UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

No. 23-9603

CENTER FOR BIOLOGICAL DIVERSITY,
Petitioner – Appellant,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY *et al.*,
Respondents – Appellees.

STATE OF COLORADO,
Intervenor – Respondent,

and

SUNCOR ENERGY (U.S.A), INC.,
Intervenor – Respondent.

Petition for Review of Final Action of the U.S. Environmental Protection Agency (Agency/Docket No. FRL-11371-01-R8)

PETITIONER'S PRELIMINARY OPENING BRIEF

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* Oral Argument Requested

CORPORATE DISCLOSURE STATEMENT

The Center for Biological Diversity ("the Center") has no parent companies, and there are no publicly traded companies that have any ownership interest in the Center.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Pursuant to 10th Circuit Rule 28.2(C)(4), the following is a glossary of the acronyms used in this brief:

CDPHE	Colorado Dept. of Public Health and Environment
EPA	United States Environmental Protection Agency
JA	Joint Appendix
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NSR	New Source Review
ppb	Parts Per Billion
SIL	Significant Impact Level
SIP	State Implementation Plan
SOx	Sulfur Oxides

INTRODUCTION

Congress enacted the Clean Air Act to "speed up, expand, and intensify the war against air pollution in the United States with a view to assuring that the air we breathe throughout the Nation is wholesome once again." H.R. Rep. No. 91-1146, 91st Cong., 2d Sess. 1, 1 (1970). The National Ambient Air Quality Standards ("NAAQS") are arguably the most important tool in this war against air pollution.

The NAAQS are limits on the maximum concentration of certain toxic pollutants allowed in the ambient air that people breathe. They apply everywhere in the country. EPA must set the NAAQS at the level necessary to protect human health and welfare.

The NAAQS, however, are not self-executing. Instead, the public health and welfare protections of the NAAQS are only achieved through a state's adoption of an effective State Implementation Plan ("SIP"). SIPs are the collection of regulations and directives used by states to keep concentrations of dangerous pollutants in the air below the NAAQS, as required by the Clean Air Act. States must also fully implement the requirements of their SIPs to protect the NAAQS.

Pursuant to the Clean Air Act, EPA's regulations, and Colorado's SIP, the state cannot issue a permit for a source that causes or contributes to violations of the NAAQS.

This case involves a permit that allows violations of the NAAQS for two groups of highly reactive gasses—nitrogen oxides ("NOx") and sulfur oxides ("SOx").

When inhaled by humans, NOx causes a variety of respiratory problems, ranging from inflammation of the airway and chest pain, to the development of asthma and reduced lung function. These harms can be acute—harms from NOx can result in a matter of minutes. NOx also leads to the formation of ozone, also known as "smog," a toxic pollutant that has plagued Colorado's Front Range for over fifteen years. SOx similarly harms the respiratory system after a very short exposure period.

Despite these harms, and the legal requirements meant to prevent them, the Title V operating permit ("Permit") issued by the Colorado Department of Public Health and Environment ("CDPHE") and approved by EPA in the proceeding below allows Suncor Energy (U.S.A.), Inc.'s petroleum refinery ("Suncor") in Commerce City, Colorado, to violate the NAAQS meant to limit NOx and SOx to safe levels.

Thus, the permit authorizes illegal releases of air pollution. On top of these state-authorized illegal releases is Suncor's long history of violating air pollution limits, for which it has been subject to repeated enforcement actions. Neighborhoods in Commerce City and north Denver bear the burden. Suncor primarily harms disproportionately impacted communities that are already heavily burdened by dangerous pollution from an array of sources. Residents of the neighborhoods adjacent to Suncor face some of the greatest environmental health risks in Colorado.

Petitioner the Center for Biological Diversity ("the Center") brings this Clean Air Act direct appeal to challenge the United States Environmental Protection Agency's ("EPA's") order[1] denying, in part, a Petition to Object[2] to CDPHE's renewal of the Title V operating permit for Suncor's East Plant.[3] Counsel from Earthjustice submitted the petition to EPA on behalf the Elyria

[1] *In the Matter of Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)*, Order on Petition Nos. VIII-2022-13 & VIII-2022-14 (July 31, 2023) [Joint Appendix ("JA")__–__] (hereinafter "Order").

[2] Petitioners' Petition to Object re Colorado Department of Public Health and Environment's Clean Air Act Renewal of Title V Permit 95OPAD108 Suncor Energy, Inc., Plant 2 (East Plant) (Oct. 11, 2022) [JA__–__] (hereinafter "Petition").

[3] Suncor is considered to be one source, but it holds two different Title V operating permits—one for the East Plant and the other for the West Plant. Order at 7 [JA].

and Swansea Neighborhood Association, Cultivando, Colorado Latino Forum, GreenLatinos, Sierra Club, and the Center (together, "Petitioners").

During the permit proceedings below, Petitioners provided both CDPHE and EPA with expert computer modeling of Suncor's NOx and SOx pollution showing that the Permit allows violations of the NAAQS for NOx and SOx. Computer modeling is the superior, and EPA's preferred, approach for demonstrating that a source's pollution will violate the NAAQS. In response, CDPHE conducted its own modeling and confirmed the results of Petitioners' expert modeling: Suncor causes and/or contributes to violations of the NAAQS for NOx and SOx.

Despite this strong, concerning record evidence, which is not contradicted by any other evidence in the record, EPA declined to object to the Permit below. EPA relied on insupportable loopholes and exemptions to explain away the results of the modeling, ignoring the practical realities of NAAQS violations and real harms to human health, in the process.

EPA allowed CDPHE to focus on specific modifications at Suncor instead of the modeled violations resulting from Suncor as a whole. Despite the modeled NAAQS violations, EPA allowed CDPHE to disregard these results by relying on an illegal screening tool called a Significant Impact Level ("SIL").

EPA took this action without assessing the implications of its decision, supporting its conclusions in the record, or otherwise assuring that the public will be protected from noxious air pollution. EPA's decision was therefore arbitrary, capricious, and contrary to law, and must be overturned.

BASIS OF JURISDICTION

This case challenges the final agency action taken by Respondents U.S. Environmental Protection Agency and Administrator Michael S. Regan in *In the Matter of Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)*, Order on Petition Nos. VIII-2022-13 & VIII-2022-14 (July 31, 2023) (the "Order"). 42 U.S.C. § 7661d(b)(2). This Court has jurisdiction under 42 U.S.C. §§ 7661d(b)(2) and 7607(b)(1). Petitioner timely filed its petition for review on November 17, 2023, within sixty days of EPA's publication of notice of the final action in the *Federal Register*, 88 Fed. Reg. 63,951 (Sept. 18, 2023).

This approval is specific to Suncor in Colorado. Thus, venue is appropriate in the Tenth Circuit. 42 U.S.C. § 7607(b)(1).

To demonstrate Article III standing, the Center must establish that at least one of its members has standing to sue in their own right, that the Center seeks to protect interests which are germane to its organizational purposes, and that the participation of individual members is not needed. *Hunt v.*

Washington State Apple Advertising Comm'n, 432 U.S. 333, 343 (1977). Individuals have standing if they suffer an injury-in-fact that is both fairly traceable to EPA's action and redressable by the Court. *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560–61 (1992).

EPA's actions injure members of the Center in Colorado. These members suffer injury due to the air pollution that will not be adequately regulated under the deficient Title V operating permit EPA approved for Suncor.

Richard Reading, a member of the Center, suffers injuries due to air pollution, including air pollution from Suncor. Air pollution impacts his running, bicycling, gardening, and dog walking in Denver, Colorado. Reading Decl. ¶¶ 5–7 (Att. 3). Dr. Reading, a wildlife biologist, suffers from serious asthma and loses his freedom to exercise outdoors when air quality is poor. *Id.* ¶ 5, 7.

