BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF	)	
Clean Air Act Title V Permit (Initial Issuance of Part 70 permit)	)	
Issued to the Cargill Incorporated, Blair, Nebraska Facility (NDEE ID 57902)	)	Operating Permit No. OP96S1-001
Issued by the Nebraska Department of Environment and Energy	)	

Petition to Object to Operating Permit No. OP96S1-001 Issued on May 12, 2022 for the Cargill, Incorporated Facility in Blair, Nebraska

Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. § 70.8(d), Cargill, Incorporated ("Cargill" or "Petitioner") respectfully petitions the Administrator of the United States Environmental Protection Agency ("Administrator" or "EPA") to object to Title V Permit No. OP96S1-001 ("Permit") issued by the Nebraska Department of Environment and Energy ("NDEE") on May 12, 2022 to Cargill's facility located at 650 Industrial Park Drive, Blair, Nebraska ("Blair Facility" or "Facility"). The Clean Air Act ("CAA") mandates that the Administrator "shall issue an objection . . . if the petitioner demonstrates to the Administrator that the permit is not in compliance" with CAA requirements. 42 U.S.C. § 7661d(b)(2). The CAA also requires the EPA to grant or deny any such petition within sixty days of its filing. *Id.*[1]

As discussed below, the Blair Facility Permit does not comply with the CAA; therefore, the EPA Administrator must object to it. Specifically, in the Permit, NDEE imposes new scrubber liquid temperature control and monitoring requirements and new inlet testing and compliance demonstration requirements that are not in compliance with the CAA, because they exceed NDEE's authority under the CAA and are arbitrary and capricious, are not justified by source- or emission point-specific features or science, and are otherwise not supported in the record. NDEE also failed to adhere to administrative process requirements in issuing the Permit.

[1] Cargill has collected and attached hereto as Exhibit 1 the federal and Nebraska statutes and regulations cited in this Petition. This Petition cites directly to the statutes and regulations, which can be cross referenced with the Table of Contents included in Exhibit 1 at page 1.

Cargill timely raised these objections through the submission of written comments[2] during the public comment period[3] for the draft of the Permit.[4] In this petition, Cargill also addresses deficiencies in NDEE's response to Cargill's comments on the draft of the Permit ("Response to Comments"), which was provided to Cargill and EPA on May 12, 2022, thereby commencing EPA's 45-day review period.[5] EPA's 45-day review period for the permit ended on June 10, 2022; the 60-day public petition period began on June 10, 2022 and ends on August 8, 2022. Therefore, this petition is timely. *See* 42 U.S.C. § 7661d(b)(2).

I. FACTS

A. Petitioner Cargill and the Blair Facility

Petitioner Cargill is a multinational agricultural company employing more than 155,000 employees across the globe. 560 of those employees and 400 contractors work at Cargill's Blair Facility. The Cargill Blair Facility operates a wet corn mill that separates and further processes the individual components of a kernel of corn through distinct unit operations to produce several products. These products include dextrose, fructose, animal feed, ethanol, corn oil, and polyols. There is no other facility in the state of Nebraska that has the same combination of unit operations and product lines as the Cargill Blair Facility. Through a recent study, conducted by a third-party, the estimated economic output of the facility with direct, indirect, and induced impact equates to 6,543 jobs created and supported across the state of Nebraska.

This petition primarily addresses new requirements imposed by the Permit on wet scrubbers at seven emission points located in the corn wet milling portion of the facility: EP-7, EP-7A, EP-8A, EP-10, EP-12, EP-66, and EP-67. Below, Cargill provides a brief overview of the features and design of each of the relevant emission points and scrubbers.

1. EP-7: Center Millhouse Scrubber

Emission units located in the Center and West Mill are aspirated to the Center Millhouse Scrubber (EP-7), which is a wet packed bed scrubber. EP-7 is subject to emission limits for volatile organic compounds ("VOC") and sulfur dioxide ("SO_2"). *See* Permit, Page 36, III(EP-7)(3)(a). As is relevant for the purposes of this Petition, the Permit imposes new scrubbing liquid temperature control and monitoring requirements, in addition to monitoring for scrubbing liquid flow rate, pH, and scrubber differential pressure. *See* Permit, Pages 37-38, III(EP-7)(4)(b)(iii),

[2] Cargill's January 31, 2022 comments on the draft of the Permit are attached hereto as Exhibit 2.

[3] The public comment period on the draft of the Permit ended on January 31, 2022.

[4] According to the Public Notice issued in this matter, the public comment period on the draft of the Permit began December 24, 2021.

[5] NDEE's Response to Comments is attached hereto as Exhibit 48. NDEE's Fact sheet is attached hereto as Exhibit 49.

[6] Cargill submitted comments on a prior version of the draft permit on January 11, 2021. NDEE rescinded that version of the draft permit following Cargill's submission of its comments.

(iv). The Permit also requires periodic performance testing that must be performed during the third calendar quarter of each applicable testing year. *See* Permit, Page 37, III(EP-7)(3)(b)(v). As discussed below, Cargill is petitioning EPA to object to the scrubbing liquid temperature control and monitoring permit conditions applicable to EP-7. *See* Permit, Pages 37-38, III(EP-7)(4)(b)(iii)(4); Page 38, III(EP-7)(4)(b)(iv)(3).

2. EP-7A: West Millhouse Scrubber

Emission units located in the Center and West Mill are aspirated to the West Millhouse Scrubber (EP-7A), which is a wet packed bed scrubber. EP-7A is subject to emission limits for VOC, SO_2, and combined hazardous air pollutants ("HAP") (state enforceable only). *See* Permit, Page 43, III(EP-7A)(3)(a). As is relevant for the purposes of this Petition, the Permit imposes new scrubbing liquid temperature control and monitoring requirements, in addition to monitoring for scrubbing liquid flow rate, pH, and scrubber differential pressure. *See* Permit, Page 44, III(EP-7A)(4)(b)(iii), (iv). The Permit also requires periodic performance testing that must be performed during the third calendar quarter of each applicable testing year. *See* Permit, Page 43, III(EP-7A)(3)(b)(v). As discussed below, Cargill is petitioning EPA to object to the scrubbing liquid temperature control and monitoring permit conditions applicable to EP-7A. *See* Permit, Page 44, III(EP-7A)(4)(b)(iii)(4); Page 44, III(EP-7A)(4)(b)(iv)(3).

3. EP-8A: Gluten Flash Dryer #2 Scrubber

EP-8A is a wet valve tray scrubber and serves Gluten Flash Dryer #2. EP-8A is subject to emission limits for VOC, SO_2, nitrogen oxides ("NOx"), carbon monoxide ("CO"), particulate matter ("PM"), acetaldehyde, and combined HAP (state enforceable only). *See* Permit, Pages 48-49, III(EP-8A)(3)(a). The Permit requires monitoring for scrubbing liquid flow rate and scrubber differential pressure for EP-8A. *See* Permit, Page 50, III(EP-8A)(4)(b)(iii). The Permit imposes a new requirement that performance testing for VOC and HAPs be performed "before the emissions stream enter the scrubber", i.e., at the scrubber inlet. *See* Permit, Page 49, III(EP-8A)(3)(b)(iv). As discussed below, Cargill is petitioning EPA to object to this inlet testing permit condition applicable to EP-8A.

4. EP-10: Germ Fluidized Bed Dryer Scrubber

EP-10 is a wet centripetal vortex scrubber and serves emission units associated with the germ fluidized bed dryer. EP-10 is subject to emission limits for VOC, SO_2, NOx, CO, PM, and PM_{10}. *See* Permit, Pages 70-71, III(EP-10)(3)(a). The Permit requires monitoring for scrubbing liquid flow and pH for EP-10. *See* Permit, Page 71, III(EP-10)(4)(b)(iii). The Permit imposes a new requirement that performance testing for VOC and HAPs be performed "before the emissions stream enter the scrubber", i.e., at the scrubber inlet. *See* Permit, Page 71, III(EP-10)(3)(b)(iv). As discussed below, Cargill is petitioning EPA to object to this inlet testing permit condition applicable to EP-10.

5. EP-12: Fiber Flash Dryer #1 Scrubber

EP-12 is a wet valve tray scrubber and serves Fiber Flash Dryer #1, as well as the WW Anaerobic Reactors. EP-12 is subject to emission limits for VOC, SO_2, NOx, CO, PM, PM_{10}, and combined HAPs. *See* Permit, Pages 80-81, III(EP-12)(3)(a). As is relevant for the purposes of this Petition, the Permit imposes new scrubbing liquid temperature control and monitoring requirements, in addition to monitoring for scrubbing liquid flow rate, pH, and scrubber inlet pressure. *See* Permit, Pages 82-83, III(EP-12)(4)(b)(iii), (iv). The Permit also requires periodic performance testing that must be performed during the third calendar quarter of each applicable testing year. *See* Permit, Page 81, III(EP-12)(3)(b)(v). As discussed below, Cargill is petitioning EPA to object to the scrubbing liquid temperature control and monitoring permit conditions applicable to EP-12. *See* Permit, Page 82, III(EP-12)(4)(b)(iii)(4); Page 83, III(EP-12)(4)(b)(iv)(3).

6. EP-66: Flaker Wet Scrubber

EP-66 is a wet Venturi scrubber and serves emission units associated with the germ flaker system. EP-66 is subject to emission limits for PM, PM_{10} and the residual VOC that is carried over in the germ from the mill. *See* Permit, Page 213, III(EP-66)(3)(a). The Permit requires monitoring for scrubbing liquid flow rate and scrubber differential pressure for EP-66. *See* Permit, Pages 214-215, III(EP-66)(4)(b)(iii). The Permit imposes a new requirement that performance testing for VOC and HAPs be performed "before the emissions stream enter the scrubber", i.e., at the scrubber inlet. *See* Permit, Page 214, III(EP-66)(3)(b)(iv). As discussed below, Cargill is petitioning EPA to object to this inlet testing permit condition applicable to EP-66.

7. EP-67: Expeller Wet Scrubber

EP-67 is a wet Venturi scrubber and serves emission units associated with the germ expeller system. EP-67 is subject to emission limits for PM, PM_{10} and the residual VOC that is carried over beyond the flaking system. *See* Permit, Pages 218-219, III(EP-67)(3)(a). The Permit requires monitoring for scrubbing liquid flow rate and scrubber differential pressure for EP-67. *See* Permit, Page 220, III(EP-67)(4)(b)(iii). The Permit imposes a new requirement that performance testing for VOC and HAPs be performed "before the emissions stream enter the scrubber", i.e., at the scrubber inlet. *See* Permit, Page 219, III(EP-67)(3)(b)(iv). As discussed below, Cargill is petitioning EPA to object to this inlet testing permit condition applicable to EP-67.

B. Cargill's Engagement with NDEE Regarding Permit No. OP96S1-001

The Permit was not issued in a vacuum. Cargill closely and regularly engaged with NDEE regarding the Blair Facility operating permit and air emissions from the Facility throughout the Permit drafting process.

Cargill initially filed an application for an operating permit on November 15, 1996. Subsequently, Cargill filed addenda to the application or supplemental applications on May 28,

2003, March 4, 2011, October 28, 2014, October 24, 2019, March 31, 2021, October 11, 2021, and November 10, 2021. In addition to these submittals, over the past 20 plus years Cargill has devoted significant internal and external resources to support the NDEE in the permitting process. Throughout the permitting process, Cargill has worked in a constructive manner to provide a substantial amount of information to NDEE and has responded to numerous NDEE requests for information.

Moreover, since NDEE's issuance of the initial source review draft permit in May 2020, Cargill has offered NDEE significant technical support, held technical meetings and calls with NDEE on a number of occasions, and has provided written and oral information regarding Facility processes and emission points, information showing the scrubber liquid temperature monitoring was not necessary to assure compliance, and information demonstrating the fundamental differences between Cargill's Blair Facility and other facilities located in Nebraska and elsewhere. Cargill provided this information during two rounds of source review and through comments on the draft of the Permit. Notwithstanding the foregoing, NDEE failed to refute or distinguish information provided by Cargill.

NDEE issued the source review draft of the Permit at issue in this petition on August 31, 2021. Cargill filed comments on the source review draft of the permit on October 1, 2021. NDEE subsequently issued the draft of the Permit for public comment on December 24, 2021. Cargill filed comments on the draft of the Permit issued for public comment on January 31, 2021.[6]

C. Overview of 2006 Consent Decree and Relevant Construction Permits

1. Construction Permit CP06-0008

As is relevant here, Construction Permit CP06-0008, attached hereto as Exhibit 3, approved the proposed expansion of the Blair corn wet milling facilities to increase production. In issuing CP06-0008, NDEE conducted a BACT analysis for several of the emission points at issue in this petition (EP-7, EP-7A and EP-8A), and established emission limits for VOC for these emissions points. *See* NDEQ Fact Sheet for Cargill Incorporated, attached hereto as Exhibit 4, at 20, 22-25 (Sept. 8, 2006) (hereinafter "2006 Fact Sheet"). Additional details regarding those BACT analyses are discussed herein as is relevant for the purposes of the petition.

CP06-0008 did not contain a requirement to control or monitor scrubbing liquid temperature or an "alternative" inlet testing and compliance demonstration requirement at any of the relevant emission points that are the subject of this petition.

2. 2006 Consent Decree and Construction Permit CP08-065

In 2006, the U.S. District Court for the District of Minnesota entered a Consent Decree between Cargill and the United States and multiple states, including the State of Nebraska ("Consent Decree," attached hereto as Exhibit 5). *See United States, et al. v. Cargill, Incorporated*, Civ. Action No. 05-2037 (D. Minn.). The Consent Decree settled allegations of

[6] Cargill submitted comments on a prior version of the draft permit on January 11, 2021. NDEE rescinded that version of the draft permit following Cargill's submission of its comments.

non-compliance with Clean Air Act requirements at a number of Cargill facilities in the United States, including the Blair Facility. "Cargill completed all the obligations of the Consent Decree and it was terminated on August 20, 2018." May 2022 "Fact Sheet For: OP96S1-001," at 76 ("Fact Sheet").

As explained in the Consent Decree, Cargill "worked cooperatively with the United States and the Plaintiff-Intervenors [including Nebraska] to structure a comprehensive program that [would] result in the installation of pollution control equipment and enforceable emission reductions of at least 40,000 tons of allowable air pollution annually from 24 Cargill facilities in 13 states[.]" Consent Decree, Ex. 5, at 2. The Consent Decree also explained, however, that "the parties agree[d] that many of the emission reductions under the Consent Decree would not otherwise be required by law[.]" *Id.* The Consent Decree thus represented a carefully negotiated, arms-length agreement between Cargill, EPA, and Nebraska, that was approved by the United States and entered by a federal court. This agreement represented a comprehensive package of emissions reductions, including reductions that "would not otherwise be required by law."

The Consent Decree framework established two categories of "emissions units": units subject to Emission Control Plans, and units not subject to Emission Control Plans. EP-7, EP-7A, EP-8A, EP-10, EP-12, EP-66, and EP-67 are the latter. The intent of the Parties was to require emission reductions for Cargill's higher emitting sources, and to establish Emissions Control Plans for those units.

For the units not subject to Emission Control Plans, no emissions reductions or controls were required by the Consent Decree. This is because the Consent Decree achieved the required emissions reduction objectives solely from the Emission Control Plan sources, so there was no reason to impose requirements on the remaining sources. However, the Consent Decree did afford Cargill the opportunity to adjust or "true-up" the VOC emission limits to accurately reflect operations for these units and incorporate them into state-issued construction permits. The goal of this permitting process was to allow Cargill to align the emission limits with actual operations; the limits were not intended to effectuate emissions reductions. *See* NDEQ Response to Public Comments Summary on the Issuance of a Construction Permit for the Incorporation of Consent Decree Limitations (Facility #57902), at 4 (Dec. 31, 2012) (hereinafter "2012 Response to Comments," attached hereto as Exhibit 6) (describing that "the intent of the permitting action required under Paragraph 39 was to correctly identify sources of VOC emissions in the facility's permit. The intent was not to add additional controls and impose additional costs other than those associated with specific control plans in Paragraphs 15 through 29 of the Consent Decree.").

To this end, Paragraph 39 also provided a process for Cargill to seek modifications to permits to impose or modify VOC emission limits for emission points that are not subject to Emission Control Plans. These limits superseded, "any air quality control permits existing as of the date of entry of this Consent," the parties expressly eliminated control technology requirements, like BACT, that may have existed by virtue of prior permits in favor of emission-only requirements. Consent Decree, Ex. 5, at Paragraph 77. In December 2008, Cargill applied for a construction permit to revise permit limits for the emission points at the Blair Facility that were not subject to Emission Control Plans under the Consent Decree. *See* Letter from Cargill to NDEQ, Re: Application to Revise Permit Limits for Non-Control Plan Sources Consent Decree

Implementation - Blair, Nebraska (Dec. 23, 2008) ("Dec. 23, 2008 Letter from Cargill to NDEQ," attached hereto as Exhibit 7).

In 2012, NDEE issued Construction Permit CP08-065, attached hereto as Exhibit 8, which incorporated the conditions related to the Consent Decree. Emission points at the Blair Facility subject to emission limitations set pursuant to Paragraph 39 of the Consent Decree, but that did not have established Emission Control Plans, included EP-7, EP-10, EP-12, EP-66, and EP-67. NDEQ, Fact Sheet for Permit Number: CP08-065 (Facility #57902), at 2 (Dec. 31, 2012) ("2012 Fact Sheet") (attached hereto as Exhibit 9); *see also* Dec. 23, 2008 Letter from Cargill to NDEQ, Ex. 7. The intent of the permitting action required under Paragraph 39 was to correctly identify sources of VOC emissions in the Facility's permit. The intent was not to add additional controls and impose additional costs other than those associated with specific control plans in Paragraphs 15 through 29 of the Consent Decree. *See* 2012 Response to Comments, Ex. 6, at 4. As a result Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66, and EP-67 based on estimated maximum, potential to emit ("PTE") post-scrubber emissions, with a safety margin built in. Indeed, NDEE itself recognized in the 2012 Fact Sheet for CP08-065, "VOC and HAP emission limitations for these units are listed as lb/hr limitations based on the maximum operational capacity of each unit (based on engineering data and stack testing conducted by Cargill at this facility and other, similar facilities)." 2012 Fact Sheet, Ex. 9, at 14.

In CP08-065, NDEE also evaluated and imposed monitoring requirements on these emission points. 2012 Fact Sheet, Ex. 9, at 3. Notably, NDEE expressly considered and declined to include scrubber liquid temperature monitoring requirements because "since Cargill is not claiming any emission reductions from the use of the scrubbers, the NDEQ agrees that monitoring scrubber water temperature is unnecessary." 2012 Fact Sheet, Ex. 9, at 4.

3. Construction Permit CP19-025

Construction permit CP19-025, attached hereto as Exhibit 10, consolidated the terms of all prior air construction permits for the Blair Facility. Neither CP19-025, nor any of the prior construction permits consolidated therein, contains a requirement to control or monitor scrubbing liquid temperature or an "alternative" inlet testing and compliance demonstration requirement at any of the seven emission points that are the subject of this petition.

II. LEGAL STANDARD FOR PETITIONS

Title V and its implementing regulations require the EPA to object to a permit if a petitioner demonstrates that a permit is not in compliance with the requirements of the Clean Air Act.[7] 42 U.S.C. § 7661d(b)(2) ("The Administrator *shall* issue an objection within such period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the

[7] "The EPA interprets the 'demonstrat[ion]' requirement in CAA § 505(b)(2) as placing the burden on the petitioner to supply information to the EPA sufficient to demonstrate the validity of each objection that the EPA grants." *See In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07, at 2-3 (June 19, 2013) (Nucor II Order) (attached hereto as Exhibit 11).

requirements of this chapter[.]") (emphasis added); 40 C.F.R. § 70.8(c)(1). *See, e.g., Citizens Against Ruining the Env't v. EPA*, 535 F.3d 670, 677 (7th Cir. 2008) (Title V "clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object if such a demonstration is made") (attached hereto as Exhibit 12); *Sierra Club v. Johnson*, 541 F.3d 1257, 1265 (11th Cir. 2008) ("Congress's use of the word 'shall' creates a nondiscretionary duty for the Administrator; it plainly mandates an objection whenever a petitioner demonstrates noncompliance. The unambiguous nature of this provision is well recognized.") (attached hereto as Exhibit 13).

"In evaluating a petitioner's claims, the EPA considers, as appropriate, the adequacy of the permitting authority's rationale in the permitting record, including the response to comment." *See* Nucor II Order, Ex. 11.[8]

EPA's determination of whether a petitioner has demonstrated that a permit is not in compliance is subject to judicial review and will be set aside if EPA's determination is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 42 U.S.C. § 7661d(b)(2); *Citizens Against Ruining the Env't*, Ex. 12, at 674 (quoting 5 U.S.C. § 706(2)(A)).

Issues raised in the petition as grounds for an objection "must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under" the CAA or Part 70. *See* 40 C.F.R. § 70.12(a)(2); 42 U.S.C. § 7661d(b)(2). For each claim raised, the petition must identify the following:

(1) The specific grounds for an objection, citing to a specific permit term or condition where applicable;
(2) The applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under the CAA or part 70, that is not met;
(3) An explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under the CAA or part 70;
(4) Identification of where the issue was raised with reasonable specificity during the public comment period, citing to any relevant page numbers in the public comment submitted to the permitting authority and attaching this public comment to the petition. If the grounds for the objection were not raised with reasonable specificity during the public comment period, the petitioner must demonstrate that such grounds arose after that period, or that it was impracticable to raise such objections within that period.
(5) Unless the grounds for the objection arose after the public comment period or it was impracticable to raise the objection within that period, the petition must identify where the permitting authority responded to the public comment, including page number(s) in the publicly available written response to comment, and explain how the permitting

[8] Note that "the Act is structured so that the EPA's evaluation of a petition under § 505(b)(2) follows and is distinct from its review of a proposed permit under § 505(b)(1), which requires the Administrator to object on his own accord if he determines the permit is not in compliance with the Act. By contrast, under§ 505(b)(2), the Administrator is compelled to object only if the necessary demonstration has been made." Nucor II Order at 5.

> authority's response to the comment is inadequate to address the issue raised in the public comment. If the response to comment document does not address the public comment at all, the petition must state that.

40 C.F.R. § 70.12(a)(2); 42 U.S.C. § 7661d(b)(2). In short, EPA reviews the petition to determine whether the petitioner has provided sufficient information to demonstrate the permit's noncompliance with the CAA or Part 70 regulations or the underlying applicable requirements, and EPA's decision is thereafter subject to review under the Administrative Procedure Act.

III. TITLE V LEGAL REQUIREMENTS GOVERNING IMPOSITION OF NEW SUBSTANTIVE REQUIREMENTS AND SUPPLEMENTAL MONITORING.

The purpose of the Title V permitting requirement is to collect all Clean Air Act requirements applicable to a source in a single permit. Prior to the Title V permitting requirement, "a source's obligations under the Act (ranging from emissions limits to monitoring, recordkeeping, and reporting requirements) [were] . . . scattered among numerous provisions of the SIP or Federal regulations," and it was difficult for EPA to discern which requirements applied to a given source. Operating Permit Program, 57 Fed. Reg. 32,250, 32,251 (July 21, 1992) (attached hereto as Exhibit 14). As EPA has explained, the Title V program is thus intended to "clarify, in a single document, which requirements apply to a source and, thus, . . . enhance compliance with the requirements of the Act." *Id.*; *see also, e.g.*, *Sierra Club v. Johnson*, Ex. 13, 541 F.3d at 1260–61 ("The intent of Title V is to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution.").

A Title V permit pulls a source's existing underlying applicable requirements into one place; however, it "does not impose substantive new requirements[.]" 40 C.F.R. § 70.1(b); *see also* Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,251; *Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1026–27 (D.C. Cir. 2000) (attached hereto as Exhibit 15); *Envtl. Integrity Project v. EPA*, 969 F.3d 529, 543 (5th Cir. 2020) ("By all accounts, Title V's purpose was to simplify and streamline sources' compliance with the Act's substantive requirements. Rather than subject sources to new substantive requirements—or new methods of reviewing old requirements—'[t]he intent of Title V [was] to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution.'") (attached hereto as Exhibit 16); White Paper for Streamlined Development of Part 70 Permit Applications, at 1 (July 10, 1995) ("In general, this program was not intended by Congress to be the source of new substantive requirements. Rather, operating permits required by title V are meant to accomplish the largely procedural task of identifying and recording existing substantive requirements applicable to regulated sources and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives.") (attached hereto as Exhibit 17); *id.* at 14 (same). Indeed, the circumstances in which the permitting authority can include non-pre-existing terms in the permit—including monitoring terms—are carefully circumscribed by Title V and EPA's regulations.

Section 504(c) of the Clean Air Act provides that "[e]ach permit issued under this subchapter shall set forth . . . monitoring, . . . and reporting requirements to assure compliance with the permit terms and conditions. Such monitoring and reporting requirements shall conform to any applicable regulation under subsection (b)." 42 U.S.C. § 7661c(c). Section 504(b) in turn provides that EPA "may by rule prescribe procedures and methods for determining compliance and for monitoring and analysis of pollutants regulated under this chapter[.]" 42 U.S.C. § 7661c(b).[9] Thus, any monitoring requirements included in a permit must conform to EPA's regulations concerning monitoring.

To implement Section 504 of the Clean Air Act, EPA established regulations governing periodic monitoring at 40 C.F.R. § 70.6, which provides a three-step procedure for determining appropriate periodic monitoring requirements for inclusion in a Title V permit. *See* Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,278.

First, 40 C.F.R. § 70.6(a)(3)(i)(A) provides that the Title V permit shall incorporate "[a]ll monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including part 64 of this chapter [CAM] . . . ." As EPA has explained, "[i]f the underlying applicable requirement imposes a requirement to do periodic monitoring or testing (which may consist of recordkeeping designed to serve as monitoring), the permit must simply[sic] incorporate this provision under § 70.6(a)(3)(i)(A)." Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,278; *see also Sierra Club v. EPA*, 536 F.3d 673, 675 (D.C. Cir. 2008) ("Where an emission standard already specifies a monitoring requirement that is both 'periodic' and sufficient to assure compliance, the permitting authority simply includes that requirement in the permit.") (attached hereto as Exhibit 18).

Second, EPA's regulation at 40 C.F.R. § 70.6(a)(3)(i)(B)—often referred to as the "periodic monitoring" provision—provides for limited gap-filling authority where there is no existing periodic monitoring or testing already required by the underlying applicable requirement. More specifically, 40 C.F.R. § 70.6(a)(3)(i)(B) states that, where the applicable underlying requirement does not require periodic testing or monitoring, periodic monitoring can be added to the permit that is "sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit" as reported by the source. It is important to underscore that this provision *only* provides gap-filling authority where the applicable requirement does not already have periodic testing or monitoring requirements, e.g., where the applicable underlying requirement contains a one-time testing requirement upon start-up. *See, e.g.*, Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,278; Compliance Assurance Monitoring, 62 Fed. Reg. 54,900, 54,901 (Oct. 22, 1991) ("In many cases, the monitoring requirements in the underlying regulations will suffice for assessing compliance. However, if particular applicable requirements do not include periodic testing or monitoring, then § 70.6(a)(3)(i)(B) requires the permit to include 'periodic monitoring' to fill that gap.") (attached hereto as Exhibit 19); *Sierra Club v. EPA*, Ex. 18, 536 F.3d at 675 ("Where the emission standard lacks a periodic monitoring requirement *altogether*, the permitting authority must create one that assures compliance and include it in the permit.") (emphasis added);

[9] Section 114 of the Clean Air Act also provides EPA with additional authority and direction to require monitoring. *See* 42 U.S.C. § 7414(a)(3).

Appalachian Power Co. v. EPA, Ex. 15, 208 F.3d at 1028 ("State permitting authorities therefore may not, on the basis of . . . 40 C.F.R. § 70.6(a)(3)(i)(B), require in permits that the regulated source conduct more frequent monitoring of its emissions than that provided in the applicable state or federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test."). Accordingly, if there are *any* periodic monitoring and testing requirements imposed by the applicable underlying requirement, this provision does not apply.

Importantly, if gap-filling is required, the permitting authority may impose only those requirements that are "sufficient to yield reliable data from the relevant time period that are s representative of the source's compliance with the permit[.]" 40 C.F.R. § 70.6(a)(3)(i)(B). In addition, any monitoring requirements imposed under this provision must assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. *Id.*

Third, 40 C.F.R. § 70.6(c)(1)—sometimes referred to as the "umbrella monitoring provision"—provides that "[a]ll part 70 permits shall contain . . . Consistent with paragraph a(3) of this section, . . . monitoring . . . sufficient to assure compliance with the terms and conditions of the permit." This provision allows a permitting authority to supplement existing periodic monitoring contained in the underlying applicable requirement, but only in very limited circumstances where the existing monitoring is inadequate, and where the permitting authority makes an affirmative, case-specific finding that the existing monitoring is not sufficient to assure compliance. *Sierra Club v. EPA*, Ex. 18, 536 F.3d at 680 (finding that the Part 70 rules can be read to "allow state and local permitting authorities to supplement *inadequate* monitoring requirements in each permit issued") (emphasis added); *id*. at 677 (noting that EPA can "authorize[] permitting authorities to supplement inadequate monitoring requirements on a case-by-case basis in each permit issued"); *In the Matter of Public Service Company of New Mexico, San Juan Generating Station,* Order Responding to Petitioners' Request That Administrator Object to Issuance of a State Operating Permit, Permit No. P062R2, at 19 (Feb. 15, 2012) (hereinafter "*San Juan Generating Station Order*") ("The determination of whether the monitoring is adequate in a particular circumstance generally will be made on a case-by-case basis considering site-specific factors.") (attached hereto as Exhibit 20).

EPA explains that "in many cases, monitoring from the applicable requirement will be sufficient to assure compliance with permit terms and conditions; consequently, the EPA recommends the monitoring analysis should begin by assessing whether the monitoring required in the applicable requirement is sufficient." *San Juan Generating Station Order*, Ex. 20, at 19; *see also In the Matter of: CITGO Refining and Chemicals Company L.P. West Plant, Corpus Christi*, Texas Permit Number O1420 Issued by Texas Commission on Environmental Quality on February 2, 2007, Petition Number VI-2007-01, at 7 (May 28, 2009) (hereinafter "*CITGO Order*") (attached hereto as Exhibit 21).

To do so, EPA identified "[s]ome factors that permitting authorities may consider in determining appropriate monitoring[, which] 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 emissions unit; and (5) the type

and frequency of the monitoring requirements for similar emission units at other facilities." *San Juan Generating Station Order*, Ex. 20, at 19-20; *see also CITGO Order*, Ex. 21, at 7-8. "The preceding list of factors is only intended to provide the permitting authority with a starting point for their analysis of the adequacy of the monitoring." *Id.*

This case-specific "rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record." *San Juan Generating Station Order*, Ex. 20, at 20; *see also CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."). In sum, if a permitting authority determines that the existing monitoring is inadequate to assure compliance, then the administrative permit record must provide a case-specific, reasoned basis for such determination and for imposing selected monitoring on a given emissions unit to meet a specified applicable requirement.

A permitting authority's gap-filling authorities are limited in additional ways. As noted above, monitoring requirements must conform to any applicable regulation prescribed by EPA "for monitoring and analysis of pollutants regulated under this chapter[.]" 42 U.S.C. § 7661c(b)-(c); *see also Sierra Club v. EPA*, Ex. 18, 536 F.3d at 678 (explaining that where EPA promulgates adequate monitoring requirements by regulation, those "requirements would bind state and local authorities under § 7661c(c)" and permits would need to "conform to" those requirements).

Moreover, EPA established a presumption that federal requirements and emissions standards promulgated after 1990 meet periodic monitoring and enhanced monitoring requirements. For instance, EPA explained that "[a]ny Federal standards promulgated pursuant to the Act amendments of 1990 are presumed to contain sufficient monitoring and, therefore, only § 70.6(a)(3)(i)(A) applies." Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,278. In the CAM final rule, EPA further reiterated this presumption, explaining that EPA was "committed to developing new emission standards subsequent to the 1990 Amendments with methods specified for directly determining continuous compliance whenever possible . . ." Compliance Assurance Monitoring, Ex. 19, 62 Fed. Reg. 54,900, 54,904. In recognition of this EPA commitment, the CAM Rule exempts New Source Performance Standards ("NSPS") and National Emission Standards for Hazardous Air Pollutants ("NESHAP") rules that are proposed after the 1990 Amendments from CAM requirements. *Id*. EPA also encouraged states to adopt a similar policy; and stated its belief that the CAM rule would not significantly affect the requirements imposed subsequent to 1990. *See id*. ("The Agency believes that States should approach their regulatory actions from the same perspective and thus the Agency does not believe that part 64 will have a significant impact on requirements imposed subsequent to the 1990 Amendments."). Finally, as detailed in the next section, EPA specifies that any emissions unit meeting CAM requirements under 40 C.F.R. Part 64 also meets monitoring requirements for the purposes of Part 70.

NDEE's regulations incorporate provisions that mirror EPA's regulation at 40 C.F.R. § 70.6. NDEE rules include §70.6(a)(3)(i)(A) requirements in 129 Neb. Admin. Code, Chapter 8, Section 004.01A, while NDEE rules include §70.6(a)(3)(i)(B) requirements in 129 Neb. Admin.

Code Chapter 8, Section 004.01B. NDEE rules include § 70.6(c)(1) requirements in 129 Neb. Admin. Code Chapter 8, Section 012.01.

IV. GROUNDS FOR OBJECTION

The Permit does not comply with the Clean Air Act and its implementing regulations at 40 C.F.R. Part 70, because NDEE exceeds it authority in imposing (i) new supplemental monitoring requirements that are not necessary to assure compliance; and (ii) other new substantive requirements that do not appear in the underlying applicable requirements.

With respect to the first category, the Permit does not comply with Section 504(c) of the CAA or 40 C.F.R. Part 70, because NDEE does not follow EPA's prescribed procedures for determining the monitoring sufficient to demonstrate compliance with applicable requirements. As described above, Section 504(c) of the CAA requires Title V operating permits to include "monitoring . . . and reporting requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). EPA's regulations then prescribe a three-step procedure under 40 C.F.R. §§ 70.6(a)(3)(i)(A), 70.6(a)(3)(i)(B), and 70.6(c)(1) for including monitoring requirements in the Title V permit, depending on whether or not the underlying applicable requirement contains monitoring requirements. The conditions in the Permit imposing new scrubbing liquid temperature control and monitoring requirements do not comply with these provisions of the Part 70—particularly 40 C.F.R. §70.6(c)(1)—because NDEE does not follow these procedures in gap-filling existing, periodic monitoring requirements.

As described in more detail below, the Permit conditions imposing additional temperature control and monitoring requirements on the Facility's scrubbers do not comply with the procedures in Title V of the CAA or Part 70, and exceed NDEE's authority thereunder, because the applicable requirements already contain periodic monitoring terms that are sufficient to assure compliance. NDEE has not conducted the requisite case-by-case analysis in imposing supplemental scrubbing liquid temperature monitoring requirements, nor clearly documented its affirmative case-specific finding in the record that such monitoring is necessary to assure compliance. NDEE also does not comply with the requirements of Part 70, because its rationales for imposing the additional monitoring requirements are not "clear and documented in the permit record." *San Juan Generating Station Order*, Ex. 20, at 20; *see also CITGO Order*, Ex. 21, at 7 (citing 40 C.F.R. § 70.7(a)(5)). Indeed, contrary to NDEE's conclusions, as described below in Section IV.A, the record simply does not support the conclusion that the relationship between scrubbing liquid temperature and VOC emissions is such that such temperature monitoring is necessary to assure compliance. It is not enough for NDEE to hypothesize that temperature has the potential to affect VOC solubility in the abstract; NDEE must show that the effects are such that scrubber liquid temperature control and monitoring on top of any existing monitoring is necessary to assure compliance for the specific scrubber at issue.

