for door leaks post and pre-NESHAP.⁸⁶ This is a formula that Drummond seemed to have created out of thin air without any citations in order to lower its SO2 and NOx estimates. Comparing PM emissions with NOx and SO2 emissions has no technical basis. PM emissions are solids, while NOx and SO2 are gaseous emissions; therefore, any new control measures may affect these two very different types of pollutants in different ways at different rates. The door leak Potential to Emit calculations must be recalculated in order to ensure that its NOx and SO2 emissions do not trigger NSR if modifications are proposed. This is especially true since door leaks have been an issue in the past, as Drummond has recorded as high as 20% leaks from the doors and offtakes at ABC Coke.⁸⁷

⁸⁰ EPA PETITION NO. IV-2010-4, *supra* note 30, at 25.

⁸¹ SELC, *supra* note 75, at 12.

⁸² JDCH, *supra* note 26, at 106.

⁸³ AP-42, *supra* note 73, at 12.2-10.

⁸⁴ JDCH, *supra* note 26, at 106.

⁸⁵ AP-42, *supra* note 73, at 12.2-10.

⁸⁶Application, Appendix A, Attachment II, 2-6.

⁸⁷ SELC, *supra* note 75, at 8.

2. The Potential to Emit for SO2, NOx, CO, and VOC from soaking must be recalculated.

Drummond also tries to use the same ratio comparisons with PM as discussed in the previous section in the soaking emissions equations in order to report underestimated SO2, NOx, CO, and VOC emissions.⁸⁸ This formula was created by Drummond, using factors from a twenty-year unreliable study (it speciously assumed that soaking emissions chemically resemble pushing emissions), AP-42 poor factors, and its own created ratios comparing SO2 and other gaseous compounds with PM, in order to come out with lower emissions.⁸⁹ This formula has no basis in any guidance document and therefore is arbitrary and capricious. Site-specific estimates are needed.

3. The Potential to Emit for VOC from flares must be recalculated.

To estimate VOC emissions from flares, Drummond assumes a 99% destruction of the Main Bleeder Flare; however, Drummond never cites to a specific document that supports this claim.⁹⁰ By assuming that 99% of all VOCs are destroyed, it significantly reduces the emissions of the VOC species that would be estimated.⁹¹ JCDH responded:

The Department and EPA have evaluated the flare at ABC Coke as part of a national flare enforcement initiative and no issues were discovered. This included looking at the flare with an optical gas imaging camera and confirmation that the flare meets 40 CFR § 60.18. Generally, the Department and EPA has accepted a destruction range in the 98.5 to 99% range.⁹²

However, 40 CFR § 60.18 is recognized now as incorrect. Regulations for refineries require better parameters to be monitored than what is needed using 40 CFR § 60.18. Under the new regulations, operational limits are more stringent for flares, ⁹³ and EPA has adopted different monitoring practices than detailed in 40 C.F.R. § 60.18.

A correct analysis of VOCs emissions from flares is important to determine the health risks to the community. A study has been completed which was cited numerous times in the comments, "Spatiotemporal association between birth outcomes and coke production and steel making facilities in Alabama, USA: a cross-sectional study," which found that there was significant relationship between preterm birth rates and the higher VOCs produced at Drummond

79 Fed. Reg. 36,880, 36,908 (June 30, 2014) (to be codified at 40 C.F.R. pts. 60 and 63).

⁹⁴ *Id.* at 36,950.

⁸⁸ *Id.* at 15.

⁸⁹ *Id.* at 14.

⁹⁰.Application, Section 6, Attachment II, 6-2; *Id.* at 18.

⁹¹ SELC, *supra* note 75, at 18.

⁹² JCDH, *supra* note 26, at 107-08.

⁹³ Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards Proposed Rule,

and other cokes plants.⁹⁵ JCDH replied by saying that the paper found that more research was needed;⁹⁶ however, the paper clearly also found this significant relationship. It is imperative that VOCs from flares are calculated correctly.

4. The Potential to Emit for SO2 emissions nor emissions' characterizations from COG fuel gas combustion units were calculated incorrectly because they were based on blanket restrictions.