Dr. Reading lives on Hudson Street in Denver, which is about 4.5 miles south of Suncor. *Id*. ¶ 3. He drives past Suncor every day on his way to and from work. *Id*. Dr. Reading regularly spends time in the Rocky Mountain Arsenal National Wildlife Refuge, which is located approximately two miles from Suncor. *Id*. ¶ 6. He recreates frequently in the Refuge and along the Sand Creek Regional Greenway, which is directly next to Suncor. *Id*. Dr. Reading is

concerned about the negative impacts to my health, as well as the health of the wildlife in the refuge, from air pollution, including air pollution from Suncor. *Id*. ¶ 6, 10, 16.

Poor air quality imposes significant costs on Dr. Reading in the form of costs for doctor and urgent care visits, medication, air filters for his home recommended by his doctor, and the use of sick and vacation time to recover from asthma attacks. *Id.* ¶ 7, 8. Dr. Reading closely follows air quality reports and limits his activity when there are air quality alerts, and even so has occasionally had to stop running or biking due to breathing problems. *Id.* ¶ 9. Dr. Reading is well aware of the many negative impacts caused by air pollution from Suncor, such as decreased lung function, asthma, bronchitis, emphysema, and permanent scarring of the lungs, particularly for sensitive groups, including himself. *Id.* ¶ 14.

All these injuries are concrete, actual or imminent, and fairly traceable to EPA's actions. EPA's approval of a Title V operating permit for Suncor that allows violations of the NAAQS for NOx and SOx harms the public, including the Center's members. A favorable decision from this Court would redress these injuries by vacating this approval and remanding to EPA to object to these violations, as discussed further below.

The Center also meets the requirements for organizational standing in this case. Protecting its members from air pollution is directly germane to the Center's mission, Burd Decl. ¶¶ 3–7 (Att. 4),[4] and this case does not require the participation of any of the Center's members.

STATEMENT OF THE ISSUE

I. Whether EPA arbitrarily and capriciously accepted CDPHE's use of SILs to determine that the Suncor refinery will not violate health-based NAAQS, despite computer modeling from both the state agency and Petitioners demonstrating that the Permit does allow violations of these standards.

[4] The Center is a nonprofit, 501(c)(3) conservation organization. The Center's mission is to ensure the preservation, protection, and restoration of biodiversity, native species, ecosystems, public lands and waters, and public health through science, policy, and environmental law. Based on the understanding that the health and vigor of human societies and the integrity and wildness of the natural environment are closely linked, the Center is working to secure a future for animals and plants hovering on the brink of extinction, for the ecosystems they need to survive, and for a healthy, livable future for all of us. The Center has more than 89,000 members, including over 3,100 members in Colorado.

STATEMENT OF THE CASE

I. Statutory and Regulatory Background

One of the primary goals of the Clean Air Act is "to protect and enhance the quality of the Nation's air resources." 42 U.S.C. § 7401(b)(1). In furtherance of this goal, the Clean Air Act requires states to have a permitting program that controls and authorizes the construction of new and modified sources of air pollution to prevent violations of the NAAQS. This permitting program is called New Source Review, because it governs new sources—both sources that are entirely new and new modifications at existing sources.

States must also administer a closely related "Title V" operating permit program for sources of air pollution that are up and operating. Title V permits must contain all Clean Air Act limits and standards that govern a source's operations, and establish "inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." *Id.* § 7661c(c). The goal of the Title V program is, in large part, to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. 32,250, 32,251 (July 21, 1992).

A. The Clean Air Act and the NAAQS

The Clean Air Act, 42 U.S.C. §§ 7401–7671q, establishes a comprehensive program for controlling and improving the nation's air quality through both state and federal regulation. Sections 108 and 109 of the Clean Air Act require EPA to establish primary and secondary NAAQS for a specific set of pollutants that includes NOx and SOx, as well as ozone. *Id*. §§ 7408, 7409; *see also* 40 C.F.R. §§ 50.4, 50.10, 50.11. NAAQS limit the concentration of each such pollutant allowable in the ambient air people breathe.

The primary standard must be set at the level which protects public health with an adequate margin of safety. *Id*. §§ 7409(b)(1), 7410. The secondary standard must be set at the level requisite to protect public welfare, which entails protecting, inter alia, soils, waters, crops, vegetation, animals, wildlife, weather, visibility, and climate. *Id*. §§ 7409(b)(2), 7602(h).

After EPA promulgates or revises a NAAQS, it must identify which areas of the country are in compliance with the standard and which are not. *Id*. § 7407(d). Areas that are meeting the NAAQS are called "attainment areas." *Id*. Areas not in compliance with the NAAQS are designated "nonattainment" areas. *Id*. The Clean Air Act imposes stricter and stricter requirements on nonattainment areas as they continue to fail to achieve compliance. *See, e.g.*, *id.* § 7511a.

In Colorado, for instance, the Front Range area failed to attain one of the NAAQS for ozone in 2021 and was downgraded from serious to severe nonattainment effective November 7, 2022. 87 Fed. Reg. 60,926 (Oct. 7, 2022). This required Colorado to submit a new plan to EPA with stricter pollution controls and analyses designed to bring the Front Range area into attainment. *Id*.

B. State Implementation Plans

Under the Act, states initially formulate pollution control strategies in their SIP to ensure that their ambient air meets the NAAQS for each pollutant. 42 U.S.C. § 7407(a). Every SIP or SIP revision must be submitted to EPA for approval. 42 U.S.C. § 7410(a)(1), (a)(2), (l). Once approved by the EPA, a SIP has "the force and effect of federal law." *Utah Physicians for a Healthy Env't v. Diesel Power Gear, LLC*, 21 F.4th 1229, 1237 (10th Cir. 2021).

SIPs or SIP revisions must contain "enforceable emission limitations" on pollution and any "other control measures, means, or techniques" necessary to ensure that the NAAQS are achieved throughout the state. 42 U.S.C. § 7410(a)(2)(A), (C); *see also* 87 Fed. Reg. 16,439, 16,441 (Mar. 23, 2022) (recent proposed rule approving a revision to Colorado's SIP, recognizing the same). The NAAQS protect people's health, and, accordingly, achieving and

maintaining attainment with the NAAQS is "central" to the Clean Air Act's regulatory scheme. *Union Electric Co. v. EPA*, 427 U.S. 246, 258 (1976).

C. New Source Review

Pursuant to Title I of the Act, states must have a permitting program in their SIP that controls and authorizes the construction of (1) new stationary sources of air pollution, and (2) modifications of existing sources of air pollution, to prevent violations of the NAAQS. 42 U.S.C. § 7410(a)(2)(C). This permitting program is referred to as "New Source Review."

States are supposed to issue a new or modified source its New Source Review permit prior to construction commencing. *See* 40 C.F.R. § 51.160(a)–(b). Hence, these permits are also referred to as "preconstruction" permits.

EPA has approved the constituent parts of Colorado's permitting program into its SIP. *See* 40 C.F.R. § 52.320(c) (identifying EPA-approved regulations in the Colorado SIP). The regulatory provisions that make up Colorado's New Source Review permitting program are set forth in Colorado's "Regulation 3," 5 Colo. Code Regs. § 1001-5 (hereinafter, "Regulation 3").

There are two kinds of New Source Review permits for new and modified sources.

Major Source Permits. Proposed sources of air pollution, including modifications, that have the potential to emit pollution in amounts over specific emissions thresholds must obtain a "major" source construction permit. Regulation 3, Part A, I.B.25; Part D, II.A.25. If the source or modification's potential to emit pollution is above the major source emissions threshold (e.g., it emits more than 250 tons of pollution per year), the source is considered major, and it must apply for a major source permit to construct or modify. *Id*.

Minor Source Permits. If a proposed new or modified source of air pollution has the potential to emit below the major source thresholds (but will emit more than negligible amounts of pollution), then it must obtain a "minor" source construction permit. Regulation 3, Part A, I.B.26; Part B, II.A.1. While major sources are subject to a variety of stringent protective measures, permits for minor sources and modifications contain "only the barest of requirements." *Sierra Club v. EPA*, 964 F.3d 882, 886 (10th Cir. 2020).