With respect to the second category, NDEE imposes other new substantive requirements contrary to the provisions of Title V, the Part 70 regulations, and the underlying applicable requirements. *See* 40 C.F.R. § 70.1(b) (noting that "title V does not impose substantive new requirements"); *see also* Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,251; *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1026–27; *Envtl. Integrity Project v. EPA*,

Ex. 16, 969 F.3d at 543. In the Permit, NDEE not only imposes new requirements to monitor scrubbing liquid temperature, but also imposes new substantive requirements to control scrubber liquid temperature on three wet scrubbers at the Facility. More specifically, the relevant conditions require Cargill to maintain scrubbing liquid temperature such that it shall not exceed above 10% of the level determined during performance testing. This scrubbing liquid temperature control requirement is a new substantive requirement that NDEE is imposing for the first time through the Title V process and appears nowhere required in the underlying applicable requirements.

In addition, as an "alternative" option to scrubbing liquid temperature control and monitoring, NDEE proposes a new substantive requirement to require testing to determine compliance with the VOC and HAP emission limits at the inlet to the wet scrubber, rather than at the emission point. Moving the compliance demonstration point to the inlet to the scrubber has the effect of increasing the stringency of the VOC emission limit, thus imposing a new substantive requirement that is noncompliant with the underlying applicable requirement. Although NDEE claims in the Response to Comments that it is merely "clarifying testing location" rather than moving the testing location, that claim is contradicted in the record as described *infra* Section IV.C.1. *See* Response to Comments 22-23, 26-27, 33, 37-38.

Cargill underscores that these new substantive requirements are not applicable requirements under the Blair Facility's construction permit CP19-025 (which consolidated the terms of prior construction permits issued for the Facility), under prior construction permits, or under any applicable federal, state, or local rule or requirement. *See* Permit CP19-025, Ex. 10. Accordingly, NDEE has exceeded its authority under the CAA, as the inclusion of these new substantive requirements is not in compliance with the CAA, the Part 70 regulations, or the underlying applicable requirements.

The new scrubbing liquid temperature monitoring requirements and new substantive requirements to control scrubbing liquid temperature that are not in compliance with the CAA and Part 70, and to which Cargill petitions EPA to object, apply to the wet scrubbers at EP-7, EP-7A, and EP-12. These noncompliant requirements are included in the following conditions in the Permit:

Noncompliant Conditions Imposing Scrubber Liquid Temperature Monitoring

Page 37-38, III(EP-7)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 44, III(EP-7A)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 82, III(EP-12)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)

Noncompliant Conditions Imposing Scrubber Liquid Temperature Control

Page 38, III(EP-7)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 44, III(EP-7A)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 82-83, III(EP-12)(4)(b)(iv)(3) (scrubber liquid temperature control)

The new substantive requirement imposing new VOC/HAP testing and compliance demonstration requirements at the scrubber inlet that are not in compliance with the CAA, Part 70, or the underlying applicable requirements, and to which Cargill petitions the EPA to object,

apply to the wet scrubbers at EP-8A, EP-10, EP-66, and EP-67. These noncompliant requirements are included in the following conditions in the Permit:

Noncompliant Conditions Imposing New VOC/HAPs Testing and Compliance Demonstration Requirements at Scrubber Inlet

Page 49, III(EP-8A)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 71, III(EP-10)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 214, III(EP-66)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 219, III(EP-67)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

These inlet testing and compliance demonstration requirements are framed by NDEE as an "alternative" to scrubber liquid temperature control and monitoring. For these requirements, NDEE implies that scrubber liquid temperature control and monitoring would be required if not for the imposition of the "alternative" inlet testing and compliance demonstration requirement, and conversely, that "alternative" inlet testing and compliance demonstration is required because there is no temperature control and monitoring requirement imposed on those emission points. For this reason, Cargill includes these emission points and "alternative" inlet testing and compliance demonstration requirements in its discussion of the temperature control and monitoring conditions, as Cargill objects to the imposition of either type of requirement as noncompliant with the CAA, Part 70, and the underlying applicable requirements. The scrubber liquid temperature control and monitoring requirements are also not necessary to assure compliance and would be noncompliant if imposed on the emission points that are currently subjected to the "alternative" inlet testing and compliance demonstration requirements (EP-8A, EP-10, EP-66, EP-67).[10]

In addition to Permit terms identified above, Cargill also petitions EPA to object to the Permit because its issuance does not comply with various requirements of the CAA and the Part 70 regulations. Among other things, NDEE's Fact Sheet and Response to Comments documents do not identify sources of authority that would justify imposition of the new requirements; NDEE failed to respond to all significant comments; and NDEE improperly replied on "guidance" to impose legal obligations contrary to Nebraska law. *See* 40 C.F.R. § 70.6(a)(1)(i); 40 C.F.R. § 70.7(a)(5); 40 C.F.R. § 70.7(h)(6). Cargill also petitions EPA to object due to certain inconsistencies in the requirements potentially applicable to emissions points with CAM plans.

Cargill raised the issues discussed in this petition with reasonable specificity in its comments on the draft of the Permit, and provides citations to the relevant page numbers in

[10] Cargill's objections to the scrubbing liquid temperature control and monitoring requirements are also intended to apply to the "alternative" inlet testing and compliance demonstration requirements, because NDEE views such "alternative" inlet testing requirements as interrelated and necessary due to the lack of temperature control and monitoring requirements imposed on those emission points. Thus, although Cargill does not repeat the phrase "or alternative inlet testing and compliance demonstration" following every mention of its objections to the scrubbing liquid temperature control and monitoring requirements, that phrase is implicit and should be read into such objections throughout the document.

Cargill's public comments in each of the sections that follow. To the extent that certain arguments in favor of objection were not raised with reasonable specificity in Cargill's comments on the draft of the Permit it is because the grounds for objection arose after the comment period, or it was impracticable to raise such objections within that period, including circumstances in which NDEE includes new information and arguments in its Response to Comments.

A. The Permit is Not in Compliance with the CAA Because NDEE Exceeds its Authority Under the CAA and with 40 C.F.R. Part 70 in Imposing New Scrubber Liquid Temperature Control and Monitoring Requirements that Are Not Necessary to Assure Compliance.

Noncompliant Conditions Imposing Scrubber Liquid Temperature Monitoring

Page 37-38, III(EP-7)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 44, III(EP-7A)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 82, III(EP-12)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)

Noncompliant Conditions Imposing Scrubber Liquid Temperature Control[11]

Page 38, III(EP-7)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 44, III(EP-7A)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 82-83, III(EP-12)(4)(b)(iv)(3) (scrubber liquid temperature control)

Noncompliant Conditions Imposing New VOC/HAPs Testing and Compliance Demonstration Requirement at Scrubber Inlet[12]

Page 49, III(EP-8A)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 71, III(EP-10)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 214, III(EP-66)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 219, III(EP-67)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

[11] Cargill is including the scrubber liquid temperature control requirements in this section, because the control requirements are premised on and connected with the scrubber liquid temperature monitoring requirements, and NDEE's rationales for imposing both sets of conditions are overlapping. The arguments made in this section with respect to scrubber liquid temperature monitoring Permit conditions equally apply to the scrubber liquid temperature control Permit conditions.

[12] Cargill is including the new inlet VOC/HAP testing and compliance demonstration requirements in this section, because NDEE frames this requirement as an "alternative" to the imposition of the scrubber liquid temperature control and monitoring requirements. If NDEE were to have imposed scrubber water temperature control and monitoring requirements on these emissions points, those conditions would also be noncompliant with Title V of the CAA and the Part 70 regulations for the reasons described in this section. The arguments made in this section with respect to scrubber liquid temperature monitoring Permit conditions, equally apply to the VOC/HAP inlet testing and compliance demonstration requirements, since NDEE uses the lack of such scrubber liquid temperature control and monitoring conditions to justify the need for the VOC/HAP inlet testing and compliance demonstration conditions.

The Permit does not comply with Section 504(c) of the CAA, 42 U.S.C. § 7661c(c), 40 C.F.R. § 70.6(c)(1), or 40 C.F.R. § 70.7(a)(5), because NDEE has not clearly documented in the record why the additional scrubber liquid temperature control and monitoring requirements being imposed in the Permit are necessary to assure compliance. NDEE's rationales for imposing additional scrubber liquid temperature control and monitoring requirements do not demonstrate that these new requirements are necessary to assure compliance either in light of the relevant source- and emission point-specific factors identified by EPA or based on additional factors identified by NDEE. Instead, NDEE seeks to impose scrubber liquid temperature control and monitoring requirements on the VOC wet scrubbers at the Facility without following the requirements of Title V or its implementing regulations and based on generalized rationales using ambiguous data obtained at ethanol production facilities. Importantly, absent from the record is evidence showing a positive relationship between scrubbing liquid temperature and VOCs that would indicate that it is necessary to monitor scrubbing liquid temperature to assure compliance at the emission points in question.

As described in the sections that follow, NDEE's imposition of scrubber liquid temperature control and monitoring requirements are not in compliance with Title V or the Part 70 regulations and are arbitrary and capricious as NDEE:

- Offers insufficient support for the supplemental temperature control and monitoring in the permit record, and thus does not include rationales that are clear and documented in the record;
- Does not consider relevant source- and emission point-specific factors; and
- Does not make the required demonstration that supplemental monitoring is necessary to assure compliance with permitted emission limits.

1. NDEE's Imposition of Supplemental Monitoring Requirements on Wet Scrubbers Based on Generic Rationales, Without Considering Source- and Emission Point-Specific Features, is Not in Compliance with 40 C.F.R. Part 70 and Section 504(c) of the CAA.

In imposing supplemental scrubber liquid temperature monitoring requirements on the Blair Facility's wet scrubbers, NDEE fails to follow EPA's established procedure for determining whether existing monitoring is sufficient to assure compliance, and therefore the permit does not comply with Section 504(c) of the CAA, 42 U.S.C. § 7661c(c) Section 504(c) of the CAA, 42 U.S.C. § 7661c(c), or with 40 C.F.R. § 70.6(c)(1). In implementing these requirements, EPA requires the permitting authority to utilize a fact-specific, case-by-case process to determine whether it is necessary to supplement existing periodic monitoring requirements. *See, e.g., San Juan Generating Station Order,* Ex. 20, at 19 ("The determination of whether the monitoring is adequate in a particular circumstance generally will be made on a case-by-case basis considering site-specific factors."); *CITGO Order,* Ex. 21, at 7.

EPA has explained that "in many cases, monitoring from the applicable requirement will be sufficient to assure compliance with permit terms and conditions; consequently, the EPA recommends the monitoring analysis should begin by assessing whether the monitoring required in the applicable requirement is sufficient." *San Juan Generating Station Order,* Ex. 20, at 19.

EPA also has identified a non-exclusive list of factors (discussed in more detail below) that are relevant for sources to consider in making this case-by-case determination. *Id.* at 19-20.

In addition, the case-specific "rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record." *Id*. at 20; *see also e.g.*, *CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).").

NDEE does not conduct a case-by-case evaluation before imposing additional monitoring requirements on the wet scrubbers at the Blair Facility. Instead, NDEE improperly utilizes its limited authority to impose supplemental monitoring under 40 C.F.R. § 70.6(c)(1) to impose generic requirements on wet scrubbers in Nebraska, without conducting the requisite tailored evaluation of source- and emission point-specific parameters and features, including an evaluation of the nature and purpose of the underlying applicable requirement (e.g., quantifying emissions vs. reducing emissions), whether existing monitoring is sufficient to assure compliance, the variability of emissions, compliance margins, or the likelihood of a violation, among other things. Cargill previously raised NDEE's failure to conduct an adequate case-by-case evaluation in its comments on the draft of the Permit. *See* Cargill Comments on Draft Permit, Ex. 1, at 14-18 (January 31, 2021) ("Cargill Comments").

NDEE acknowledges in the May 2022 "Fact Sheet For: OP96S1-001" issued with the Permit ("Fact Sheet") and in the Response to Comments, that EPA requires the evaluation of case-specific factors, rather than a generic, non-tailored approach to monitoring. *See* Response to Comments at 16 (citing EPA case-specific factors); Fact Sheet at 82-83 (same); Fact Sheet at 81 (noting that EPA's CAM "guidance identifies the most appropriate indicators to monitor *depend upon a number of factors*, including type of pollutant (whether PM is also present), scrubber design, and exhaust gas characteristics[.]") (emphasis added).

However, although NDEE nominally purports to consider various factors in imposing additional monitoring, NDEE's justifications for imposing such monitoring invariably revert back to generalized and non-specific rationales that fail to consider the features of the specific emission points and source in question. Indeed, in a number of places in the Fact Sheet and Response to Comments, NDEE expressly states that it seeks to impose standardized scrubbing liquid temperature control and monitoring requirements on all VOC wet scrubbers, and that source- and emission point-specific features are instead "irrelevant" to NDEE's analysis provided there are some VOCs present in the emissions. *See, e.g.,* Response to Comments at 9, 17.

For instance, in the Fact Sheet, NDEE describes its rationale for imposing the scrubber monitoring requirements as follows: "[t]he operational and monitoring requirements, and associated recordkeeping and reporting requirements for scrubbers were updated and *standardized* using NDEE current *standard language as a basis*." Fact Sheet at 93 (emphasis added). The Fact Sheet further explains that: "NDEE has developed *standardized* monitoring and

recordkeeping requirements after review of performance testing results over the last 20 years for VOC scrubbers (including Cargill and at other ethanol plants with similar equipment) and review of EPA rules and guidance[.]" Fact Sheet at 80.[13] NDEE further explains that it seeks to impose generic, non-tailored scrubbing liquid temperature control and monitoring on the wet scrubbers at the Facility, asserting that "NDEE has determined that [monitoring of] differential pressure (inlet pressure can be substituted) along with scrubbing liquid flowrate *would be required for all scrubbers*, [and] scrubbing liquid (water) temperature for *all* VOC and VOC-HAP scrubbers." Fact Sheet at 77 (emphasis added).[14]

These statements demonstrate that NDEE does not follow the case-by-case approach required by EPA in evaluating whether existing monitoring at the relevant emission is sufficient to assure compliance with the VOC emission limits contained in the Permit. Instead, NDEE makes the conclusory assertion that all Cargill wet scrubbers that emit or control VOCs should be subject to the same "standardized" state-wide monitoring policy requiring scrubber liquid temperature control and monitoring. The Title V program is not the appropriate mechanism for NDEE to implement such a policy.[15]

In its Response to Comments, NDEE nominally purports to consider source and emission-point specific features and baldly asserts that it "adequately evaluated each emission point's specific features, including emission profiles for the Blair Facility [. . .] whether each of the emission points were covered under federal requirements, past performance testing information, information provided by Cargill in negotiation meetings, and all other information and data available to NDEE." Response to Comments 7, 16. However, that statement is belied by the record. Rather than considering these features, NDEE's Response to Comments instead either: (i) explains why NDEE does not consider certain features or factors, (ii) explains why it considers various features or factors to be "irrelevant," or (iii) provides a generic, unsupported rationale, instead of a case-specific rationale based on evidence in the record. None of these conclusory statements indicate that NDEE has conducted a source- and emission point-specific analysis that supplemental monitoring is necessary to assure compliance, as Title V and Part 70 requires. Instead, these rationales attempt—and fail—to justify NDEE's lack of source- and emission-point specific analysis.

With respect to the first rationale, NDEE makes clear that it did not consider a number of factors that EPA has previously identified as being relevant to an evaluation of whether

[13] Note that while NDEE references its consideration of performance testing results from scrubbers at "Cargill and at other ethanol plants," it does not identify which results its considered relevant or provide any analysis of those results. NDEE's explains that its reference to "other ethanol plants" focused on the fermentation scrubbers at those plants. As described in detail in this petition, ethanol fermentation emission points are fundamentally different from the corn milling emission points that are the subject of this petition. NDEE's passing reference to its consideration of testing results does not provide a clear and documented basis in the record for its decision to impose supplemental monitoring.

[14] Note that despite NDEE's express intent to take a "standardized" monitoring approach, this approach has not been consistently applied to all sources with VOC scrubber emissions in Nebraska.

[15] As discussed below, to the extent NDEE seeks to adopt a state-wide policy establishing categorical monitoring requirements for wet scrubbers, the proper procedure is for NDEE to issue a rulemaking subject to the Nebraska Administrative Procedure Act's ("Nebraska APA") public participation process.

supplemental monitoring is necessary to assure compliance. *See* Response to Comments at 8, 16. The Response to Comments states that "[i]t is important to note that the factors in the *CITGO Order* are ***not prescriptive in nature,*** but rather are examples of considerations that permitting authorities ***may*** use in determining adequate monitoring and record keeping requirements." Response to Comments at 8, 16 (emphasis in original). While it is correct that EPA identifies these factors as non-exhaustive and as a "starting point" for a permitting authority's analysis in determining appropriate monitoring, it is equally correct that NDEE is not at liberty to simply disregard relevant information in the record concerning such factors. As Cargill explains below in its discussion of NDEE's treatment of the factors previously identified by EPA, NDEE's failure to address these factors as applied to each emission point is arbitrary and capricious as NDEE fails to provide a reasoned basis in the record for doing so. *See, e.g.*, *Whittle v. Dep't of Health & Hum. Servs.*, 309 Neb. 695, 717 (2021) (for review under the Nebraska Administrative Procedure Act, "for errors appearing on the record, the inquiry is whether the decision conforms to the law, is supported by competent evidence, and is neither arbitrary, capricious, nor unreasonable.") (attached hereto as Exhibit 22). Indeed, disregarding these factors raises significant questions about the quality of the NDEE review and the information and factors that NDEE did rely upon. Where a permitting authority jettisons the above factors, EPA should closely review the imposition of supplemental monitoring to ensure that it has support in the record.

Along similar lines, although a permitting authority is required to engage in case-by-case decision-making that considers source- and emission point-specific factors and that is clear and documented on the record, NDEE expressly determines in the Response to Comments that much of this information is categorically irrelevant. More specifically, in responding to Cargill's arguments regarding the emissions profiles associated with the relevant emission points, NDEE concludes that "it is ***irrelevant*** to the wet scrubber whether the VOC emissions are coming from facilities with different SIC codes or types of processes such as batch, continuous, wet, dry, corn milling, ethanol plant, etc." Response to Comments 8-9, 17 (emphasis in original).

NDEE thus goes so far as to say that the type of source and processes generating VOC emissions that are associated with the relevant wet scrubbers is "***irrelevant***" to its decision making, indicating that NDEE did not even consider the source of the emissions in making its decision to impose additional monitoring—a hallmark of arbitrary and capricious decision making. *See*, *e.g.*, *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) ("Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.") (attached hereto as Exhibit 23).

And finally, even where NDEE does purportedly consider relevant factors in assessing whether monitoring is necessary to assure compliance (rather than disregarding them or deeming them irrelevant), NDEE provides a generic, unsupported rationale instead of a case-specific rationale based on evidence in the record. As one example, the Fact Sheet generically "considers" the relevant factors as follows:

> NDEE has determined that the variability of emissions from ethanol production using a biological source (i.e. yeast fermentation) will create a variability in the composition of the emissions (about percentage of VOC – as ethanol – produced, and the percentages of each HAP). NDEE requires scrubbers (or RTOs as an alternative) to control large VOC emission sources at ethanol plants. NDEE considers the monitoring, process, maintenance, or control equipment data available for emissions points when determining monitoring requirements. NDEE allows a FTIR CEMS (Fourier Transform Infrared Continuous Emissions Monitoring Systems) as a replacement for monitoring of operating parameters for the control devices. NDEE provided the option of using FTIR CEMS instead of operating parameter monitoring, to date Cargill declined the use of a CEMS.

Fact Sheet at 83.

The next section explains why NDEE's alleged consideration of each of the factors identified by EPA is not sufficient, including where NDEE applies generalized rationales to support imposition of generic monitoring instead of considering case-specific features of the relevant source and emission points to determine that monitoring is necessary to assure compliance.

2. NDEE's Cursory Discussion of the Factors Identified by EPA for Determining Whether Supplemental Control and Monitoring is Necessary to Assure Compliance is Arbitrary and Capricious, Disregards Relevant Source- and Emission point Specific Information, Lacks Support in the Record, and is Not in Compliance with 40 C.F.R. Part 70 and Section 504(c) of the CAA.

As referenced above, does not comply with the requirements of 40 C.F.R. Part 70 and the CAA, because NDEE does not actually analyze whether the existing monitoring at each emission point is sufficient to demonstrate compliance with the applicable requirement and did not consider factors relevant to such an analysis. *See, e.g., San Juan Generating Station Order*, Ex. 20, at 19 ("[T]he monitoring analysis should begin by assessing whether the monitoring required in the applicable requirement is sufficient."); 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1). "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 emissions unit; and
> (5) the type and frequency of the monitoring requirements for similar emission units at other facilities."

San Juan Generating Station Order, Ex. 20, at 19-20; *see also CITGO Order*, Ex. 21, at 7-8. "The preceding list of factors is only intended to provide the permitting authority with a starting point for their analysis of the adequacy of the monitoring." *Id.*

As discussed above, in imposing supplemental scrubber liquid temperature control and monitoring requirements, NDEE does not meaningfully evaluate the factors identified by EPA, nor does NDEE base its determination on other relevant source- or emission point-specific factors. Cargill previously raised this issue in its comments on the draft of the Permit. *See* Cargill Comments at 18-29.

While EPA's list of factors is not prescriptive or exhaustive, NDEE cannot ignore such relevant information in the record. Although NDEE claims it adequately considered these factors, NDEE's analysis consists of generalized and/or conclusory statements unmoored to facts relating to the specific emission points at issue.

Below, Cargill explains why NDEE's decision to impose scrubber liquid temperature control and monitoring requirements is unsupported in the record and arbitrary and capricious. *See, e.g.*, *CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).").

a. Variability of Emissions from the Unit in Question

In terms of NDEE's discussion of the first factor—variability of emissions from the emissions unit—NDEE gives no indication in either the Fact Sheet or the Response to Comments that NDEE has actually considered the variability of the emissions from the relevant emission points. NDEE thus essentially disregards this factor. Nor does NDEE provide any relevant information about emission variability at these emission points that would indicate that scrubber liquid temperature control and monitoring are necessary to assure compliance. Cargill previously raised these arguments in its comments on the draft of the Permit. *See* Cargill Comments at 20-21.

While NDEE nominally considers the variability of emissions, its consideration boils down to two internally contradictory arguments—both arbitrary and capricious and unsupported by record evidence: (1) scrubber liquid temperature monitoring at the relevant emission points is important because of VOC emission variability resulting from the nature of processes at ethanol plants (even though none of the relevant emission points are ethanol plant sources); and (2) differences in emissions resulting from different processes are "***irrelevant***" and variability does not matter as long as the source emits some VOCs, no matter the amount.

With respect to the first point, NDEE asserts in the Fact Sheet that:

> NDEE has determined that the variability of emissions from *ethanol production using a biological source* (i.e. yeast fermentation) will create a variability in the

> composition of the emissions (about percentage of VOC – as ethanol – produced, and the percentages of each HAP). NDEE requires scrubbers (or RTOs as an alternative) to control large VOC emission sources at ethanol plants.

Fact Sheet at 83 (emphasis added). NDEE further indicates its reliance on emissions information and variability for ethanol plants by explaining that:

> Cargill requested that the testing records *used as basis of determining scrubber operating parameters* to be included in the Administrative Record (i.e., fact sheet). There have been over 300 tests conducted at VOC *fermentation scrubbers at ethanol plants* in the last 20 years. These testing records for all the *fermentation emission points at ethanol plants* in Nebraska are in Appendix J and for the testing results for all emission points at Cargill's facility are in Appendix K. The wet scrubbers operational parameter monitoring and *variability at ethanol plants* are discussed later in this fact sheet and in Appendix L [Wet Scrubber White Paper].

Fact Sheet at 78 (emphasis added).

First and foremost, these statements indicate that NDEE has premised its evaluation of this factor—and its monitoring determinations—on plainly incorrect assumptions regarding the type of emission points at the Blair Facility. More specifically, NDEE states that it is appropriate to impose temperature monitoring on the relevant emission points because of variability in emissions from "ethanol production using a biological source (i.e. yeast fermentation)." Fact Sheet at 83.

Importantly, *none* of the seven relevant scrubbers are fermentation scrubbers or even scrubbers located in the ethanol production area of the Facility. Thus, the type of variability identified by NDEE—related to variability caused by the use of yeast in the ethanol fermentation process—is not a relevant factor for these scrubbers. Rather, these scrubbers are associated with the millhouse processes (EP-7, EP-7A), gluten drying process (EP-8A), germ drying process (EP-10), fiber drying process (EP-12), and germ process (EP-66 and EP-67). These scrubbers are located at the Blair Facility's corn wet milling plant (SIC Code 2046 – Corn Wet Milling), which has an entirely different SIC code from the ethanol production area at the Facility (SIC Code 2869 – Industrial Organic Chemicals, Not Elsewhere Classified). In addition, the AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors recognizes that the corn wet milling operations that are associated with the seven scrubbers at issue are distinct operations from ethanol production processes. *See* AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors, Volume 1: Stationary Point and Area Sources, at 9.9.7-1 – 9.9.7-8 (attached hereto as Exhibit 24).[16] Accordingly, NDEE's rationale that monitoring is required because emissions from "ethanol production using a biological source" are variable is based on plainly incorrect assumptions about the emission profiles of the relevant emission points.

[16] Moreover, even if the emissions points in question were ethanol sources, NDEE's rationale would still be arbitrary and capricious as it also disregards that the Blair Facility is not a batch dry mill plant, but rather a continuous process ethanol plant.

Responding to Cargill's comments that the emission points in question are not associated with ethanol production and that corn wet milling facilities have distinct emissions profiles, NDEE nominally acknowledges that the relevant emission points at the Blair Facility are distinct types of sources and processes from ethanol processes, and that emissions vary between sources. However, the Response to Comments document then proceeds to explain that these distinctions are "***irrelevant***":

> NDEE agrees that there are different and unique unit operations (e.g. distillation, gluten drying, fiber drying, germ processing, fermentation, etc [sic]) within different corn milling and/or ethanol producing facilities. While different unit operations and facilities with different SIC codes may produce smaller or larger quantities of VOC, emissions testing (please refer to Table 3) show that these operations are not unique since the testing results indicate they ***all emit*** Volatile Organic Compounds (VOC).
>
> Note that the design principle of a wet scrubber that controls VOC emissions generally does not take into consideration where and how the VOC emissions were generated in the process(es) prior to the wet scrubber. Furthermore, it is ***irrelevant*** to the wet scrubber whether the VOC emissions are coming from facilities with different SIC codes or types of processes such as batch, continuous, wet, dry, corn milling, ethanol plant, etc.
>
> While there is variability in the ***amount*** of VOCs emissions created in the different unit operations and/or type processes, NDEE's obligation is to prescribe permit conditions that ensure continuous VOC ***control*** of such emissions.

Response to Comments at 8-9, 17 (emphasis in original).

In other words, NDEE argues that although "there are different and unique unit operations" and these "different unit operations and facilities with different SIC codes may produce smaller or larger quantities of VOC," this fact is "***irrelevant***" as long as there are some VOCs being emitted. Response to Comments at 8-9, 17 (emphasis in original). This rationale is arbitrary and capricious and unsupported in the record for a number of reasons.

First, in explaining that variability is "irrelevant" to an evaluation of whether additional monitoring is required, the above-quoted rationale internally contradicts with statements in the Response to Comments, Fact Sheet, and the Wet Scrubber White Paper that is attached in support of the Permit as Appendix L. For example, NDEE's assertion that the types of processes generating VOC emissions are "***irrelevant*** to the wet scrubber" is contradicted by NDEE's own acknowledgement that "different unit operations and facilities with different SIC codes may produce smaller or larger quantities of VOC." Response to Comments 8-9, 17 (emphasis in original). It is also contradicted by NDEE's statements in the Fact Sheet that additional monitoring is appropriate because "NDEE has determined that the variability of emissions from ethanol production using a biological source (i.e. yeast fermentation) will create a variability in the composition of the emissions (about percentage of VOC – as ethanol – produced, and the percentages of each HAP)." Fact Sheet at 83. And, NDEE's statements in the Response to

Comments are also inconsistent with the "guidance" contained in NDEE's Wet Scrubber White Paper—which is attached to the Permit and relied upon extensively in the Fact Sheet—which observes that there can be significant emission rate variation in the form of a "peak" over a fermentation cycle at *batch dry mill* ethanol plants that "*has generally not been observed at continuous process ethanol plants; rather, VOC and HAP emission rates at these plants have maintained a more steady-state.*" Wet Scrubber White Paper, Appendix L, at 10 (emphasis added). Thus, NDEE's claim that source- and process-specific information is irrelevant, is expressly contradicted elsewhere in the Fact Sheet and Response to Comments.

Second, the statement that "it is ***irrelevant*** to the wet scrubber whether the VOC emissions are coming from facilities with different SIC codes or types of processes such as batch, continuous, wet, dry, corn milling, ethanol plant, etc." is incorrect for multiple reasons. First, different types of processes produce different species of VOCs. These different species of VOCs *do* react differently inside a scrubber. Indeed, nowhere does NDEE consider the types and amounts of VOCs in the emission stream treated by the scrubber. In addition, different types of processes differ in the variability of emissions they produce, and this factor is expressly recognized as relevant by EPA in its prior decisions. *See San Juan Generating Station Order*, Ex. 20, at 19-20; *see also CITGO Order*, Ex. 21, at 7-8. Therefore, the variability in emissions is a relevant concept when evaluating whether additional control and monitoring is necessary to assure compliance.

Third, NDEE's claim that mere VOC presence in emissions—rather than amount and variability of VOCs—is the relevant factor in determining whether supplemental monitoring is needed is not in compliance with Title V and Part 70. The hallmark for determining whether additional supplemental monitoring may be imposed under Title V is that such monitoring is necessary to "assure compliance." 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c). The amount of VOCs, their variability, the emission limit, and compliance margin, are thus quite relevant to whether existing monitoring is "sufficient to assure compliance" with the emission limits included in the permit. *Id*. In contrast, the mere presence of VOCs in emissions is not.

Indeed, rather, than evaluate these issues in the context of the specific Cargill emission points at issue, NDEE includes and relies on a table in the Response to Comments (Table 3), which "depicts the *presence* of VOC in the controlled tested emissions from Cargill Blair and seven other plants of different types and sizes in Nebraska; please note that the information provided is to depict VOC *presence rather than the quantity* of VOC present." Response to Comments at 10-11 (emphasis added). This table provides one test result each for a number of emission points at other facilities, the vast majority of which appear to have disparate operations from the Cargill emission points at issue. The table does not include the emission limits or associated VOC compliance margins, nor does it provide any indication of the variability of VOCs at each emission point, as only one test result for VOCs—a snapshot in time—is provided for each emission point. Nor is any indication provided as to whether all of these emission points must monitor scrubber liquid temperature, and in fact, some of them do not as described in Section IV.A.2.e, below. Nor does this table provide any information regarding whether VOC emissions are affected by scrubber liquid temperature at these emission point. Rather, as NDEE admits, the table shows only the "presence of VOC" rather than providing any meaningful information regarding whether additional monitoring is necessary to assure compliance.

Yet somehow, NDEE concludes from the bare bones information provided in this table that "[t]he test results depicted in Table 3 indicate that while there are different types of corn milling and/or ethanol facilities throughout the State of Nebraska, the emission profiles are comparable to the emission profile from the Cargill facility; therefore, Cargill is incorrect in its claim that their emissions are unique. Based on the data represented in the table and information provided by Cargill, NDEE has correctly and adequately assessed the emissions profile for EP-7, EP-7A and EP-12." Response to Comments at 12.

NDEE's assessment is unsupported and unsupportable. First, the "presence" of VOC emissions alone—no matter the amount or how constant—cannot in and of itself demonstrate the need for monitoring in addition to the monitoring required by the underlying applicable requirement. If this were the case, a permitting authority would have carte blanche to impose supplemental monitoring on any emission point emitting VOCs. This is not the law under Title V, Part 70, or EPA guidance. Indeed, under this standard, the exception (i.e., state gap-filling to impose new monitoring to assure compliance) would swallow the rule (i.e., that Title V is not presumptively intended to impose new requirements).

Second, as described below in Section IV.A.2.e. with respect to fifth factor identified by EPA ("The type and frequency of the monitoring requirements for similar emission units at other facilities"), the other emission points in the table are not comparable or similar to the relevant emission points at Cargill and thus do not provide relevant information about Cargill's emissions profile.

And finally, NDEE nowhere actually considers the variability of the emissions from the relevant emission points, and thus essentially disregards the variability factor. Nor does NDEE provide any relevant information about the emissions profiles for these emission points that would indicate that scrubber liquid temperature control and monitoring are necessary to assure compliance.

For the reasons described above, the rationale offered by NDEE is contrary to law, unsupported by the record, and therefore arbitrary and capricious and not in compliance with the requirements of Part 70 or the CAA. *See, e.g., CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).").

b. Likelihood of a Violation of the Requirements

In terms of the second factor, NDEE gives no indication in either the Fact Sheet or the Response to Comments that it considered the likelihood of a violation of the current underlying applicable requirements. NDEE does not offer any support in the record that the Blair Facility emission points subject to the additional monitoring are likely to exceed applicable VOC emission limits. NDEE does not account for compliance history, compliance margin, or whether the absence of scrubber liquid temperature control and monitoring is leading to instances of non-

compliance. NDEE also does not offer any evidence of how monitoring temperature would assure compliance. *See San Juan Generating Station Order*, Ex. 20, at 19-20 (identifying "the likelihood of a violation of the requirements" as a consideration in determining whether additional monitoring is necessary). Indeed, as described below in Section IV.A.4, the record does not support the conclusion that the relationship between scrubbing liquid temperature and VOC emissions is such that such temperature monitoring is necessary to assure compliance. Cargill previously raised these arguments in its comments on the draft of the Permit. *See* Cargill Comments at 21-22, 30-44.

The scrubbers for which NDEE seeks to impose additional monitoring requirements have been operating in compliance with the federally-enforceable VOC emission limits for many years. Nothing has changed with respect to the design of these scrubbers or with respect to how these scrubbers operate that would warrant scrubber liquid temperature control and monitoring or "alternative" inlet testing and compliance demonstration, and NDEE does not provide information in the record to the contrary. As Cargill noted in its comments regarding the draft of the Permit, NDEE has issued only one Notice of Violation ("NOV") related to a scrubber at the Blair Facility in over twenty years, and even that NOV was not relevant to the proposed additional monitoring.[17] NDEE does not consider the Blair Facility compliance history in evaluating whether supplemental monitoring is necessary to assure compliance.

Nor does NDEE consider the compliance margins for federally-enforceable VOC emissions for each emission point. Although NDEE includes stack testing data in the record as Appendix K, NDEE declines to consider the data, instead asserting that "NDEE does not have an accurate assessment of Cargill's current compliance margins for prescribed limitations on the emission units in question." Response to Comments 16. The data contained in Appendix K show sufficient compliance margins between the VOC emissions values recorded during the stack tests and the emission limits at the emission points for which NDEE is seeking to impose additional scrubber monitoring:

[17] The NOV was issued in November 2013 and related to venting from a coupling which connects the germ dryer (EP-10) to the inlet of the scrubber that was observed during a performance test at this unit. This NOV is not relevant to the proposed additional scrubber monitoring. First, the NOV is not related to the performance of the scrubber itself and does not relate to exceedances of emissions at the outlet of the scrubber; rather, it alleges that emissions were vented prior to reaching the scrubber. Second, additional scrubber water temperature control and monitoring at the scrubber is not required to assure compliance in such instances. Third, after the NOV was referred to the State of Nebraska Office of the Attorney General, the Office of the Attorney General decided not to pursue the matter further and closed the enforcement case against Cargill for the allegations in the NOV, by letter dated February 27, 2017.

Emission Point	Highest Test Result (Total VOC lb/hr)	Permit Limit (VOC lb/hr)
EP-7	10.65	24.36
EP-7A	8.26	24.36
EP-8A	6.01	21.92
EP-10	4.23	10.08
EP-12	8.39	12.00
EP-66	3.03	5.94
EP-67[18]	6.75	9.59

Yet, NDEE disregards these stack test data, compliance margins, and compliance history in its evaluation of whether to impose scrubber liquid temperature control and monitoring requirements and "alternative" inlet testing and compliance demonstration requirements at these emission points.