Gasp argued that Drummond cannot rely on a blanket pollutant emission rate in the SO2 Potential to Emit determination to calculate SO2 Potential to Emit for underfire stacks and the Excess COG Flare.⁹⁷ JCDH regulations define the meaning of "Potential to Emit:" as "the maximum capacity of a stationary source to emit a pollutant."⁹⁸ And "[r]estrictions contained in state permits which limit specific types and amounts of actual emissions ('blanket" restrictions on emissions) are not properly considered in the determination of a source's potential to emit."⁹⁹

Drummond's SO2 Potential to Emit characterization for the underfire stacks used an SO2 emission factor of 588.39 lbs SO2/MMCF; for the Excess COG Flare, Drummond used an SO2 emission factor of 596.97 lbs SO2/MMCF.¹⁰⁰ Yet these two COG fuel gas combustion units are supposed to be burning the same gas with the same assumed H_2S grainloading rates from the same COG fuel gas main. No emission factor calculations are provided for either of the two emission factors, and the Montrose report attachment to the application provides no explanation for the difference in the two SO2 emission factors used.

JCDH responded that Boiler 9 was subject to New Source Review pre-construction emission limits and New Source Performance Standards and therefore Potential to Emit estimates are not needed.¹⁰¹ However, Gasp's comment was not about the Potential to Emit for Boiler 9, but about the Potential to Emit for underfire stacks and the Excess COG Flare.¹⁰² JCDH's response regarding Gasp's calculations for the H₂S grainloading limit also conflates Boiler 9 with the emissions-unit specific analysis for the Excess COG Flare and does not address the Potential to Emit estimates for the underfire stacks and Excess COG flare. These sources must be separated as the permit itself characterizes Boiler 9 (Emission Unit 001) and the Excess COG flare (Emission Unit 031) as separate emission units. Accordingly, JCDH did not address Gasp's comments in their response.

⁹⁹ United States v. Louisiana-Pacific. Corp., 682 F. Supp. 1141, 1160 (D. Colo. 1988).

⁹⁵ Travis R. Porter et al, *Spatiotemporal Association Between Birth Outcomes and Coke Production and Steel Making Facilities in Alabama, USA: A Cross-Sectional Study,* 13 ENVTL. HEALTH at 7 (2014). www.ncbi.nlm.nih.gov/pmc/articles/PMC4223752. ⁹⁶ IDCU

⁹⁶ JDCH, *supra* note 26, at 14, 61, 77, and 98.

⁹⁷ Gasp, *supra* note 56, at 22.

⁹⁸ JEFFERSON COUNTY BOARD OF HEALTH, AIR POLLUTION CONTROL RULES AND REGULATIONS § 2.4.2(d) (revised Apr. 19, 2017), <u>https://jcdh.org/SitePages/Misc/PdfViewer?AdminUploadId=325</u>.

¹⁰⁰ Application, Appendix A, Attachment II, 2.7, 6.2.

¹⁰¹ JCDH, *supra* note 26, at 121.

¹⁰² Gasp, *supra* note 56, at 22-23.

Because Gasp's comments were not addressed and the deficiencies still remain, Petitioners ask the EPA to object to Drummond's permit where the emissions characterizations for SO2 for the underfire stacks and Excess COG flares are estimated using blanket restrictions.

5. The Potential to Emit particulate emissions from pushing, quenching, and solids materials handling and storage must be recalculated because it is based on averages.

For many of its sources, Drummond uses average values for its Potential to Emit calculation for particulate emissions. "Potential to Emit" is defined as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design" throughout the Alabama SIP.¹⁰³ However, instead of using the maximum value in a formula, Drummond repeatedly uses the average value to calculate Potential to Emit. Drummond uses average stack test emission factors for the various baghouses to estimate potential particulate Potential to Emit estimates from pushing.¹⁰⁴ Further, Drummond uses the average Total Dissolved Solids (TDS) to calculate particulate emissions from quenching.¹⁰⁵ Additionally, it uses the average data for moisture contents to calculate particulate emissions from solid materials handling and storage.¹⁰⁶ The average variables that are plugged into these equations do not show the maximum of what Drummond is able to emit from particulate emissions. JCDH never responds to these comments. The agency "has an obligation to respond adequately to significant comments on the draft title V permit."¹⁰⁷ It is a key principle of administrative law that an inherent component of any meaningful notice and opportunity for comment is a response by the regulatory authority to significant comments.