Even though minor source permits are weaker than major source permits, a state still cannot issue one for a source if that source or modification will cause or contribute to a violation of the NAAQS. 40 C.F.R. § 51.160(a)–(b); Order at 6 [JA__]. As EPA has acknowledged, a state's minor source New Source Review permitting program regulates "modifications and

new construction of stationary sources within the area **as necessary to assure the NAAQS are achieved.**" 87 Fed. Reg. at 16,441 (emphasis added).

D. The Title V Program

1. Each Title V Source Must Obtain an Operating Permit that Identifies and Assures Compliance with its Clean Air Act Obligations.

In addition to New Source Review permitting, another cornerstone of the Act is an operating permit program, adopted as part of the 1990 Clean Air Act Amendments, that governs the nation's largest sources of air pollution, such as factories, power plants, and refineries. This program is set forth in Title V of the Act and requires each major source (and certain other sources) to obtain an operating permit enforceable by EPA and the public. 42 U.S.C. §§ 7661-7661f.

A Title V permit must contain all Clean Air Act limits and standards that govern a source's operations, and establish "inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions." *Id.* § 7661c(c). As EPA explained when promulgating its Title V regulations, the Title V program "will enable the source, States, EPA, and the public to understand better the requirements to

which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. 32,250, 32,251 (July 21, 1992).

Title V requires EPA to promulgate regulations establishing the minimum requirements for state Title V programs and requires states to submit programs to EPA for approval. 42 U.S.C. §§ 7661a(b), (d). EPA's Title V regulations are published at 40 C.F.R. Part 70. To promote compliance and simplify enforcement, Congress enacted detailed statutory requirements designed to ensure that each Title V permit comprehensively identifies a source's Clean Air Act obligations and requires monitoring, recordkeeping, and reporting sufficient to assure the source's ongoing compliance. A state must have adequate authority to "issue permits and assure compliance by all [Title V sources] with each applicable standard, regulation or requirement under this chapter." *Id.* § 7661a(b)(5)(A); *see also* 40 C.F.R. § 70.6(a).

Congress also mandated that Title V permits "include enforceable emission limitations and standards … and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable [SIP]." 42 U.S.C. § 7661c(a); *see also Sierra Club v. EPA*, 964 F.3d 882, 895 (10th Cir. 2020) (holding that the term "'applicable requirements' encompasses all requirements under the Clean Air Act"). Further, EPA's regulations must require that an "applicant

submit with the permit application a compliance plan describing how the source will comply with all applicable requirements under this chapter." 42 U.S.C. § 7661b(b).

If a source violates its Title V permit, EPA may enforce compliance administratively or in federal court. *Id*. §§ 7413(a), (b). Additionally, any person may bring a citizen suit against a source for violating its Title V permit. *Id*. §§ 7604(a)(1), (f)(4).

2. EPA's Statutory Duty to Oversee State Program Implementation and Ensure that Title V Permits Meet Federal Requirements.

Even after approving a state Title V program, "EPA retains an important supervisory role as the states fulfill their responsibilities." *N.Y. Pub. Interest Research Grp. v. Johnson*, 427 F.3d 172, 180 (2d Cir. 2005). EPA's comprehensive oversight authority includes the ability to impose substantial statutory sanctions or withdraw federal approval of a program if a state fails to comply with Clean Air Act requirements. 42 U.S.C. § 7661a(i); 40 C.F.R. § 70.10(c); *see also* 42 U.S.C. § 7413(a)(2) (establishing remedial procedures that apply if EPA finds that a state is not enforcing its Title V program effectively).

Congress also gave EPA important duties to ensure that individual Title V permits comply with federal requirements. Specifically, before a state may

issue a permit, it must submit a proposed permit to EPA for review. *Id.* §§ 7661d(a), (b). If EPA determines that a proposed permit does not comply with the Act, EPA "shall" object to the permit. *Id.* § 7661d(b)(1).

If EPA does not object on its own, any person may petition EPA to object within 60 days after EPA's review period ends. *Id.* § 7661d(b)(2). EPA must grant or deny such petition within 60 days, and "shall issue an objection … if the petitioner demonstrates … that the permit is not in compliance with the requirements of [the Clean Air Act], including the requirements of the applicable implementation plan." *Id.* Any petition denial is subject to judicial review in the U.S. Courts of Appeal. *Id.* § 7661d(b)(2).

If EPA objects, the state may not issue the permit until addressing the objection. *Id.* § 7661d(b)(3). If the state does not submit a revised permit to address the objection within 90 days, EPA "shall issue or deny the permit." *Id.* § 7661d(c).

Even after permit issuance, EPA retains authority to instruct a state to "terminate, modify, or revoke and reissue" a deficient permit. *Id.* § 7661d(e). If the state fails to act, "the Administrator may, after notice and in accordance with fair and reasonable procedures, terminate, modify, or revoke and reissue the permit." *Id.*

E. Consolidated New Source Review and Title V Permitting

While New Source Review permitting and Title V permitting often proceed separately, Colorado's SIP results in situations, like the one at hand, where one permitting proceeding implicates the requirements of both permitting programs. CDPHE allows Title V permit approvals to serve as New Source Review approvals of, for instance, modifications that require a minor source permit.

As EPA acknowledged in the Order, Colorado's EPA-approved Title V regulations give rise to an obligation to consider a source or project's impact on the NAAQS through a title V permit proceeding like the one below. Order at 54 [JA__].

In this circumstance, pursuant to Colorado's SIP, CDPHE may only approve a modification if "[t]he proposed source or activity will not cause an exceedance of any National Ambient Air Quality Standards." Regulation 3, Part B, III.D.1.c; *see id.* § II.A.6 (minor modifications subject to Part C, Section X, must satisfy Part B, Section III.D.1.a. through III.D.1.g.); *see also* C.R.S. § 25-7-114.5(7)(a)(III) ("Any permit required pursuant to this article shall be granted by [CDPHE] or the commission, as the case may be, if it finds that . . . . For construction permits, the source or activity will meet any applicable

ambient air quality standards and all applicable regulations."); Regulation 3, Part C, III.C.12, IV.A, V.B.1, X.A.1, and X.D.5.d (state Title V regulations).

Further, CDPHE may only use minor permit modification procedures "for those permit modifications that . . . [d]o not violate any applicable requirement," including NAAQS compliance. Regulation 3, Part C, X.A.1.[5]

In the context of Suncor, the Permit incorporates for the first time an array of purportedly minor modifications that Suncor has made to the East Plant since the last time that CDPHE renewed the plant's Title V permit in 2009. CDPHE, Proposed Technical Review Document ("Proposed TRD") at 12–158 [JA__–__]. Importantly, CDPHE has never issued (and will not issue) separate minor source permits authorizing these physical and operational changes. Instead, pursuant to Colorado's SIP, these minor New Source Review modifications are processed as minor Title V permit modifications. Regulation 3, Part B, II.A.6; Part C, X.I. Suncor was allowed to make these facility modifications immediately after filing its minor modification applications. Colo. Dep't of Pub. Health & Env't, *Response to Comments*

[5] In addition, CDPHE cannot approve a combined construction/operating permit application unless the applicant submits a complete application that includes "[d]ata necessary to allow [CDPHE] to determine whether the source complies with . . . [a]ny applicable ambient air quality standards and all applicable regulations." Regulation 3, Part C, X.D.5.d.; *see id.* §§ III.C.12, V.B.1.

submitted on behalf of the Conservation & Community Groups, at 71 (Feb. 8, 2022) [JA__].

Before this Title V permit renewal proceeding, CDPHE made no public determination whatsoever regarding the legality of Suncor's modifications, including whether these changes actually trigger major New Source Review requirements or whether these changes will cause or contribute to a NAAQS violation. Rather, CDPHE waited to process a final approval to these changes—and to provide an opportunity for public comment on these changes—until this Title V permit renewal proceeding. In other words, pursuant to Colorado regulations, it is this Title V permit renewal that authorizes Suncor's minor modifications.