NDEE attempts to justify its decision to disregard the record evidence of the sufficient VOC compliance margin at three of these emission points (EP-7, EP-7A, and EP-12), by noting that "performance testing information for the three emission points in question were conducted between 2012 and 2015." Response to Comments at 7. NDEE then goes on to state that:

> Just like any other type of industry, the corn milling and ethanol sectors are continuously looking for ways to maximize production yields and develop new products; these changes may affect the emissions profile from the facility. Because of continuous changes in operation, aging of the equipment, lack of real time continuous emission monitoring data, and the fact that the performance tests were conducted as far back as a decade ago, NDEE does not have an accurate assessment of Cargill's current compliance margins for EP7, EP-7A and EP-12 with the prescribed limitations.

Id.; *see also* Response to Comments at 16.

Consistent with its overall approach NDEE does not consider source- and emissions-point specific information, but rather relies on broad generalizations that are unsupported by record evidence and do not support the imposition of additional monitoring.

In arguing that NDEE lacks sufficient information to consider the likelihood of a violation, including compliance margins, NDEE points to the age of performance tests conducted on EP-7, EP-7A, and EP-12, which were conducted in 2013, 2012, and 2015 respectively. NDEE then proceeds to speculate that this length of time is significant for several reasons.

[18] For some reason, the testing data for EP-67 is not contained in Appendix K. EP-67 was tested on May 29, 2013 with a VOC result of 6.75 lb/hr.

First, NDEE speculates that these tests may no longer be valid, not based on any specific information about the Cargill Blair Facility, but based on a generalized assumption about the industry in general, which it claims lead to "continuous changes in operation" that "may affect" emissions: "Just like any other type of industry, the corn milling and ethanol sectors are continuously looking for ways to maximize production yields and develop new products; these changes may affect the emissions profile from the facility." Response to Comments at 7.

NDEE provides no information in the record in support of either this generalized claim, or of the alleged "continuous changes in operation" that "may affect" emissions at the Blair Facility. Indeed, Cargill emphasizes that this claim is incorrect and does not reflect the realities of the extensive permitting requirements to which the Blair Facility must adhere when making changes to its processes. NDEE seems to imply that Cargill can make changes to its operations that increase its emissions at will. However, to the contrary, the Blair Facility is subject to Prevention of Significant Deterioration ("PSD") requirements which restrict the changes that can be made to facility operations. Cargill is required to analyze any modification to an emission unit or change in the method of operation to determine if the modification will cause an emissions increase. *See* Permit, Page 3, Condition I(I). This emissions increase calculation is evaluated against historical actual emissions and includes any increases to emissions from upstream or downstream units that would have increased utilization because of the modification or change in method of operation. If the emissions increase is above the significance threshold for any regulated pollutant, Cargill is required to obtain a construction permit for the modification. As a part of the permitting process, NDEE is not just informed about changes in operation at the Blair Facility—NDEE must approve them and issue a construction permit with appropriate conditions.

Under the terms of the Permit, NDEE will be kept apprised of Cargill's evaluations of emission increases even where a new construction permit may not be required. The Permit requires Cargill to submit to NDEE notifications that document when the Facility "makes physical or operational changes to an emissions unit or associated control equipment that may cause an increase in emissions that makes the original testing not representative of current operating conditions or emissions[.]" *See* Permit, Page 3, Condition I(I). Such notifications must be received by NDEE within fifteen (15) days after such change, and "NDEE may require performance testing based on review of the specific changes identified in the notification and the resulting potential impact on emissions from the unit(s) and/or performance of the control equipment[.]" *Id.* The Permit also requires notification to NDEE for other changes to a Facility—including changes to emissions—even where they would not require an operating permit revision. *See* Permit, Pages 8-10, Condition II.(L). NDEE may require a facility to apply for an operating permit if criteria are not met and may require additional testing. *See id.*

Thus, if Cargill does make changes in operations, effects on emissions are either considered as a part of the construction permit process or submitted to NDEE for review. Indeed, to the extent future operational changes render increased monitoring necessary, the appropriate mechanism to impose those changes is through the associated construction permit. And, as noted above, NDEE has the authority to require additional performance testing where changes at the facility may cause the original test to no longer be accurate. It is inappropriate to speculatively impose significant new monitoring requirements through the Title V process without appropriate

support that such monitoring is necessary to assure compliance, and to do so is in excess of NDEE's authority.

Furthermore, NDEE's claim that continuous changes in the "corn milling and ethanol sectors" justify its decision to disregard available stack testing and emissions information once again conflates the operations at the relevant emission points with operations in the "ethanol" sector. Cargill has repeatedly commented that the corn milling and ethanol sectors are distinct operations with separate SIC codes. Many of NDEE's explanations are premised on the variability that is observed at fermentation scrubbers at ethanol facilities—particularly batch ethanol facilities which experience peaks and can experience emissions variability due to fermentation and yeast-related activities. As Cargill has emphasized, there are significant differences between the emissions profiles at ethanol operations and corn milling operations. For instance, the ethanol production process often can use batch fermentation which has an emissions peak, and the objective of such process is to produce ethanol, which is a VOC. Unlike the ethanol production process, the corn milling process seeks to minimize ethanol production and does not intentionally produce VOCs, and operations are more continuous and less variable. Moreover, emissions from corn milling operations largely depend on production rates, and stack tests are conducted while running operations at close to maximum operating capacity as possible to account for this and to ensure the testing results reflect peak operations. And, as noted above, any relevant changes at such corn milling facilities would be evaluated and addressed through the construction permitting process or submitted to NDEE as a notification for its review. The nature of corn milling operations, that stack tests are conducted at maximum operating levels, and the restrictions imposed by the PSD construction permitting process and other notification requirements ensure that Cargill is not changing operations in a manner that will increase emissions as hypothesized by NDEE. NDEE's speculation in this regard is not sufficient to support the imposition of significant additional monitoring through the Title V process.

Second, NDEE further speculates that the "aging of the equipment" may render the existing stack testing and compliance margin information invalid, allowing NDEE to disregard that information. However, once again, NDEE fails to provide any information specific to the relevant emission points, and does not even identify the "equipment" in question. It is unclear even whether NDEE is referring to the equipment in the underlying process, or whether the scrubber equipment itself. No support is provided, and this assumption is without a basis in fact in the record. Accordingly, this claim cannot be used to impose significant new monitoring requirements.

Assuming NDEE is referring to the age of the wet scrubbers at these emission points (as opposed to the age of other equipment), Cargill notes that it regularly maintains such scrubbers and has a scheduled environmental preventative maintenance program in place. This environmental preventative maintenance program includes periodic internal inspections of all seven scrubbers, as well as preventative maintenance on the critical instrumentation for these scrubbers and scrubber packing is changed out as needed. NDEE has not explained how imposing scrubber liquid temperature monitoring is required to assure compliance for older equipment.

In any event, the mere reference to "aging equipment," without any record evidence that this poses a compliance concern, cannot be used as a valid reason to impose additional control and monitoring. To find otherwise would allow an agency unbridled discretion to impose new monitoring on any non-new equipment based on the specter of the amorphous and unidentified effects of aging. This is not in accordance with Title V, which only permits the imposition of additional new monitoring where necessary to assure compliance based on the specific emission point in question.

And finally, NDEE appears to view the ages of the performance tests, in and of themselves, as rendering them not representative of emissions. Cargill disputes that 7-10 years is old enough to assume that the existing stack test information is not valid, especially given the construction permitting and notification requirements imposed on Cargill for changed operations, as described above. However, if NDEE is concerned about the age of these tests, NDEE has the authority to require stack testing rather than impose burdensome new continuous monitoring requirements. Indeed, the Permit does in fact impose new stack testing requirements on all of the relevant emission points, with a near-term schedule for doing so. NDEE nowhere explains why additional stack testing would not be sufficient to alleviate any concerns about the age of the existing testing or the relevant equipment.

In sum, available information in the record supports the conclusion that sufficient compliance margins for VOCs exist at the relevant emission points, and NDEE has pointed to no non-speculative or non-generalized information that indicates that there is a likelihood of a violation of the VOC emission limits at these emission points. Accordingly, this factor does not support the conclusion that the imposition of new supplemental monitoring requirements on these emission points is necessary to assure compliance.

c. Whether Add-on Controls Are Being Used to Meet Emission Limits

In terms of the third factor—whether add-on controls are being used for the unit to meet the emission limit—NDEE's proposal to impose additional control and monitoring does not account for the fact that the subject scrubbers are primarily designed for removal of sulfur dioxide ("SO_2") and/or particulate matter ("PM"), not for VOC removal. Wet scrubbers designed for efficient removal of PM or SO_2 emissions may have minimal effect on reducing VOCs. *See* U.S. EPA, Air Pollution Control Technology Fact Sheet, EPA-452/F-03-015, at 5 ("Configuring a control device that optimizes control of more than one pollutant often does not achieve the highest control possible for any of the pollutants controlled alone.") (attached hereto as Exhibit 25). While some ancillary VOC control is obtained, these scrubbers are not primarily designed for VOC emissions control. NDEE should have considered this information in determining whether additional monitoring was needed for these emission points. *See San Juan Generating Station Order*, Ex. 20, at 19-20 (identifying whether add-on controls are being used for the unit to meet the emission limit as a consideration in determining whether additional monitoring is necessary). Cargill previously raised these arguments in its comments on the draft of the Permit. *See* Cargill Comments at 23-25.

Below Cargill discusses the two emission points subject to BACT determinations (EP-7A, EP-8A), followed by the five emission points subject to the Consent Decree (EP-7, EP-10, EP-12, EP-66, EP-67).

i. Emission Points: EP-7A, EP-8A

For EP-7A and EP-8A, NDEE itself anticipated that these scrubbers—originally designed for the control of other pollutants—would get some ancillary VOC control, but would have relatively low VOC removal efficiencies. NDEE set the VOC emission limitations for these scrubbers accordingly recognizing that a large percentage—but not all—of the VOCs in the gas stream would exit the existing wet scrubbers. *See San Juan Generating Station Order*, Ex. 20, at 19-20 (identifying "whether add-on controls are being used for the unit to meet the emission limit" as a consideration in determining whether additional monitoring is necessary). In light of this low removal level, any fluctuations in scrubber performance as it relates to VOCs are expected to have minimal effect on emissions, such that additional monitoring lacks value and is unjustified.

For instance, when conducting BACT analysis for EP-7A and EP-8A in connection with the 2006 construction permit (CP06-0008) for the Blair corn wet milling facilities, NDEE recognized that the scrubbers as designed and optimized for other pollutants would achieve limited VOC control. *See* 2006 Fact Sheet, Ex. 4, at 23 (explaining, in connection with EP-7A, that "the scrubber design, as optimized for SO_2 control, would achieve very limited VOC control (approximately 4%)"); *see id*. at 25 (explaining, in connection with EP-8A, that "the scrubber design, as optimized for SO_2 and PM/PM_{10} control, would achieve very limited VOC control (approximately 3%)").[19] This information supports the notion that additional monitoring is not needed to demonstrate compliance with VOC emission limits for these emission points.

In the Fact Sheet, NDEE acknowledges Cargill's prior comments on this issue, agreeing that the BACT for EP-7A and EP-8A "assumed only 3-4% VOC control efficiency since it was optimized to control SO_2, and that it would be cost prohibitive to (1) redesign the scrubber to achieve higher VOC control or (2) install an additional control device (i.e. another scrubber or an RTO) after the SO_2 scrubber." Fact Sheet at 77.

Instead of using the information in its own 2006 BACT analysis or considering the explanation in Cargill's comments on the Draft Permit, the Fact Sheet concludes that:

> Cargill submitted in its 2012-2020 emission inventories that EP-7A achieves 99.0% control efficiency for VOC and EP-8A achieve 95.0% control efficiency for VOC.

[19] As part of the required BACT analysis, Cargill evaluated a variety of methods to improve VOC removal efficiency including enhancements to the existing wet scrubbers for VOC emissions control. These methods were determined not to be cost-effective. NDEE agreed with this analysis and based the VOC BACT emission limitation on VOC emissions that exit through the PM/SO_2 wet scrubbers without optimizing those scrubbers for VOC control, as determined by testing of the existing scrubbers. *See* 2006 Fact Sheet, Ex. 4, at 12, 24, 25. This conclusion similarly applies with respect to HAP control. "For organic vapor HAP control applications, low outlet concentrations will typically be required, leading to impractically tall absorption towers, long contact times, and high liquid-gas ratios that may not be cost-effective." Air Pollution Control Technology Fact Sheet at 2.

> Therefore, the initial assumption in the PSD-BACT analysis appears to be incorrect. The VOC PSD-BACT for scrubbers is usually at least 90% control efficiency, but typically 95-98% control efficiency (exact values would be based on evaluating currently permitted PSD-BACT units in EPA's RACT/BACT/LAER Clearinghouse); which may be represented as a lb/hr limitation instead of a control efficiency limitation.

Fact Sheet at 77.

In Cargill's comments and during multiple meetings with NDEE staff, Cargill had explained that the 99% and 95% control efficiencies referenced in Cargill's emission inventory submissions from 2011-2020 apply to pollutants *other* than VOCs (i.e., SO_2, PM)—not to VOCs. *See* Cargill Comments at 24. In the Response to Comments, however, rather than critically evaluate Cargill's claim that the emissions inventory values for control efficiency applied to other pollutants that were included in the submission, NDEE responded that "[t]he emission inventories submitted by Cargill were certified by its Responsible Official to be true, accurate and complete[.]" Response to Comments at 17. NDEE further explained that "NDEE does not agree that Cargill made it clear that the control efficiencies did not apply to VOCs. If Cargill wishes to modify the VOC control efficiencies for EP-7A and EP-8A, Cargill will need to submit an amended and certified emission's inventory for the years in question." Response to Comments at 18.

NDEE's explanations in both the Fact Sheet and Response to Comments, and its conclusions that "the initial assumption in the PSD-BACT analysis appears to be incorrect,"[20] and that the scrubbers are instead obtaining 99% and 95% control efficiencies, are flawed. Fact Sheet at 77.

As explained in Cargill's comments and in numerous meetings between Cargill and NDEE, Cargill maintains that NDEE's assertion that the 99% and 95% control efficiencies referenced in Cargill's emission inventory submissions from 2011-2020 refer to VOCs is incorrect. They do not. Rather, the 99% and 95% control efficiencies apply to pollutants *other* than VOCs (i.e., SO_2, PM). As noted in the emission inventory provisions cited by NDEE in the Response to Comments, the inventory is submitted "on forms furnished by or acceptable to the Department[.]" Response to Comments at 17. However, the layout on the NDEE's form had multiple pollutants being listed on one line, without separate cells to separate out which control

[20] Cargill does not agree with NDEE's characterization that achieving greater emissions reductions means that the original BACT analysis was "incorrect." NDEE based the 2006 BACT analysis on information current at that time. NDEE's reliance on this statement makes it unclear whether NDEE is essentially seeking to reopen and retroactively change its prior BACT determination to achieve greater emissions reduction control than required. The unilateral reopening of construction permits and BACT determinations is not permitted as a part of the Title V process. *See Environmental Integrity Project v. U.S. EPA*, Ex. 16, 969 F.3d at 543, 546 (finding EPA's interpretation persuasive that "Title V is not the appropriate vehicle for reexamining substantive validity of underlying Title I preconstruction permits;" and explaining that the Title V process is not [a] "new method[] of reviewing old requirements"); *see also Operating Permit Program*, Ex. 14, 57 Fed. Reg. 32,250, 32,259 (noting intent not to second-guess the results of state NSR programs).

efficiency applied to which pollutants.[21] The form thus does not distinguish which efficiencies apply to which pollutants.[22] In order to clarify the confusion associated with the layout of the NDEE's form and to respond to NDEE's assertion that Cargill should submit an amended emission inventory, on August 5, 2022, Cargill submitted a revised emissions inventory for calendar years 2020 and 2021 clarifying the removal efficiencies. Cargill is attaching this submission hereto as Exhibit 27.[23]

ii. Emission Points: EP-7, EP-10, EP-12, EP-66, EP-67

While NDEE at least acknowledges Cargill's arguments with regards to EP-7A and EP-8A, albeit based on incorrect assumptions and a misunderstanding regarding the emissions inventory form, NDEE does not respond to Cargill's comments that other scrubbers being subjected to new requirements also were not primarily designed or optimized to control VOCs (EP-7, EP-10, EP-12, EP-66, EP-67). *See* 40 C.F.R. § 70.7(h)(6). Instead, NDEE either imposes temperature control and monitoring without acknowledging Cargill's arguments (EP-7, EP-12), or incorrectly states that these scrubbers provide *no* VOC control such that NDEE treats the emission point as if it does not have a scrubber at all (EP-10, EP-66, EP-67). Below, Cargill reiterates points raised in its comments to which NDEE does not respond. *See* Cargill Comments at 27, 65, 75-80, 116-117.

The Consent Decree emission points not subject to Emission Control Plans include five of the seven emission points at issue in the Permit (EP-7, EP-10, EP-12, EP-66, and EP-67). Cargill's comments explained that the Consent Decree established no emissions reductions requirement for VOCs for emission points that were not subject to Emission Control Plans. In accordance with the Consent Decree, Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66 and EP-67 based on a maximum, potential to emit with a margin of safety. NDEE subsequently issued CP08-065—the construction permit incorporating the Consent Decree requirements. *See* Ex. 8.

Notably, CP08-065 did not require scrubber water temperature monitoring or control for the Consent Decree emission points not subject to Emission Control Plans (EP-7, EP-10, EP-12, EP-66, and EP-67). *Id.* Importantly, NDEE expressly considered and decided against imposing

[21] Cargill notes that Table 5 was created by NDEE to summarize its interpretation of the annual emission inventory form for the purpose of the Response to Comment, but does not reflect how this information was reported on the annual emission inventory form. Response to Comments 18.

[22] Cargill notes that the instructions for the emissions inventory report form required "general information" to be provided for the air pollution control equipment. *See* NDEE, Instructions and Overview of Air Emissions Inventory Forms - General Industry (2018), attached hereto as Exhibit 26, *available at* http://deq.ne.gov/Publica.nsf/Pages/AIR014K.

[23] Note that because NDEE informed Cargill of the need to submit a revised emission inventory in the Response to Comments document, and the revised emission inventory was submitted to NDEE following the comment period (which ended January 31, 2022), it was not possible for Cargill to provide this revised inventory during the comment period. It is permissible to include this information because the grounds for the objection arose after the public comment period. *See* 40 C.F.R. § 70.12(a)(2).

such water temperature control and monitoring requirements. NDEE's draft construction permit had contained a requirement to monitor scrubber liquid temperature. As NDEE explained in its 2012 Response to Comments on the construction permit, Cargill had commented that, with respect to these scrubbers:

> the add-on control of VOCs by chemical addition and scrubber liquid temperature *are not* conditions that are required by the Consent Decree. Paragraph 39 of the Consent Decree only requests that VOC limits be identified and written in to the facility's permit for those sources at the facility that were considered to be *minor contributors* of VOC emissions.

2012 Response to Comments, Ex. 6, at 4 (emphasis added). Cargill's comments further explained that "the intent of the permitting action required under Paragraph 39 was to correctly identify sources of VOC emissions in the facility's permit. The intent was not to add additional controls and impose additional costs other than those associated with specific control plans in Paragraphs 15 through 29 of the Consent Decree." 2012 Response to Comments, Ex. 6, at 4; *see also id.* ("[B]ecause the emission limitations would be set at the PTE of each unit, Cargill is not being credited with any HAP emission reductions from the required control devices, and the facility is already a major source of HAPs it is not necessary to include the HAP emission limitations in this permit.").

In NDEE's 2012 Response to Comments, NDEE agreed with Cargill's comment and removed the draft conditions requiring scrubber water temperature monitoring, explaining that "since Cargill is not claiming any emission reductions from the use of the scrubbers, the NDEQ agrees that monitoring scrubber water temperature is unnecessary." *Id.*

NDEE's decision not to impose this monitoring in CP08-065 makes perfect sense when viewed in the appropriate context and in light of the nature of the emission limits for these emission points. As noted above and discussed in more detail below in Section IV.D., the Consent Decree established no emissions reduction requirements for VOCs for EP-7, EP-10, EP-12, EP-66, and EP-67. Instead, Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66 and EP-67 based on estimated maximum, potential to emit ("PTE") post-scrubber emissions, with a safety margin built in. Indeed, NDEE itself recognized in the 2012 Fact Sheet, Ex. 9, for CP08-065, "VOC and HAP emission limitations for these units are listed as lb/hr limitations based on the maximum operational capacity of each unit (based on engineering data and stack testing conducted by Cargill at this facility and other, similar facilities)." 2012 Fact Sheet, Ex. 9, at 14.

Thus, for these emission points, the VOC emission limits were *not* intended to effect emissions reductions, but were merely meant to reset limits for each emission point in order to reflect actual worst-case operations, with a margin of safety. At the Blair Facility, the process used to identify these limits involved a review of the emission test data in conjunction with equipment operation throughput rates, utilizing the test data intended to be representative of worst case conditions, with a safety factor applied as deemed appropriate. The wet scrubbers were thus not added-on or primarily designed to achieve VOC reductions. Cargill's comments emphasized that it would be inappropriate to impose additional temperature control and

monitoring requirements on these emission points, where the underlying applicable requirement was not intended to achieve any VOC emission reductions. *See* Cargill Comments at 75-77.

Moreover, while the Consent Decree superseded prior BACT determinations for these emission points,[24] Cargill also underscored in its comments that the wet scrubbers associated with the above-cited emission points were not primarily designed or optimized to control VOCs even prior to the Consent Decree. *See* Cargill Comments at 77-79. For instance, the fact sheet for the 2002 construction permit (prior to the Consent Decree), contains a summary table for each of the above emission units that shows the pollutants originally "controlled" by the relevant wet scrubber at each of these emission points as follows: EP-7 (SO_2), EP-10 (PM/PM_{10}, SO_2), EP-12 (PM/PM_{10}, SO_2), EP-66 (PM/PM_{10}), EP-67 (PM/PM_{10}). *See* Fact Sheet for Cargill, Inc. Corn Wet Milling Facility, at 8 (Nov. 20, 2002) ("2002 Fact Sheet") (attached hereto as Exhibit 28). Importantly, prior to CP08-065, each of these emission points had undergone previous BACT review only for non-VOC pollutants (EP-10, EP-12, EP-66, EP-67), or BACT for VOCs was determined to be a pre-existing scrubber optimized for another pollutant (EP-7). There is also no applicable requirement that requires these emission points to be controlled by a wet scrubber for VOC emissions control as any previous VOC BACT requirements that attached to these emission points was superseded by the Consent Decree. *See* Consent Decree, Ex. 5, Paragraph 77. Additional details regarding the history for each emission point are provided below:

- **Emission Point: EP-7:** The wet scrubber controlling emissions at EP-7 is primarily designed and optimized for SO_2 emissions control. As background, when issuing Permit CP06-0008, NDEE evaluated BACT for EP-7 for SO_2 and VOCs. NDEE explained that "[b]ecause the proposed modifications to these millhouse aspiration sources may cause an increase in emissions, the millhouse has been evaluated for the purposes of BACT review with regard to SO_2 and VOCs. However, potential emissions from EP 7 itself are not expected to increase; therefore, no permit condition is being included in the permit to address the modification to this emission unit." 2006 Fact Sheet, Ex. 4, at 22. NDEE determined that BACT for SO_2 was a wet scrubber that had previously been installed at the emission point for SO_2 control. *Id*. For VOCs, NDEE found that "[s]ince a wet scrubber is already installed, use of this scrubber will be considered the baseline level of VOC control for EP 7. Based upon testing of EP 7, the baseline controlled VOC emission rate for purposes of the BACT analysis will be 24.36 lb/hr." *Id.* NDEE then conducted a BACT analysis for VOCs, but found that installation of an RTO would be economically infeasible, and therefore "BACT was determined to be no additional control; or, use of a wet scrubber with an expected VOC emission rate of 24.36 lb/hr." *Id.* at 23. In short, NDEE determined that no additional controls qualified as BACT for VOCs and found that BACT was the expected baseline VOC control level for emissions that exit the existing scrubber as primarily designed for SO_2 control. *Id.* The VOC emission limit

[24] Note that Paragraph 77 of the Consent Decree, "superced[ed] and control[s] over corresponding terms and conditions of any air quality control permits existing as of the date of entry of this Consent Decree." *See* fuller discussion of the Consent Decree in Section I.C. In short, Paragraph 39 required Cargill to propose a VOC emission limitation for certain emissions points. When NDEE issued the construction permit, this Consent Decree emission limitation superseded any prior emission limitations and permits relating to those emission points, and they are thus no longer subject to BACT. CP19-025 confirms this by using only a "Consent Decree" citation for the VOC emission limitations.

included in the prior construction permit represented a maximum potential to emit based on previous stack testing at the outlet of the scrubber, and which included a safety factor. In the permitting action for CP08-065, Cargill recommended, and NDEE, accepted, a VOC emission limitation based on maximum potential to emit at this emission point.

- **Emission Point: EP-10:** For EP-10, in the original permitting action for the Germ Fluidized Bed Dryer, NDEE determined BACT based on installation of a wet scrubber to control emissions of total suspended particulate ("TSP") and PM_{10}; NDEE established no VOC emission limitation in the 1993 Construction Permit. In 2002, NDEE and Cargill undertook an effort to consolidate emission limits applying to equipment at the Facility, and undertook a new permitting action to supersede previous construction permits. However, as noted above, and as explained by NDEE in the fact sheet for this 2002 permitting effort, NDEE did not consider the installed wet scrubber as a means of controlling VOC emissions, but it did include a VOC emission limit in that permit. *See* Rev. Prevention of Significant Deterioration ("PSD") Construction Permit No. CP99-0075 (2002) ("2002 Permit") (attached hereto as Exhibit 29). That VOC emission limit represented expected combustion-based VOC emissions and did not consider process-based VOC emissions from germ drying. As with other similar units, the Consent Decree provided Cargill the opportunity to reevaluate VOC emissions from EP-10, and set a revised VOC emission limit considering both process emissions and improved emissions estimation methods. The Consent Decree did not impose a VOC emission reduction or control requirement on this emission point and the wet scrubber was not named as a VOC emission control device in 2002. In the permitting action for CP08-065, Cargill recommended and NDEE accepted a VOC emission limit based on maximum potential to emit at this emission point.

- **Emission Point: EP-12:** In a previous permit action, NDEE established BACT for PM/PM_{10} based on use of a wet scrubber. Subsequently, NDEE set an SO_2 BACT limit based on addition of caustic to the scrubber solution. 2002 Fact Sheet, Ex. 28, at 10. As part of the 2012 Consent Decree permitting action, NDEE also approved a modification of the VOC emission limit for EP-12. This modification increased VOC and HAP emissions, and NDEE set new emission limits for VOC and HAP based on "engineering testing . . . to determine representative emission factors." *See* 2012 Fact Sheet, Ex. 9, at 4, 10. The 2012 Fact Sheet also explains that because certain modifications to EP-12 would "increase HAP emissions above the 2.5 tpy individual / 10 tpy aggregate HAP threshold of section 002 of this chapter, state toxics best available control technology (T-BACT) must be applied to EP-12." *Id.* at 10-11. "Based on the PSD review conducted for EP12 the NDEQ determined that the use of the existing wet scrubber also satisfies the T-BACT requirements of this chapter and that no additional control is necessary." *Id*. Thus, after re-evaluating the control technology in 2012, NDEE imposed, no additional controls for VOC or HAP. The emission limits for VOC and HAP are based on the pollutants in the gas stream exiting through the existing wet scrubber, as demonstrated during the engineering tests. *See* Letter from Cargill to NDEE, Re: Revision to Proposed VOC/HAP Permit Limit EP #12 Consent Decree Implementation – Blair, Nebraska U.S. EPA et al. v. Cargill, Incorporated (D. Minn. No. 05-2037) (March 12, 2010) ("To accommodate a more realistic operating scenario Cargill requests that the proposed VOC emission limit

be revised to 12 lb/hr, and that the proposed HAP emission limit be revised to 5.0 lb/hr. These proposed limits are based on engineering tests of EP #12 and Cargill's expected fiber dryer operation . . . .") (attached hereto as Exhibit 30).

- **Emission Points: EP-66**, **EP-67:** Cargill installed the wet scrubbers associated with EP-66 and EP-67 to meet PM/PM_{10} BACT requirements. The emission points were not subject to an emission reduction requirement for VOCs in the Consent Decree, and were not subject to a VOC emission limitation before the Consent Decree. Instead, Cargill proposed, and NDEE adopted VOC emission limitations based on updated information related to VOC emissions at these units. *See* Letter from Cargill to NDEQ (Dec. 23, 2008), Ex. 7. The wet scrubbers are primarily designed and optimized for PM/PM_{10} emissions controls, rather than VOCs. The emission limitations reflect maximum, potential to emit with a margin of safety.

NDEE does not respond to Cargill's comments that these scrubbers were not primarily designed for VOC control, that the scrubbers were not intended to reduce VOC emissions (although they may have some ancillary VOC reductions), and that the relevant emission limits were designed to reflect maximum potential to emit, with a margin of safety. *See* Cargill Comments at 76-79; 40 C.F.R. § 70.7(h)(6). In other words, these controls were not added on to meet VOC emission limits. Nor does NDEE explain its change in position from its prior determination made in 2012 that scrubber water temperature control should not be required for these emission points based on the nature of the emission limits set by the Consent Decree. NDEE's failure to consider this pertinent information is arbitrary and capricious and not in compliance with the requirements of Title V.

iii. NDEE Fails to Account for the History and Purpose of the Scrubbers in Imposing Scrubber Liquid Temperature Control and Monitoring Requirements.

NDEE disregards the history and purpose of the scrubbers at the above identified emission points. In so doing, nowhere in the record does it respond to the specific facts and information offered by Cargill that the scrubbers were not designed or deployed to reduce VOCs or meet VOC emission limits. *See* Cargill Comments at 27, 58-59, 65, 68, 77, 80. Rather, NDEE by fiat offers the following dissonant rationale in an attempt to rationalize the imposition of the scrubber liquid temperature control and monitoring requirements: either (1) a scrubber provides VOC reductions and this alone is enough to consider it a VOC scrubber and automatically mandate additional scrubber liquid temperature monitoring; or (2) the scrubber is considered "uncontrolled" for VOCs and the Permit thus imposes a new substantive requirement in the form of VOC inlet testing and compliance demonstration despite the fact that all historical tests have been performed and approved by NDEE at the outlet to these scrubbers. Notwithstanding the foregoing, and as explained below, none of the subject seven scrubbers fall into these convenient, over-simplified categories.

As detailed above, the relevant scrubbers were designed primarily to control other pollutants, not VOCs. However, while these scrubbers were not intended to work additional VOC emission reductions, at the same time, they are not "uncontrolled" for VOCs. NDEE's Fact Sheet and Response to Comments contain a number of misstatements regarding whether the

VOC emissions are "uncontrolled," and this incorrect understanding results in the arbitrary and capricious treatment of the relevant emission points.

For instance, during the source review period, NDEE proposed to subject all seven emission points to inlet VOC testing and compliance demonstration requirements. With respect to EP-7, EP-7A, and EP-12 (emission points with CAM plans), on December 14, 2021, NDEE emailed Cargill to seek its concurrence to remove the CAM plan requirements for these emission points, stating that "[s]ince Option 1 (VOC/HAP testing prior to scrubber) is being applied to EP-7, EP-7A, and EP-12, it is assumed that the VOC/HAPs from the emission units in these emission points are uncontrolled. CAM is for emission unit-pollutant that are controlled. Therefore, CAM is not required for EP-7, EP-7A, and EP-12." Email from Stephenie Moyer to Jay Frazer, Michelle Bucklin, JJ Zmudzinksi, Re: Cargill - OP question - EP-7, EP-7A, EP-12 (Dec. 14, 2021, 11:14 am) (attached hereto as Exhibit 31). Cargill replied, reiterating its objections and concerns regarding "Option 1," and disagreeing with NDEE's statement "that these emission points (EP-7, EP-7A, EP-12) are 'uncontrolled' for VOCs/HAPs, as applicable and as applied in the context you have stated." Email from Michelle Bucklin to Stephenie Moyer, Re: Cargill - OP question - EP-7, EP-7A, EP-12 (Dec. 15, 2021, 12:17 pm) (attached hereto as Exhibit 32). Based on this statement, NDEE concludes in the Response to Comments that "Cargill indicated on email correspondence from Ms. Michelle Bucklin on December 15, 2021, that the VOC and HAP emissions from EP-7, EP-7A and EP-12 benefitted from control by the associated scrubbers." Response to Comments at 7, 14, 18, 30, 33, 47, 70.[25] As a result, because the emission points were not entirely "uncontrolled," NDEE automatically imposes supplemental temperature control and monitoring on these emission points, without considering the nuances described above and in Cargill's comments.

Although as described above and in Cargill's comments, the wet scrubbers at EP-8A, EP-10, EP-66, and EP-67, are similar in many respects to EP-7, EP-7A, and EP-12 in terms of being primarily designed to control other pollutants, NDEE arbitrarily and capriciously treats these units entirely differently—as "uncontrolled" and subject to VOC inlet testing and compliance demonstration requirements despite record information and Cargill's comments to the contrary. In both the Fact Sheet and the Response to Comments, NDEE mischaracterizes Cargill's statements regarding these emission points and then imposes inlet testing and compliance demonstration requirements based on those mischaracterizations. For instance, in the Fact Sheet, NDEE states that "Cargill claims the control device is not necessary to meet the VOC/HAP permit limits, thus the stack testing of VOC/HAP emissions must be conducted prior to the gas stream entering scrubber." *See* Fact Sheet at 75. NDEE also states that "Cargill's applications indicated **no control** for VOC/HAPs" for these emission points, and "Cargill submitted BACT analysis indicated **no control** for these process areas." Fact Sheet at 74 (emphasis in original). Despite Cargill's comments underscoring that these statements are incorrect, NDEE fails to correct these statements in its Response to Comments, instead reiterating that "[b]ased on

[25] Note that Cargill objected to characterization of this email in its comments. See Comments at 118 (NDEE's paraphrase is inaccurate. NDEE should directly quote Cargill's emails which says: "Cargill respectfully disagrees that these emission points (EP-7, EP-7A, EP-12) are "uncontrolled" for VOC/HAPs, as applicable and as applied in the context you have stated.").

information provided by Cargill in the application, these units have scrubbers that control other pollutants." Response to Comments at 7, 14, 21, 25, 30, 36, 47.

As Cargill explained in its comments:

> Cargill has not stated that no VOC emission control is obtained through these scrubbers. Rather, Cargill has stated that some of these scrubbers are not primarily designed or optimized for VOC control, and were optimized and/or originally installed for pollutants other than VOCs. However, this does not mean that there is no ancillary VOC control obtained through these scrubbers, or that the BACT analysis showed no VOC reductions. In fact, to the contrary, these scrubbers are expected to achieve some level of ancillary VOC control, the BACT analyses and Consent Decree just did not require additional VOC reductions beyond that being achieved through the existing scrubbers that are primarily designed for and optimized for non-VOC pollutants.

Cargill Comments at 58. NDEE's failure to correct these issues in the Fact Sheet and to respond to Cargill's comments regarding these emission points in the Response to Comments is arbitrary and capricious and not compliant with the Title V regulations. *See* 40 C.F.R. § 70.7(h)(6).

In sum, given the fact that the scrubbers are not primarily designed or optimized for VOC control, nor intended to achieve VOC emission reductions, NDEE's imposition of additional supplemental monitoring is arbitrary and capricious and is not supported in the record. *See, e.g.*, *CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).").