6. The Potential to Emit for NOx from the boilers must be recalculated.

The Potential to Emit NOx emissions from the boilers is absurdly underinflated. First, for Boiler 9, the *average* NOx emission factor was used to estimate its potential emissions which is contra to the definition of Potential to Emit in the SIP. ¹⁰⁹ EPA has said:

To make a reasoned demonstration that a proposed new source will not cause or contribute to a violation of any NAAQS or applicable PSD increment, the permit applicant and permitting authority should consider the emission rate that reflects the *maximum* allowable operating conditions allowed under the facility's permit as expressed by the enforceable emissions limit, operating level, and operating factor for each applicable pollutant.¹¹⁰

¹⁰³ See Ala. Admin. Code r. 335-3-14.04 (2)(d); see also Ala. Admin. Code r. 335-3-14.05(2)(d).

¹⁰⁴ SELC, *supra* note 75, at 15.

¹⁰⁵ *Id.* at 15-16.

 $^{^{106}}$ *Id.* at 18.

 ¹⁰⁷ EPA PETITION NO. VI-2011, In The Matter Of Williams Four Corners, LLC, Sims Mesa CDP Compressor Station 13 (July 29, 2011), https://www.epa.gov/sites/production/files/2015-08/.../simsmesa_response2010.pdf.
 ¹⁰⁸ Home Box Office, Inc. v. FCC, 567 F.2d 9, 35 (D.C. Cir. 1977) ("the opportunity to comment is meaningless unless the agency responds to significant points raised by the public.")."

¹⁰⁹ ALA. ADMIN. CODE r. 335-3-14.04 (2)(d); see also Ala. Admin Code r. 335-3-14.05 (2)(d).

¹¹⁰ EPA Petition No. IV-2010-4, *supra* note 30, at 26 (emphasis added).

However, in this case, Drummond uses the average NOx emission factor, not the maximum amount possible.

Additionally, for Boilers 7 and 8, Drummond used an emission factor derived from a 30year old 1986 stack test (when the boilers were only 10 years old) instead of using the more recent emissions data from Boiler 9. Even using the average data from Boiler 9 would show that NOx emission factor for Boiler 9 was 70% more than the factors used for Boilers 7 and 8. JCDH does not respond to this comment, which is antithetical to the public participation requirements.¹¹¹ Drummond cannot omit this data just because using an older stack test would help with its calculations. This information in the application must be "sufficient to evaluate the subject source and its application and to determine all applicable requirements."¹¹² Furthermore, applications cannot omit "information needed to determine the applicability of, or to impose, any applicable requirement."¹¹³

ii. <u>Drummond did not include emergency flares' emissions in its permit</u> <u>application</u>.

Under Title V, permitting authorities issuing permits to major sources must "identify all emission limits for the source" including "enforceable emissions limitations and standards" and "requirements to assure compliance with the permit terms and conditions."¹¹⁴ A Title V application must include detailed emissions information *for all sources of emissions* (including emission calculations), control technology and compliance information, and "information that may be necessary to implement and enforce other applicable requirements of the Act or of [Title V] or to determine the applicability of such requirements." ¹¹⁵

EPA must object to the permit because Drummond did not properly identify or account for the emissions of all sources in its permit application, namely four emergency flares.¹¹⁶ Gasp commented that APCP Form 105 did not properly identify all of the four battery emergency flares.¹¹⁷ Further, Gasp argued that Drummond's all-zero emission characterization from its APCP Form 105 for emergency flares for the three process units shown cannot be reconciled with the specific "non-zero" emission characterization found in the Potential to Emit.¹¹⁸ Gasp concluded that Drummond's permit application was incomplete unless and until the four emergency flare units are properly identified with descriptors and their emissions properly characterized on a per flare basis.¹¹⁹

¹¹⁸ Id. at 17.

¹¹¹ JCDH, *supra* note 26, at 108.

¹¹² 40 C.F.R. § 70.5(a)(2).

¹¹³ 40 C.F.R. §70.5(c).

¹¹⁴ Sierra Club, 536 F.3d at 674; 42 U.S.C. § 7661c(a); 42 U.S.C. § 7661c(c).

¹¹⁵ 40 C.F.R. § 70.5(c) (emphasis added).

¹¹⁶ The Statement of Basis section entitled "List of All Units and Emissions Generating Activities" also did not contain a reference to the four battery emergency flares.

¹¹⁷ Gasp, *supra* note 56, at 16-17.

¹¹⁹ *Id*.