While Suncor has already made the facility modifications in question, Suncor assumed the risk that CDPHE ultimately would disapprove of them after following the required public-notice-and-comment and EPA-review procedures.

EPA agreed that the impact of the modifications on the NAAQS are reviewable in this Title V permit proceeding, stating:

> Given that CDPHE's EPA-approved part 70 regulations explicitly require CDPHE's consideration of NAAQS impacts resulting from a modification through certain types of title V permit proceedings, EPA agrees that

> such issues may be reviewable in a petition challenging those title V permits.

Order at 54 [JA__]. Further, EPA stated that it "agrees with the Petitioners that the present title V renewal permit appears to be the first such permit action in which these issues are reviewable." *Id*. at 55 [JA__].

F. Determining Whether a Source Violates the NAAQS

Given that CDPHE must determine whether a new source, or a modifying source, is or is not violating the NAAQS, this case is premised on the question of what the agency must do to make this determination.

EPA regulations require that, where appropriate, the permitting agencies use air quality modeling to determine whether a modification will cause or contribute to a NAAQS violation. 40 C.F.R. § 51.160(f); *see also* Regulation 3, Part C, X.D.5.d. The modeling requirements are specified in EPA's *Guideline on Air Quality Models* at Appendix W to 40 C.F.R. Part 51. *See* 40 C.F.R. § 51.160(f)(1).

EPA has made clear that modeling is the preferred approach for determining whether a source will violate NAAQS. 40 C.F.R. Part 51, App. W § 1.0(b). More specifically, EPA has stated that: "The impacts of new sources that do not yet exist, and modifications to existing sources that have yet to be

implemented, can only be determined through modeling. Thus, models have become a primary analytical tool in most air quality assessments." *Id*. While air quality measurements may be appropriate for determining an entire area's attainment, *see id*.; see also Primary National Ambient Air Quality Standard for Sulfur Dioxide, 75 Fed. Reg. 35,520, 35,550 (June 22, 2010), they are "rarely sufficient for characterizing the ambient impacts of individual sources or demonstrating adequacy of emission limits for an existing source due to limitations in spatial and temporal coverage of ambient monitoring networks." 40 C.F.R. Part 51 App. W § 1.0(b).

Modeling can also account for levels of background pollution and nearby pollution sources—inputs necessary to ascertain exactly what consequences the new or modified source's pollution will have on ambient air quality. This is generally referred to as a cumulative impacts analysis. *See, e.g.*, *id*. § 8.3.

Despite the advantages and insight that can only be afforded through modeling, CDPHE has created loopholes and exemptions that allow new or modifying sources to avoid needing to model the consequences of toxic pollution.

First, CDPHE only considers the change in emissions caused by individual modifications to determine whether the permitted source (e.g.,

Suncor as a whole) will violate the NAAQS. Order at 57 [JA__]. This disregards the requirements of the law, as well as the real pollution in the ambient air resulting from the source as a whole.

Second, CDPHE relies on emissions thresholds, which it categorizes as Significant Impact Levels ("SILs"), to justify not conducting further analysis of the impacts a modification's pollution can have on a NAAQS. Order at 59 [JA__]. CDPHE relies on SILs to find proposed new or modified sources of air pollution have demonstrated they will not violate the NAAQS whenever the analysis shows the specific modification's individual pollution contribution is smaller than the SILs. Thus, many sources evade the full analysis needed to demonstrate that their pollution will not violate the NAAQS, including an analysis that fully accounts for background pollution and pollution from nearby sources. EPA, *Legal Memorandum: Application of Significant Impact Levels in the Air Quality Demonstration for Prevention of Significant Deterioration Permitting under the Clean Air Act*, at 1 (Apr. 2018) [JA__]. In fact, as demonstrated by the present action, sources can receive permits even where it is demonstrated they will cause, or contribute to, a violation of the NAAQS—so long as their impact is below a SIL.

CDPHE's SILs at issue are 0.46 pounds per hour ("lb/hr") for both NO_2 and SO_2. Order at 59 [JA__]. If an individual modification's emissions are

below this threshold, CDPHE automatically determines that the permit approval will not result in violations of the NAAQS, skipping the cumulative impact analysis, ignoring existing emissions levels and all other projected emissions contributions to the area.

Colorado is not alone in interjecting SILs into permitting decisions. EPA's promulgation of SILs as guidance for permitting agencies has been challenged in the past. EPA has introduced SILs for certain pollutants as part of permitting major sources in areas that are attaining the NAAQS (called Prevention of Significant Deterioration, or "PSD," permitting). *See, e.g.*, *Sierra Club v. EPA*, 705 F.3d 458, 465 (D.C. Cir. 2013). In the Order, EPA draws on its use of SILs in the PSD permitting context to defend its position. Order at 56 [JA__].

As discussed further in the Argument, the D.C. Circuit Court of Appeals expressly rejected use of SILs to "automatically exempt sources with projected impacts below the SILs from having to make the demonstration" that a source will not cause or contribute to a NAAQS violation. *Sierra Club*, 705 F.3d at 465 (vacating and remanding back to EPA a rule establishing a SIL for determining whether, in a PSD analysis, particular matter emissions violated NAAQS).

EPA has adopted "significance levels" for certain pollutants in the past, *e.g.*, 40 C.F.R. § 51.165(b)(2), but these values determine when a source's

contribution should be found significant, not insignificant. *See Sierra Club*, 705 F.3d at 463 (contrasting 40 C.F.R. § 51.165 with EPA's SILs rule from 2010).

II. Factual and Procedural Background

A. Harms of Suncor's Air Pollution

In addition to several other harmful pollutants, the Permit authorizes Suncor to releases hundreds of tons of NOx and SOx per year.

1. Nitrogen Oxides [6]

The formation of NOx is mainly caused by the burning of fossil fuels. The EPA has long recognized NOx as one of the six criteria pollutants commonly found throughout the country that pose significant public health and welfare risks. When inhaled by humans, NOx causes a variety of respiratory problems, ranging from inflammation of the airway and chest pain, to the development of asthma and reduced lung function.[7]

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[6] The NAAQS at issue applies to oxides of nitrogen, as measured by nitrogen dioxide (NO_2). *See, e.g.*, 75 Fed. Reg. 6474, 6476 n.4 (February 9, 2010). When discussing the NAAQS or SILs associated with the NAAQS, the record generally refers to NO_2. When discussing emissions from Suncor, the record generally refers to oxides of nitrogen or nitrogen oxides (NOx).

[7] *See e.g.,* U.S. EPA. Basic Information About NO_2 - Effects of NO_2 (Mar. 2, 2024), *available at* https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2.

As the EPA has previously explained in its NAAQS review process, short term exposure to concentrations of NO_2 above 100 ppb in the ambient air can have deleterious effects on human health. 82 Fed. Reg. 34,792, 34,827 (July 26, 2017). The EPA's 2016 Integrated Science Assessments (ISA) found epidemiologic studies showing that exposure to NOx at levels of 100 ppb for as little as 20 minutes can result in decreased airway responsiveness. *Id*.

NOx presents significant environmental harms as well because it frequently reacts with other chemicals in the air to form harmful pollutants like tropospheric ozone, particulate matter, and acid rain. *Id*. at 34,800–01; *see also Am. Farm Bureau Fed'n v. EPA*, 559 F.3d 512, 515 (D.C. Cir. 2009); 78 Fed. Reg. 3,086, 3,098 (Jan. 15, 2013) (no evidence of safe level of exposure for ozone or fine particulate matter). The EPA established NOx NAAQS to regulate the levels of NOx being emitted into the atmosphere which significantly contribute to the public health and welfare risks.

2. Sulfur Oxides

SO_2 is emitted from mobile sources burning fuel with high sulfur contents, natural processes, and some industrial processes, but the largest contributor to SO_2 emissions is the burning of fossil fuel for power production

or other largescale industry.[8] Since the establishment of its original primary NAAQS, the EPA has known of a series of harmful effects on both the environment and human health from SO_2.