As a final note, although NDEE states that it reviewed the "existing guidance for appropriate scrubber monitoring (consideration numbers 3 and 4 of the CITGO Order) in its decision to require continuous scrubbing liquid temperature monitoring[,]" consideration number 3 is related to "whether add-on controls are being used to meet emission limits," not scrubber monitoring guidance. Response to Comments at 8. NDEE thus appears to be misstating consideration number 3 in the Response to Comments, further evincing that NDEE did not consider this issue in deciding to impose scrubber liquid temperature control and monitoring requirements on these scrubbers.

d. The Type of Monitoring, Process, Maintenance, or Control Equipment Data Already Available

In terms of the fourth factor, as Cargill emphasized in its comments, NDEE did not evaluate the adequacy of existing monitoring or maintenance, the specific process being controlled, or available control equipment data. *See San Juan Generating Station Order*, Ex. 20, at 19-20; Cargill Comments at 14-16, 25. Rather than providing any record support regarding "the type of monitoring, process, maintenance, or control equipment data already available for

the emissions unit," NDEE vaguely asserts that "NDEE considers the monitoring, process, maintenance, or control equipment data available for emission points when determining monitoring requirements." Fact Sheet at 83. Similarly, in the Response to Comments, NDEE states that it reviewed the "existing guidance for appropriate scrubber monitoring (consideration numbers 3 and 4 of the CITGO Order) in its decision to require continuous scrubbing liquid temperature monitoring." Response to Comments at 8.

Notwithstanding its statements, NDEE fails to explain what information it considered, to provide any analysis, or to describe how this analysis supports the need for additional monitoring at each emission point, makes for a vacuous record that does not support the imposition of supplemental monitoring. For instance, NDEE does not evaluate or determine whether or how existing monitoring at each emission point is inadequate. Nor does NDEE evaluate process-specific information as described above in Section IV.A.2.a. Rather it simply leans on its unsupported conclusion that process related distinctions are irrelevant.

Instead of providing this information, the Fact Sheet inexplicably notes that "NDEE provided the option of using FTIR CEMS instead of operating parameter monitoring, to date Cargill declined the use of a CEMS." Fact Sheet at 83. Similarly, in its Response to Comments, NDEE notes that CEMS provides an alternative to periodic monitoring. Response to Comments at 21-22, 26, 36-37.

CEMS is not required for the relevant emissions units under either state or federal law, and Cargill is unclear why the fact that Cargill has not voluntarily installed CEMS on the emission points is a justification for adding additional control and monitoring, and does not believe this is a relevant consideration to whether additional control and monitoring is needed.[26] Instead of merely noting that the emission units do not have CEMS, NDEE should have considered the other parameters already monitored to demonstrate compliance at the emission points. Not every potential parameter is required to be controlled and monitored for a given emission point to assure compliance with the permitted limits.

EPA's Draft CAM Technical Guidance does not require or support NDEE's proposed approach to scrubber monitoring for VOC, including the need to control or monitor inlet scrubbing liquid temperature in addition to scrubbing liquid flowrate, differential pressure, and chemical addition flowrate and type (for HAPs emission to achieve control efficiency). In fact, Appendix A, Example A.4 in the Draft CAM Technical Guidance sets forth an example compliance assurance monitoring protocol for VOC control from process tanks using a packed bed wet scrubber. The monitoring requirements in the exemplar include "continuously monitor

[26] Cargill notes that there are a number of technical issues that can arise in the context of VOC CEMS that makes their installation costly and undesirable. For instance, Cargill is aware of only one supplier of VOC/HAPS CEMS, and one vendor that can maintain such systems. If a system malfunctions, this can lead to delays in fixing a system and compliance issues associated with the system being down. This contractor shortage is worldwide, "Due to the lack of cost-effectiveness, after-sales service and standard of care in this industry, apparently the limitations of the [VOC] continuous emissions monitoring systems has been shown in the Chinese Market." *See* Zhou, Gang *et.al. Status and Needs Research for On-line Monitoring of VOCs Emissions from Stationary Sources,* Earth and Environmental Sciences, IOP Publishing, 108 (2018) 042029 (attached hereto as Exhibit 35). Moreover, moisture in the gas stream, "causes serious interference to the measurements." *Id.*

water flow rate" as the only indicator of compliance. U.S. EPA, Technical Guidance Document: Compliance Assurance Monitoring, at A.4-1 (Revised Draft, Aug. 1998 with App'x A updated in 2004) (*available at* https://www.epa.gov/sites/production/files/2016-05/documents/cam-tgd.pdf) (attached hereto as Exhibit 34). Moreover, the Draft CAM Technical Guidance does not discuss scrubber liquid inlet temperature control or monitoring for VOC. And, to the extent the Draft CAM Technical Guidance does discuss temperature monitoring in the context of scrubber liquid outlet or scrubber exhaust outlet temperature monitoring for VOC, it discusses it as a surrogate for liquid flow rate. Cargill is already monitoring scrubber liquid flow rate at these emission points. *See* EPA's Compliance Assurance Monitoring Technical Guidance Document, Appendix B: CAM Illustrations, Revision 1, Review Draft (January 2005)("For systems that control thermal processes, scrubber outlet gas temperature may be monitored as a surrogate for scrubber liquid flow rate.")(attached hereto as Exhibit 33); *see also id.* ("Scrubber liquid outlet temperature is another surrogate parameter for liquid flow rate; this parameter may be used for thermal processes only and is less reliable than monitoring of the liquid flow rate."); *see also id.* at Table B-5. In sum, the Draft CAM Technical Guidance does not support imposition of liquid temperature control and monitoring across packed-bed wet scrubbers regardless of other existing monitoring (including scrubber liquid flow rate monitoring), the pollutant being monitored, or other source- or emission point-specific features.

For the three emission points for which the Permit imposes scrubber water temperature control and monitoring (EP-7, EP-7A, EP-12), the Permit also imposes liquid flow rate, pH, and differential or inlet pressure monitoring, for a total of four parameters. In imposing additional scrubber liquid temperature control and monitoring requirements, NDEE did not evaluate whether existing monitoring is sufficient to assure compliance at each of the emission points.

e. The Type and Frequency of the Monitoring Requirements for Similar Emission Units at Other Facilities

In the Fact Sheet, NDEE claims that "NDEE considered the type and frequency of monitoring of scrubbers at *ethanol plants* (especially those controlling VOC and VOC-HAPs) which require, at a minimum, monitoring of scrubbing liquid flowrate, differential pressure, and scrubbing liquid temperature, along with VOC and HAP testing (a minimum of once every 5 years, to several times a year), with the HAP composition speciated and quantified." Fact Sheet at 83 (emphasis added). However, this claim is unsupported in the record. NDEE neither provides any facts or information to support this claim nor does it identify the other scrubbers at "ethanol plants" it claims to have considered. In any event as detailed below and in Cargill's comments, the seven relevant emission points at issue in this petition are not associated with ethanol plant facilities, but rather with corn wet milling facilities, and the emission units at such facilities are not in fact "similar" to each other.[27] *See* Cargill Comments at 20-21, 25-26, 33-42.

In the Response to Comments, NDEE slightly expands its claim asserting that "NDEE reviewed type and frequency of monitoring requirements for similar *corn milling and ethanol producing facilities* (consideration number 5 of the CITGO Order." Response to Comments at 8

[27] Indeed, as further evidence of the distinct nature of these operations and their emission profiles, while the corm mill emission units have no applicable NESHAP standard, the ethanol fermentation emission units are subject to the requirements and controls under the Miscellaneous Organic NESHAP ("MON"), 40 C.F.R. Part 63, Subpart FFFF.

(emphasis added). However, once again, NDEE fails to identify the monitoring requirements for the facilities it allegedly considered. More importantly, NDEE does not identify a single source with emission points comparable to the seven scrubbers at issue at the Blair Facility, that are subject to the scrubber liquid temperature control and monitoring or the "alternative" inlet testing and compliance demonstration requirements that NDEE seeks to impose on the Blair Facility. Indeed, Cargill is unaware of any such source. As described in more detail below, the only Nebraska source with arguably comparable emissions units (millhouse scrubbers, gluten drying scrubbers, germ drying scrubbers) at a corn wet milling facility is not subject to these scrubber liquid temperature control and monitoring requirements or the "alternative" inlet testing and compliance demonstration requirements. *See* Email from Jj Zmudzinski to Shelley Schneider (Nov. 8, 2021, 1:38 pm) (attached hereto as Exhibit 36); *see also* Cargill Comments at 26.

In its Response to Comments, NDEE includes a table (Table 3), which purports to show emission points associated with various processes at ethanol and corn milling facilities in the state of Nebraska. It is unclear whether this is the information that NDEE is purportedly relying on. However, at the outset, Cargill notes that Table 3 does not indicate whether or not these facilities are subject to scrubber liquid control and temperature monitoring requirements, so the table itself does not provide the information in the record that is necessary to consider this factor.

Nevertheless, NDEE appears to be claiming that scrubber liquid temperature control and monitoring requirements are appropriate because Cargill emission point are no different than these other emission points, and that the emissions profiles across all ethanol plants (both continuous and batch processes) and corn wet milling facilities (multiple types of processes) are essentially the same, thus obviating NDEE the need to consider source- and emission-point specific features. *See* Response to Comments at 8 ("While different unit operations and facilities with different SIC codes may produce smaller or larger quantities of VOC, emissions testing (please refer to Table 3) shows that these operations are not unique in the sense that they ***all emit*** VOCs.") (emphasis in original); *id* at 12 ("The test results depicted in Table 3 indicate that while there are different types of corn milling and/or ethanol facilities throughout the State of Nebraska, the emission profiles are comparable to the emission profile from the Cargill facility; therefore, Cargill is incorrect in its claim that their emissions are unique."). NDEE thus appears to argue that because all ethanol and corn milling facilities are similar, they should all be subjected to the same enhanced scrubber liquid temperature control and monitoring requirements.

As with the variability factor discussed above, the effect of this approach is to disregard this factor as irrelevant, because there is no real evaluation of the similarity of emissions units other than to note that they have VOCs present in their emissions. As NDEE itself claims, it "is ***irrelevant*** to the wet scrubber whether the VOC emissions are coming from facilities with different SIC codes or types of processes . . . ." Response to Comments 8-9, 17 (emphasis in original).

These arguments are arbitrary and capricious and flawed for a number of reasons. First, the other emission points in the table are not comparable or similar to the relevant emission points at the Blair Facility.

At the outset, Cargill notes that significant variability exists even within corn wet milling operations depending on the type of process. Indeed, evaluating each emission point on a case-by-case basis is even more essential for corn wet milling operations such as Cargill's, which exhibit a diversity of operations. Indeed, the AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors explains that "[t]he diversity of operations in corn wet milling results in numerous and varied potential sources of air pollution. It has been reported that the number of process emission points at a typical plant is well over 100." *See* AP-42, Fifth Edition Compilation of Air Pollutant Emissions Factors, Volume 1: Stationary Point and Area Sources, Ex. 24, at 9.9.7-4. *See also* Cargill Comments at 15-17.

Moreover, apart from the seven corn wet milling emission points at the Blair Facility that are the subject of this petition, the vast majority of Table 3 contains information on either batch ethanol or continuous ethanol fermentation or distillation emission points. These ethanol emission points are not comparable to Cargill's seven wet corn milling emission points. As described above in Section IV.A.2.a, Cargill has repeatedly commented that the corn milling and ethanol sectors are distinct operations with separate SIC codes and distinct emission profiles. *See* Cargill Comments at 20-21, 25-26, 33-42. As Cargill has emphasized, there are significant differences between the emissions profiles at batch ethanol sources, continuous ethanol sources, and corn milling sources. Reflective of these differences, the ethanol scrubbers at Cargill are subject to NESHAP 40 C.F.R. Part 63, Subpart FFFF requirements while the mill and germ scrubbers are not. Many of NDEE's explanations are premised on the variability that is observed at fermentation scrubbers at ethanol facilities—particularly batch ethanol facilities which experience peaks and can experience emissions variability due to fermentation and yeast-related activities. In addition, the objective of such ethanol processes is to produce ethanol, which is a VOC. Unlike the ethanol production process, the corn milling process seeks to minimize ethanol production and does not intentionally produce VOCs. Emissions at corn milling facilities largely depend on production rates, and stack tests are conducted while running operations at close to maximum operating capacity as possible to account for this and to ensure the testing results reflect peak operations.

As an additional illustration as to why NDEE's conclusion that all the emission points in Table 3 effectively have the same emissions profile is inaccurate and unsupported in the record, Cargill notes that *continuous* process ethanol plants have significant emissions profile differences when compared to a *batch* process ethanol plant. There can be significant emission rate variation in the form of a "peak" over a fermentation cycle at *batch dry mill* ethanol plants. "While the availability of consistent test data is comparatively scarce, this emissions 'peak' *has generally not been observed at continuous process ethanol plants; rather, VOC and HAP emission rates at these plants have maintained a more steady-state.*" Wet Scrubber White Paper, Appendix L, at 10 (emphasis added). Indeed, as recognized by NDEE in the Wet Scrubber White Paper, the batch ethanol production process has multiple features that lead to variable emissions and that are not present in a continuous process ethanol plant.[28] The batch ethanol production

[28] Note that this is internally inconsistent with NDEE's claims in the Fact Sheet that "Even though Cargill is a wet mill ethanol plant instead of dry mill ethanol plant, the compositions of the emissions are similar for the two types of ethanol plants. Both dry mill and wet mill ethanol plants use yeast in a biological process (fermentation) with similar

process has a batch fermentation process which then feeds a continuous distillation process. Batch fermentation consists of a series of fermenters that have a staggered start times and a surge tank (known as a beerwell) to supply the continuous distillation process. This process has a "fermentation peak," i.e., a peak in the batch fermentation process activity, which at its highest point would be generating the most ethanol, CO_2, and other gases from the yeast activity. When a batch has completed its fermentation, the tank is emptied out to the beerwell and then cleaned. All of the fermenters typically vent to a common header that is controlled by a scrubber or scrubbers. Due to the nature of this batch process there are VOC emission peaks that occur during peak fermentation, when a tank is emptied, or when peak fermentation and the emptying of a tank occur simultaneously. The aforementioned peaking events do not occur in a continuous process ethanol plant, as the process consistently produces more steady-state emissions. And, as discussed above, these peaking events do not occur in corn wet milling emission points that are the subject of this petition. Given the significant differences in emission profiles, it is thus inappropriate to view the corn milling emission points as similar to the disparate ethanol process emission points.

Yet despite the significant emission variability associated with certain ethanol production plants—recognized by NDEE in its own whitepaper attached as Appendix L to the Permit—NDEE's Response to Comments includes both batch and continuous ethanol emission points in Table 3, and concludes that they are effectively the same, and also somehow the same as Cargill's seven non-ethanol plant corn wet milling scrubbers. This conclusion is internally inconsistent, arbitrary and capricious, and not supported in the record. Nor does NDEE respond to Cargill's comments on this issue—instead summarily concluding that all these emission points are effectively the same due to the mere presence of VOCs—despite significant record evidence to the contrary. *See* 40 C.F.R. § 70.7(h)(6).

Importantly, there are only two non-Cargill, corn wet milling scrubbers in Table 3. And, notably, those two scrubbers (WM05 and WM08 at Facility 39285) have ***not*** been subjected to scrubber liquid temperature monitoring requirements. *See* Email from Jj Zmudzinski to Shelley Schneider (Nov. 8, 2021, 1:38 pm), Ex. 36; *see also* Cargill Comments at 25-26. Table 3 is thus composed entirely of non-comparable sources and/or sources for which NDEE has not imposed scrubber liquid temperature control and monitoring. It is thus unclear how NDEE has concluded that these sources have a similar emissions profile to the relevant Cargill emission points, or how these other emission points support the imposition of supplemental scrubber liquid temperature monitoring. NDEE's conclusions in this regard are unsupported in the record and thus not in compliance with Title V requirements.

Rather than basing its conclusions on the source- and emission point-specific factors, NDEE effectively concludes that all emission points with scrubbers where VOCs present are similar, and thus presumptively require additional scrubber liquid temperature control and monitoring. However, this standardized logic for imposing control and monitoring requirements is not compliant with the requirements of Title V, which requires a clearly documented case-by-

processing of the ethanol and solid by-products. The differences in the dry mill and wet mill ethanol plants are prior to the fermentation process: dry mills use the entire corn kernel in the fermentation process to produce ethanol, while wet mills breakdown the corn kernel to produce multiple products – bran, starch, gluten, fibers, sugars, as well as ethanol." Fact Sheet at 77.

case evaluation of the whether monitoring is necessary to assure compliance at the specific emission points in question. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions)."); *CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5)."). To the extent NDEE seeks to find that all ethanol and corn wet milling facilities should be regulated the same and required to continuously monitor scrubber liquid temperature because they are all so "similar," NDEE should do so through rulemaking, not a Title V permit.

For the reasons described above, NDEE's consideration of this factor is arbitrary and capricious, unsupported in the record, and not in compliance with the requirements of the CAA.

f. Conclusion

In sum, NDEE neither evaluates nor documents its consideration of the factors identified by EPA or other source-specific and emission point-specific information for each emission point. As such, NDEE does not comply with the case-by-case, source- and emission point-specific approach required by Title V for determining whether additional monitoring requirements are necessary to assure compliance, and its rationales for imposing such additional monitoring are not clear and documented in the record.[29] 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions)."); *CITGO Order*, Ex. 21, at 7 ("In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5).").

Moreover, as detailed above, significant record evidence relevant to the factors identified by EPA supports the opposite conclusion—that scrubber liquid temperature control and monitoring are not necessary to assure compliance. Given that available information indicates that VOC emissions from these emission points do not experience significant variability and are below the relevant limits with sufficient compliance margins, the fact that the scrubbers are not primarily designed or optimized for VOC control or to effect VOC reductions, and that the only other similar corn wet milling emission units are not required to control and monitor scrubber liquid temperature, NDEE's imposition of additional supplemental monitoring is arbitrary and capricious and is not supported in the record.

3. NDEE Does Not Identify Additional Source- and Emission Point-Specific Factors that Justify the Imposition of Additional Scrubber Liquid Temperature Control and Monitoring.

As noted above, in imposing additional scrubber liquid control and temperature monitoring requirements, NDEE neither evaluates nor documents its consideration of the factors identified by EPA or other source-specific and emission point-specific information for each

[29] NDEE also does not consider other relevant factors, such as the costs related to comply with the additional control and monitoring and testing requirements.

emission point. Unsurprisingly, in its Response to Comments, NDEE emphasizes that the EPA factors are "***not prescriptive in nature***," and the "list of factors is only intended to provide the permitting authority with a ***starting point***" for the analysis for the adequacy of the monitoring. Response to Comments at 8, 16 (emphasis in original) (internal quotation marks omitted).

As an initial note, while NDEE's statement regarding the non-prescriptive nature of the factors may be correct, simply disregarding these factors raises significant questions about the quality of the NDEE review and the information and factors that NDEE did rely upon. Where a permitting authority jettisons the above factors, EPA should closely review the imposition of supplemental monitoring to ensure that it has support in the record.

However, in addition to not considering the above-described source- and emission-point specific factors identified by EPA, NDEE has not provided support in the record showing that other source- or emission point-specific factors would necessitate additional scrubber liquid temperature control and monitoring to assure compliance for the seven scrubbers at issue. NDEE vaguely explains in the Response to Comments that "[t]he temperature monitoring requirements for EP-7, EP-7A and EP-12 prescribed in Cargill's draft permit are based on the following:

i. Cargill Operating Permit applications received;
ii. Source specific considerations (e.g.: source of water supply);
iii. Past performance testing results for EP-7, EP-7A and EP-67 [sic];
iv. Past submitted emission inventories.

Response to Comments at 47.[30] NDEE also notes that it reviewed "source specific considerations (e.g.: source of water supply), emission's profiles, [and] wet scrubber design considerations." *Id.* at 43.

In addition, the Response to Comments explains that "The clarification on performance testing for EP-8A, EP-10, EP-66 and EP-67 are based on the following:

i. Cargill Operating Permit applications received;
ii. Information provided by Cargill during the draft permit negotiation meetings.

Response to Comments at 47.

Much of this information was discussed in the prior section, and does not support the imposition of supplemental scrubber liquid temperature control and monitoring for the reasons described in that section. However, Cargill provides the following additional comments regarding the insufficiency of this list as a basis for the monitoring requirements in the Permit.

[30] Note that the Response to Comments document refers to EP-67, rather than EP-12. This appears to be an error.

First, the general references to "Cargill Operating Permit applications received," "wet scrubber design consideration,"[31] and "Source specific considerations" do not satisfy the requirement that the basis for imposing supplemental monitoring be clear and documented in the record. *CITGO Order*, Ex. 21, at 7; 40 C.F.R. § 70.7(a)(5). For "wet scrubber design considerations" NDEE notes that "NDEE reviewed publicly available scrubber design information for wet scrubbers and had discussions with scrubber manufacturers/design and distribution companies as to the role of temperature in the design and efficiency of the scrubbers. NDEE posed general questions related to a wet scrubber controlling VOC; in particular, NDEE asked if variations in scrubbing liquid temperature would have an effect on control efficiency." Response to Comments at 41. However, NDEE nowhere includes any evidence that describes the outcome of these discussions or the answers to these unidentified "general questions." NDEE cannot rely on information that is not included in the record and that is seemingly not case-specific to Cargill's seven VOC scrubbers.

Second, as discussed in detail above in Section IV.A.2.b., past VOC emission performance testing results for the seven emission points that are the subject of this petition show sufficient compliance margins between the highest recorded testing result and the emission limit. Also discussed above, NDEE's rationales for disregarding the results of these performance tests (age of the tests, age of the equipment, and continuous changes in operation) are generic rationales that are not supported with record evidence specific to the emission points or could easily be addressed via additional stack testing—which the Permit in fact requires Cargill to conduct in the near future. *See* Permit, Pages 37, 43, 49, 71, 81, 214, 219, Conditions III.(EP-X)(3)(b)(i) (requiring performance testing by September 30, 2024 for EP-7, EP-7A, EP-8A, EP-10, EP-12, EP-66, and EP-67). Moreover, as described above, NDEE's "consideration" of emission profiles is generalized and inaccurate.

Third, as discussed in detail above in Section IV.A.2.c.i., NDEE's claims regarding the Cargill's "past submitted emission inventories," are based on NDEE's misunderstanding due to an unclear reporting form, and are thus unsupported in the record and do not support the imposition of additional monitoring. As noted above, on August 5, 2022, Cargill submitted updated annual emission inventories for calendar years 2020 and 2021 in order to clarify the confusion associated with the layout of the NDEE's form and to respond to NDEE's assertion that Cargill should submit an amended emission inventory. *See* Ex. 27. Moreover, NDEE's treatment of the two emissions points (EP-7A) and (EP-8A) based on this unclear reporting form is internally inconsistent in that one of these two scrubbers (EP-7A) is assumed by NDEE to have a very high VOC removal efficiency based on the annual inventory form, while the other scrubber (EP-8A) is assumed have zero VOC removal efficiency.

Fourth, NDEE notes that it determines the requirements for EP-8A, EP-10, EP-66 and EP-67 based on "[i]nformation provided by Cargill during the draft permit negotiation

[31] Cargill notes that the Blair Facility employs a variety of wet scrubbers, including packed-bed scrubbers, Venturi scrubbers, tray scrubbers, and vane scrubbers, all of which operate under different design and mechanical principles. And, while the Fact Sheet acknowledges that these different types of scrubbers exist in the abstract, it does not analyze how these differences may affect the type of monitoring that is necessary to assure compliance at each of the specific emission points at issue. *See* Fact Sheet at 78-80.

meetings." Response to Comments at 47. While this is vague, the Fact Sheet and Response to Comments indicates that NDEE is referring to Cargill's alleged statements that these emission points get no VOC control. However, as detailed above, this is an inaccurate generalization of Cargill's comments.

Apart from these factors, NDEE points to the "source of water supply" as a consideration that supported its decision to impose supplemental scrubber liquid temperature monitoring. Response to Comments at 20, 35, 43, 47. However, as with other NDEE rationales, this consideration also fails to support the need for supplemental scrubber liquid control and monitoring requirements to assure compliance.

As Cargill explained in its comments, NDEE's rationales for imposing scrubber liquid temperature control and monitoring due to Cargill's water source are arbitrary and capricious as they are based on incorrect assumptions and lack support in the record. *See* Cargill Comments at 45-47. For instance, one of the primary rationales put forward by NDEE for imposing temperature control and monitoring requirements on Cargill's scrubbers is that:

> It is NDEE's understanding that the Cargill Blair Complex receives all its water for their processes from the City of Blair. The City of Blair receives and processes all its potable water including the water sent to Cargill from the Missouri River. The City indicated that the water temperature sent to their customers (including Cargill) usually ranges from the low to mid 30's in the winter to a high of the mid 70's in the summer. In addition, the City indicated that very rarely the water temperature may reach the low 80's if there was an extended time of very high ambient temperatures, if the water depth is low in the river, and if the river had a very low flow rate. Based on this information and that Cargill has recorded scrubber liquid temperatures above 90 degrees during testing of some scrubbers, NDEE is requiring all VOC scrubbers not using a chiller to control scrubbing liquid temperature to monitor their liquid temperature continuously and record the temperature once per day, once the initial performance test, after the issuance of this operating permit, is completed. NDEE expects that temperature will be measured during the performance test. NDEE is requiring the daily recording of the scrubbing liquid temperature, or monitoring of temperature in accordance to NESHAP Subpart FFFF, to verify that the liquid temperature is consistent with the temperatures recorded during stack testing to evaluate if the VOC emissions are still representative.

Fact Sheet at 89-90. The Fact Sheet further states that:

> NDEE requires temperature monitoring on all scrubber water that is not well water, to include water from the city and reverse osmosis processes. Cargill uses city water for scrubbing liquid. The city receives its water from the Missouri River, whose temperature can vary depending on outside temperature (Appendix Q — USGS temperature monitoring of Missouri River at Omaha, NE). Cargill is the only facility (wet or dry milling) to use surface water as its virgin source of water in

> Nebraska. All other facilities use groundwater, which less variability in temperature.

Fact Sheet at 84.

This rationale is problematic for multiple reasons. First, NDEE did not evaluate the individual scrubbers at each emission point on a case-by-case basis and advances a generic rationale across the Facility's scrubbers based solely on the original source of water—without regard to what happens to that water afterwards and to the exclusion of other factors. *See id.* ("NDEE requires temperature monitoring on *all* scrubber water that is not well water, to include water from the city and reverse osmosis processes.") (emphasis added). Second, the factual statements underlying this rationale are inaccurate, including NDEE's statement that "Cargill uses city water for scrubbing liquid." Rather, Cargill's incoming source of water at the facility is from the Blair City Water Plant. Moreover, Cargill does not always use City water as the direct water source for a number of its scrubbers. While scrubbers at the Blair Facility have the ability to utilize City water, Cargill often uses other water sources at these scrubbers. For instance, at certain scrubbers, Cargill uses reverse osmosis water due to reverse osmosis water containing fewer impurities compared to City water. Thus, ambient City water temperature is not always indicative of the scrubber liquid temperature used in the scrubbers. Indeed, as part of Cargill's operations, what the water temperature was at the source may very well change by the time it arrives at the scrubber. This is true regardless of the original source of the water, including for well water, be this at the Cargill facility or any other facility in Nebraska where NDEE has the misguided expectation that the water used at the scrubber will follow a direct path from intake to scrubber inlet and thus have no variation of temperature in between. Cargill continues to assert that differing water sources should not be a determining factor for whether scrubber liquid temperature control and monitoring is required. To date, NDEE has not provided support for its conclusion that the difference between the use of well water versus other water sources merits the imposition of water temperature control and monitoring, and has not responded to Cargill's comments on these points. *See* Cargill Comments at 45-46; 40 C.F.R. § 70.7(h)(6).

Additionally, even to the extent, the temperature of the original water source is an important indicator of compliance (which Cargill disputes), the Permit requires Cargill to conduct its performance tests for the scrubbers with scrubbing liquid temperature monitoring during the third calendar quarter in each testing year in which ambient temperatures are historically documented at or near their highest.[32] Under the terms of the Permit, scrubber testing "shall be conducted during the third quarter of the calendar year (July through September)" for relevant emission points.[33] Ambient temperatures during these months are historically at or near high levels on a consistent basis, as shown in Appendix Q. In accordance with NDEE's

[32] NDEE's Response to Comments states that "Cargill's comment letter on page 28 incorrectly states: 'Recently, Cargill has conducted testing in the summer months and demonstrated compliance during these tests. Thus, to the extent the ambient temperature is an important factor of compliance (which Cargill disputes)…'" Response to Comments at 20, 35, 42-43. However, Appendix K shows that the most recent test for EP-7A (in 2012), and the second most recent test for EP-7 (also in 2012), both occurred in mid-late June. In any event, all future testing is required by the Permit to occur in the third quarter.

[33] *See* Permit at Page 37, III(EP-7)(3)(b)(v); Page 43, III(EP-7A)(3)(b)(v); Page 81, III(EP-12)(3)(b)(v).

hypothesis regarding temperature impacts, testing during months with high ambient temperatures reduces any potential incremental value of imposing additional scrubber liquid temperature monitoring to capture the effects of alleged variations in ambient temperature. This testing approach is utilized in other states at ethanol facilities that do not require scrubber liquid temperature control and monitoring to assure compliance. *See, e.g.*, Iowa Department of Natural Resources, Air Quality Construction Permit Number: 04-A-441-S8, at Section 2, footnote 1 (requiring testing in June, July, or August) (attached hereto as Exhibit 37); *see also* Cargill Comments at 46.

Moreover, even assuming *arguendo*, that the City water temperature is indicative of scrubber liquid temperature, NDEE's explanation neither links the instances of higher City water temperature to any noncompliance event at the Blair Facility, nor does it identify evidence that increased ambient City water temperatures alter the gas-water interface chemistry to a degree that it would lead to an exceedance of any VOC emission limit in the permit, especially given the degree of compliance margin observed at these scrubbers. Indeed, even NDEE's own analysis states that "very rarely the water temperatures may reach the low 80's," which would indicate that ambient temperature-related concerns are unlikely to materialize. Fact Sheet at 90. NDEE does not respond to Cargill's comments on these points. *See* Cargill Comments at 46-47 40 C.F.R. § 70.7(h)(6).

In addition, NDEE notes that its determination is in part based on NDEE's claim that "Cargill has recorded scrubber liquid temperatures above 90 degrees during testing of some scrubbers." Fact Sheet at 90. NDEE claims that this provides support its statements that water temperatures may be high, as well as unsubstantiated conclusion that higher temperature results in lower VOC emissions control. Fact Sheet at 90. Yet, NDEE neither identifies the scrubbers to which this statement applies, nor includes the results upon which it appears to rely in the permit record; nor does NDEE link those higher recorded temperatures to noncompliance. *Id.*

Cargill notes that NDEE's reference to temperatures above 90 degrees is to the performance testing at EP-22 and EP-22A, two ethanol fermentation scrubbers controlled by use of a chiller that are subject to the more stringent requirements and controls of the Miscellaneous Organic NESHAP ("MON"), 40 C.F.R. Part 63, Subpart FFFF. Further, this water is temperature-controlled and is not reflective of ambient temperature. Indeed, during the performance tests, the scrubbing liquid temperature for these scrubbers was manually increased by Cargill for the purpose of performing a NESHAP compliance test for HAPs control under a design experiment to determine how hot the scrubber liquid could get and still maintain compliance. This testing was thus intentionally conducted with hot water. In any event, the testing referenced by NDEE demonstrated compliance even with temperatures recorded above 90 degrees F. As previously underscored in Cargill's comments, Cargill emphasizes that the NESHAP-regulated ethanol fermentation scrubbers EP-22 and EP-22A are materially different than the seven corn wet mill scrubbers for which NDEE imposes temperature control and monitoring and the performance testing data from EP-22 and EP-22A does not support the use of such temperature control and monitoring at the disparate corn wet mill scrubbers. NDEE does not respond to Cargill's comments on these points. *See* Cargill Comments at 47; 40 C.F.R. § 70.7(h)(6).

Similarly, NDEE states elsewhere in the Response to Comments that "temperature (in specific scrubbing liquid temperature) was found to play a role in scrubber design and can also affect VOC control efficiency in a wet scrubber. As a matter of fact, ***sources often install water conditioning systems (i.e.: chillers) to achieve higher control efficiencies for VOC from wet scrubbers,*** thus indicating temperature is a factor." Response to Comments at 20, 43 (emphasis in original). Once again, NDEE does not provide support for this statement in the record, but again NDEE seems to be extrapolating requirements and practices applicable to ethanol fermentation scrubbers required to meet NESHAP Subpart FFFF control of HAPs to other scrubbers not applicable to Subpart FFFF. For instance, EP-22 and EP-22A—Cargill's fermentation scrubbers—do have chillers in place, but these emission points are not comparable to Cargill's corn wet milling emission points for the reasons described above.

This conflation of the MON-regulated ethanol fermentation scrubbers with Cargill's corn wet milling scrubbers exemplifies NDEE's overall approach in seeking to impose generic, non-tailored scrubber monitoring requirements, rather than performing the case-by-case evaluation for each emission point, as required by Title V and Part 70. These generic, unsupported rationales are arbitrary and capricious and do not provide the requisite documentation or explanation necessary to support the conclusion that supplemental scrubbing liquid control and monitoring is necessary to assure compliance.

In its Response to Comments, NDEE does not respond to these arguments or correct the record, instead repeating only the same bare-bones rationale already provide in the Fact Sheet, noting that "Cargill is the only corn milling and/or ethanol facility in the State of Nebraska that utilizes surface water (versus ground water) as the water source for its operations, this includes the scrubbing liquid for all control devices. As discussed in the Operating Permit Fact Sheet, surface water temperatures can vary dependent on weather conditions and seasonality to a greater degree than ground/well water." Response to Comments at 43; *see also id.* at 20, 35 (same); *see* Response to Comment at 85 (showing that NDEE did not provide a further response to Cargill's comments on this issue).

For all the reasons described above, this explanation does not support the need for scrubber liquid temperature control and monitoring to assure compliance, and thus the relevant Permit conditions are not in compliance with Title V or the Part 70 regulations.

4. NDEE's Generalized Arguments Regarding its Hypothesized Correlation Between Scrubber Liquid Temperature and VOC Emissions Do Not Support the Need for Supplemental Monitoring and Are Arbitrary and Capricious and Unsupported by Scientific Literature, Data, or Record Information.

As described above, NDEE does not evaluate the factors identified in EPA guidance on the requisite source- and emission point-specific basis, fails to identify additional factors that show such monitoring is necessary to assure compliance, and fails to evaluate a number of other pertinent considerations related to the relevant emission points. Indeed, rather than relying on case-specific features as required by Title V, many of NDEE's justifications for imposing such monitoring instead rely upon generalized arguments regarding NDEE's misunderstanding of the relationship between scrubber liquid temperature and VOC emissions, more specifically NDEE's

hypothesis that there is a strong positive correlation between higher scrubber liquid temperature and higher VOC emissions. However, as detailed in Cargill's comments and in the section below, many of NDEE's general justifications based on this hypothesized correlation are flawed for multiple reasons, and do not comply with the requirements for imposing supplemental monitoring under Title V and Part 70.

First, as discussed below, the scientific literature and EPA guidance do not justify the need for scrubber liquid temperature control and monitoring requirements. The generic descriptions in the Fact Sheet and Response to Comments of the relationship between scrubber liquid temperature and VOC emissions are oversimplified, not supported in the record, and do not reflect EPA guidance, which identifies temperature as a "less significant" monitoring parameter. *See* Cargill Comments at 30-34.