JCDH responded that the "0" emissions on APCP Form 105 for the battery reflects the expectation that the emergency flares will seldom be operated and not operated deliberately.¹²⁰ JCDH provided the basis for the non-zero estimated emissions ("a release of eight minutes per year of raw coke oven gas at the maximum gas generation rate for all batteries combined using AP-42 factors which are based on the amount of coal charged").¹²¹ JCDH further justified that *White Paper for Streamlined Development of Part 70 Permit Applications* allows a permittee to omit short-term activities.¹²² First, as stated above, the twenty-four-year-old *White Paper 1* is not relevant to this permit because this is not an initial permit application, but rather Drummond's fourth permit.

Second, 40 C.F.R. § 70.5 makes abundantly clear that all sources of emissions must be included in the permit application.¹²³ A flare is an emissions unit that has the potential to release emissions both when not operating (pilot and purge) and while in use (active flaring). The primary purpose of a flare is to handle "emergency" releases. These emergency releases occur when there are process and other types of malfunctions. The most severe emergency releases occur when there are process and other types of malfunctions: most typically during power outages.¹²⁴ JCDH's belief that omitting emergency flares is harmless contradicts the requirements of 40 C.F.R. § 70.5 that the application must include detailed emissions information *for all sources of emissions*.

Additionally, Gasp raised the issue that Drummond did not provide the method of determining compliance with the source-wide VOC emissions limits that flare systems be capable of controlling 120% of the normal gas flow of gas generated by the battery, capable of controlling VOCs with 95% destruction efficiency and operate with no visible emissions.¹²⁵ Without including the four emergency flares in the estimates, JCDH cannot determine whether Drummond is complying with its permit. Because the four emergency flares likely operate off of battery gas collection mains prior to gas cleaning equipment, it cannot be assumed that the relief gas burned in the four emergency flares is similar to cleaned COG; the raw coke oven gas will contain more particles, VOCs, HAPs, multiple TRS compounds, ammonia than what is likely burned in the excess COG flare. JCDH failed to provide a reasoned explanation for how the compliance demonstration method associated with the VOC emissions limit, which is used to determine compliance with the source-wide VOC limit, accounts for all actual VOC emissions from the four emergency flares omitted. Without accounting for these flares, the VOC efficiency destruction rate used to establish the VOC Potential to Emit limit is not enforceable because it simply assumes a combustion efficiency that does not take into account all emissions sources.

¹²⁰ JCDH, *supra* note 26, at 119.

¹²¹ Id.

 $^{^{122}}$ *Id*.

¹²³ 40 C.F.R. § 70.5(c) (2019).

¹²⁴ ENVIRONMENTAL INTEGRITY PROJECT, Gaming the System: How Off the-Books Industrial Upset Emissions Cheat the Public Out of Clean Air at 2 (Aug. 2004),

www.environmentalintegrity.org/pdf/publications/Report_Gaming_the_System_EIP.pdf. The report found that more than half of the 37 facilities studied had SSM emissions of at least one pollutant that were 25% or more of their total reported annual emissions of that pollutant. For ten of the facilities, upset emissions of at least one pollutant actually exceeded the annual emissions that each facility reported to the state for that pollutant.

¹²⁵ Gasp, *supra* note 56, at 15.

Accordingly, without accounting for all emissions units, Drummond's source-wide VOC limit in the permit is not enforceable and is grounds for EPA to object to the permit.

CONCLUSION

EPA must object to the permit as the Total Annual Benzene requirements are inaccurate, the monitoring is insufficient, and Drummond's application and Potential to Emit estimates do not meet federal standards. To do anything less would allow Drummond to continue evading its obligations under the Clean Air Act.

Haley C. Lewis

Haley Lewis Attorney, Gasp

Jarah Stokes

Sarah Stokes Attorney, Southern Environmental Law Center

CERTIFICATE OF SERVICE

I hereby certify that on June 13, the foregoing *Petition Requesting That The Administrator Object To The Issuance Of Title V Permit No. 4-07-0001-04 For Drummond Company's D/B/A Abc Coke Plant* was filed electronically through the EPA's Central Data Exchange system. A copy of same will be served via Certified Mail, Return Receipt Requested,

to the parties as indicated below.

Mary Walker EPA Region 4 Administrator 61 Forsyth Street, S.W. Mail Code: 9T25 Atlanta, GA 30303-8960 Jefferson County Department of Health 1400 Sixth Avenue South Birmingham, Alabama 35233

Drummond Company, Inc. Attn: ABC Coke, a Division of Drummond Company, Inc. P.O. Box 10246 Birmingham, AL 35202

> <u>/s/ Sarah Stokes</u> Sarah Stokes Attorney for Petitioner Gasp, Inc.