Even short-term exposure to SO_2 can lead to additional dangerous consequences. Indeed, the EPA itself recognizes that "short-exposures to SO_2 can harm the human respiratory system and make breathing difficult. People with asthma, particularly children, are sensitive to these effects of SO_2." *Id*.

Particulate matter created by SO_2 can penetrate the respiratory system and cause significant health effects. *Id*.; *see, e.g., Catawba County v. EPA*, 571 F.3d 20, 26 (D.C. Cir. 2009) (particulate matter pollution linked with premature death, lung and cardiovascular disease, and asthma).

SO_2 is also a contributor to acid rain, can directly harm natural flora by causing direct damage and decreasing growth, and is capable of reacting with other atmospheric compounds to form particulate matter contributing to regional haze. *Id*.

The EPA is required under the CAA to review the NAAQS every five years to assure that the current standards are adequate to protect human health and welfare. Since the CAA was enacted in 1970, the EPA has revised

[8] EPA, Sulfur Dioxide Basics, http://www.epa.gov/so2-pollution/sulfur-dioxide-basics.

the primary NAAQS for SOx and NOx a combined seven times. The EPA's last revision of the SOx and NOx NAAQS came in 2010, when the Agency set the level of the 1-hour NAAQS at 100 parts per billion ("ppb") for NO_2 and at 75 ppb for SO_2. 75 Fed. Reg. 6474 (Feb. 9, 2010); 75 Fed. Reg. 35,520 (June 22, 2010). The pressing risk from short-term exposure contributed in large part to the 2010 rulemaking establishing the shortest averaging time for any NAAQS of one hour.

B. Suncor and the Neighboring Communities

The Suncor refinery is a 98,000-barrel-per-day refinery that produces gasoline, diesel fuel and paving-grade asphalt. Petition at 1 [JA__]. The sprawling 230-acre facility looms over neighborhoods in Commerce City and north Denver and consistently releases pollutants known to cause respiratory problems and to exacerbate heart conditions. *Id*. Suncor has a long history of violating air pollution limits and has been subject to repeated enforcement actions.[9] A significant portion of the oil produced at the refinery comes from thick "tar" sands in Canada, the processing of which can emit particularly high levels of toxic air pollution. *Id*.

[9] *See, e.g.*, Colo. Dep't of Pub. Health & Env't, *Enforcement Actions Against Suncor*, https://cdphe.colorado.gov/enforcement-actions-against-suncor.

The refinery includes the Plant 2 ("East Plant") and Plants 1 and 3 ("West Plant"). The East and West Plants operate under separate title V permits. Order at 7 [JA__]. The current direct appeal specifically challenges the Title V permit for Plant 2 (East Plant). *Id*. The Permit at issue allows Suncor's East Plant to emit 54 tons per year ("tpy") of particulate matter ("PM"), 390 tpy of SO_2, 266 tpy of NOx, 311 tpy of carbon monoxide ("CO"), and 374 tpy of volatile organic compounds ("VOCs") each year. Colo. Dep't of Pub. Health & Env't, *Technical Review Document for Renewal/Modifications to Operating Permit 95OPAD108*, at 172 (Sept. 1, 2022) [JA__].

Residents of the neighborhoods adjacent to Suncor—the north Denver neighborhoods of Elyria, Swansea, and Globeville and Commerce City in Adams County—face some of the greatest environmental health risks in Colorado. Petition at 2–5 [JA__–__]. In addition to the Suncor refinery, the 928-megawatt Cherokee Generating Station is located immediately to the northwest of Suncor. *Id*. Superfund sites are just blocks from people's homes and less than half a mile from an elementary school. *Id*.

Scattered among residential buildings and single-family homes are a wood treatment facility, roofing products manufacturer, many solvent-based industries, and a pet food manufacturing facility. *Id*. Freight trains filled with coal and petroleum refining products frequently travel through the

communities, expelling coal dust from the uncovered cars and amplifying the near constant industrial noise. *Id*. Two heavily trafficked highways, Interstate 70 and Interstate 25, bisect the neighborhoods, and further exacerbate air pollution problems. *Id*.

Overall, industrial and commercial uses cover more than 70% of the neighborhoods, twice as much as the Denver average.[10] Independent community air quality monitoring shows that air pollution levels in the north Denver/south Commerce City area tend to be higher than other comparable metro area sites to the northwest across a range of pollutants. Petition at 2–3 [JA__–__]. Every day, residents face significant threats to their health from air pollution in their neighborhoods, such as spikes of high levels of particulate matter that exceed EPA's proposed health standards. *Id*.

The communities surrounding Suncor are considered "Disproportionately Impacted Communities" under Colorado's Environmental Justice Act (House Bill 21-1266). C.R.S. § 24-4-109(2)(b)(ii). Colorado's EnviroScreen tool shows that the census block groups immediately surrounding Suncor rank in the 86th to 100th percentile for environmental burdens. Petition at 2 [JA__]. This means that between 86 to 100 percent of

[10] Health Impact Assessment 21, 24; WE ACT for Env't Just., *Assisting Congress to Better Understand Environmental Justice* 35 (2013), https://www.sipa.columbia.edu/file/3172/download?token=gHKXRCd2 [JA__, __].

the census block groups in Colorado have a lower Colorado EnviroScreen score, and are thus less burdened, than the census block groups surrounding Suncor.

EPA conducted an analysis using EPA's EJScreen10 to assess key demographic and environmental indicators within a five-kilometer radius of the Suncor facility. Order at 7 [JA__]. This analysis showed a total population of approximately 69,570 residents within a five-kilometer radius of the facility, of which approximately 72 percent are people of color and 37 percent are low income. In addition, EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indices for the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of the State of Colorado:

EJ Index	Percentile in State
Particulate Matter	96
Ozone	89
Diesel Particulate Matter	95
Air Toxics Cancer Risk	97
Air Toxics Respiratory Hazard	97
Toxic Releases to Air	94
Traffic Proximity	87
Lead Paint	92
Superfund Proximity	96
RMP Facility Proximity	96
Hazardous Waste Proximity	96
Underground Storage Tanks	89
Wastewater Discharge	91

Order at 7 [JA__].

C. Suncor's Permitting History

EPA fully approved Colorado's Title V permitting program in 2000. 65 Fed. Reg. 49,919 (Aug. 16, 2000). CDPHE is the Colorado agency responsible for issuing Title V permits. As a "major stationary source" of air pollution, Suncor must obtain a Title V permit. Order at 6 [JA__].

CDPHE issued Suncor its first Title V permit for the East Plant on October 1, 2006, and last revised it on June 15, 2009. *Id*. at 7 [JA__]. Though a Title V permit expires after five years, 42 U.S.C. § 7661a(b)(5)(B), CDPHE did not release a draft renewal permit for public comment until February 17, 2021—after more than 10 years of delay. Petition at 6 [JA__]. CDPHE largely rejected Petitioners' timely comments on the draft permit and forwarded a proposed permit to EPA on February 8, 2022. Order at 8 [JA__].

EPA objected to the Initial Proposed Permit on March 25, 2022, citing deficiencies in the permit's Compliance Assurance Monitoring analyses for the Main East Plant Flare and Railcar Dock Flare. *Id*. EPA raised additional concerns about minor modifications, NAAQS compliance, and environmental justice problems at Suncor. *Id*. But these concerns took the form of non-binding recommendations, and EPA did not formalize them all in its Order.

On May 25, 2022, CDPHE released a revised proposed Title V permit, and opened a 14-day comment period. Petition at 13 [JA__]. Petitioners timely submitted comments on the proposed revisions on June 8, 2022. *Id*. CDPHE again dismissed Petitioners' comments in large part, and submitted the revised permit to EPA on June 22, 2022. Order at 8 [JA__]. EPA did not object to the revised permit within its 45-day review period, and CDPHE issued the final permit on September 1, 2022. *Id*.

D. Petitioners' Petition to Object

On October 11, 2022, Petitioners timely petitioned EPA to object to Suncor's Permit. Order at 8 [JA__].