Second, NDEE's 2021 Wet Scrubber Operational Parameter Monitoring and Variability at Ethanol Plants ("Wet Scrubber White Paper") also does not support the imposition of scrubber liquid temperature control and monitoring requirements at the Blair Facility. NDEE appears to rely heavily on the Wet Scrubber White Paper, as several pages of text in the Fact Sheet appear to be copied and pasted from the Wet Scrubber White Paper into the Fact Sheet. *See* Fact Sheet at 80-89. The Wet Scrubber White Paper is also appended to the Permit package as Appendix L. However, as discussed below and in Cargill's comments, the Wet Scrubber White Paper contains a number of flaws, should be rescinded, and should not be relied upon in establishing monitoring conditions in the Permit. *See* Cargill Comments at 34-38, 129-31. Indeed, on January 31, 2022, Cargill requested that NDEE rescind or revise the versions of all six white papers, dated November 1, 2021, and by letter dated April 1, 2022, NDEE advised Cargill that it intended to initiate a proceeding to consider a revision or repeal of a guidance document in accordance with Neb. Rev. Stat. § 84-901.03(3)(b) (attached hereto as Exhibit 38).[34] *see also* Response to Comments at 47 (noting NDEE's response to Cargill's request). In addition, it is procedurally inappropriate to rely on such "guidance documents" as a basis for imposing additional substantive monitoring requirements on facilities across Nebraska—particularly one that is under active consideration by NDEE for the purpose of rescindment or revision pursuant to the proper procedures under Nebraska law. The procedural issues associated with relying on the white papers are described in more detail *infra* Section IV.G.

Third, the stack testing data provided by NDEE in Appendices J and K do not support the need for additional scrubber liquid temperature control and monitoring to assure compliance. These data are incomplete and are not the result of controlled studies, and thus it is not possible to determine the effects each variable has on the VOC emissions rate based on these data. Moreover, even assuming the data were robust and scientifically appropriate to use, the stack test results do not evince a discernable correlation between scrubber liquid temperature and VOC emissions, and a number of tests either show no pattern or show situations in which the VOC emissions were lower even with increased temperatures. *See* Cargill Comments at 38-44.

[34] Note that because this letter was issued on April 1, 2022, following the comment period (which ended January 31, 2022), it was not possible for Cargill to raise any arguments related to this letter during the comment period. It is permissible to include this information because the grounds for the objection arose after the public comment period. *See* 40 C.F.R. § 70.12(a)(2).

a. Scientific Literature and EPA Guidance Do Not Support the Need for Additional Scrubber Liquid Temperature Control and Monitoring or the Inlet Testing and Compliance Demonstration Requirement.

As described in Cargill's comments, Cargill disputes that the relationship between temperature and emissions control is as simple and straightforward as generalized by NDEE in the Fact Sheet and Response to Comments. *See* Cargill's Comments at 30-44. While temperature can have some effect on scrubber performance, the nature and degree of that relationship and the effect on scrubber performance depend on a number of factors. The removal of VOCs using scrubbers depends on material balances (liquid and gas flowrates), vapor-liquid equilibrium, mass transfer surface area, and mass transfer coefficients. *See* Email Statement of Hunter Flodman, Ph.D., Department of Chemical and Biomolecular Engineering, University of Nebraska-Lincoln (hereinafter "Flodman Statement") (attached hereto as Exhibit 39). Temperature affects the vapor-liquid equilibrium relationship between VOCs and water through the temperature dependency of Henry's Law constants.[35] *Id.* It is true that as temperature increases vapor-liquid equilibrium for VOC, removal becomes less favorable. However, mass transfer coefficients *increase* with increasing temperature, counteracting the effects of increasing vapor-liquid equilibrium on VOC removal. These effects thus have opposite trends with increasing temperature, cancelling each other out to some extent, and reducing the degree to which temperature affects VOC removal. *Id.*

In correspondence with NDEE, Dr. Flodman has also explained that:

> Increases in scrubber liquid inlet temperature can decrease, increase, or have negligible effects on the overall scrubber control efficiency depending on the specific pollutants, process, equipment design, and operating conditions. An increase in scrubber liquid inlet temperature tends to increase the mass transfer coefficient which tends to increase scrubber control efficiency. An increase in scrubber liquid inlet temperature also tends to decrease vapor-liquid equilibrium driving force which tends to decrease scrubber control efficiency. Increases in scrubber liquid inlet temperature can cause an overall increase in scrubber control efficiency due to the increase in the mass transfer coefficient overcoming the change in vapor liquid equilibrium driving force for specific pollutants, processes, equipment designs, and operating conditions. For certain pollutants, processes, scrubber designs, and operating conditions, the increase in mass transfer coefficient due to the increase in scrubber liquid inlet temperature can be counteracted by an unfavorable change in vapor liquid equilibrium leading to an overall decrease in scrubber control efficiency. There are additional cases for certain pollutants, processes, equipment designs, and operating conditions when variations in the scrubber liquid inlet temperature has no affect on scrubber control efficiency due to either negligible changes in both the mass transfer coefficient and vapor liquid equilibrium or changes that counteract each other.

[35] As indicated in Dr. Flodman's statement, Henry's Law for ethanol has been reviewed by Warneck (2006); Henry's Law for acetaldehyde has been reported by Betterton and Hoffmann (1988) and Benkelberg *et al.* (1995).

Appendix P at 31-32 (email from Dr. Hunter Flodman to David Christensen, Shelley Schneider, Re: NDEE Scrubber Questions (Nov. 19, 2021)).

NDEE cites the above text from Dr. Flodman's November 18, 2021 email in its Response to Comments. *See* Response to Comments at 19.

However, NDEE also cites a statement from an earlier November 8, 2021 email from Dr. Flodman out of context and in a way that mischaracterizes the statement, which was intended to apply to a very specific example and not intended as a general statement regarding the relationship between scrubber liquid temperature and VOC emissions. More specifically, in its Response to Comments, NDEE also quotes the following statement:

> Specifically, "Fact *Sheet – Appendix P"* question number one of the email correspondence dated November 8, 2021, with Dr. Flodman summarizing the telephone conversation states:
>
> NDEE's question:
>
> "1. Do you believe variations in scrubbing liquid temperature have an effect on VOC control efficiency? Why or why not?
>
> - NDEE's understanding from what you explained was that temperature has an effect on mass transfer as well as vapor-liquid equilibrium; while these can play off of each other, one could expect that (keeping process inputs the same) ***that increases in temperature can cause decreases in scrubber control efficiency*** (emphasis added);"
>
> Dr. Flodman's response:
>
> "This ***bullet point is correct*** (emphasis added), but it is also important to add that, " the degree of control efficiency decrease depends on both the pollutant being controlled and the equipment design and operating conditions." The Aspen Plus model that I referenced for one particular scrubber design had only a modest change in control efficiency with temperature increases compared to other parameters such as scrubber liquid flowrate."

Response to Comments at 19.

Cargill emphasizes that, as excerpted and emphasized by NDEE, the above excerpt is misleading. What NDEE does not mention in the Response to Comments is that in a later series of emails, NDEE paraphrased the above statement from Dr. Flodman as stating, "NDEE had a telephone conversation followed by email correspondence with Mr. Hunter Flodman, PhD, Associate Professor of Practice, Department of Chemical and Biomolecular Engineering at UNL. He indicated that variations in scrubbing liquid temperature can affect the VOC/HAP control efficiency." Appendix P at 30 (email from David Christensen to Dr. Hunter Flodman, Re: NDEE Scrubber Questions (Nov. 18, 2021)).

On November 19, 2021, via email, Dr. Flodman corrected the record regarding this statement, saying:

> The second sentence in the statement that you sent me is referencing a specific example we discussed in our phone conversation regarding a CO2 scrubber for ethanol fermentation. When this statement is used in general or outside of the context of that specific example, it is not technically accurate. In our written meeting notes summarized by Pati West and clarified by myself on 11/8 via email, I went on to say that this is dependent on the pollutant being controlled, the equipment design, and the operating conditions. In our phone conversation, I explained that increases in scrubber liquid inlet temperature can also cause increases in scrubber control efficiency due to the increase in the mass transfer coefficient. There are additional situations when variations in the scrubber liquid inlet temperature has no affect on scrubber control efficiency due to either negligible changes in both the mass transfer coefficient and vapor liquid equilibrium or changes that counteract each other.

Appendix P at 31 (email from Dr. Hunter Flodman to David Christensen, Shelley Schneider, Re: NDEE Scrubber Questions (Nov. 19, 2021)). Dr. Flodman then went on to request that:

> To further improve communication on technical subject matters, I am requesting for you to send me paraphrased comments or written excerpts that you are attributing to me prior to using them in a document for my approval or asking me to provide you with written statements authored by myself for record. To address the items stated above, please use the edited statement below.

Id. The edited statement is the second statement that appears in the Response to Comments on page 19, and is meant as a substitute and clarification of the first statement that NDEE quotes on page 19. NDEE fails to acknowledge as much in its Response to Comments.

Thus, although the overall presentation of this email exchange in NDEE's Response to Comments serves to muddy the waters, the overall message of Dr. Flodman's statements, when read together and in context, is that "[i]ncreases in scrubber liquid inlet temperature can decrease, increase, or have negligible effects on the overall scrubber control efficiency depending on the specific pollutants, process, equipment design, and operating conditions." Response to Comments at 19 (citing Appendix P at 31).

There is thus no universal positive correlation between higher scrubber liquid temperature and higher VOC emissions, as NDEE's Fact Sheet and Response to Comments hypothesize. Rather, the relationship, to the extent one exists at all, is highly dependent on the circumstances. The lack of support in the record for any such a relationship makes NDEE's failure to consider source- and emission-point specific factors at the relevant emission points even more problematic. It also renders the imposition of scrubber liquid temperature control and monitoring requirements not in compliance with Title V or Part 70, as the record does not

support that such temperature control and monitoring are necessary to assure compliance at the relevant emission points.

Indeed, as detailed herein and in Cargill's comments, and shown by the results contained in Appendices J and K, no correlative trend between temperature and VOC emissions is readily discernable from the data provided by NDEE in those two appendices. *See* Cargill Comments at 38-44. In fact, consistent with the above statement by Dr. Flodman, there are a number of instances where the data show that emissions were higher when temperature was lower, and vice versa. Yet, NDEE does not respond to Cargill's comments and arbitrarily and capriciously disregards this record evidence and adopts the unsupported position that a positive relationship between scrubber liquid temperature and VOC emissions exists to a degree meriting the imposition of scrubber liquid temperature control and monitoring requirements on every scrubber that controls any amount of VOCs regardless of source- or emission-specific features. *See* 40 C.F.R. § 70.7(h)(6).

NDEE also does not cite to any scientific literature or studies[36] in support of its generalizations regarding the effects of temperature on scrubber performance, or on the need to monitor scrubber liquid temperature in addition to scrubber liquid flow rate. Instead, NDEE includes summary results from an ethanol volatility analysis NDEE conducted on testing and operational data collected at an ethanol facility in Nebraska. *See* Fact Sheet at 85-90. Relying heavily on these data, which are extrapolated with an equation, NDEE concludes that ethanol is much more likely to evaporate at higher temperatures. Response to Comments at 41 ("As discussed at length in the Fact Sheet, scrubbing liquid temperature is one of the factors that influences volatility of VOCs; thus, requiring liquid temperature monitoring for a wet scrubber that controls VOCs is merited.").

However, as described in Cargill's comments, this very limited data—not connected in any way to wet scrubber operation—does not support the temperature water control and monitoring requirements that NDEE is seeking to impose on Cargill's VOC scrubbers. *See* Cargill Comments at 33-34. First, as noted above, the seven scrubbers for which NDEE is seeking to impose these additional requirements are not ethanol fermentation scrubbers, and are not located at the ethanol production area of the Blair Facility. Rather they are located at the Blair Facility's corn wet milling plant (SIC Code 2046 – Corn Wet Milling), which bears an entirely different SIC code from the ethanol production area at the Facility (SIC Code 2869 – Industrial Organic Chemicals, Not Elsewhere Classified). Second, these data and NDEE's conclusions were not peer reviewed or published in a scientific journal, and the discussion lacks a description of the scientific method used to collect the data. Without such scrutiny, NDEE

[36] Indeed, available scientific literature largely appears to be lacking. In 2004, Lawrence Liverpool National Laboratory undertook an extensive literature search to characterize VOC scrubber performance. *See* H. Saito, ASSESSMENT OF INDUSTRIAL VOC GAS-SCRUBBER PERFORMANCE (Feb. 20, 2004) (attached hereto as Exhibit 40). Relevant here, researchers were unable to locate information on "low molecular weight alcohols" resulting in "a lack of or unsuitable literature citations. A broadened focus on volatile organic compounds widened the number and range of citations, but the few potentially suitable citations obtained after sifting through large lists were mostly too general or vague for a quantitative evaluation of actual industrial scrubber performance." *Id.* at 5. In addition, "[l]imited searching and sifting through the US patents did not yield additional specific or quantitative experiential information." *Id.*

should not assign a level of significance to the data presented. Moreover, there is no information on the source of the data presented, the particular facility's process (*e.g.* type of ethanol facility or process, liquid flow rate, whether it was a thermal operation, whether the facility used chemical addition, whether water was the scrubber medium, where volatility was measured in the process, *etc.*), or a discussion on whether the temperatures measured and flow rates are indicative of actual operations at most facilities, or even for continuous process ethanol plants like the Blair Facility, let alone a corn wet milling facility. Accordingly, the volatility analysis does little to inform the monitoring discussion.

It is not enough for NDEE to allege that temperature has the potential to affect VOC solubility in the abstract; NDEE must show that the effects are such that scrubber liquid temperature control and monitoring on top of any existing monitoring is necessary to assure compliance for the specific scrubber at issue.

Cargill previously commented on the fact that Appendices J and K do not support NDEE's hypothesis regarding temperature and VOCs, that EPA guidance considers temperature a "less significant" monitoring parameter, the lack of scientific literature or studies cited by NDEE, and the inadequacy of the volatility analysis, and NDEE does not respond to those comments in its Response to Comments document. *See* Cargill Comments at 30-44; 40 C.F.R. § 70.7(h)(6).

Such inadequate information certainly cannot be permitted to override the case-specific analysis required by Title V before imposing supplemental monitoring requirements.

b. NDEE's White Paper on "Wet Scrubber Operational Parameter Monitoring and Variability at Ethanol Plants" is Substantively and Procedurally Flawed and Does Not Support the Imposition of Additional Scrubber Liquid Temperature Control and Monitoring Requirements.

In March 2021, NDEE released a draft white paper on "Wet Scrubber Operational Parameter Monitoring and Variability at Ethanol Plants" ("Wet Scrubber White Paper").[37] A version of the Wet Scrubber White Paper dated November 2021 is also appended to the Permit package as Appendix L. In addition, much of the text of the Wet Scrubber White Paper appears to be copied into the Fact Sheet. *See* Fact Sheet at 80-89. In the Wet Scrubber White Paper, NDEE seeks to impose a generic monitoring scheme that would require sources to monitor four different parameters for wet scrubbers—liquid flow, pressure differential, liquid temperature,

[37] Cargill submitted detailed comments on the March 2021 draft Wet Scrubber White Paper (the "Draft White Paper Comments") on July 16, 2021, and incorporated and reiterated those comments into its comments on the draft of the Permit. Cargill's Draft White Paper Comments continue to apply to the November 2021 version of the Wet Scrubber White Paper, as they did to the March 2021 version. Cargill Draft White Paper Comments, are attached hereto as Exhibit 41.

and chemical addition rate—regardless of source- and emission point-specific considerations and whether such monitoring is necessary to assure compliance. *See* Appendix L.[38]

As an initial note, and as described in more detail *infra* Section IV.G, NDEE's white papers are state guidance documents that express NDEE policy preferences, and cannot and should not be relied upon to impose additional federally enforceable requirements. Moreover, under the Nebraska Administrative Procedure Act ("NE APA"), guidance documents may not "impose additional requirements or penalties on regulated parties[.]" *See* Neb. Rev. Stat. 84-901.03(2). "A guidance document shall not give rise to any legal right or duty *or be treated as authority for any standard, requirement, or policy.*" *See id.* at 84-901(5) (emphasis added). Imposing additional requirements via guidance—as the Wet Scrubber White Paper seeks to do—is contrary to the Nebraska APA, because the state cannot use guidance as a means of imposing or authorizing new requirements on sources. Imposing these requirements based on a white paper that is procedurally flawed, and under consideration by NDEE for rescindment or revision in accordance with the proper statutory procedures under Nebraska law, is even more improper, as described in more detail in Section IV.G.[39]

Substantively, NDEE relies on the Wet Scrubber White Paper in support of its proposal to impose additional control and monitoring requirements on wet scrubbers for gaseous pollutants used at ethanol plants, without considering relevant source- and emission point-specific factors. *See, e.g.,* Fact Sheet at 55-56, 58 (for EP-7, EP-7A, and EP-12, explaining that "[t]he scrubber water temperature is monitored for scrubbers controlling VOC, since as the temperature in the water changes the control efficiency of the scrubber changes as discussed in Appendix L."); *see also id.* at 78 ("The wet scrubbers operational parameter monitoring and variability at ethanol plants are discussed later in this fact sheet and in Appendix L.").

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[38] Cargill also commented on the draft of NDEE's "State Comparison" white paper (Cargill's comments on the white paper were incorporated into Cargill's Comments at page 34; *see* Cargill's Draft White Paper Comments, Ex. 41, at 2-7). Cargill commented that NDEE should avoid drawing definitive conclusions regarding the appropriateness of any particular type of permit condition to Nebraska sources, given the limited nature of the NDEE comparative review of source in other states and the very small sample size. More specifically, NDEE limited its review of facility permits in ten other states to ethanol facilities, but did not identify the type of ethanol plant, and reviewed only a small sample of permits from each state, further limiting the relevance of the comparison. Cargill conducted its own review of ethanol plant operating and construction permits in the ten states identified by NDEE. Cargill also included permits from two states that NDEE did not include in its state comparison study: Michigan and Colorado. As explained in the Cargill's Draft White Paper Comments, Cargill's review of permits in these states found that the permits included a variety of different regulatory requirements for VOC and HAPs emissions, such that comparisons of permit requirements are often not apples-to-apples comparisons. Notably, Cargill's review also found that most of the permits required no more than two monitoring parameters for wet scrubbers, and none of the permits required four monitoring parameters as identified in NDEE's Wet Scrubber White Paper.

[39] Imposing monitoring in addition to existing requirements is also contrary to the Governor's Executive Order No. 17-04, which requires agencies to streamline requirements and provides that "[a]ny regulation deemed to be more restrictive than required under state or federal law or creates an undue burden on Nebraskans, shall be revised or repealed pursuant to the Nebraska Administrative Procedure Act." State of Nebraska, Office of the Governor, Executive Order No. 17-04 Regulatory Reform (July 6, 2017) (attached hereto as Exhibit 42).

In its comments, Cargill highlighted a number of substantive flaws associated with the Wet Scrubber White Paper. *See* Cargill Comments at 34-38. Rather than respond substantively to Cargill's comments and concerns regarding the contents and use of the white paper, NDEE's Response to Comment denies that NDEE is in fact relying on the white paper. Response to Comments at 47 ("NDEE ***does not cite any of the white papers*** as the origin or authority for any term or condition in the draft Operating Permit.") (emphasis in original*); id.* at 48 ("Again, NDEE ***does not cite any of the white papers*** as the origin or authority for any term or condition in the draft Operating Permit.") (emphasis in original); *see also id.* at 71 (same).

However, despite NDEE's claims, NDEE is still relying on the Wet Scrubber White Paper as support for the Permit—it is still attached as Appendix L to the Permit package, it is still expressly referenced in the Fact Sheet as support for imposing scrubber liquid temperature control and monitoring requirements, and a large portion of the whitepaper is still copied wholesale into the Fact Sheet. Because this indicates that NDEE is still relying on the Wet Scrubber White Paper as support for the Permit, NDEE's claims in the Response to Comments document that it is not in fact relying on this whitepaper are not credible and are unsupported in the record.

As described below and in Cargill's comments, NDEE's reliance on the Wet Scrubber White Paper remains substantively and procedurally flawed for a number of reasons, as it does not demonstrate that the additional monitoring is necessary to assure compliance at Cargill's corn wet milling emission points, and its use by NDEE is not compliant with Title V or the Part 70 regulations. *See* Cargill Comments at 34-38, 129-131.

First, the Wet Scrubber White Paper in Appendix L suffers from the same issues already discussed above. Namely, in the whitepaper NDEE seeks to impose a generic monitoring scheme that would require sources to monitor four different parameters for wet scrubbers—liquid flow, pressure differential, liquid temperature, and chemical addition rate—regardless of source- and emission point-specific considerations and whether such monitoring is necessary to assure compliance. *See* Appendix L. NDEE's proposed approach would presume that all packed-bed wet scrubbers are the same regardless of factors such as compliance margins, operating rates, types of operation (e.g., ethanol vs. corn milling, continuous versus batch fermentation, dry mill vs wet mill), pollutant type and pollutant stream concentrations, and existing regulatory and monitoring requirements, *etc*. This proposed generic monitoring approach is not consistent with the state or federal Title V program, which allows additional monitoring to be imposed on a case-by-case basis where necessary to assure compliance. Instead of this case-by-case analysis, the Wet Scrubber White Paper would instead set a generic standard for monitoring packed-bed wet scrubbers at ethanol plants, contrary to Title V and Part 70 requirements that monitoring be necessary to assure compliance in light of source- and emissions-point specific factors. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); *San Juan Generating Station Order*, Ex. 20, at 19-20; *CITGO Order*, Ex. 21, at 7-8. NDEE's position that the agency *will* as a general matter require all four scrubber parameters to be monitored in issuing permits is thus contrary to law.

Moreover, as noted above, imposing new uniform monitoring requirements through guidance is contrary to the Nebraska APA. Accordingly, this guidance cannot serve as a basis for imposing significant new monitoring requirements on Cargill as a part of the permitting process.

NDEE must continue to evaluate which permit monitoring conditions will be required on a case-specific basis, as required by the Clean Air Act. Accordingly, NDEE should not use the Wet Scrubber White Paper as a basis for the permitting decision for the Blair Facility, and should not include Appendix L in the Permit record.

Second, even assuming, *arguendo*, that NDEE was permitted to impose uniform monitoring requirements on wet scrubbers through a guidance document (which it is not), NDEE lacks record support for the conclusion that such monitoring is needed to assure compliance. In the Wet Scrubber White Paper in Appendix L, NDEE points to three sources of information to support its assertion that it should require scrubber liquid temperature control and monitoring for wet scrubbers in the ethanol industry: EPA's Compliance Assurance Monitoring Technical Guidance Document, Appendix B: CAM Illustrations, Revision 1, Review Draft (January 2005) ("Draft CAM Technical Guidance"); EPA's Air Pollution Control Fact Sheet, EPA-452/F-03-015 ("APCFS"); and NDEE's assessment of limited historical testing data. *See* Appendix L at 4-8. As described in Cargill's comments, these sources do not provide support for the conclusions NDEE draws, and do not justify bypassing the case-by-case analysis for establishing and/or incorporating supplemental monitoring requirements into a Title V operating permit. *See* Cargill Comments at 36-38.

As discussed above, EPA's Draft CAM Technical Guidance does not require or support NDEE's proposed standardized approach to monitoring for VOC, including the need to control or monitor inlet scrubbing liquid temperature in addition to scrubbing liquid flowrate, differential pressure, and chemical addition flowrate and type (for HAPs emission to achieve control efficiency). *See* Draft CAM Technical Guidance, Appendix B, Section B.5.2, Ex. 33; *see also* https://www.epa.gov/air-emissions-monitoring-knowledge-base/monitoring-control-technique-wet-scrubber-gaseous-control. The Draft CAM Technical Guidance does not discuss scrubber liquid inlet temperature control or monitoring for VOC. And, to the extent the Draft CAM Technical Guidance does discuss temperature monitoring in the context of scrubber liquid outlet or scrubber exhaust outlet temperature monitoring for VOC, it discusses it as a surrogate for liquid flow rate. Cargill is already monitoring scrubber liquid flow rate at these emission points. *See* Draft CAM Technical Guidance, Appendix B, Section B.5.2, Ex. 33 ("For systems that control thermal processes, scrubber outlet gas temperature may be monitored as a surrogate for scrubber liquid flow rate."); *see also id.* ("Scrubber liquid outlet temperature is another surrogate parameter for liquid flow rate; this parameter may be used for thermal processes only and is less reliable than monitoring of the liquid flow rate."); *see also id.* at Table B-5. In sum, the Draft CAM Technical Guidance does not support imposition of liquid temperature control and monitoring across packed-bed wet scrubbers regardless of other existing monitoring (including scrubber liquid flow rate monitoring), the pollutant being monitored, or other source- or emission point-specific features. Accordingly, the Draft CAM Technical Guidance does not support NDEE's position.[40]

[40] NDEE also cites to EPA's APCFS, which contains a summary statement that, "[i]n general, the higher the gas temperature, the lower the absorption rate, and vice-versa. Excessively high gas temperatures also can lead to significant solvent or scrubbing liquid loss through evaporation." APCFS, attached hereto as Exhibit 43, at 2. Notably, EPA's general statement regarding evaporation relates to the scrubber liquid volume, not necessarily to pollutant evaporation. And, the temperature variable is the gas temperature, not the liquid temperature. NDEE cites no additional support for the contention that all pollutants evaporate once absorbed by the scrubber liquid due to

NDEE's Wet Scrubber White Paper also lacks a technically supported justification for generically requiring monitoring of the four individual parameters identified in the white paper, including scrubber liquid temperature monitoring. As noted above and Cargill's comments, NDEE does not cite to scientific literature or studies before generalizing the effects of temperature on scrubber performance, or on the need to monitor scrubber liquid temperature in addition to scrubber liquid flow rate. As noted above, NDEE includes summary results from an ethanol volatility analysis NDEE conducted on testing and operational data collected at an ethanol facility in Nebraska. However, as discussed in more detail above and in Cargill's comments, this very limited data—and not connected in any way to wet scrubber operation—does not support the uniform temperature control and monitoring requirements that NDEE seeks to impose via guidance. And, it should not be extrapolated to support the imposition of additional monitoring requirements on scrubbers that are not located in the ethanol production plant at the Facility, as is the case with the seven scrubbers that are at issue in the Permit. *See* Cargill Comments at 37.

In addition to the volatility analysis, in Figures 2 through 5 of the Wet Scrubber White Paper, NDEE presents four isolated instances of data taken over consecutive days of testing in which scrubber liquid temperature increased between day one and day two of testing. *See* Fact Sheet at 86-89; Appendix L at 6-8. However, other operating parameters also changed between day one and two, and were not controlled. This limited data set and lack of a controlled variable make it inappropriate for NDEE to draw any conclusions from these isolated data points.

Moreover, the actual data conflicts with the conclusions NDEE draws. While Figure 2 and the associated table show an increase in air pollutant emission rates on the second day of testing with increasing temperature, Figures 3 and 4 and the associated tables show a *decrease* in emissions rate with an increase in temperature, while Figure 5 and the associated table show a decrease in VOCs, but an increase in HAPs with an increase in temperature. *See* Fact Sheet at 87-88; Appendix L at 6-8.[41] These data do not support NDEE's conclusion that the data "appear to show a temperature dependency with scrubber efficiency." NDEE acknowledges as much by recognizing the need for additional data. *See* Fact Sheet at 89 (noting that "additional data is necessary"); Appendix L at 8 (same).

NDEE also provides no discussion on how chemical addition may have affected the vapor-liquid equilibrium, mass transfer surface area, and mass transfer coefficients, and whether the results would be comparable to a wet scrubber operation that does not use chemical addition or uses a different chemical. Accordingly, NDEE's data analysis does not support NDEE's position that water temperature control and monitoring must be generally required for VOC wet scrubbers.[42]

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increased temperature of the liquid. Accordingly, Cargill does not find support in EPA's APCFS for NDEE's position.

[41] Note that the table references in the text of the Fact Sheet do not match up with the labeling in the tables themselves. NDEE should fix this error.

[42] Cargill notes that to cover the possibility that increased ambient temperatures could increase emissions, NDEE

Another limitation on the data arises from the fact that NDEE acknowledges the handful of data points in Figures 2-5 come from one continuous process ethanol plant. Cargill understands this data to be from the Blair Facility's two (2) ethanol fermentation scrubbers. None of the seven scrubbers at issue in the petition are fermentation scrubbers or even located in the ethanol production area at the Blair Facility, making this data inapposite. Instead, these seven scrubbers control emissions sources in the corn wet milling plant, which has an entirely different SIC code than the ethanol production plant. This data should thus not be extrapolated not only because of the very small sample size, but also because the data are from a distinct process (ethanol fermentation) that is not comparable to the processes at issue in the corn wet mill.

NDEE does not respond to Cargill comments on these issues. *See* Cargill Comments at 36-38; 40 C.F.R. § 70.7(h)(6).

In sum, the data set that NDEE relies upon in the Wet Scrubber White Paper (and in the text from that Wet Scrubber White Paper copied into the Fact Sheet) is extremely limited and subject to a variety of limitations that reduce its value and render it inappropriate to draw the sweeping conclusions regarding the necessity of scrubber liquid temperature control and monitoring to assure compliance.

c. The Stack Test Data Provided by NDEE in Appendices J and K Do Not Support NDEE's Proposal to Impose Additional Scrubber Liquid Temperature Control and Monitoring.

In support of NDEE's decision to impose supplemental scrubber liquid temperature control and monitoring on VOC wet scrubbers, the Fact Sheet cites to various stack testing conducted at VOC scrubbers in the state. The Fact Sheet states that "NDEE has developed standardized monitoring and recordkeeping requirements after review of performance testing results over the last 20 years for VOC scrubbers (including Cargill and at other ethanol plants with similar equipment) and review of EPA rules and guidance[.]" Fact Sheet at 80. The Fact Sheet further states that:

> Following the evaluation of numerous stack test results for wet scrubber systems, NDEE is requiring Cargill to monitor the temperature of the scrubbing liquid as it has been determined temperature has the potential to change VOC control efficiency and emission rates. NDEE requires temperature monitoring on all scrubber water that is not well water, to include water from the city and reverse osmosis processes. Cargill uses city water for scrubbing liquid.

Fact Sheet at 84.

is requiring testing during the third quarter of the year in the Permit, when ambient temperatures are likely highest. NDEE's Wet Scrubber White Paper and the Fact Sheet do not provide information disputing the reliability of third quarter testing in addressing theoretical temperature concerns.

As noted in the Fact Sheet, in prior comments submitted to NDEE, "Cargill requested that the testing records used as basis of determining scrubber operating parameters to be included in the Administrative Record (i.e. fact sheet)." Fact Sheet at 78. In response, NDEE notes that "[t]here have been over 300 tests conducted at VOC fermentation scrubbers at ethanol plants in the last 20 years. These testing records for all of the fermentation emission points at ethanol plants in Nebraska are in Appendix J and for the testing results for all emission points at Cargill's facility are in Appendix K." *Id.*

In Appendix J and Appendix K, NDEE provides summary tables, including raw stack test data, without any explanation for which test results NDEE is relying upon in support of its position. Indeed, neither the Fact Sheet, nor the appendices, provide any meaningful analysis of these data or explanation regarding NDEE's findings, why such data are relevant, or NDEE's rationale(s) for relying on these data. It is thus unclear how NDEE reaches its conclusions that these tests somehow demonstrate that scrubber liquid temperature control and monitoring or the inlet testing and compliance demonstration requirements are necessary.

Without a "clear and documented" basis in the administrative record outlining NDEE's decision making, NDEE may not impose supplemental monitoring requirements on the Blair Facility's scrubbers. *See, e.g., San Juan Generating Station Order,* Ex. 20, at 20 ("[T]he rationale for the monitoring requirements selected by a permitting authority must be clear and documented in the permit record."); *CITGO Order*, Ex. 21, at 7 (same); 40 C.F.R. § 70.7(a)(5) ("The permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions).").

Additionally, an analysis of the data contained in Appendix J and Appendix K reveals that the data do not support the scrubber liquid temperature control and monitoring conditions NDEE seeks to advance. First, many of the stack tests in Appendix J are missing values for various parameters, including temperature. NDEE cannot validly conclude that temperature monitoring is needed based on stack tests from facilities that do not have temperature monitoring. Still more of the stack tests recorded a temperature range rather than a single temperature, which makes it impossible to evaluate the potential relationship between temperature and emissions. Moreover, many additional variables, other than temperature, can affect emissions, and the effect that one variable is having versus the others based on the data is not distinguishable. To compound matters, many of the stack tests have blank/missing values for operating parameters identified in the data spreadsheets, and there are likely even more operating parameters that are relevant and that were not recorded that are not included in Appendix J. Without controlled variable studies that isolate a single variable for study, it is impossible to determine the degree of effect each variable has, if any, on the end result. Utilizing these uncontrolled stack tests to draw any conclusions about a variable's influence on compliance is thus arbitrary, capricious, and unscientific.

Second, the data in Appendix J does not reflect testing of similar scrubbers and operating conditions as those at the Blair Facility. As NDEE acknowledges, wet scrubbers vary widely in terms of scrubber type, intended pollution control, and operational and process parameters, among other things. All of the data in Appendix J comes from ethanol facilities, rather than corn

wet mills, and such ethanol processes have different emission profiles from corn wet milling processes. These differences make it inappropriate to extrapolate data from ethanol processes to corn wet milling processes.

Of the three emission points for which NDEE seeks to require new scrubber liquid temperature control and monitoring at the Blair facility, as well as the four emission points for which NDEE imposes "alternative" VOC inlet testing and compliance demonstration requirements in lieu of temperature control and monitoring, *none* of the seven scrubbers control the fermentation tanks or fermentation processes utilizing yeast, and none of the seven emission points are even located in the ethanol production plant at the Blair Facility. As detailed herein, the associated scrubbers instead control emissions sources in the corn wet milling plant. Note that the corn wet milling plant (SIC Code 2046 – Corn Wet Milling) bears an entirely different SIC code from the ethanol production area at the Facility (SIC Code 2869 – Industrial Organic Chemicals, Not Elsewhere Classified). The emissions profiles from an ethanol fermentation process are not comparable to those of the Blair Facility non-ethanol plant operations. The ethanol plant data in Appendix J thus cannot be deemed representative of the relevant emission points.

Third, to the extent the data for ethanol plants in Appendix J have any relevance to Cargill's disparate Blair Facility operations, they do not support the conclusion that temperature control and monitoring is necessary to assure compliance. Notably, there are a number of instances in the data set where there appears to be no discernable correlation between temperature and VOC emissions (for instance the data for FID 84220; FID 84534; FID 85434; FID 86026; FID 87072; FID 87464) as the data show wide variability in the potential temperature-emissions association. Importantly, a number of stack test results show lower temperature conditions coinciding with higher VOC and HAP emissions, or otherwise indicate that temperature has not had a significant effect on VOC emissions. *See, e.g.*, FID 34651 (showing higher levels of VOC emissions with temperature decrease, but with other potentially confounding variables); FID 58049 (showing approximately same VOC emissions with a drop in temperature from 91.6 degrees F to 80.4 degrees F, with other variables staying about the same, indicating temperature had little to no effect on emissions); (showing increased VOC emissions with lower temperature and higher water flow rate); FID 82836 (showing two tests conducted at 57 degrees F, with other variables approximately the same, but with VOC emission nearly double in one test (7.45 vs 12.5 lbs/hr) indicating no apparent correlation between temperature and VOC emissions).

NDEE provides no explanation for the numerous testing results that run counter to its hypothesis regarding the elevated importance of scrubber liquid temperature to VOC emission levels.[43] As noted above in Section IV.A.4.b, even the data and figure incorporated into the Fact

[43] For example, as explained in Cargill's comments regarding the Draft Permit, the data associated with scrubber EP-22 showed slightly higher VOC emissions and significantly higher HAPs during a test conducted with a scrubber water temperature of 61.5 degrees F as compared to a test conducted with a water temperature of 92.7 degrees F. Data associated with scrubber EP-22A similarly shows that multiple tests indicated EP-22A had higher emissions on days with lower scrubber water temperatures. NDEE's oversimplification of the relationship between scrubber water temperature and VOC emissions

Sheet from the Wet Scrubber White Paper could support the antithesis.[44] Indeed, NDEE acknowledges the need for additional data. *See* Fact Sheet at 89 (noting that "additional data is necessary to be sure"); *see also* Wet Scrubber White Paper, Appendix L, at 8 (same). Nor does NDEE respond to Cargill comments on these issues. *See* Cargill Comments at 38-44; 40 C.F.R. § 70.7(h)(6).

In sum, the limited data do not support the need for water temperature control and monitoring to assure compliance. As a result, NDEE's decision to nonetheless impose those requirements without clear and documented support in the record is not in compliance with the requirements of Title V or the Part 70 regulations.

5. Conclusion

In sum, the scrubber liquid temperature control and monitoring requirements included in the Permit do not comply with Section 504(c) of the CAA, 42 U.S.C. § 7661c(c), 40 C.F.R. § 70.6(c)(1), or 40 C.F.R. § 70.7(a)(5), because NDEE has not clearly documented in the record why the additional scrubber liquid temperature control and monitoring requirements are necessary to assure compliance. NDEE does not follow EPA's prescribed case-by-case procedures for determining the monitoring sufficient to demonstrate compliance with applicable requirements, and NDEE's rationales for imposing additional scrubber liquid temperature control and monitoring requirements do not demonstrate that these new requirements are necessary to assure compliance either in light of the relevant source- and emission point-specific factors identified by EPA or based on additional factors identified by NDEE.

Rather than relying on case-specific features as required by Title V, many of NDEE's justifications for imposing such monitoring instead rely upon generalized, unsupported arguments regarding NDEE's understanding of the relationship between scrubber liquid temperature and VOC emissions, more specifically NDEE's hypothesis that there is a strong positive correlation between higher scrubber liquid temperature and higher VOC emissions. However, as detailed above, the record does not support the conclusion that the relationship between scrubbing liquid temperature and VOC emissions is such that such temperature monitoring is necessary to assure compliance. It is not enough for NDEE to hypothesize that temperature has the potential to affect VOC solubility in the abstract; NDEE must show that the effects are such that scrubber liquid temperature control and monitoring on top of any existing monitoring is necessary to assure compliance for the specific scrubber at issue.

As described herein, the scientific literature, EPA guidance, and the NDEE's Wet Scrubber White Paper do not justify the need for scrubber liquid temperature control and monitoring requirements to assure compliance at the emissions points that are the subject of this petition. The stack testing data provided by NDEE in Appendices J and K also do not support the need for additional scrubber liquid temperature control and monitoring to assure compliance. For these reasons, NDEE's decision to impose additional monitoring is not supported in the record and thus not in compliance with the requirements of Title V or the Part 70 regulations.

[44] While Figure 2 shows an increase in air pollutant emission rates on the second day of testing with increasing temperature, Figures 3 and 4 show a decrease in emissions rate with an increase in temperature, while Figure 5 shows a decrease in VOCs, but an increase in HAPs with an increase in temperature.

B. The Permit is Not in Compliance with Title V Because NDEE Exceeds its Authority Under the CAA and Part 70 in Imposing New Substantive Requirements in the Form of Scrubber Liquid Temperature Control Requirements, and NDEE's Decision to Do So is Arbitrary and Capricious and Unsupported in the Record.

Noncompliant Conditions Imposing Scrubber Liquid Temperature Control Requirements

Page 38, III(EP-7)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 44, III(EP-7A)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 82-83, III(EP-12)(4)(b)(iv)(3) (scrubber liquid temperature control)

The Permit contains new scrubber liquid temperature control requirements for the above-listed emission points as follows:

- "The scrubbing liquid temperature shall not exceed above 10% of the level determined during performance testing, a required in Condition III.(EP-7)(3)(b)(i) above."

- "The scrubbing liquid temperature shall be maintained at or below the tested level(s) allowing a +10% margin under normal operating conditions, following the performance testing required in Condition III.(EP-7A)(3)(b)(i) above."

- "The scrubbing liquid temperature shall be maintained at or below the tested level(s) allowing a +10% margin under normal operating conditions, following the performance testing required in Condition III.(EP-12)(3)(b)(i) above."

These provisions exceed NDEE's legal authority under Title V because they impose new substantive requirements, and are arbitrary and capricious and lack legal and factual support in the record. Accordingly, they should be removed from the Permit.

Because the provision to control scrubber liquid temperature is predicated on the scrubber liquid temperature monitoring requirements discussed herein, it suffers from all the same flaws Cargill has identified with respect to the scrubber liquid temperature monitoring requirements, above. As such, Cargill incorporates the arguments made in Section IV.A above into this section. As with the scrubber liquid temperature monitoring requirements, NDEE does not provide support in the record for how these provisions would be required to assure compliance at VOC wet scrubbers for all the reasons discussed above, including the lack of a reasoned case-by-case analysis, as well as the lack of scientific studies or data that support NDEE's position.

However, these new provisions are additionally flawed because they have the effect of imposing significant, costly new substantive temperature control requirements on these emission points, contrary to Title V, and should thus be removed from the Permit. NDEE cannot leverage temperature monitoring provisions in order to impose new substantive temperature control requirements through the Title V process. As described above in Section III, the Title V permitting program is intended to pull all underlying applicable requirements into a single

document, with gap-filling related to monitoring allowed in limited circumstances. It is *not* intended to impose new substantive requirements or increase the stringency of those requirements. *See* 40 C.F.R. § 70.1(b) (explaining that the "title V does not impose substantive new requirements"); Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,251; *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1026–27; *Envtl. Integrity Project v. EPA*, Ex. 16, 969 F.3d at 543 ("By all accounts, Title V's purpose was to simplify and streamline sources' compliance with the Act's substantive requirements. Rather than subject sources to new substantive requirements—or new methods of reviewing old requirements—'[t]he intent of Title V [was] to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution.'"); White Paper for Streamlined Development of Part 70 Permit Applications, Ex. 17, at 1 ("In general, this program was not intended by Congress to be the source of new substantive requirements. Rather, operating permits required by title V are meant to accomplish the largely procedural task of identifying and recording existing substantive requirements applicable to regulated sources and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives."); *id.* at 14 ("[O]perating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives."). NDEE also does not comply with Title V and the Part 70 regulations because it does not "specify and reference the origin of and authority for" the temperature control conditions. 40 C.F.R. § 70.6(a)(1)(i).

There is currently no applicable requirement that would require the Blair Facility to control scrubber liquid temperature at these emission points, and this requirement thus constitutes a new requirement imposed on these emissions units. Moreover, this new requirement is substantive because it "impose[s] duties and obligations on those who are regulated[.]" *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1027; *see also, e.g., General Electric v. Koncelike*, No. 05AP-310 (OH 3/13/2006), at ¶ 23 (Ohio 2006) (attached hereto as Exhibit 44). As described below, adding such a requirement would also effectively constitute reopening of the relevant construction permits, which is not permitted as a part of the Title V process.[45] *See* 40 C.F.R. § 70.6(a)(1); 129 Neb. Admin. Code Ch. 15 (establishing procedures NDEE must follow to revise a construction permit); *Environmental Integrity Project v. U.S. EPA*, Ex. 16, 969 F.3d at 543, 546 (finding EPA's interpretation persuasive that "Title V is not the appropriate vehicle for reexamining substantive validity of underlying Title I preconstruction permits;" and explaining that the Title V process is not "new methods of reviewing old requirements"); *see also Operating*

[45] A permitting authority can revise a construction permit when an application for a permit revision is submitted by the permittee, but NDEE lacks authority to self-initiate such changes absent clear error in the permit. 129 Neb. Admin. Code Ch. 15, 006.01 *see also* U.S. EPA, Questions and Answers on the Requirements of Operating Permits Program Regulations, at 12-2, https://www.epa.gov/sites/production/files/2015-08/documents/bbrd_qa1.pdf (posing question of whether Title V permit revisions can change previous NSR condition, and explaining "No. Title V permits cannot, in general, change a requirement of an NSR permit. The Part 70 permit revision process, however, may suffice for making a change when the NSR and Part 70 programs are integrated.") (attached hereto as Exhibit 45). When requested by the Part 70 permit applicant, a concurrent revision of the construction permit, and incorporation into the Part 70 Permit can occur simultaneously. Cargill has not submitted a request for a revision, nor requested use of the concurrent processing mechanism.

Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,259 (July 21, 1992) (noting intent not to second-guess the results of state NSR programs).

Importantly, scrubbers are not designed with a mechanism to alter temperatures of either the gas stream or the fluids running through the scrubber, and temperature can only be controlled by adding process equipment (e.g., a chiller) to control scrubber liquid temperature. Yet, NDEE neither provides legal or technical support in the Fact Sheet justifying these new temperature control requirements, nor an indication that NDEE considered the potentially significant added cost of control (or monitoring) or the technical feasibility of retrofitting operations with a chiller or other equipment to provide temperature control for wet scrubbers. For the scrubbers at issue here, Cargill does not have water chillers or other process equipment in place to control scrubber liquid temperature or its effects on operations, and doing so was not a control technology contemplated or required as part of the Consent Decree or the VOC BACT analyses that form the underlying basis for the applicable requirements relevant to these three emission points. These two categories are discussed below.

1. Emission Points with VOC BACT Determinations: EP-7A

In terms of the VOC emission limit for EP-7A, which was based on a VOC BACT analyses, requiring Cargill to control scrubber liquid temperature now would fundamentally change and have the effect of reopening the BACT determinations upon which the VOC limits rely, side-stepping the required cost-effectiveness analysis that would have been performed as part of determining the BACT emission limitation. Within the BACT determination, defining appropriate available control technology options is conducted on a case-by-case basis considering a number of factors, including cost. Given the potentially costly control equipment that would be required to meet the temperature control requirement, NDEE's imposition of the temperature control Permit conditions effectively circumvent the BACT process. As a consequence, NDEE does not consider either cost other environmental considerations that are part of a BACT determination, including water use requirements, potential emissions of ozone depleting substances (which would be used in chillers), and potential energy penalties with associated greenhouse gas emissions.

Such a reopening of construction permits and BACT determinations is not permitted as a part of the Title V process. *See Environmental Integrity Project v. U.S. EPA*, Ex. 16, 969 F.3d at 543, 546 (finding EPA's interpretation persuasive that "Title V is not the appropriate vehicle for reexamining substantive validity of underlying Title I preconstruction permits;" and explaining that the Title V process is not "new methods of reviewing old requirements"); *see also Operating Permit Program*, Ex. 14, 57 Fed. Reg. 32,250, 32,259 (July 21, 1992) (noting intent not to second-guess the results of state NSR programs).

The VOC BACT analysis conducted for EP-7A further bolsters the notion that scrubber liquid temperature control and monitoring is neither appropriate nor necessary to ensure compliance at the emission point. Such control and monitoring are not merited because the millhouse and feed house wet scrubber at EP-7A is primarily designed for SO_2 emissions control and is not optimized for VOC emissions control. EP-7A triggered BACT review for SO_2 and VOCs as part of the CP06-0008 project, and NDEE determined that a wet

scrubber was BACT for SO_2. 2006 Fact Sheet, Ex. 4, at 22-23.

As part of its BACT review process, NDEE then reviewed the effectiveness of that wet scrubber for VOC emissions control, but NDEE concluded that, "the scrubber design, as optimized for SO_2 control, would achieve very limited VOC control (approximately 4%)")." 2006 Fact Sheet, Ex. 4, at 23; *see also* Appendix D, PSD-BACT Analysis for EP-7A and EP-8A From Application for CP06-0008. After evaluating additional control technologies (e.g., RTO), NDEE determined that no additional controls qualified as BACT for VOCs. NDEE concluded that "[s]ince a wet scrubber is being installed for BACT-level control of SO_2, use of this scrubber will be considered the baseline level of VOC control for EP 7A. Based upon testing of the facility's existing millhouse and feed house scrubber, the baseline controlled VOC emission rate for purposes of the BACT analysis will be 24.36 lb/hr." 2006 Fact Sheet, Ex. 4, at 23. In other words, NDEE set the VOC emission limit in the permit based on a significant percentage of the VOCs in the gas stream exiting through the scrubber as optimized for SO_2 control. *Id*.[46]

NDEE does not respond to Cargill's comments on this issue. *See* Cargill Comments at 49-51; 40 C.F.R. § 70.7(h)(6).

2. Emission Points Subject to the Consent Decree: EP-7 and EP-12

In terms of VOC emission limits based on the Consent Decree, imposing additional control requirements is also inappropriate as it upsets emission control and monitoring terms that had been carefully negotiated and agreed to by the parties to the Consent Decree. Neither the Consent Decree, nor the construction permit incorporating the Consent Decree emission limits (CP08-065), contain such scrubber liquid temperature control requirements, and NDEE lacks the authority to impose new applicable substantive control requirements through the Title V process. In fact, as noted below, NDEE previously determined that scrubber liquid temperature control and monitoring were unnecessary in the context of these units.

CP08-065—the construction permit incorporating the Consent Decree requirements—does not require scrubber liquid temperature monitoring or control for the Consent Decree emission points not subject to Emission Control Plans. These Consent Decree emission points not subject to Emission Control Plans include five of the seven emission points at issue in the Permit (EP-7, EP-10, EP-12, EP-66, and EP-67). Notably, NDEE expressly considered and

[46] Similarly, for EP-7, a similar millhouse and feed house scrubber, the scrubber was originally designed for SO_2 control, and NDEE concluded that for VOCs, "BACT was determined to be no additional control; or, use of a wet scrubber with an expected VOC emission rate of 24.36 lb/hr." 2006 Fact Sheet, Ex. 4, at 23. "Since a wet scrubber is already installed, use of this scrubber will be considered the baseline level of VOC control for EP 7. Based upon testing of EP 7, the baseline controlled VOC emission rate for purposes of the BACT analysis will be 24.36 lb/hr." *Id.* Note however, that under Paragraph 77 of the Consent Decree, the Consent Decree emission limitation superseded any prior emission limitations and permits relating to EP-7, such that EP-7 is no longer subject to a BACT control requirement or required to use a wet scrubber to meet the emission limitation. *See supra* Section I.C.2. CP19-025 confirms this by using only a "Consent Decree" citation for the VOC emission limitation.

decided against imposing such a liquid temperature control and monitoring requirement. NDEE's draft construction permit had contained a requirement to monitor scrubber liquid temperature. As NDEE explained in its Response to Comments on the permit, Cargill had commented that, with respect to these scrubbers:

> the add-on control of VOCs by chemical addition and scrubber liquid temperature *are not* conditions that are required by the Consent Decree. Paragraph 39 of the Consent Decree only requests that VOC limits be identified and written in to the facility's permit for those sources at the facility that were considered to be *minor contributors* of VOC emissions.

2012 Response to Comments, Ex. 6, at 4 (emphasis added). Cargill's comments further explained that "the intent of the permitting action required under Paragraph 39 was to correctly identify sources of VOC emissions in the facility's permit. The intent was not to add additional controls and impose additional costs other than those associated with specific control plans in Paragraphs 15 through 29 of the Consent Decree." 2012 Response to Comments, Ex. 6, at 4; *see also id.* ("[B]ecause the emission limitations would be set at the PTE of each unit, Cargill is not being credited with any HAP emission reductions from the required control devices, and the facility is already a major source of HAPs it is not necessary to include the HAP emission limitations in this permit.").

NDEE agreed with Cargill's comment and removed the draft conditions requiring scrubber liquid temperature monitoring, explaining that "since Cargill is not claiming any emission reductions from the use of the scrubbers, the NDEQ agrees that monitoring scrubber water temperature is unnecessary." *Id.* NDEE's decision not to impose this monitoring in CP08-065 makes perfect sense when viewed in the appropriate context and in light of the nature of the emission limits for these emission points. As discussed above in Section I.C.2 and below in Section IV.D, the Consent Decree established no emissions reduction requirements for VOCs for EP-7, EP-10, EP-12, EP-66, and EP-67, as these emission points were not subject to Emission Control Plans. Instead, Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66 and EP-67 based on estimated maximum, potential to emit ("PTE") post-scrubber emissions, with a safety margin built in. NDEE recognized in the 2012 Fact Sheet for CP08-065, "VOC and HAP emission limitations for these units are listed as lb/hr limitations based on the maximum operational capacity of each unit (based on engineering data and stack testing conducted by Cargill at this facility and other, similar facilities)." 2012 Fact Sheet, Ex. 9, at 14. It would thus be inappropriate to impose additional temperature control and monitoring requirements on these emission points, where the underlying applicable requirement was not intended to achieve any VOC emission reductions.

NDEE does not respond to Cargill's comments that these scrubbers were not primarily designed for VOC control, that the scrubbers were not intended to reduce VOC emissions (although they may have some ancillary VOC reductions), and that the relevant emission limits were designed to reflect maximum potential to emit, with a margin of safety. *See* Cargill Comments at 51-52, 58-59, 65-70; 40 C.F.R. § 70.7(h)(6). In other words, these controls were not added on to meet VOC emission limits. Nor does NDEE explain its change in position from its prior determination made in 2012 that scrubber water temperature control and monitoring

should not be required for these emission points based on the nature of the emission limits set by the Consent Decree. *See* Cargill Comments at 75-77. NDEE's failure to respond to Cargill's comments or consider this pertinent information is arbitrary and capricious and not in compliance with the requirements of Title V. *See* 40 C.F.R. § 70.7(h)(6).

3. NDEE Fails to Justify Why Scrubber Liquid Temperature Control Requirements Are Necessary to Assure Compliance or to Provide a Source of Authority for These Requirements.

Rather than address Cargill's emission point-specific arguments, NDEE provides only a generic rationale for its decision to impose scrubber liquid temperature control requirements. Once again, NDEE's response fails to offer a case-specific demonstration for why such control is necessary to assure compliance or to provide a valid source of authority for these new requirements. In the Response to Comments NDEE explains that:

> [I]t is important to note that the permit ***does not*** prescribe that the operating parameters ***need to be controlled*** but rather ***maintained*** to ensure demonstration of compliance with permit limitations. The concept of operating under conditions that most challenge the control device while conducting performance testing is to establish baseline values for the operating parameters on the control device (wet scrubber). Once the values are established, the source has the flexibility to operate the control device "at or below" or "at or above" the baseline value depending on the parameter.
>
> Typical operating parameters for a wet scrubber controlling VOCs are scrubbing liquid flow rate, temperature, pressure, chemical flow rate (if used), etc. Monitoring and recording operating parameters ***provides proof*** that the control device is operating as it was during the performance testing in which it demonstrated compliance with permitted limits, which in turn indicates continuous compliance with permitted limits; these requirements are consistent within the air permitting program in the State of Nebraska.

Response to Comments at 21, 36 (emphasis in original).

This explanation once again discusses monitoring only in terms of what NDEE claims is "typical," rather than based on a case-specific evaluation of whether supplemental monitoring is necessary to assure compliance in addition to the existing monitoring requirements required for the relevant emission points. Title V and the Part 70 regulations do not require monitoring of all "typical operating parameters" as determined during a performance test as NDEE suggests; they require monitoring of only those parameters necessary to assure compliance. For the reasons described herein, NDEE has not demonstrated that the scrubber liquid temperature control and monitoring requirements are necessary to assure compliance. Moreover, although NDEE attempts to distinguish between "maintaining" temperature and "controlling" temperature, the result is the same: this provision will require new temperature control at the relevant scrubbers, as described above.

In the Response to Comments, NDEE further claims that:

> Cargill believes it is appropriate to test for VOC, acetaldehyde and/or combined HAP emissions ***after*** the control device and ***not maintain*** the typical operating parameters (scrubbing liquid flow rate, temperature, pressure, chemical flow rate, etc) for the wet scrubber as determined during performance testing. In other words, have emissions flow through the control device and not have to maintain any scrubber operating parameters; this approach does not assure demonstration of continuous compliance with prescribed limitations.

Response to Comments at 23, 27, 38 (emphasis added). However, this is inaccurate and does not address the issues with the proposed new monitoring and substantive requirements raised by Cargill. Cargill is not challenging a number of the requirements to monitor (or in some cases maintain) various operating parameters in the Permit (e.g., liquid flow rate, pH, etc.) where the parameters are meaningful to assure compliance with the applicable requirement and have an effect on the control of pollutants the scrubbers were designed to control. Indeed, a number of those requirements are existing applicable requirements that were incorporated into the Permit from the underlying construction permits. *See, e.g.*, CP19-025, Ex. 10, at IIIE-1—IIIE-2, Condition III(E)(3)(b)(iii) (requiring Cargill to maintain certain levels for scrubber system pH and scrubber liquid flow rate for EP-7); IIIJ-1—IIIJ-2, Condition III(J)(3)(c)(iii) (requiring Cargill to maintain certain levels for scrubber system pH and scrubber liquid flow rate for EP-10). In contrast, the scrubber liquid temperature control and monitoring requirements are not from the underlying applicable requirements and are not necessary to assure compliance.

Contrary to NDEE's characterization, what Cargill objects to is having—as a part of the Title V process—its emission points automatically required to comply with either: (i) new inlet emissions testing and compliance demonstration requirements that shift the compliance point and increase the stringency of the underlying applicable requirement, or (ii) new supplemental control and monitoring requirements that have not been demonstrated to be meaningful and are not necessary to assure compliance.

In sum, NDEE lacks authority to impose the scrubber liquid temperature control and monitoring requirements for the reasons described above, and the Permit terms imposing such requirements are thus not compliant with Title V and Part 70.

C. The Permit is Not in Compliance with the Title V Because NDEE Exceeds its Authority Under the CAA in Imposing New Substantive Requirements in the Form of "Alternative" VOC/HAPs Inlet Testing and Compliance Demonstration Requirements, and NDEE's Decision to Do So is Arbitrary and Capricious and Unsupported in the Record.

Noncompliant Conditions Imposing New VOC/HAPs Testing and Compliance Demonstration Requirement at Scrubber Inlet

Page 49, III(EP-8A)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

Page 71, III(EP-10)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

Page 214, III(EP-66)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 219, III(EP-67)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

1. NDEE's Imposition of the "Alternative" Inlet VOC/HAPs Testing and Compliance Demonstration Requirement Constitutes a New Substantive Requirement and Exceeds NDEE's Authority Under Title V.

For EP-8A, EP-10, EP-66 and EP-67, the Permit includes a new requirement that "[t]he VOC and HAPs performance tests shall be performed before the emissions stream enter the scrubber[.]" *See* Permit, Pages 49, 71, 214, 219, Condition III(EP-X)(3)(b)(iv). NDEE explains in the Fact Sheet that this provision would require "[t]esting emissions prior to the scrubbers to demonstrate compliance with existing VOC/HAP limits[.]" Fact Sheet at 74; *see also id.* at 91 ("For EP-8A, EP-10, EP-66, and EP-67, . . . NDEE is requiring the testing of VOC and HAPs to be conducted prior to the scrubber (inlet)."). This requirement thus not only requires inlet testing, but requires Cargill to demonstrate compliance with the existing VOC and HAP emission limits at the inlet of the scrubber, rather than the outlet, changing the compliance point. This increases the stringency of the applicable requirement holding Cargill to the same emission limit, by requiring Cargill to meet that limit prior to the control device (i.e., the scrubber) rather than after.

This condition is not in compliance with Title V, Part 70, or the underlying applicable requirement, and should be removed from the Permit, because it exceeds NDEE's authority, as it effectively changes the compliance point and imposes a new substantive requirement in the form of a more stringent emission limit that is not part of any existing applicable requirement. 40 C.F.R. § 70.1(b); *see also* 129 Neb. Admin. Code Ch. 1, 018 (definition of "applicable requirement"). Cargill previously raised this noncompliance in its comments on the Draft Permit. *See* Cargill Comments at 52-60.

As described above, the Title V permitting program is intended to pull all underlying applicable requirements into a single document, with gap-filling related to monitoring allowed in limited circumstances. *See, e.g. Sierra Club v. EPA*, Ex. 18, 536 F.3d at 677, 680 (finding permitting authorities may supplement *inadequate* monitoring requirements on a case-by-case basis). However, the Title V program is *not* intended to impose new substantive requirements or increase the stringency of those requirements. *See* 40 C.F.R. § 70.1(b) (explaining that the "title V does not impose substantive new requirements"); Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,251; *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1026–27; *Envtl. Integrity Project v. EPA*, Ex. 16, 969 F.3d at 543 ("By all accounts, Title V's purpose was to simplify and streamline sources' compliance with the Act's substantive requirements. Rather than subject sources to new substantive requirements—or new methods of reviewing old requirements—'[t]he intent of Title V [was] to consolidate into a single document (the operating permit) all of the clean air requirements applicable to a particular source of air pollution.'"); White Paper for Streamlined Development of Part 70 Permit Applications, at 1 (July 10, 1995) ("In general, this program was not intended by Congress to be the source of new substantive requirements. Rather, operating permits required by title V are meant to accomplish the largely procedural task of identifying and recording existing substantive requirements applicable to

regulated sources and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives."); *id.* at 14 ("[O]perating permits and their accompanying applications should be vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives.").

There is currently no applicable requirement that would require the Blair Facility to meet the VOC or HAP emission limits at the inlet to the scrubber, and it is thus new.[47] Moreover, this new requirement is substantive because it "impose[s] duties and obligations on those who are regulated[.]" *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1027; *see also, e.g., General Electric v. Koncelike*, Ex. 44, No. 05AP-310 (OH 3/13/2006), at ¶ 23. This new requirement not only imposes new testing obligations on Cargill, but also increases the stringency of underlying applicable requirement by requiring Cargill to demonstrate compliance with the VOC limits prior to the scrubber. The requirement to conduct performance testing and demonstrate compliance at the inlet of the scrubbers would be a wholly new substantive requirement for Cargill, because such a requirement is not found in the underlying construction permit or any other applicable requirement. Moreover, the requirement is "substantive" because it defines how the performance test must be performed and compliance demonstrated, creates a liability for failure to adhere to these restrictions, and would be enforceable by EPA, NDEE, or a citizen if Cargill were to fail to comply. Currently, none of the relevant scrubbers are physically equipped with an inlet testing port, modifications of the equipment would be necessary to accommodate the new testing requirement, further demonstrating that such a requirement is new and substantive. Indeed, the D.C. Circuit has held that testing requirements contained in emissions standards, including test methods and testing frequency, are "substantive" requirements. *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1027. As such, these scrubber inlet testing and compliance demonstration provisions are not in compliance with Title V, Part 70, or the underlying applicable requirement, and should be removed from the permit. *See* 40 C.F.R. § 70.1(b). NDEE also does not comply with Title V and the Part 70 regulations because it does not "specify and reference the origin of and authority for" these conditions or acknowledge that it is effectively increasing the stringency of the underlying applicable requirement. 40 C.F.R. § 70.6(a)(1)(i).

In addition, the inlet testing requirements also are not necessary to assure compliance and thus do not comply with the requirements of Title V, Part 70, or the underlying applicable requirements. *See* 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1). As an initial matter, there are no HAP emission limits applicable to EP-10, EP-66, or EP-67, and thus the HAPs testing does not assure compliance with *any* applicable requirement. Moreover, for EP-8A there is no federally enforceable HAPs emission limitation, only a state Toxic Best Available Control Technology ("T-BACT") limit. *See* Permit, Pages 48-49, III(EP-8A)(3)(a) (labeling requirement as state enforceable only); 2006 Fact Sheet, Ex. 4, at 38-39; *see also*, Cargill Toxics-BACT Analysis of Total HAP: Gluten Flash Dryer (EP # 8A) (May 18, 2009) (attached hereto as Exhibit 46).

[47] A requirement is "new" if it has "not been imposed upon, nor held applicable to [the facility] before." *See General Electric v. Koncelike*, Ex. 44, No. 05AP-310 (OH 3/13/2006), at ¶ 20; *see also Columbus Steel Castings Co. v. Nally***,** 2012 Ohio 4417 (Ohio App. 2012) (finding that "[s]ince the terms and conditions were not enforceable until they were placed in the Title V permit, they were new.") (attached hereto as Exhibit 47).

NDEE lacks authority to impose performance test requirements in the Title V operating permit when there is no underlying federal applicable requirement with which Cargill is required to demonstrate compliance, let alone a requirement to test at the inlet to the scrubber. Indeed, the Fact Sheet indicates that the provision is intended to require "[t]esting emissions prior to the scrubbers to demonstrate compliance with *existing* VOC/HAP limits[.]" Fact Sheet at 63 (emphasis added). Accordingly, NDEE should remove any reference to HAP testing requirements from Condition III(3)(b)(iv) for emission points EP-8A, EP-10, EP-66, and EP-67, as these requirements exceed NDEE's authority under Title V to impose supplemental monitoring.

With respect to VOC emissions for EP-8A, EP-10, EP-66, and EP-67, the relevant underlying applicable requirements impose emission limits on the amount of VOCs Cargill may emit to the atmosphere "from each emission point." *See* Permit, Pages 48, 70, 213, 218, Condition III(EP-X)(3)(a). That these applicable requirements apply at the emission point's discharge location is manifest in the form of the standard, and the definitions of emission limitation—which is a requirement "which limits the quantity, rate . . . of emissions of air pollutants"—and of "air pollutant"—which is a pollutant that is emitted into or "enters the ambient air." *See* 42 U.S.C. § 7602 (the definitions of "emission limitation" and of "air pollutant"); *see also* 129 Neb. Admin. Code Ch. 1, 051 (definition of "emission limitation"); 129 Neb. Admin. Code Ch. 1, 012 (defining "air pollutant" as the "presence in the *outdoor atmosphere* of one or more air contaminants") (emphasis added); *see also* Neb. Rev. St § 81-1502(9) ("Emissions shall mean releases or discharges *into the outdoor atmosphere* of any air contaminant or combination thereof") (emphasis added); 129 Neb. Admin. Code Ch. 1, 054 ("Emissions" means "releases or discharges *into the outdoor atmosphere* of any air contaminant or combination thereof.") (emphasis added).

These provisions clearly define the emission point in relation to the point a pollutant enters the atmosphere—not the point at which it enters a control device such as a scrubber. Accordingly, measuring the rate of emissions "before" the emission point rather than "from each emission point" strays from the plain language meaning of both the Permit and the regulations and bears no reasonable, technical, or legal relationship to assuring compliance with an applicable requirement that applies at the emission discharge point. These VOC inlet testing and compliance demonstration requirements are thus not in compliance with Title V, Part 70, or the underlying applicable requirement.

Moreover, in terms of VOC emission limits based on the Consent Decree (EP-10, EP-66, EP-67), imposing additional inlet testing and compliance demonstration requirements is also inappropriate as it upsets emission control and monitoring terms that had been carefully negotiated and agreed to by the parties to the Consent Decree, and as memorialized in CP-0865, as described below in more detail *infra* Section IV.D. Neither the Consent Decree, nor CP08-065 (the construction permit incorporating the Consent Decree emission limits), contain inlet testing and compliance demonstration requirements for VOCs (or HAPs), and NDEE lacks the authority to impose new applicable substantive control requirements through the Title V process.

Rather, for EP-10, EP-66, EP-67, the construction permit identifies these emission points as attaching to the scrubbers and assigns the corresponding VOC emissions limit from the

Consent Decree to those emission points. This is consistent with how these VOC emission limits were established. As discussed in more detail below in Section IV.D, the Consent Decree established no emissions reduction requirements for VOCs for EP-7, EP-10, EP-12, EP-66, and EP-67, as these emission points were not subject to Emission Control Plans. Instead, Cargill submitted a permit application to establish VOC emission limitations for EP-7, EP-10, EP-12, EP-66, and EP-67 based on estimated maximum, potential to emit, with a safety margin built in. These limits were generally determined based on engineering tests at the outlet of the scrubber, not the inlet of the scrubber, and it would be inappropriate to now require compliance at the inlet, as doing so would increase the stringency of the emission limits beyond what was required or intended in the Consent Decree or the associated construction permit (CP08-065).

Moreover, for these Consent Decree emission points (EP-10, EP-66, EP-67), NDEE's administrative record also shows that the emission limits were set based on the assumption that the compliance point would be the discharge stack of the scrubber. The compliance stack test plans submitted for NDEE review and approval expressly identify the testing point as the scrubber *outlet*. These test plans show the test port on the stack (i.e., after the scrubber) and note that EPA Method 1 will be used "for the location of sampling ports and points" and that the "[l]ocation of the sampling ports must be approved before testing." *See, e.g.*, Test Plan for Performance Compliance Test Cargill Blair Corn Mill Germ Dryer (EP 10), at 3-5 (February 14, 2013) ("EP-10 Test Plan"); Test Plan for Performance Compliance Test Cargill Blair Corn Mill Germ Flaker/Conditioner and Cyclone (EP 66), at 3-4 (March 25, 2013) ("EP-66 Test Plan"); Test Plan for Performance Compliance Test Cargill Blair Corn Mill Germ Cooker Expeller Scrubber (EP 67), at 2-4 (May 13, 2013) ("EP-67 Test Plan") (Test Plans attached hereto as Exhibits 61-63). These test plans also state that EPA Method 320 and/or EPA Method 18 will be used for determinations of HAPs and VOCs, and that three 60-minute determinations will be performed at the "outlet." EP-10 Test Plan at 3; EP-66 Test Plan at 3; EP-67 Test Plan at 3.

In addition, the compliance stack test reports submitted for NDEE review and approval expressly identify the testing point as the scrubber *outlet*. *See, e.g.*, Results of the May 30, 2013 Air Emission Compliance Test on the Germ Dryer Outlet (EP-10) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32164 (EP10), at 1 (July 9, 2013) (report title and first page identify that the test occurred at the *outlet*); Results of the May 29, 2013 Air Emission Compliance Test on the Germ Expeller Outlet (EP-67) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32164 (EP67), at 1 (July 9, 2013) (same); Results of the April 30, 2013 Air Emission Compliance Test on the Germ Expeller Scrubber (EP 66) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32086 (EP 66), at 1 (June 7, 2013) (first page identifies that the test occurred at the *outlet*) (compliance test results compiled and attached hereto as Exhibits 64-66).[48]

[48] Cargill attached the test protocols to its comments. However, with this petition it is additionally attaching the test results for these tests to this petition. NDEE argues for the first time in the Response to Comments document that it was unaware that Cargill was testing at the outlet, so Cargill is providing this additional information in response to that claim. *See* Response to Comments at 22, 26, 37 ("NDEE discovered during the drafting of the Operating Permit documents that Cargill had tested for VOC, acetaldehyde and/or combined HAP emissions for EP-8A, EP-10, EP-66 and EP-67 ***after*** the control device rather than ***before*** the control device.") (emphasis in original). It is permissible to include this information because the grounds for the objection arose after the public comment period (i.e., in the Response to Comments document). *See* 40 C.F.R. § 70.12(a)(2). In any event, Cargill raised with reasonable

Similarly, for EP-8A, NDEE's administrative record also shows that the emission limits were set based on the assumption that the compliance point would be the discharge stack of the scrubber. For instance, for EP-8A, NDEE established the VOC permitted emissions rate, assuming the baseline level of VOC control being provided by the wet scrubber, and based on stack test data collected from the discharge stack of EP-8. *See* 2006 Fact Sheet, Ex. 4, at 25 ("Since a wet scrubber is being installed for BACT-level control of SO_2 and PM/PM to, use of this scrubber will be considered the *baseline* level of VOC control for EP 8A. Based upon testing of the facility's existing gluten flash dryer, the *baseline controlled* VOC emission rate for purposes of the BACT analysis will be 21.92 lb/hr.") (emphasis added); *see also* E-mail from Jim Pavlik to Nick Streinke (dated June 9, 2006) (attached hereto as Exhibit 50).

Moreover, the relevant construction permit included a requirement to perform an initial performance test on EP-8A. Cargill completed that test on December 4, 2008, using a sampling port on the scrubber exhaust stack—showing that all parties understood the standard to apply on the exhaust stack not the entrance to the scrubber. *See* Results of the December 4, 2008 Air Emission Compliance Test on the Gluten Dryer (EP 8A) at the Cargill Corn Milling Facility in Blair, Nebraska, Interpoll Laboratories, Report Number 8-27054 (January 14, 2009) (attached hereto as Exhibit 51). Cargill has continued to use, and NDEE has approved, use of this sampling port in a subsequent test plan in 2015. *See, e.g.,* Test Plan for Performance Compliance Test Cargill Blair Corn Mill Gluten Dryer #2 (EP 8A), at 3-5 (December 17, 2015) (attached hereto as Exhibit 52). The 2015 test plan for EP-8A shows the test port on the stack (i.e., after the scrubber) and notes that EPA Method 1 will be used "for the location of sampling ports and points" and that the "[l]ocation of the sampling ports must be approved before testing." *Id.* at 3. The compliance stack test report for EP-8A submitted for NDEE review and approval also identifies the testing point as the scrubber outlet. *See* Results of the January 20, 2016 Air Emission Compliance Test on the Gluten Dryer (EP-8A) at the Cargill Corn Milling Facility in Blair, Nebraska, Report Number 16-34992 (EP8A), at Appendix B (Feb. 4, 2016) (showing the test port location at the stack/outlet) (attached hereto as Exhibit 53).