As a threshold matter, Petitioners established that the lawfulness of CDPHE's approval of the minor modifications can be reviewed in this Title V permit renewal proceeding. Petition 44–54 [JA__–__]; *see supra* Section I.E.

Petitioners further asserted that the Permit does not assure compliance with the applicable SIP requirement prohibiting modifications that cause or contribute to a NAAQS violation because (1) Petitioners' and CDPHE's own modeling shows NAAQS violations—Petition at 54–58 [JA__–__]—and, (2) the CDPHE's decision to not require modeling for the modifications was not adequately justified and CDPHE failed to offer any other reasoned basis for

determining that the modifications will not cause or contribute to a NAAQS violation—Petition at 58–64 (JA__–__).

E. EPA's Order

On July 31, 2023, EPA issued the final order under review, granting in part and denying in part the Petition. *See* Order [JA__–__]. In relevant part, EPA agreed that it can review the issue of NAAQS violations. Order at 49–50 (JA__–__) ("CDPHE was obligated to assess whether the modification of the source would cause an exceedance of the NAAQS.").

EPA, however, denied the parts of the Petition premised on the modeled violations of the NAAQS. As explained further in the argument below, EPA improperly accepted CDPHE's approach of only analyzing individual modifications for NAAQS compliance, instead of the modified source as a whole. EPA also improperly accepted CDPHE's use of SILs to determine that the permit modifications would not interfere with the NAAQS.

STANDARD OF REVIEW

The standard for judicial review of final action by EPA under the Clean Air Act comes from the federal Administrative Procedure Act. *Oklahoma v. EPA*, 723 F.3d 1201, 1211 (10th Cir. 2013).

The Court must set aside EPA's action if the action is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); *see Sierra Club v. EPA*, 99 F.3d 1551, 1555 (10th Cir. 1996); *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *Olenhouse v. Commodity Credit Corp.*, 42 F.3d 1560, 1574 (10th Cir. 1994).

An agency's action is 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, or offered an explanation for its decision which runs counter to the evidence before the agency[.]" *State Farm*, 463 U.S. at 43. Additionally, if the action fails to meet statutory requirements, the court must vacate the agency action. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 413–14 (1971).

The reviewing court must also determine whether the agency considered all relevant factors and whether there has been a clear error of judgment. *State Farm,* 463 U.S. at 43. The grounds upon which the agency acted must be clearly disclosed in, and sustained by, the record. *Id*. at 40. Additionally, "[i]f the agency has failed to provide a reasoned explanation for its action, or if limitations in the administrative record make it impossible to conclude the action was the product of reasoned decision making . . . it may

not simply affirm." *Olenhouse*, 42 F.3d at 1575. "The duty of a court reviewing an agency action under the arbitrary or capricious standard is to ascertain whether the agency examined the relevant data and articulated a rational connection between the facts found and the decision made." Id. at 1574.

Statutory Interpretation. When the statute's text is unambiguous and congressional intent is clear, an agency is bound by the statute's plain language. The standard for reviewing an agency's interpretation of an unambiguous statute is provided in *Sinclair Wyoming Refinery Company v. EPA*, 874 F.3d 1159, 1163, 1169–70 (10th Cir. 2017), and *New Mexico v. Department of Interior*, 854 F.3d 1207, 1224–25, 1230–31 (10th Cir. 2017). This follows the familiar *Chevron* two-step analysis. Under *Chevron* step one, if a statute is not ambiguous, then "the agency must give effect to the unambiguously expressed intent of Congress." *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837, 843 (1984). Under *Chevron* step two, EPA's interpretation of ambiguous statutory provisions must be rejected if, among other things, "the agency has [not] offered a reasoned explanation for why it chose that interpretation." *Vill. of Barrington v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011).

Regulatory Interpretation. An agency is also bound by plain language when interpreting its own regulations. *Kisor v. Wilkie*, 139 S. Ct. 2400, 2415

(2019). When courts consider a regulatory interpretation put forward by an agency, they must first determine if the regulation is truly ambiguous and then apply the analysis in *Kisor v. Wilkie* to determine if deference to the agency's interpretation is warranted. *Id*. at 2415, 2423–24. Among other requirements, an agency's interpretation of its regulation must be "reasonable" in order to receive deference. *Walker v. BOKF*, N.A., 30 F.4th 994, 1006 (10th Cir. 2022).

SUMMARY OF THE ARGUMENT

The Clean Air Act, EPA's regulations, and Colorado's SIP require CDPHE to ensure that the modifications it approved in the Permit will not interfere with attainment or maintenance of the NAAQS. Compliance with the NAAQS is an applicable requirement with which Title V permits must comply.

Petitioners' modeling and CPDHE's own modeling show that Suncor is permitted to cause violations of the 2010 one-hour-averaging-time NOx and SOx NAAQS.

Accordingly, the Proposed Permit does not comply with applicable requirements that: (i) CDPHE can only issue construction permits for modifications that will not cause or contribute to a violation of the NAAQS, 40 C.F.R. § 51.160(a)–(b); Regulation 3, Part B, III.D.1; Part C, III.C.12, V.B.1,

X.D.5.d., .X.A.1; and (ii) CDPHE must adequately justify the basis for permit terms, 40 C.F.R. § 70.7(a)(5).

EPA improperly approved of CDPHE's approach of judging whether modeling is necessary based on just the change in emissions resulting from individual modifications, rather than assessing whether Suncor, as modified, violated the NAAQS. The change in emissions has nothing to do with whether a source will cause or contribute to a violation of the NAAQS. People do not breath the change in emissions. They breath the emissions from the source. NAAQS are designed to protect people and so it is arbitrary to determine whether modeling is necessary based on the change in emissions. A NAAQS analysis must be based on emissions from the source, not a change in emissions.

Further, the use of SILs is contrary to law. Sources that cause or contribute to violations of the NAAQS cannot be permitted according to the plain language of the Clean Air Act, EPA's regulations, and the Colorado SIP. The plain language leaves no room for CDPHE to add a "significance" threshold, and to only deny a permit if the source is a significant cause or contributor to a violation.

In addition, the emissions rates CDPHE relied on to disregard the modeling and determine that the modifications would not result in a NAAQS

violation do not even qualify as SILs. CDPHE looked at emissions thresholds alone, but emissions are not the same as ambient concentrations, which is what the NAAQS are based on. Several other variables must be considered to translate a source's emissions into ambient concentrations. Thus, EPA's condoning of the use of emissions rates thresholds as SILs was arbitrary.

ARGUMENT

I. Petitioners' Computer Modeling and CDPHE's Own Modeling Show NOx and SOx NAAQS violations.

The Permit includes permit modifications that increase emissions and therefore cause or contribute to violations of the 2010 one-hour averaging time NOx and SOx NAAQS. This is demonstrated by Petitioners' modeling and CDPHE's own modeling.[11] EPA does not dispute that this modeling shows that Suncor violates the NAAQS.

[11] The conditions of the Permit that are impacted by this objection are: (i) Modification 1.28 (Section I, Cond. 5.1; Section II, Cond. 8.1, 8.6, 8.8, 8.11, 18); (ii) Modification 1.29 (Section I, Cond. 5.1; Section II, Cond. 5.1, 8.1, 8.6, 8.8, 8.10, 18; (iii) Modification 1.33 (Section I, Cond. 5.1; Section II, Cond. 9.1, 9.5, 9.7; (iv) Modification 1.36 (same as 1.33); and (v) Modification 1.38 (Section II, Cond. 7.1).

A. Petitioners' expert modeling shows NAAQS violations.

In support of their public comments, Petitioners commissioned an air quality modeling expert to model the impacts of Suncor's emissions on NAAQS. Petitioners' modeling shows that Suncor's permitted emissions, which include increased emissions from the incorporated permit modifications, will cause violations of both the one-hour NOx and SOx NAAQS. See Lindsey Meyers, Air Dispersion Modeling Analysis for Verifying Compliance of Permitted Emissions with the One-Hour SO_2 and NO_2 NAAQS: Suncor Refinery, Commerce City, Colorado (May 10, 2021; updated July 12, 2022, and Aug. 30, 2022) (hereinafter "Meyers Modeling Analysis") [JA__–__]. Petitioners' initial modeling showed an NO_2 value of 235.21 micrograms per cubic meter ("µg/m^3"), which exceeds the NOx NAAQS of 188 µg/m^3. *Id*. at 18. The modeling also showed an SO_2 value of 230.52 µg/m^3, while the SOx NAAQS is 196.2 µg/m^3. *Id*. at 17.