The historical record of these VOC emission limits and how they were established, as well as the approved testing plans and test results demonstrate that the applicable requirement is not an emission limit on the inlet. Indeed, inlet testing is not even an identified or referenced method to evaluate emission points under NDEE's regulations.[49]

Given that the emission limits at EP-8A, EP-10, EP-66, and EP-67 were set assuming an emission point located at the scrubber outlet, and have been historically tested at that point, NDEE would be unequivocally and impermissibly increasing the stringency of the emission limit if NDEE were to change the compliance demonstration point so as to hold Cargill in noncompliance with the applicable requirements based on the results of the inlet testing requirement.

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specificity the issue that testing at these emission points was historically required to occur at the emission outlet, not the inlet and provided supporting documentation including the test protocols for these compliance tests. *See* Cargill Comments at 55-56.

[49] In fact, Cargill could find no reference to compliance performance "inlet" or "inlet testing" in NDEE's regulations. *See* Neb. Admin. R. & Regs. Tit. 129; *see also* Neb. Rev. St §§ 81-1501-1532.

Courts have long recognized that regulatory agencies cannot alter the way compliance is demonstrated in a manner that affects the stringency of the requirement.[50] For instance, in *Portland Cement Association v. Ruckelshaus*, the D.C. Circuit remanded regulations to EPA after finding that compliance provisions prescribed use of measurements that differed from the methods used to set the standards, explaining that "a significant difference between techniques used by the agency in arriving at standards, and requirements presently prescribed for determining compliance with standards, raises serious questions about the validity of the standard." 486 F.2d 375, 396 (D.C. Cir. 1973) (attached hereto as Exhibit 54); *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d 1015, at 1027 (vacating EPA's periodic monitoring guidance after finding that it significantly broadens the rule and noting that, "[w]e have recognized before that changing the method of measuring compliance with an emission limitation can affect the stringency of the limitation itself"). *Cf. PPG Industries, Inc. v. Costle*, 659 F.2d 1239 (D.C. Cir. 1981) (finding EPA failed to provide proper notice when it changed the manner of measuring compliance with the NAAQS which resulted in a potentially more stringent standard) (attached hereto as Exhibit 55).[51]

In addition, because the relevant construction permits set the emission limits assuming a compliance demonstration at the emission point, not the scrubber inlet, changing the compliance point would have the effect of reopening the construction permits, which is not permitted as a part of the Title V process.[52] *See* 40 C.F.R. § 70.6(a)(1); 129 Neb. Admin. Code Ch. 15 (establishing procedures NDEE must follow to revise a construction permit); *Environmental Integrity Project v. U.S. EPA*, Ex. 16, 969 F.3d at 543, 546 (finding EPA's interpretation persuasive that "Title V is not the appropriate vehicle for reexamining substantive validity of underlying Title I preconstruction permits;" and explaining that the Title V process is not "new

[50] A permitting authority also must assure that test methods and averaging periods are consistent with the underlying applicable requirement. *See* 40 CFR § 70.6(a)(3)(i)(B)(requiring permitting authorities to include in a permit "monitoring requirements [that] shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement").

[51] Such a change in conditions is impermissible because neither enhanced monitoring nor credible evidence, and by logical extension periodic monitoring, can affect the stringency of the underlying emission standard by amending the nature of the compliance obligation. Credible Evidence Revisions, 62 Fed. Reg. 8,314, 8,314-15 (Feb. 24, 1997) ("The credible evidence revisions are not intended to and will not serve to affect the stringency of underlying emission standards by amending the nature of the compliance obligation.") (attached hereto as Exhibit 56); *see also* Compliance Assurance Monitoring, Ex. 19, 62 Fed. Reg. 54,900, 54,907 (Oct. 22, 1991) ("The CE Revisions and the use of CAM data as potential credible evidence do not change the stringency of any emission standard for the reasons set forth in the preamble to the CE Revisions.").

[52] A permitting authority can revise a construction permit when an application for a permit revision is submitted by the permittee, but NDEE lacks authority to self-initiate such changes absent clear error in the permit. 129 Neb. Admin. Code Ch. 15, 006.01 *see also* U.S. EPA, Questions and Answers on the Requirements of Operating Permits Program Regulations, at 12-2, https://www.epa.gov/sites/production/files/2015-08/documents/bbrd_qa1.pdf (posing question of whether Title V permit revisions can change previous NSR condition, and explaining "No. Title V permits cannot, in general, change a requirement of an NSR permit. The Part 70 permit revision process, however, may suffice for making a change when the NSR and Part 70 programs are integrated.") (attached hereto as Exhibit 57). When requested by the Part 70 permit applicant, a concurrent revision of the construction permit, and incorporation into the Part 70 Permit can occur simultaneously. Cargill has not submitted a request for a revision, nor requested use of the concurrent processing mechanism.

methods of reviewing old requirements"); *see also Operating Permit Program*, Ex. 14, 57 Fed. Reg. 32,250, 32,259 (July 21, 1992) (noting intent not to second-guess the results of state NSR programs); *In the matter of Maimonides Medical Center*, Petition Number II-2001-04 (2002) (granting a petition for objection in part because a permitting authority "has no discretion in changing the reporting requirement that is in the SIP") (attached hereto as Exhibit 58). Thus, although NDEE has authority to incorporate applicable requirements into the Permit and to "gap fill" inadequate or non-existent monitoring in limited circumstances, it does not have authority to change applicable requirements as written or implemented pursuant to the construction permits or the Consent Decree. Such a change is not compliant with Title V, Part 70, and the underlying applicable requirement. *See* 40 C.F.R. § 70.1(b); 40 C.F.R. § 70.6(a)(1)(i).

NDEE attempts to side-step the fact that its proposed change of compliance point is a substantive change that has the effect of increasing the stringency of the VOC emission limit, by claiming in the Fact Sheet that "Cargill claims the scrubber does not control the VOC/HAP emissions" for the relevant emission points. *See* Fact Sheet at 54-58, 66-67, 75. NDEE also states that "Cargill claims the control device is not necessary to meet the VOC/HAP permit limits, thus the stack testing of VOC/HAP emissions must be conducted prior to the gas stream entering scrubber." *See* Fact Sheet at 75. NDEE also states that "Cargill's applications indicated **no control** for VOC/HAPs" for these emission points, and "Cargill submitted BACT analysis indicated **no control** for these process areas." Fact Sheet at 74 (emphasis in original).

Despite Cargill's comments underscoring that these statements were incorrect, NDEE does not correct these statements in its Response to Comments, instead reiterating that "[b]ased on information provided by Cargill in the application, these units have scrubbers that control other pollutants." Response to Comments at 7, 14, 21, 25, 30, 36, 47; *see* Cargill Comments at 58-60.

Thus, in both the Fact Sheet and the Response to Comments, NDEE mischaracterizes Cargill's statements regarding these emission points and then imposes inlet testing and compliance demonstration requirements based on those mischaracterizations. As Cargill explained in its comments:

> Cargill has not stated that no VOC emission control is obtained through these scrubbers. Rather, Cargill has stated that some of these scrubbers are not primarily designed or optimized for VOC control, and were optimized and/or originally installed for pollutants other than VOCs. However, this does not mean that there is no ancillary VOC control obtained through these scrubbers, or that the BACT analysis showed no VOC reductions. In fact, to the contrary, these scrubbers are expected to achieve some level of ancillary VOC control, the BACT analyses and Consent Decree just did not require additional VOC reductions beyond that being achieved through the existing scrubbers that are primarily designed for and optimized for non-VOC pollutants.

Cargill Comments at 58.

In its comments, Cargill also provided more detail regarding the above for each of its scrubbers. For EP-8A, Cargill also provided significant information regarding the BACT evaluation for the emission point.[53] *See* Cargill Comments at 58-59. More specifically NDEE determined that a wet scrubber was BACT for PM/PM_{10} and SO_2, and then reviewed the effectiveness of that wet scrubber for VOC emissions control, but concluded that "the scrubber design, as optimized for SO_2 and PM/PM to control, would achieve very limited VOC control (approximately 3%)." 2006 Fact Sheet, Ex. 4, at 24-25. After evaluating additional control technologies, NDEE concluded that "BACT was determined to be no *additional* control; or, use of a wet scrubber with an expected VOC emission rate of 21.92 lb/hr. 2006 Fact Sheet, Ex. 4, at 25 (emphasis added). This is corroborated by the 2006 Fact Sheet for CP06-0008, which shows that BACT for EP-8A for VOCs is the wet scrubber, with the associated emission limit being 21.92 lbs/hr. 2006 Fact Sheet, Ex. 4, at 19; *see also* Cargill Response to NDEQ Request for information and meeting follow-up (Aug. 18, 2006) (responding to EPA questions regarding ~3-4% removal efficiency) (attached hereto as Exhibit 59). Importantly, as noted above, the wet scrubber was assumed to be in place in setting the emission limit for this emission point. The 2006 Fact Sheet notes that "[s]ince a wet scrubber is being installed for BACT-level control of SO_2 and PM/PM to, use of this scrubber will be considered the *baseline* level of VOC control for EP 8A. Based upon testing of the facility's existing gluten flash dryer, the *baseline controlled* VOC emission rate for purposes of the BACT analysis will be 21.92 lb/hr." 2006 Fact Sheet, Ex. 4, at 25 (emphasis added). NDEE set the VOC BACT emission limits assuming low—but non-zero—control levels of VOCs, and this control was taken into account in determining the emissions rate limit. Accordingly, it would impermissibly increase the stringency of that limit if NDEE now were to require Cargill to meet that emissions rate limit prior to the scrubber.

Indeed, NDEE seems to believe that EP-8A actually gets significantly more emissions reductions than were identified in the BACT analysis. The Fact Sheet states that "[t]he 2011-2020 emission inventories submitted by Cargill (see Appendix E) stated the VOC control efficiency for EP-7A is 99% and is 95% for EP-8A." Fact Sheet at 29; *see also id.* at 77; *see also* Response to Comments at 18. Cargill disputes NDEE's interpretation of the emissions inventory information, as described in Section IV.A.2.c.i. However, regardless of the exact VOC emissions reductions level offered by the scrubber, both Cargill and NDEE agree it is a non-zero number. *See id.* Thus, by moving the compliance demonstration point to the scrubber inlet, NDEE will effectively increase the stringency of the emission limit that was set based on the assumption that the emission limit would be complied with at the outlet.

As detailed in Cargill's comments, Cargill has similarly not stated that the scrubbers on EP-10, EP-66, and EP-67 result in no VOC control. *See* Cargill Comments at 59-60. Similarly to EP-8A, at the time Cargill applied for and obtained the construction permit for these emission points, there were already scrubbers in place as control equipment originally designed to control other pollutants (e.g., PM, SO_2). Thus, when Cargill developed these emission limits based on potential to emit limits for the amount of VOCs that would exit through the existing scrubber (with a safety factor), it did so based on testing that took the effect of the scrubber into account. It would thus also effectively increase the stringency of the emission limit for these emission points were NDEE to move the compliance demonstration point to the scrubber inlet.

[53] EP-8A was subject to a BACT evaluation as part of the CP06-0008 project.

Cargill raised each of these issues in its comments. *See* Cargill Comment at 54-60. However, NDEE does not respond to most of the issues raised by Cargill above, including Cargill's comments that NDEE approved of test plans and that clearly identified the compliance and testing point as the outlet of the scrubber and that each of the emission limits were determined and set based on a compliance point after the scrubber. Instead, NDEE continues to repeat that these emission points have "no control" of VOCs. NDEE's failure to correct these issues in the Fact Sheet and to respond to Cargill's comments regarding these emission points in the Response to Comments is arbitrary and capricious and not compliant with Title V or the Part 70 regulations. 40 C.F.R. § 70.7(h)(6).

Indeed, instead of providing a response to Cargill's comments, NDEE makes several claims, all of which are arbitrary and capricious, not credible, and are unsupported in the record.

First, seeming to realize that its change of compliance demonstration point would in fact work an increase in the stringency of the emission limit, NDEE for the first time claims in the Response to Comments document that the inlet testing and compliance demonstration requirements are not new substantive requirements, because NDEE is merely "clarifying testing location." Response to Comments 22-23, 26-27, 33, 37-38. More specifically, NDEE's Response to Comments states that:

> NDEE discovered during the drafting of the Operating Permit documents that Cargill had tested for VOC, acetaldehyde and/or combined HAP emissions for EP-8A, EP-10, EP-66 and EP-67 ***after*** the control device rather than ***before*** the control device. The draft Operating Permit clarified testing location because the Construction Permit CP08-065 did not explicitly require Cargill to test the VOC, acetaldehyde and/or combined HAP emissions before entering any type of control device. As such, NDEE is ***not imposing any new testing requirements,*** but rather just adding clarifying language on testing location. It is important to note that NDEE simply clarified test locations to reflect information provided by Cargill. Cargill's comment letter at page 58 incorrectly indicates that this clarification: "has the effect of increasing the stringency of the VOC emission limit."
>
> NDEE ***did not change*** any limitations; the VOC, acetaldehyde and/or combined HAP limitations for EP- 8A, EP-10, EP-66 and EP-67 are identical to what was previously prescribed in CP19-025.

Response to Comments at 22, 26, 37 (emphasis in original).

This explanation provided by NDEE is not credible. As detailed above and in Cargill's comments, each of these emission limits was established based on the assumption that emission testing would occur after the scrubber. For EP-8A, the scrubber was deemed BACT for VOCs, and for the Consent Decree emission points, the emission limits in CP08-065 were developed based on potential to emit limits for the amount of VOC's that would exit through the existing scrubber (with a safety factor), based on testing that took the effect of the scrubber into account. *See* Cargill Comments at 58-60.

Moreover, as shown above by the test protocols for EP-8A, EP-10, EP-66, and EP-67, NDEE had to affirmatively approve the test port location for each of these emission points, and they were photographs attached to each protocol showing the testing location to be the stack at the outlet of the scrubber. *See* EP-10 Test Plan at 3-5, EP-66 Test Plan at 3-4, and EP-67 Test Plan at 2-4 (Exs., 61, 62, and 63); *see also* Cargill Comments at 55-56. Moreover, the test protocols for EP-10, EP-66, and EP-67 expressly state that VOC and HAPs testing will occur at the outlet to the scrubber using EPA test methods. EP-10 Test Plan at 3, EP-66 Test Plan at 3, and EP-67 Test Plan at 3 (Exs. 61, 62, and 63). And finally, the stack test results themselves—which were submitted to NDEE—expressly state in the title of the report itself and/or in the very first sentence of the very first page that the testing occurred at the scrubber outlet, or otherwise clearly show the testing port location as the outlet. *See, e.g.*, Results of the May 30, 2013 Air Emission Compliance Test on the Germ Dryer Outlet (EP-10) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32164 (EP10), at 1 (July 9, 2013) (report title and first page identify that the test occurred at the *outlet*); Results of the May 29, 2013 Air Emission Compliance Test on the Germ Expeller Outlet (EP-67) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32164 (EP67), at 1 (July 9, 2013) (same); Results of the April 30, 2013 Air Emission Compliance Test on the Germ Expeller Scrubber (EP 66) at the Cargill Corn Milling Facility Located in Blair, Nebraska, Report Number 13-32086 (EP 66), at 1 (June 7, 2013) (first page identifies that the test occurred at the *outlet*); Results of the January 20, 2016 Air Emission Compliance Test on the Gluten Dryer (EP-8A) at the Cargill Corn Milling Facility in Blair, Nebraska, Report Number 16-34992 (EP8A), at Appendix B (Feb. 4, 2016) (showing the test port location at the stack/outlet) (*see* Ex. 49).[54]

In addition, inlet testing is not standard practice. Cargill could find no reference to compliance performance "inlet" or "inlet testing" in NDEE's regulations. *See* Neb. Admin. R. & Regs. Tit. 129; *see also* Neb. Rev. St §§ 81-1501-1532. And, as noted above the relevant underlying applicable requirements impose emission limits on the amount of VOCs Cargill may emit to the atmosphere "from each emission point." *See* Permit, Pages 48, 70, 213, 218, Condition III(EP-X)(3)(a). That these applicable requirements apply at the emission point's discharge location is manifest in the form of the standard, and the definitions of emission limitation—which is a requirement "which limits the quantity, rate . . . of emissions of air pollutants"—and of "air pollutant"—which is a pollutant that is emitted into or "enters the ambient air." *See* 42 U.S.C. § 7602 (the definitions of "emission limitation" and of "air pollutant"); *see also* 129 Neb. Admin. Code Ch. 1, 051 (definition of "emission limitation"); 129 Neb. Admin. Code Ch. 1, 012 (defining "air pollutant" as the "presence in the *outdoor atmosphere* of one or more air contaminants") (emphasis added); *see also* Neb. Rev. St § 81-1502(9) ("Emissions shall mean releases or discharges *into the outdoor atmosphere* of any air contaminant or combination thereof") (emphasis added); 129 Neb. Admin. Code Ch. 1, 054 ("Emissions" means "releases or discharges *into the outdoor atmosphere* of any air contaminant or combination thereof.") (emphasis added). These provisions define the emission point in relation to the point a pollutant enters the atmosphere—not the point at which it enters a control device such as a scrubber.

[54] See *supra* note 48.

As such, it is not plausible that NDEE somehow just now discovered that Cargill had been testing after the scrubber rather than before, and that that the underlying applicable requirement was intended to apply at the inlet, rather than the outlet.

Indeed, NDEE admits that the prior construction permit "did not explicitly require Cargill to test the VOC, acetaldehyde and/or combined HAP emissions before entering any type of control device[.]" Response to Comments at 22. In other words, requiring Cargill to do so is a new substantive applicable requirement that did not previously exist in the underlying construction permits.

NDEE's Response to Comments further attempts to claim that there is no change in the substantive requirement, because the numerical value of the emission limit did not change: "NDEE ***did not change*** any limitations; the VOC, acetaldehyde and/or combined HAP limitations for EP- 8A, EP-10, EP-66 and EP-67 are identical to what was previously prescribed in CP19-025." Response to Comments at 22, 26, 37 (emphasis in original).

However, this explanation too, is not credible and is contrary to law. Contrary to NDEE's efforts to dismiss the significance of its action as merely changing the testing location, the requirement is "substantive" because it defines how the performance test must be performed, creates a liability for failure to adhere to these restrictions, and would be enforceable if Cargill were to fail to comply. *See Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d 1015, at 1027 (vacating EPA's periodic monitoring guidance after finding that it significantly broadens the rule and noting that, "[w]e have recognized before that changing the method of measuring compliance with an emission limitation can affect the stringency of the limitation itself"); *see also, e.g., General Electric v. Koncelike*, Ex. 44, No. 05AP-310 (OH 3/13/2006), at ¶ 23. Indeed, the D.C. Circuit has held that testing requirements contained in emissions standards, including test methods and testing frequency, are "substantive" requirements. *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1027. Indeed, it is easy to see how changing the compliance demonstration point from after an emission control device to before an emissions control device would change the stringency of the relevant emission limit, even where the numerical value remains the same.

In addition to NDEE's claim that it somehow did not know that VOC/HAPs testing occurred after the scrubber, NDEE also attempts to claim that control efficiency testing and information is required any time a source is permitted to utilize a testing location after the emission point:

> [I]n order for NDEE to prescribe that the testing location be ***after*** the control device when a source claims ***an unknown efficiency*** from the control device, the source needs to provide justification that the control device indeed is or is not controlling any emissions and to what degree. One method to verify the control efficiency is through testing which measures pollutant emission rates before and after the associated control device (i.e., inlet and outlet testing).
>
> In addition to requesting scrubber design information, NDEE asked Cargill on numerous occasions to provide data verifying control efficiency of VOC,

> acetaldehyde, and/or combined HAP emissions from the scrubbers associated with EP-8A, EP-10, EP-66 and EP-67. Cargill would not provide any information to substantiate the claim that there is no control of VOC, acetaldehyde, and/or HAP emissions from the scrubbers in question. Cargill also would not provide information about the design of each scrubber.

Response to Comments at 23, 27, 38 (emphasis in original).

NDEE provides no support or authority for the novel position that any time testing occurs after a control device, a source must measure both before and after the control device to determine the efficiency. In fact, despite NDEE's statements indicating that this is standard practice, as noted above, Cargill could find no reference to compliance performance "inlet" or "inlet testing" in NDEE's regulations. *See* Neb. Admin. R. & Regs. Tit. 129; *see also* Neb. Rev. St. §§ 81-1501-1532. Indeed, Cargill has not encountered such a requirement, except where the applicable requirement is itself in the form of a control efficiency requirement, i.e., the control device is required to achieve a certain percentage efficiency and that percentage is the applicable requirement. The relevant construction permits neither required these emission points to achieve a specific control efficiency, nor required any inlet testing or compliance demonstration. Cargill notes that, as of the date of this Petition, none of the relevant emission points even have an inlet testing port. In order to conduct inlet testing and also meet EPA test method requirements, this would require significant engineering design and installation work and associated costs.

Although NDEE's response quoted above implies that Cargill has control efficiency information for these scrubbers and is simply refusing to provide that information to NDEE, Cargill notes that it does not have this information, because these scrubbers were not originally designed for VOC control and there are currently no inlet stack test ports. Nor has Cargill performed testing to evaluate these scrubbers for VOC control efficiency because there currently is no control efficiency requirement, nor was there one historically. Cargill objects to NDEE's unsupported claim that "Cargill also would not provide information about the design of each scrubber" as it is false. Response to Comments at 23, 27, 38. The Permit itself contains descriptions on the design of each scrubber, including type and other information, and numerous information on this point has been provided both through Cargill's Permit applications, in its comments on the Permit, and in conversations with NDEE.

For the reasons stated above, NDEE's imposition of the new scrubber inlet testing and compliance demonstration requirements is not compliant with Title V and Part 70, and the associated conditions should be removed from the Permit.

2. NDEE's Imposition of VOC and HAP Monitoring at the Inlet of the Scrubber is Not Necessary to Assure Compliance and is Arbitrary and Capricious and Unsupported in the Record.

As discussed above, the VOC/HAPs inlet testing and compliance demonstration requirement is a new substantive requirement that has the effect of changing the compliance demonstration point and the stringency of the relevant emission limits in excess of NDEE's authority under the Title V program.

NDEE also never explains why such a requirement is necessary, except by reference to the unsupported dichotomy that underpins each of the challenged permit conditions: either (1) a scrubber provides VOC reductions and this alone is enough to consider it a VOC scrubber and automatically mandate additional scrubber liquid temperature control and monitoring; or (2) the scrubber is considered "uncontrolled" for VOCs and the Permit thus automatically imposes a new substantive requirement in the form of VOC inlet testing and compliance demonstration. However, as detailed above in Section III, such an approach is not valid, as Title V provides the permitting authority with the ability to impose new substantive requirements using periodic monitoring authorities only in limited circumstances when they are necessary to assure compliance following a case-by-case analysis. *See*, *e.g. See* 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); *San Juan Generating Station Order*, Ex. 20, at 19-20; *see also CITGO Order*, Ex. 21, at 7-8; *Sierra Club v. EPA*, Ex. 18, 536 F.3d at 677, 680 (finding permitting authorities may supplement *inadequate* monitoring requirements on a case-by-case basis).

As an initial note, it is important to understand that the VOC/HAPs inlet testing and compliance demonstration requirement was imposed by NDEE as an alternative "option" to controlling and monitoring scrubber liquid temperature to maintain it at less than a +10% margin above the stack tested level. *See* Fact Sheet at 74. NDEE identifies other potential options as well, and claims that one of these options is required to assure compliance with VOC/HAP permitted limits. NDEE thus proposes the inlet testing and compliance demonstration requirement as a work-around to make scrubber liquid temperature irrelevant, because in that instance the scrubber would not be relied on to remove any VOCs. The need for this "alternative" testing requirement is thus predicated on NDEE's unsupported assumptions and claims that it is necessary to monitor and control scrubber liquid temperature at each of these emission points to ensure VOC compliance.

Because the inlet VOC/HAP testing and compliance demonstration requirement is predicated on the assumption that scrubber liquid temperature control and monitoring requirements are necessary to assure compliance, the justifications for requiring this inlet testing and compliance demonstration requirements suffer from all the same flaws Cargill has identified with respect to the scrubber liquid temperature control and monitoring requirements above *supra* Sections IV.A and IV.B. As with the scrubber liquid temperature control and monitoring requirements, NDEE does not provide record support for how the inlet requirements would be required to assure compliance at VOC wet scrubbers, as the data presented by NDEE do not support the notion that the scrubber liquid temperature control and monitoring provisions are necessary to assure compliance.

However, the new inlet testing requirements are additionally flawed because it would not assure compliance as it would not "detect deviations with sufficient representativeness, accuracy, precision, reliability, frequency and timeliness in order to determine if compliance is continuous during the reporting period."[55] Here, the new inlet testing requirement would not yield

[55] Ex. 19, 62 Fed. Reg. 54,900, 54,909 (Oct. 22, 1997). EPA's did not codify this specific definition of enhanced monitoring from the proposed rule in the final rule, because it embodied this concept within performance criteria in

representative, accurate, precise, or reliable data of the emissions existing the scrubber "from the emission points," because inlet testing cannot account for pollutants removed from the gas stream in the wet scrubbers. In this regard, the data could not qualify as "credible evidence" of noncompliance because a measurement exceeding the applicable requirement at the inlet does not provide an accurate indication of the emission rate at the point of discharge.[56,57] Given the above, inlet testing results could only serve to document when the scrubbers are in compliance with VOC requirements, *not* when the scrubbers are in noncompliance with those requirements. Such an inlet testing requirement would be inconsistent with the underlying applicable requirement—a VOC emission limit applicable to the emission point (i.e., the scrubber outlet). Accordingly, inclusion of such requirements in the Title V is exceeds the authorities granted to NDEE in the periodic monitoring provisions.

Cargill raised these issues in its comments; however, NDEE does not offer a substantive response to these arguments in its Response to Comments. *See* Cargill Comments at 60-61. Rather, NDEE instead claims that:

> Cargill believes it is appropriate to test for VOC, acetaldehyde and/or combined HAP emissions ***after*** the control device and ***not maintain*** the typical operating parameters (scrubbing liquid flow rate, temperature, pressure, chemical flow rate, etc) for the wet scrubber as determined during performance testing. In other words, have emissions flow through the control device and not have to maintain any scrubber operating parameters; this approach does not assure demonstration of continuous compliance with prescribed limitations.

Response to Comments at 23, 27, 38 (emphasis added). This is inaccurate and does not address the issues with the proposed new monitoring and substantive requirements raised by Cargill. Cargill is not challenging a number of the requirements to monitor (or in some cases maintain) various operating parameters in the Permit, e.g., liquid flow rate, differential pressure, pH, etc. Indeed, a number of those requirements are existing applicable requirements that were incorporated into the Permit from the underlying construction permits. *See, e.g.*, CP19-025, Ex. 10, IIIE-1—IIIE-2, Condition III(E)(3)(b)(iii) (requiring Cargill to maintain of certain levels for scrubber system pH and scrubber liquid flow rate for EP-7); IIIJ-1—IIIJ-2, Condition III(J)(3)(c)(iii) (requiring Cargill to maintain of certain levels for scrubber system pH and scrubber liquid flow rate for EP-10).

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the rule. *See* 40 CFR §64.3(b) (data must be "representative" "valid[ ]," "typical of variability" etc.). Nonetheless, the proposed definition remains a conceptually valid description of enhance monitoring principles. *Id.* at 54,909.

[56] In this regard, Cargill could use measured values below the applicable requirement to further support certifying compliance with Title V applicable requirements, but would not use the measurement as basis for finding non-compliance.

[57] In 1997, EPA stated that where Method 25A is used as the reference method for VOC emissions, credible evidence of VOC emissions would "have to relate to the likely measurement of VOCs that would be obtained by a Method 25A measurement." Method 25A requires selection of a testing port that represents the purpose for the test (e.g. to measure emissions from the exhaust of a stack) in accordance with Method 1. Ex. 56, 62 Fed. Reg. 8,314, 8,316 (February 24, 1997). Here, an inlet testing port would not meet these requirements.

Contrary to NDEE's characterization, what Cargill objects to is having—as a part of the Title V process—its emission points automatically required to comply with either: (i) new inlet emissions testing and compliance demonstration requirements that shift the compliance point and increase the stringency of the underlying applicable requirement, or (ii) new supplemental control and monitoring requirements that are not necessary to assure compliance.

Moreover, Title V does not require monitoring of all "typical operating parameters" as determined during a performance test as NDEE suggests; it requires monitoring of only those parameters necessary to assure compliance. For the reasons described herein, neither the inlet testing and compliance demonstration requirement, nor the scrubber liquid temperature control and monitoring requirements are necessary to assure compliance.

In sum, NDEE lacks authority to impose the inlet VOC testing and compliance demonstration requirement for the reasons described above, and the Permit terms imposing such requirements are thus not compliant with Title V and Part 70.

D. NDEE's Rationales for Imposing Additional Requirements Despite the Terms Agreed-Upon in the Consent Decree Are Arbitrary and Capricious and Lack Support in the Record.

Permit Conditions in Error:

Page 37-38, III(EP-7)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 38, III(EP-7)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 71, III(EP-10)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 82, III(EP-12)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 82-83, III(EP-12)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 214, III(EP-66)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 219, III(EP-67)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

NDEE does not justify the imposition of additional scrubber liquid temperature control and monitoring requirements or the "alternative" inlet testing and compliance demonstration requirements on the emission points subject to the Consent Decree. The Consent Decree emission points at issue in this petition were not subject to Emission Control Plans (EP-7, EP-10, EP-12, EP-66, and EP-67). For emission points that were not subject to Emission Control Plans, the VOC emission limits were *not* intended to effect emissions reductions, but were merely meant to reset limits for each emission point in order to reflect actual worst-case operations, with a margin of safety. At the Blair Facility, the process used to identify these limits involved a review of the emission test data in conjunction with equipment operation throughput rates, utilizing the test data intended to be representative of worst case conditions, with a safety factor applied as deemed appropriate.

However, in order for these emission limits to be reset in a meaningful way, it is important to recognize that the limit, test methodology, and parametric monitoring are

inextricably linked. The addition of a new monitoring parameter would thus merit a reevaluation of the limits to ensure that the limit is compatible with the new monitoring requirement. Similarly, imposition of inlet VOC testing and compliance demonstration, would merit a reevaluation of the VOC limits, because the existing VOC limits were developed based on outlet, not inlet, testing. In other words, the emission limits established for these emission points were not developed independently from the test methods and monitoring used to develop them, and changes to the testing and monitoring requirements would thus necessitate concomitant changes to those limits.[58]

Thus, in the event that NDEE decides to require additional scrubber liquid temperature control and monitoring or to impose "alternative" inlet VOC testing and compliance demonstration requirements on these emission points, additional testing using the new monitoring parameter or test method would be required to generate a compatible limit. However, because of the nature of these limits, Cargill submits that it is not necessary to undertake this exercise. Cargill underscores that these VOC emission limits were not created to demonstrate compliance with the use of any specific VOC emissions control requirement under the Consent Decree, but rather to represent the potential VOC emissions from the facility with a reasonable margin added to assure the facility emission inventories accounted for potential VOC emissions.[59]

Importantly, as detailed above in Section IV.B.2, construction permit CP08-065—the permit incorporating the Consent Decree requirements—does not require scrubber liquid temperature monitoring or control for the Consent Decree emission points not subject to Emission Control Plans. Notably, NDEE expressly considered and decided against imposing such a water temperature control and monitoring requirement. NDEE's draft construction permit had contained a requirement to monitor scrubber liquid temperature. As NDEE explained in its 2012 Response to Comments on the permit, Cargill had commented that, with respect to these scrubbers:

> the add-on control of VOCs by chemical addition and scrubber liquid temperature *are not* conditions that are required by the Consent Decree. Paragraph 39 of the Consent Decree only requests that VOC limits be identified and written in to the facility's permit for those sources at the facility that were considered to be *minor contributors* of VOC emissions.

[58] Neither Cargill nor NDEE considered whether the potential to emit emission limits would be appropriate under different conditions of temperature, and had these variables been studied and considered at that time, it may have resulted in the setting of higher emission limits to represent maximum potential VOC emissions from the emission points.

[59] At the time the parties negotiated the Consent Decree, EPA was revising its methodologies for measuring VOC/HAP emissions. A change in measurement method could alter VOC emission inventories from the Blair facility. The purpose of the VOC emission limits was for the parties to the Consent Decree to agree on the VOC emission limits with a reasonable margin of safety added to assure the maximum potential VOC emissions were accounted for. *See e.g.* Note 3 in Appendix J providing the methodology for measuring VOC emissions at one facility, but also providing provisions, "[i]n the event anew VOC test method is promulgated by U.S. EPA." *Also see* Letter from Winston A. Smith, Air, Pesticides and Toxic Management Division to Ron W. Gore, Chief Air Division Alabama Dept. of Environmental Management (Nov. 2, 1997) (recognizing discrepancies in the way states measured and computed VOC emissions) (attached hereto as Exhibit 32).

2012 Response to Comments, Ex. 6, at 4 (emphasis added). Cargill's comments further explained that "the intent of the permitting action required under Paragraph 39 was to correctly identify sources of VOC emissions in the facility's permit. The intent was not to add additional controls and impose additional costs other than those associated with specific control plans in Paragraphs 15 through 29 of the Consent Decree." 2012 Response to Comments, Ex. 6, at 4; *see also id.* ("[B]ecause the emission limitations would be set at the PTE of each unit, Cargill is not being credited with any HAP emission reductions from the required control devices, and the facility is already a major source of HAPs it is not necessary to include the HAP emission limitations in this permit.").

In the 2012 Response to Comments, NDEE agreed with Cargill's comment and removed the draft conditions requiring scrubber water temperature monitoring, explaining that "since Cargill is not claiming any emission reductions from the use of the scrubbers, the NDEQ agrees that monitoring scrubber water temperature is unnecessary." *Id.* NDEE's decision not to impose this monitoring in CP08-065 makes perfect sense when viewed in the appropriate context and in light of the nature of the emission limits for these emission points. As discussed below, the Consent Decree established no emissions reduction requirements for VOCs for EP-7, EP-10, EP-12, EP-66, and EP-67, as these emission points were not subject to Emission Control Plans. Instead, Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66 and EP-67 based on estimated maximum, potential to emit ("PTE") post-scrubber emissions, with a safety margin built in. NDEE recognized in the 2012 Fact Sheet for CP08-065, "VOC and HAP emission limitations for these units are listed as lb/hr limitations based on the maximum operational capacity of each unit (based on engineering data and stack testing conducted by Cargill at this facility and other, similar facilities)." 2012 Fact Sheet, Ex. 9, at 14. It would thus be inappropriate to impose additional temperature control and monitoring requirements on these emission points, where the underlying applicable requirement was not intended to achieve any VOC emission reductions.

NDEE's original decision not to impose this control and monitoring in CP08-065 makes perfect sense when viewed in the appropriate context and in light of the nature of the emission limits for these emission points. As recognized by NDEE in 2012, for EP-7, EP-10, EP-12, EP-66, and EP-67, the Consent Decree established no emissions reductions requirement for VOCs, as these units were not subject to Emission Control Plans. Instead, Cargill submitted a permit application to establish emission limitations for EP-7, EP-10, EP-12, EP-66 and EP-67 based on a maximum, potential to emit with a margin of safety. As NDEE recognized in the 2012 Fact Sheet for CP08-065, "VOC and HAP emission limitations for these units are listed as lb/hr limitations based on the maximum operational capacity of each unit (based on engineering data and testing conducted by Cargill at this facility and other, similar facilities)." 2012 Fact Sheet, Ex. 9, at 14.

In neither the Fact Sheet nor the Response to Comments does NDEE explain or acknowledge its change in position on the issue of additional scrubber liquid temperature monitoring. Nor does it respond to Cargill's comments on these issues related to the Consent Decree emission points. *See* Cargill Comments at 75-77; 40 C.F.R. § 70.7(h)(6). Given its previous conclusion that additional monitoring was not required to assure compliance with the

Consent Decree limits, NDEE must properly justify this change in position. Yet, NDEE provides no such explanation for why scrubber water temperature control and monitoring (or "alternative" inlet testing and compliance demonstration) is now necessary to assure compliance at these emission points, for which both Cargill and NDEE previously recognized that the VOC emission limitations were set at each emission point's potential to emit, which assumed VOCs in the vent gas stream exiting existing scrubbers without additional reductions required. It is similarly unnecessary to require inlet testing and compliance demonstration for these emission points, because the intent of the VOC limits was *not* to effect emissions reductions, but merely to reset limits for each emission point in order to reflect actual worst-case operations.

Nevertheless, in its Response to Comments, NDEE asserts that it is appropriate for it to impose these additional requirements, because:

> It is imperative to note that there were ***no monitoring and control requirements discussed*** in the terminated 2006 Consent Decree for all emission units not addressed by the emission reduction program in Appendix H. The terminated 2006 Consent Decree prescribed that Cargill evaluate the emission limitations for EP-7, EP-7A, EP-8A, EP-10, EP-12, EP-66 an EP-67; the terminated 2006 Consent Decree did not and does not negate NDEE's authority to prescribe monitoring and recordkeeping requirements in future permitting actions.

Response to Comments at 31. This explanation fails to account for the history and purpose behind the relevant emission limits or to justify NDEE's change in position, and also fails to respond to Cargill's significant comments on this issue. *See* Cargill Comments at 73-77; 40 C.F.R. § 70.7(h)(6). Accordingly, NDEE's explanation in this regard is not in compliance with Title V or the Part 70 regulations.

In addition, imposing additional supplemental monitoring and new substantive requirements is also inappropriate as it upsets emission control and monitoring terms that had been carefully negotiated and agreed to by the parties to the Consent Decree. Neither the Consent Decree, nor the construction permit incorporating the Consent Decree emission limits (CP08-065), contain such scrubber water temperature control requirements, and NDEE lacks the authority to impose new applicable substantive control requirements through the Title V process.

To the extent NDEE appears to assert in the Fact Sheet and Response to Comments that it may alter the requirements established pursuant to the Consent Decree because it has been terminated or because the relevant emission points were not Emission Control Plan sources, this rationale is incorrect. *See* Response to Comments at 31. Indeed, relevant elements of the Consent Decree expressly survived termination of the agreement, and any NDEE conditions imposed in the final permit should not alter the carefully negotiated agreement that was struck in the Consent Decree.[60] For instance with respect to Emission Control Plan sources, Paragraph 39 of the Consent Decree states that "[i]t is the intent of the parties that the requirements under

[60] That a consent decree is terminated does not obviate its requirements. When a court terminates a consent decree it is simply recognizing that the court's oversight of the consent decree's implementation is no longer needed, particularly whereas here the Consent Decree by its terms indicates its obligations are continuing.

Paragraphs 15-27 and associated appendices survive termination of this Consent Decree and are deemed 'applicable requirements' under Title V of the Clean Air Act and state and local operating permit programs that implement the requirements of Title V." Moreover, Paragraph 88 of the Consent Decree ("Termination") expressly provides that Paragraph 39 "shall survive the termination of the Consent Decree." Importantly, Paragraph 39 also committed EPA and the state to adhering to the Consent Decree's terms in incorporating the Consent Decree terms into permits.[61] It was through this mechanism that the VOC emission limits for EP-7, EP-10, EP-12, EP-66, and EP-67 were established.

More specifically, with respect to sources not subject to Emissions Control Plans, Paragraph 39 provides that "[f]or units and pollutants not addressed by the emission reduction programs under Paragraphs 15-27 of this Consent Decree, Cargill shall have a period of 3 years from the date of lodging of the Consent Decree to apply for a permit or permit amendment to impose or modify the VOC, HAP or CO emission limits for the sources included in Appendix A." As noted above, Paragraph 39 expressly survives termination, so this requirement also survives. Accordingly, NDEE's explanations in the Fact Sheet lack support in the record, and NDEE fails to respond to Cargill's comments on this issue. *See* Cargill Comments at 73-74; 40 C.F.R. § 70.7(h)(6).

In addition, NDEE's statement that the requirements for the non-Emission Control Plan sources were not considered in the Consent Decree is incorrect. During the Consent Decree negotiation process, these sources were meticulously evaluated to determine appropriate control requirements and if they should be designated as Emission Control Plan sources. The parties ultimately concluded that these sources did not merit emission reductions after this evaluation; however, this does not mean that NDEE may leverage the emission limits adopted pursuant to the Consent Decree requirements to impose additional requirements that upset the carefully negotiated settlement agreed to by all parties.

And finally, NDEE also does not consider that the monitoring requirements implemented pursuant to the Consent Decree were approved by EPA after the 1990 Clean Air Act amendments, and thus should be presumed to be sufficient for Title V purposes. Nor did NDEE consider whether it even has the authority to alter the monitoring established by NDEE in CP08-0065, years after the Consent Decree has been terminated. EPA found that Cargill had met its obligations under the Consent Decree—which included its incorporation of terms into construction permits that satisfied the requirements of the Consent Decree—and it was terminated by a federal court. If any party to the Consent Decree, including the State of Nebraska, thought the established requirements were not enough to demonstrate compliance, the time to raise those concerns was before Consent Decree termination.

[61] Paragraph 39 of the Consent Decree provides that "EPA, states and local agencies agree to propose as permit conditions, and may propose as revisions to their SIPs, the specific emission limits, operating parameters, monitoring requirements and recordkeeping requirements set forth under Paragraphs 15-27 and associated appendices, and as proposed by Cargill under Paragraphs 15-27 so long as Cargill's proposal is consistent with Consent Decree emission reduction requirements. Cargill agrees not to contest any such permit conditions or SIP revisions."

E. NDEE Fails to Identify Sources of Authority that Would Justify the Imposition of New Substantive Requirements and NDEE Does Not Satisfy the Threshold Requirement for Imposing Supplemental Monitoring Requirements.

Conditions Imposing Scrubber Liquid Temperature Monitoring Requirements

Page 38, III(EP-7)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 44, III(EP-7A)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)
Page 82, III(EP-12)(4)(b)(iii)(4) (scrubber liquid temperature monitoring)

Conditions Imposing Scrubber Liquid Temperature Control Requirements

Page 38, III(EP-7)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 44, III(EP-7A)(4)(b)(iv)(3) (scrubber liquid temperature control)
Page 83, III(EP-12)(4)(b)(iv)(3) (scrubber liquid temperature control)

Conditions Imposing New VOC/HAPs Control Requirement at Scrubber Inlet

Page 49, III(EP-8A)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 71, III(EP-10)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 214, III(EP-66)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)
Page 219, III(EP-67)(3)(b)(iv) (inlet VOC/HAPs testing and compliance demonstration requirement)

As discussed above, NDEE seeks to impose additional control and monitoring requirements without legal authority. *See* 40 C.F.R. § 70.6(a)(1)(i) (requiring that each permit "specify and reference the origin of and authority for each term or condition"). It also does not adhere to 40 C.F.R. § 70.7(a)(5) which requires that "the permitting authority shall provide a statement that sets forth the legal and factual basis for the draft permit conditions (including references to the applicable statutory or regulatory provisions)." In short, NDEE must ensure that both the Permit and the Fact Sheet identify the correct sources of authority for each condition. NDEE has failed to do this and instead routinely cites law or regulations which do not authorize the particular condition.

1. Authorities Cited for Scrubber Liquid Temperature Control and Monitoring Requirements

In support of the conditions requiring scrubber liquid temperature control and monitoring NDEE cites as authority in the Permit:

- Construction Permit #CP19-025, Condition III.(X)(3)
- Title 129, Chapter 8, Sections 004.01
- Title 129, Chapter 8, Sections 004.012

See Permit at above-listed conditions.

In further support of its decision to add monitoring to Cargill's scrubbers, in the Fact Sheet, NDEE asserts that:

> NDEE has the authority to include additional control monitoring parameters and additional recordkeeping in the Class I (Title V) operating permit that are not specified in CP19-025, in accordance with 40 CFR 70.6(a)(3)(i)(B), 40 CFR 70.6(c), 40 CFR 63.8(a) {and associated recordkeeping in 40 CFR 63.10(b)(vii)} and Title 129, Chapter 8, Section 004.01B when the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring and in accordance with 40 CFR 70.6(c)(1) and Title 129, Chapter 8, Section 012.01 when monitoring and recordkeeping requirements are not sufficient to yield reliable data from the relevant time period that are representative of the source's compliance. NDEE has determined the parametric monitoring and recordkeeping for scrubbers controlling VOCs in CP19-025 is not sufficient to demonstrate compliance with the permitted emissions limitations.

Fact Sheet at 53; *see also* Response to Comments at 32-33, 43-44.[62]

For the reasons described below, the cited sources of authority do not support the imposition of these permit conditions.

First, Construction Permit #CP19-025 contains no requirement for Cargill to control or monitor scrubber liquid temperature. Cargill can only presume that the citation to CP19-025 is intended by NDEE to provide the source of authority for other monitoring parameters included in the Permit, rather than the scrubber liquid temperature requirements.

Second, Title 129, Chapter 8, Section 004.01 also provides no basis for the relevant requirements. As explained above in Section III, Title 129, Chapter 8, Sections 004.01 mirrors EPA's regulation at §70.6(a)(3)(i)(B). However, 40 C.F.R. § 70.6(a)(3)(i)(B) provides very limited gap-filling authority *only* where there is no existing periodic monitoring or testing already required by the underlying applicable requirement. *See, e.g.*, Operating Permit Program, Ex. 14, 57 Fed. Reg. 32,250, 32,278; Compliance Assurance Monitoring, Ex. 19, 62 Fed. Reg. 54,900, 54,901 ("[I]f particular applicable requirements do not include periodic testing or monitoring, then § 70.6(a)(3)(i)(B) requires the permit to include 'periodic monitoring' to fill that gap."); *Sierra Club v. EPA*, Ex. 18, 536 F.3d at 680 ("Neither § 70.6(a)(3)(i)(A) nor §

[62] In addition to the above cited sources, NDEE also cites to Title 129 Chapter 8, Section 13 in its Response to Comments, which prescribes: "013 The Director may place such conditions and restrictions upon a permit issued or renewed under this Title as he or she deems necessary to protect public health or the environment. Such conditions or restrictions may be placed upon the permit at the time it is issued, modified, or renewed. By way of example, and not of limitation, such conditions or restrictions may be new federal applicable requirements not yet adopted by the Council." *See* Response to Comments at 32, 44. NDEE makes a conclusory statement in the Response to Comments that the scrubber liquid temperature control and monitoring requirements are necessary to protect public health or the environment, but provides no support in the record for such conclusion. *Id.* at 33, 44. Nor does NDEE cite this provision as a source of authority for the relevant requirements in the Permit or the Fact Sheet, as it is required to do. 40 C.F.R. § 70.6(a)(1)(i).

70.6(a)(3)(i)(B) allows state and local authorities to supplement inadequate monitoring requirements[.]"); *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d at 1028 ("State permitting authorities therefore may not, on the basis of . . . 40 C.F.R. § 70.6(a)(3)(i)(B), require in permits that the regulated source conduct more frequent monitoring of its emissions than that provided in the applicable State or federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test."). The underlying applicable requirements associated with the seven emission points already included periodic monitoring and testing requirements. *See, e.g.*, Fact Sheet at 54-58, 66-67. Accordingly, these provisions do not provide authority for NDEE to impose additional periodic monitoring requirements. NDEE thus incorrectly cites to 40 C.F.R. § 70.6(a)(3)(i)(B) and Title 129, Chapter 8, Section 004.01B as authority in instances in which periodic monitoring requirements are already in place.

Third, as described in detail in this petition in Sections IV.A and IV.B, NDEE has not followed the correct regulatory requirements and procedures embedded in the Clean Air Act and EPA's Part 70 regulations for imposing additional monitoring under 40 C.F.R. 70.6(c)(1) and Title 129, Chapter 8, Section 012.01, and these requirements are not necessary to assure compliance. Moreover, these provisions do not provide authority for NDEE to impose new substantive scrubber liquid temperature control requirements. NDEE's lack of authority in this regard is described in detail *supra* Section IV.B above.

And finally, contrary to NDEE's assertion in the above-quoted excerpt in the Fact Sheet, 40 C.F.R. § 63.8(a) also does not provide separate authority to gap-fill monitoring required in a NESHAP. *See* Fact Sheet at 53 (noting that "NDEE has the authority to include additional control monitoring parameters and additional recordkeeping in the Class I (Title V) operating permit that are not specified in CP19-025, in accordance with 40 CFR 70.6(a)(3)(i)(B), 40 CFR 70.6(c), 40 CFR 63.8(a) {and associated recordkeeping in 40 CFR 63.10(b)(vii)} . . .). 40 C.F.R. § 63.8(a) sets forth certain monitoring requirements under the NESHAPs, which do not apply to EP-7, EP-7A, or EP-12 and do not authorize the scrubber liquid temperature monitoring and control conditions for these emission units. This provision applies only when a NESHAP regulation references the applicability of 40 C.F.R. Part 63, Subpart A, and nothing in this regulatory text provides a permitting agency with gap-filling authority to require monitoring beyond that which is specified by the applicable federal NESHAP standard.

In sum, the sources of authority identified by EPA do not support the conditions contested by this petition, and the Permit is thus in noncompliance with Title V and the Part 70 regulations. Cargill raised these issues in its comments on the draft of the Permit. *See* Cargill Comments at 10-12.

2. Authorities Cited for VOC/HAP Inlet Testing and Compliance Demonstration Requirements

In support of the conditions requiring VOC/HAP testing and compliance demonstration at the scrubber inlet, NDEE cites as authority in the Permit:

- Title 129, Chapter 34, Section 001

- Title 129, Chapter 8, Sections 004.01B
- Title 129, Chapter 8, Sections 004.012

See Permit at above-listed conditions. In addition, in the Response to Comments, NDEE additionally states:

> NDEE relies upon Title 129 Chapter 34 for its authority to prescribe testing requirements as appropriate.
>
> Title 129 Chapter 34 Section 001 and 004 prescribes:
>
> > "001 The Department may order any person responsible for the operation of an emission source to make or have tests made to determine the rate of contaminant emissions from the source whenever it has reason to believe on the basis of estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer, that existing emissions exceed the limitations required in these control regulations. Such tests may also be required pursuant to verifying that any newly installed control device meets performance specifications. Should the Department determine that the test did not represent normal operating conditions or emissions, additional tests may be required."
> >
> > "004 The Department may conduct test of emissions of contaminants from any stationary source."
>
> The clarifications on testing requirements are in accordance with environmental regulations and do not exceed NDEE's authority thereunder

Response to Comments at 25 *see also* Response to Comments at 32-33, 43-44.

For the reasons described below, the cited sources of authority do not support the imposition of these permit conditions.

First, neither construction permit CP19-025 nor any other construction permits required Cargill to conduct VOC/HAP performance testing or to demonstrate compliance at the scrubber inlet for the emission points in question. NDEE acknowledges as much in its Response to Comments. Response to Comments at 22, 26, 37.

Second, Title 129, Chapter 8, Section 004.01 also provides no basis for the relevant requirements. As explained above and in Section III, Title 129, Chapter 8, Sections 004.01 mirrors EPA's regulation at §70.6(a)(3)(i)(B). And, 40 C.F.R. § 70.6(a)(3)(i)(B) provides very limited gap-filling authority *only* where there is no existing periodic monitoring or testing already required by the underlying applicable requirement. The underlying applicable requirements associated with the seven emission points already included periodic monitoring and

testing requirements. *See, e.g.,* Fact Sheet at 54-58, 66-67. Accordingly, these provisions do not provide authority for NDEE to impose additional periodic monitoring requirements.

Third, NDEE's citation to Title 129, Chapter 8, Section 012.01 also does not provide authority for the additional monitoring requirements. As noted above, Title 129, Chapter 8, Section 012.01 mirrors EPA's regulation at 40 C.F.R. § 70.6(c)(1). However, as described in detail in this petition in Sections IV.A, IV. B, and IV.C, NDEE has not followed the correct regulatory requirements and procedures embedded in the Clean Air Act and EPA's Part 70 regulations for imposing additional monitoring under 40 C.F.R. 70.6(c)(1) and Title 129, Chapter 8, Section 012.01, and these requirements are not necessary to assure compliance. Moreover, these provisions do not provide authority for NDEE to impose new substantive requirements, in this case moving the VOC/HAP emission compliance demonstration point to the scrubber inlet, and thus increasing the stringency of the underlying applicable requirement. NDEE's lack of authority in this regard is described in detail *supra* Section IV.C above.

And finally, NDEE also cites Chapter 34, Sections 001 and 004, in support of the VOC/HAP inlet testing and compliance demonstration requirement. However, although NDEE cites these provisions in the Permit and the Response to Comments, it does not explain how Section 001 authorizes the VOC/HAP inlet testing and compliance demonstration conditions. The cited provision allows for NDEE to require testing where "it has reason to believe on the basis of estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer, that existing emissions exceed the limitations required in these control regulations." *See* Response to Comments at 25. NDEE does not assert that the existing emissions from EP-8A, EP-10, EP-66, or EP-67 exceed limitations required by Title 129 regulations. Nor does NDEE include in the record any "estimates of potential contaminant emissions rates from the source and due consideration of probable efficiency of any existing control device, or visible emission determinations made by an official observer" giving rise to a belief that these emission points exceed their existing permitted limits. NDEE thus fails to include in the record any basis for utilizing Section 001 authority to impose inlet testing conditions on the four emission units at issue. Nor does NDEE explain how Section 004—which authorizes NDEE itself to conduct its own testing—authorize NDEE to impose testing requirements on Cargill in the Permit.

Even if NDEE could establish that Chapter 34, Section 001 authorizes testing, this provision would still not authorize the shifting of the VOC/HAP compliance demonstration point to the scrubber inlet. Once again, NDEE cites to no authority that would allow it to impose new substantive requirements, in this case moving the VOC/HAP emission compliance demonstration point to the scrubber inlet, and thus increasing the stringency of the underlying applicable requirement.

In short, NDEE has failed to fulfill its requirement to specify the legal basis for the scrubber liquid temperature control and monitoring conditions and inlet testing and compliance demonstration requirements in the Permit. 40 C.F.R. § 70.6(a)(1)(i); 40 C.F.R. § 70.7(a)(5).

F. NDEE Improperly Seeks to Use the Title V Permitting Process to Circumvent Rulemaking Requirements.

As explained above, NDEE fails to conduct a source-specific analysis when imposing the scrubber liquid temperature control and monitoring requirements and inlet testing and compliance demonstration requirements, and instead seeks to impose permit conditions based on NDEE's policy preferences, which have not been subject to public scrutiny via the procedure prescribed by the Nebraska APA. NDEE's attempt to use the Title V permitting process to circumvent the rulemaking process is an improper use of NDEE's limited gap-filling authority, and does not support the inclusion of the scrubber liquid temperature control and monitoring or inlet testing and compliance demonstration requirements for the emission points that are the subject of this petition.

NDEE purports to rely upon its limited gap-filling authority under 40 C.F.R. § 70.6 and the Title V permitting process to impose a statewide policy requiring liquid temperature control and monitoring on all wet scrubbers in Nebraska, without conducting a tailored evaluation of scrubber type and other scrubber-specific parameters and features, the nature and purpose of the underlying applicable requirement (e.g., quantifying emissions vs. reducing emissions), the variability of emissions, compliance margins, or the likelihood of a violation, among other things. In the Fact Sheet, NDEE describes its rationale for imposing the scrubber monitoring requirements as follows: "[t]he operational and monitoring requirements, and associated recordkeeping and reporting requirements for scrubbers were updated and *standardized* using NDEE current *standard language as a basis*." Fact Sheet at 93 (emphasis added). The Fact Sheet further explains that: "NDEE has developed *standardized* monitoring and recordkeeping requirements after review of performance testing results over the last 20 years for VOC scrubbers (including Cargill and at other ethanol plants with similar equipment) and review of EPA rules and guidance[.]" Fact Sheet at 80. NDEE further explains that it seeks to impose generic, non-tailored scrubber water temperature control and monitoring on wet scrubbers at the Facility and across the state, asserting that "NDEE has determined that [monitoring of] differential pressure (inlet pressure can be substituted) along with scrubbing liquid flowrate *would be required for all scrubbers*, [and] scrubbing liquid (water) temperature for *all* VOC and VOC-HAP scrubbers." Fact Sheet at 77 (emphasis added). In short, NDEE concedes that it has based these permit conditions on NDEE's policy preference that wet scrubbers that control VOCs should be subject to the same additional "standardized" monitoring.

To the extent NDEE wishes to impose a standardized scrubber monitoring policy, NDEE must adhere to the rulemaking requirements established by the Nebraska APA. NDEE cannot circumvent rulemaking requirements by arbitrarily imposing generalized monitoring requirements via the Title V permitting process. Further, because NDEE fails to provide supporting information—beyond its preference for standardization—for the scrubber liquid control and monitoring and inlet testing and compliance demonstration conditions in the Permit, NDEE has failed to comply with the Nebraska APA in issuing the Permit.

Finally, imposing monitoring in addition to existing requirements is also contrary to the Governor's Executive Order No. 17-04, which requires agencies to streamline requirements and provides that "[a]ny regulation deemed to be more restrictive than required under state or federal

law or creates an undue burden on Nebraskans, shall be revised or repealed pursuant to the Nebraska Administrative Procedure Act." State of Nebraska, Office of the Governor, Executive Order No. 17-04 Regulatory Reform (July 6, 2017) (Ex. 42). Thus, NDEE has not only failed to follow the Nebraska APA's procedural requirements, but also to implement the Governor's Executive Order.

G. NDEE Improperly Relies on "Guidance" that is Procedurally and Substantively Flawed.

NDEE's process for issuing the Blair Title V permit was procedurally flawed in part because NDEE improperly relies on "guidance" documents which impose substantive monitoring requirements on regulated entities and were issued without adhering to statutorily required procedures. Specifically, NDEE relies upon two white papers: Appendix H, *NDEE White Paper: Continuous Emissions Monitoring Systems (CEMS) vs Performance Testing* ("CEMS White Paper"), and Appendix L, *NDEE White Paper: Wet Scrubber Operational Parameter Monitoring and Variability at Ethanol Plants* ("Wet Scrubber White Paper").

NDEE's white papers are state guidance documents that express NDEE policy preferences, and cannot and should not be relied upon to impose additional federally enforceable requirements. Moreover, under the NE APA, guidance documents may not "impose additional requirements or penalties on regulated parties[.]" *See* Neb. Rev. Stat. 84-901.03(2). "A guidance document shall not give rise to any legal right or duty *or be treated as authority for any standard, requirement, or policy*." *See id.* at 84-901(5) (emphasis added). Imposing additional requirements via guidance—as the Wet Scrubber White Paper seeks to do—is contrary to the Nebraska APA, because the state cannot use guidance as a means of imposing or authorizing new requirements on sources. Imposing these requirements based on a white paper that is procedurally flawed, and not issued in accordance with the proper statutory procedures under Nebraska law, is even more improper. Cargill raised these issues in its comments on the draft Permit. *See* Cargill Comments at 129-130.

In its Response to Comments, NDEE does not directly respond to Cargill's comments explaining why it was inappropriate to ***rely*** on such improperly issued "regulatory decisions."[63] Instead, NDEE repeatedly asserts that "NDEE ***does not cite any of the white papers*** as the origin or authority for any term or condition in the draft Operating Permit." Response to Comments 47, 48 (emphasis in original); *see also id.* at 71, 84. However, NDEE does *rely* on the white papers *without citing* directly to them. Nowhere in the Response to Comments and nowhere in the Fact Sheet does NDEE explain why it included Appendices H and L if NDEE was not relying on them in issuing the permit. And, although NDEE disclaims relying on Appendix L, NDEE cites Appendix L eight times in the Fact Sheet when explaining why NDEE is imposing additional temperature control and monitoring requirements. *See* Fact Sheet 55, 56, 58, 59, 60, 61, 62, 78 ("temperature in the water changes the control efficiency of the scrubber changes *as discussed in Appendix L*") (emphasis added). Moreover, as noted above, substantial portions of Appendix L

[63] NDEE characterized the white papers as "regulatory decisions" after finalizing and incorporating them into the Agency's Air Compendium. *See* NDEE Air Compendium, *available at* https://ecmp.nebraska.gov/publicaccess/viewer.aspx?MyQueryID=759 (to view white papers, run query including documents issued on November 1, 2021).

are copied verbatim into the Fact Sheet. *See* Fact Sheet at 80-89. Contrary to its assertions, NDEE has plainly and improperly relied on the Wet Scrubber White Paper in issuing the Permit.

Notably, after NDEE finalized the white papers, Cargill requested that NDEE review or revise the white papers because of the substantive obligations imposed therein. On April 1, 2022, NDEE sent Cargill a letter regarding the white papers "advising Cargill that we intend to initiate a proceeding to consider a revision or repeal of a guidance document in accordance with Neb. Rev. Stat. § 84-901.03(3)(b)." NDEE does not appear to have undertaken this proceeding as of this Petition, and the status of the white papers is unclear. As such, it was inappropriate for NDEE to issue the Permit containing conditions that rely on in-flux "guidance."

Furthermore, as explained in Cargill's comments and regarding the Permit and above *supra* Section IV.A.4.b, the contents of the Wet Scrubber White Paper are substantively flawed and adopt positions contrary to state and federal law.

NDEE does not substantively reply to Cargill's comments regarding either the procedural defects or the substantive flaws in the Wet Scrubber White Paper.

H. NDEE's Procedure for Issuing the Permit was Flawed Because NDEE Fails to Respond to All Significant Comments and Thus Did Not Comply with Title V or its Regulations.

To satisfy public participation requirements, "[a]n agency must consider and respond to significant comments received during the period for public comment." *Perez v. Mortg. Bankers Ass'n*, 575 U.S. 92, 96 (2015). As Part 70 requires,"[t]he permitting authority must respond in writing to all significant comments raised during the public participation process, including any such written comments submitted during the public comment period and any such comments raised during any public hearing on the permit." 40 C.F.R. § 70.7(h)(6). The Nebraska APA's response to comments requirement is slightly more specific: a regulating authority must complete a written report which "lists any specific issues or questions that were presented by individuals or representatives of organizations at the hearing or in written testimony submitted as part of the public hearing process. The report shall also include a response from the agency proposing the regulatory change to the questions and issues that were presented by individuals." Neb. Rev. St § 84-907.4(3).

NDEE does not consider or respond to numerous significant comments raised by Cargill regarding the Permit, and it is thus not in compliance with the requirements of Title V or Part 70. 40 C.F.R. § 70.7(h)(6). Cargill has identified numerous instances of this failure to respond to comments throughout this petition. In addition, Cargill has summarized NDEE's failures to respond to its comments in a table that is attached to this petition as Addendum 1.

I. Errata: NDEE's Inconsistent Language Regarding Compliance Assurance Monitoring ("CAM") Plans Creates Regulatory Uncertainty.

In response to Cargill's comments regarding EP-7, EP-7A, and EP-12, which are subject to CAM Plans attached to the Permit, NDEE states "NDEE had numerous conversations with

Cargill stating that while the CAM plans met the minimum requirements of the rule, they were considered ***inadequate*** for their facility operations." Response to Comments 40 (emphasis in original). The Fact Sheet also states:

> The CAM plans submitted by Cargill for these emission-units meet the minimum requirements for CAM plans as shown in guidance documents from EPA (only 2 indicators shown in example). NDEE has determined additional parameter monitoring (more than 2 indicators) is necessary to demonstrate continuous compliance with VOC/HAP limitations. Pursuant to 40 CFR 64.6(b), the CAM plans are being included in the operating permit on condition that Cargill collect additional data to confirm the ability of the monitoring to provide data that are sufficient and to confirm the appropriateness of an indicator range(s) or designated condition(s).

Fact Sheet 38. NDEE's inconsistent language is both erroneous and creates regulatory uncertainty for the Blair Facility.

As Cargill explained in its comments regarding the Dec. 2021 Draft Permit, emission points that are subject to CAM plans, by default, are deemed to be subject to monitoring that is sufficient to assure compliance within the meaning of EPA's Title V regulations. *See, e.g.*, *CITGO Order*, Ex. 20, at 7 ("For example monitoring established consistent with EPA's Compliance Assurance Monitoring (CAM) rule (40 C.F.R. Part 64) *will* be sufficient to assure compliance with permit terms and conditions, thus meeting the requirements of 40 C.F.R. § 70.6(c)(1)."") (emphasis added); Frequently Asked Questions (FAQs) Concerning the Compliance Assurance Monitoring (CAM) Rule, at 13, https://www.epa.gov/sites/production/files/2016-05/documents/camfaq.pdf (querying "What happens to part 70 monitoring (this includes periodic monitoring) for units subject to the CAM rule?" and explaining that "Part 70 monitoring is replaced by CAM for those units subject to the CAM rule. Until CAM is in place, part 70 monitoring (including periodic monitoring) remains in effect.") (attached hereto as Exhibit 60).[64] CAM monitoring by its very nature is designed to "provide a reasonable assurance of compliance with emission limitations or standards[.]" 40 C.F.R. § 64.3. Monitoring meeting this standard would necessarily be "sufficient to assure compliance under 40 C.F.R. § 70.6.

Thus, by finding that the CAM plans meet these minimum requirements, NDEE approved them in accordance with the regulations. 40 C.F.R. § 64.6 ("Based on an application that includes the information submitted in accordance with § 64.5, the permitting authority shall act to approve the monitoring submitted by the owner or operator by confirming that the monitoring satisfies the requirements in § 64.3.").

[64] Moreover, although vacated by the D.C. Circuit on other grounds in *Appalachian Power Co. v. EPA*, Ex. 15, 208 F.3d 1015, EPA's 1998 periodic monitoring guidance also emphasized that CAM monitoring was adequate for Title V purposes. *See* U.S. EPA, Periodic Monitoring Guidance for Title V Operating Permits Programs, at 6 (Sept. 15, 1998) (vacated on other grounds) ("Thus, emission units with an approved CAM plan will have sufficient monitoring to satisfy the periodic monitoring requirement under title V and part 70. In other words, although units subject to part 64 are also subject to part 70's periodic monitoring requirement, an adequate CAM plan will also satisfy the periodic monitoring requirements of part 70 for those emission units covered by the CAM plan.").

NDEE's suggestion that the CAM plans are somehow inadequate creates significant regulatory uncertainty for the Blair Facility. NDEE now asserts that it never approved these CAM plans. Email from Shelley Schneider to Jay Frazer, Michelle Bucklin, JJ Zmudzinksi, Re: Cargill - OP question - EP-7, EP-7A, EP-12 (Dec. 16, 2021, 8:12 am) ("NDEE has not approved, nor do we approve any CAM plans."). Given that NDEE includes the CAM Plans in the final Permit, it is unclear whether complying with the CAM Plans will demonstrate the Blair Facility's compliance with the Permit terms. Further, because NDEE has previously asserted a unilateral authority to reopen permit proceedings,[65] Cargill does not know whether NDEE is indicating that, based on its current assertion that the CAM plans are inadequate, NDEE will seek to reopen the CAM Plans or Permit and add new requirements.

In sum, NDEE's assertions regarding the CAM Plans are internally inconsistent, erroneous, and create regulatory uncertainty regarding how to comply with the Blair Facility's Permit. As a result, EPA should object to the Permit so NDEE can clarify the status of the CAM Plans.

J. EPA's Review of the Permit in Response to the Petition is a Distinct From its Prior Review During the Comment Period

On January 28, 2022, EPA Region 7 issued comments to NDEE regarding the Permit. *See* Response to Comments, Attachment A. EPA's January 28, 2022 comments were submitted prior to Cargill's submission of its comments and prior to NDEE's issuance of its Response to Comments. Cargill notes that EPA's review of this petition is separate and distinct from EPA's prior review during the comment period:

> [T]he Act is structured so that the EPA's evaluation of a petition under § 505(b)(2) follows and is distinct from its review of a proposed permit under § 505(b)(1), which requires the Administrator to object on his own accord if he determines the permit is not in compliance with the Act. By contrast, under § 505(b)(2), the Administrator is compelled to object only if the necessary demonstration has been made.

Nucor II Order, Ex. 11, at 5. As a part of this separate and distinct review, Cargill respectfully requests that EPA reconsider certain statements made in its January 28, 2022 comments. In particular, based on NDEE's prior statements concerning emission variability at ethanol plants, EPA indicates that it supports certain enhanced monitoring. More specifically, the letter states that:

> In our oversight role, we recognize that the NDEE has been concerned with emissions variability from various source categories, including ethanol plants. Emission variability is a concern because it is difficult for the state to assure

[65] As explained above, NDEE has asserted in conversations that it has authority to unilaterally reopen previously-issued construction permits to add additional monitoring terms based on Title 129, Chapter 15, 006.01(D), which allows for a permit to be reopened upon the discovery of a material mistake. To date, NDEE has not asserted that the CAM Plans contain any material mistake.

> communities and citizens that sources are in continual compliance with their permit. To address this concern, NDEE has required permitted sources to enhance their monitoring to ensure continuous compliance. Appendix L of Cargill's draft permit is included, as part of the permit record, to establish a basis for additional wet scrubber monitoring at Cargill's ethanol operations in Blair. The enhanced monitoring and additional record keeping and/or reporting requirements seek to demonstrate compliance with federally enforceable emissions limits and provide increased transparency to the public. Increased monitoring could provide insights into the operation of the facility, help to evaluate whether the facility meets the limits, as established by rule and permit, and provide more timely information regarding necessary corrective actions. As stated in our January 7, 2021, letter, the EPA believes that the enhanced monitoring requirements are consistent with the requirements of Section 504(c) of the CAA, 40 CFR § 70.6(a)(3)(i)(B) and Nebraska Air Quality Regulations at Title 129, Chapter 8, Section 004.01B. In addition, the enhanced monitoring requirements are consistent with 40 CFR § 70.6(c)(1) and Nebraska Air Quality Regulations at Title 129, Chapter 8, Section 012.01, which require testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Region 7 supports the NDEE's inclusion of the enhanced monitoring requirements in the Cargill Blair Title V operating permit to ensure compliance and supports the NDEE's intent to issue this permit which has taken many years to finalize.

Cargill respectfully requests that EPA reconsider and independently evaluate the above statement as a part of the petition process for several main reasons. First, as described in detail herein, EPA's statement appears to be premised on NDEE's representations concerning the variability of emissions at ethanol plants. However, none of the emission points at issue in this petition are located at the ethanol portion of the Facility, and the variability concerns identified by NDEE in the Wet Scrubber White Paper are not applicable to the corn wet mill emission points covered by this petition. Second, for the reasons described herein, the Wet Scrubber White Paper cited by EPA should not factor into EPA's analysis as it is procedurally infirm in that NDEE did not follow the requirements of Nebraska law in issuing the document, and it contains a number of substantive flaws as detailed above in Sections IV.A.4.b and IV.G. Importantly, NDEE expressly disclaims reliance on this white paper in its Response to Comments and has expressed its intent to reconsider this white paper. Accordingly, the Wet Scrubber White Paper should not be used in support of additional monitoring requirements. And finally, as detailed above, NDEE does not conduct a case-by-case analysis of whether monitoring is necessary to assure compliance with applicable requirements, as is required by Title V.

For these reasons, Cargill requests that EPA conduct an independent and distinct review of these issues in evaluation of this petition.

V. CONCLUSION

For the reasons set forth herein, EPA must object to the Title V permit prepared by NDEE for the Cargill Blair Facility.

Respectfully submitted on August 8, 2022, on behalf of Cargill, Incorporated.

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