Petitioners revised their modeling to address the concerns raised by Suncor in its response to comments. *See* Meyers Modeling Analysis; *see also* Suncor Energy (U.S.A.) Inc., *Response to Public Comments Regarding Plant 2 Title V Permit Renewal,* at 23 (May 21, 2021) [JA__]. Even after addressing the concerns Suncor raised in its response to public comments, without evaluating their accuracy, Petitioners' adjusted modeling showed that Suncor

causes violations of the one-hour NOx and SOx NAAQS under every modeled scenario. Meyers Modeling Analysis at 20 [JA__]. This modeling showed a NO_2 value of 235.12 ug/m3 and an SO_2 value of 230.40 ug/m3. *Id*.

For both modeling analyses, Petitioners used a variety of techniques and inputs in order to be comprehensive. Petitioners selected the modeled values for NO_2 and SO_2 referenced above based on CDPHE's preferred approach to modeling Suncor's emissions. Petitioners also used the same meteorological data sets as CDPHE. Meyers Modeling Analysis at 14–15 [JA__–__]; *see also* Proposed TRD at 76–77 [JA__–__]; Colo. Dep't of Pub. Health & Env't, *Modeling Review Comments*, Project ID: 538-210630 (June 30, 2021) ("CDPHE Modeling Review Comments") at 1, 5–9 [JA__, __–__]. These various techniques and inputs all resulted in finding that Suncor will violate the health-based one-hour NOx and SOx NAAQS.

Further, Petitioners' modeled values relied on non-conservative assumptions, so the values are very likely underestimates. Meyers Modeling Analysis at 17 [JA__]. For example, due to limited information, Petitioners were not able to (i) model all of the emissions points at Suncor; (ii) include downwash parameters for all of the objects as Suncor; or (iii) include nearby sources of pollution, of which there are many in the overburdened community where Suncor is located. *Id*. at 11–12, 17–18 [JA__–__, __–__]. Examples of

nearby sources include the Cherokee Generating Station, Metro-Denver's sewer plant, the expanded I-70, and I-270. *See* Petition at 2–3 [JA__–__] (discussing the multitude of background sources near Suncor).

B. CDPHE's modeling shows NAAQS violations.

CDPHE's own modeling confirms that Suncor violates the one-hour NOx and SOx NAAQS. See generally CDPHE Modeling Review Comments [JA__–__]. In response to the modeling analysis submitted with Petitioners' public comments, CDPHE conducted its own modeling. CDPHE's modeling shows violations of the one-hour SOx NAAQS under every modeling scenario, with values ranging from 211.71 µg/m^3 to 232.97 µg/m^3. CDPHE Modeling Review Comments at App. B, Table 2.3 [JA__]; Colo. Dep't Pub. Health & Env't, *Suncor Impacts* ("Suncor Impacts") [JA__–__].

The modeling shows one-hour NO_2 NAAQS exceedances in 16 out of 20 scenarios, *see* Suncor Impacts [JA__], and CDPHE stated that "[i]t can be concluded that [Suncor] will contribute and/or cause a modeled violation of the 1-hr NO_2 NAAQS standard," CDPHE Modeling Review Comments at 1 [JA__]; see also *id*. at App. B, Table 2.3 [JA__]. CDPHE's report summarizes the results, stating:

> Although a cumulative analyses [sic] could be completed including all of the sources at Suncor and nearby sources, it is expected that this facility will continue to contribute and/or cause a modeled violation of the 1hr NO2 and 1hr SO_2 NAAQS **due to the facility alone exceeding over 100% of the NAAQS for both 1hr NO2 and SO_2.**

CDPHE Modeling Review Comments at 1 [JA__] (emphasis added).

Further, in its responses to Petitioners' comments, CDPHE's Air Pollution Control Division summarized:

> The Division has reviewed the modeling analysis behind the Lindsay [sic] Meyers report and conducted its own preliminary modeling. This modeling showed lower values than the Lindsey Meyers report but **still showed the facility was exceeding the SO_2 and NOx NAAQS.** Based on this, the Division agrees that additional modeling and analysis should be done, with further refinements including input from the source. While these findings are concerning and deserve more in-depth assessment, this information does not provide a legal basis for denying the Title V renewal since the facility already has received construction permits for its operations and the NAAQS is not considered an applicable requirement for Title V purposes.

Response to Comments at 5 (emphasis added) [JA__].

Accordingly, CDPHE admits the modeled violations of the health-based NAAQS in fact.

Nor does EPA dispute that the modeling shows NAAQS violations. Instead, as discussed in the following sections, EPA condones CDPHE's

approach of ignoring the forest for the trees—allowing CDPHE to use SILs and to focus on individual modifications to examine whether the NAAQS were violated, instead of considering the legally required and practically important question—whether the source, Suncor, will violate the NAAQS.

II. EPA acted contrary to law by only considering the change in emissions.

The NAAQS analysis for the permit must assess whether permitted emissions will comply with the relevant NAAQS. The analysis cannot focus simply on the *change* in emissions resulting from each individual modification, rather than whether the source as modified will violate the NAAQS. The plain language requirements of the Clean Air Act, EPA's regulations, and Colorado's SIP dictate that the object of the analysis cannot be just the change in emissions.

A. The source as a whole must be analyzed for NAAQS violations.

CDPHE improperly relied upon only the change in permitted emissions from the project, not the emissions from the entire source, when it initially concluded that modeling was not required for the modifications. Response to Comments at 9, 37 [JA__, __]; *see, e.g.*, Proposed TRD at 82–84 (1.28

Miscellaneous Process Vent); 93–94 (1.29 Upgrade Main East Plant Flare); 105–06 (1.33 Rail Rack Liquefied Petroleum Gas (LPG) Loading); 117–18 (1.36 Rail Rack Flare RSR Project); 120–21 (1.38 Revise Truck Rack VCU Emission Calculation Methodology) [JA__–__, __–__, __–__, __–__, __–__, __–__). CDPHE claimed that "the first step of the modeling process is to model the project, not the entire facility." *See, e.g.*, Response to Comments at 37 [JA__]. This statement is false. A NAAQS analysis must be based on emissions from the source, not a change in emissions.

Despite the modeled NAAQS violations, EPA agreed that the question is not whether the source causes or contributes to NAAQS violations, but is instead "whether the emission changes associated with the specific proposed project have a significant impact on air quality concentrations." Order at 57 [JA__].

EPA's position is that, for modeling purposes, emissions associated with a modification at an existing source would be determined by comparing the change in permitted emissions before and after the modification, since modeling is done on allowable or permitted emissions. Existing, allowable emissions are not part of the modification, thus, according to EPA's position here, they would not be considered for the first stage of the modeling analysis.

Therefore, it was appropriate to look at the change in permitted emissions to determine if modeling would be required.

However, Colorado's SIP mandates that CDPHE must determine that "[t]he proposed source or activity will not cause an exceedance of any National Ambient Air Quality Standards" and "will meet any applicable ambient air quality standards." Regulation 3, Part B, III.D.1.c–d. The regulations say nothing about the "change in emissions." Similarly, 40 C.F.R. Part 51, App. W, Section 9.2.3.a.i, which CPDHE cited to justify modeling the change in emissions from an emission unit rather than the facility, Response to Comments at 9 [JA__], does not say that only the change in emissions from a modification should be modeled. Rather, Appendix W describes the first stage of the modeling analysis as "a single-source impact analysis, since this stage involves considering only the impact of the new or modifying source." 40 C.F.R. Pt. 51, App. W § 9.2.3.a.i (emphases added).

Appendix W focuses exclusively on the term "the source," id. § 9.2.3.c., which in this case is the Suncor refinery; it does not mention individual projects, emissions units, or emissions points. The goal of this first step is to determine "the potential of a proposed new or modifying **source** to cause or contribute to a NAAQS . . . violation," *id*. (emphasis added), not whether an individual modification will contribute to a NAAQS violation. The second step,

meanwhile, is a cumulative impacts analysis that models nearby sources and other sources—for example, natural, minor, and distant major sources. *Id*. § 9.2.3.a.ii; *see also id*. § 9.2.3.d.

The change in emissions has nothing to do with whether a source will cause or contribute to a violation of the NAAQS. People do not breath the change in emissions. They breath the emissions from the source. NAAQS are designed to protect people and so it is arbitrary to determine whether modeling is necessary based on the change in emissions.

B. EPA fails to justify analyzing the change in emissions alone.

EPA does not connect the use of change in emissions to the plain language requirements of the SIP and Title V regulations. The number for emissions that are permitted is not the number that EPA or CDPHE analyzed for NAAQS compliance. The emissions analyzed (the change in emissions) are not in the permit. EPA and CDPHE are not protecting the NAAQS by looking at the change alone.

Such an approach is contrary to law. *Overton Park, Inc.,* 401 U.S. at 413–14. It also fails to account for relevant factors the agency must consider in its decision. *State Farm,* 463 U.S. at 43.

EPA only relies on its prior Title V actions and guidance to justify this approach. Order at 57–59 [JA__–__]. EPA argues that it has relied on this approach for a long time. *Id*. at 58 [JA__].

The public, however, has not had the opportunity to challenge this approach directly, and a court has not condoned the approach. For example, the D.C. Circuit determined that EPA's promulgation of SIL guidance incorporating this approach was a non-final agency action and dismissed the appeal. *Sierra Club v. EPA*, 955 F.3d 56, 65 (D.C. Cir. 2020). Further, the Center is not challenging general practices pertaining to SILs—this case is premised on the use of SILs to improperly justify the approval of Suncor's Permit despite clear modeled violations of the NAAQS for NOx and SOx.

A large part of the problem is that CDPHE's approach of assessing the change in emissions that EPA has endorsed here assumes that before the modifications Suncor was not violating the NAAQS; i.e., that preexisting or "baseline" emissions do not result in a NAAQS violation. With a preexisting NAAQS violation (or background pollution that is very close to violating the NAAQS) modifications that further exacerbate those violations, even if they add a small amount of additional pollution burden, push ambient air quality into violation of the NAAQS, and thus cannot be approved.

EPA and CDPHE admit that modeling shows violations but rely on monitoring data to assume that baseline ambient air quality around Suncor means the additional pollution from the approved modifications will not, by themselves, cause a NAAQS violation. Order at 52, 59 n.84 [JA__, __].

However, inherently, a "monitor only measures air quality in its immediate vicinity." *Catawba County v. EPA*, 571 F.3d 20, 30 (D.C. Cir. 2009). On top of this, violations of the 1-hour NOx NAAQS can be highly localized. Reliance on the limited monitoring network provides no substantive evidence supporting the conclusion that NOx violations are not being caused by Suncor's modification. Thus, reliance on monitoring data, especially in the face of clear modeled violations, is arbitrary and not supported by the record.

Further, given multiple large sources of pollution in close proximity to Suncor—*see supra* Statement of the Case, Section II.B (discussing the host of polluters near Suncor—it is arbitrary to conclude that background levels of pollution are not high. Thus, EPA failed to consider an important aspect of the problem in approving a permit that allows violations of the NAAQS. Further, EPA was required to object if CDPHE failed to adequately justify the basis for permit terms, 40 C.F.R. § 70.7(a)(5).

CDPHE's approach of only considering the change in permitted emissions improperly disregards some, or even most, of the emissions of the

source, contrary to the plain language of Appendix W and Colorado regulations. While the change in emissions might be relevant to determining whether a modification should obtain a major or minor permit, it is not relevant to whether the source causes or contributes to a NAAQS violation. *See Good Fortune Shipping v. Comm'r of IRS*, 897 F.3d 256, 261 (D.C. Cir. 2018) (agency interpretation must be "rationally related to the goals of the statute" and reasonably explained (internal quotation marks omitted)).

III. The use of SILs to permit sources that violate the NAAQS is contrary to the plain language of applicable law.

A source cannot be permitted if it will violate the NAAQS. There is no qualifier in Colorado's SIP, the Clean Air Act, or EPA's regulations, that would only require CDPHE to deny a permit if the source's cause or contribution to a NAAQS violation is "significant."

A. The plain language of applicable law does not include a "significance" threshold.

The Permit does not comply with applicable requirement that CDPHE can only issue construction permits for modifications that will not cause or contribute to a violation of the NAAQS. 40 C.F.R. § 51.160(a)–(b); Regulation 3, Part B, III.D.1; Part C, III.C.12, V.B.1, X.D.5.d., X.A.1. Colorado's SIP mandates

that CDPHE must determine that "[t]he proposed source or activity will not cause an exceedance of any National Ambient Air Quality Standards" and "will meet any applicable ambient air quality standards." *Id*., Part B, III.D.1.c–d.

Nothing in applicable federal or state law indicates that a permitting authority ever has the power to approve a modification without considering the modification's potential impact on ambient air quality. *See* 42 U.S.C. § 7410(a)(2)(C); 40 C.F.R. § 51.160(a)–(b); C.R.S. § 25-7-114.5(7)(a)(III); Regulation 3, Part B, III.D.1 (containing no mention of an exemption from the required analysis of air quality impacts for modifications based on an anticipated emissions increase that is not generally deemed to be "significant").

The plain language of the statute—which does not contain the word significant—controls, regardless of whether the implementing agency has taken an alternative approach. *Chevron*, 467 U.S. at 842–843. Indeed, the D.C. Circuit Court of Appeals expressly rejected use of SILs to "automatically exempt sources with projected impacts below the SILs from having to make the demonstration" that a source will not cause or contribute to a NAAQS violation. *Sierra Club v. EPA*, 705 F.3d at 465 (vacating and remanding back to EPA a rule establishing a SIL for determining whether particular matter emissions violated NAAQS).

Where Congress did intend to utilize a significance threshold in the Clean Air Act, it did so explicitly. *See, e.g.*, 42 U.S.C. § 7410(a)(2)(D)(i)(I) (state implementation plan must prohibit emissions that will "contribute significantly to nonattainment in . . . any other State") (emphasis added); *id*. § 7426(a)(1)(B) (providing for notification of nearby states if a source is being constructed that "may significantly contribute" to violation of the NAAQS in such other state) (emphasis added); *id*. § 7511a(h)(2) (providing that an area may be treated as a rural transport area if its emission sources "do not make a significant contribution" to ozone concentrations in that area or any other area) (emphasis added); *see also id.* §§ 7506a(a), 7492(c)(1), 7547(a)(1), (4).

It is a well-established rule that "when the legislature uses certain language in one part of the statute and different language in another, the court assumes different meanings were intended." *Sosa v. Alvarez-Machain*, 542 U.S. 692, 711 n.9 (2004) (quoting 2A N. Singer, Statutes and Statutory Construction § 46:06, at 194 (6th rev. ed. 2000)); *see also Barnhart v. Sigmon Coal Co.,* 534 U.S. 438, 452-53 (2002) (internal quotations omitted).

As the Supreme Court stated in *EPA v. EME Homer City Generation, LP*, when analyzing NAAQS-related provisions of the Clean Air Act, "[w]e do not lightly assume that Congress has omitted from its adopted text requirements that it nonetheless intends to apply, and our reluctance is even greater when

Congress has shown elsewhere in the same statute that it knows how to make such a requirement manifest." 572 U.S. 489, 510 (2014) (quoting *Jama v. Immigration and Customs Enforcement*, 543 U.S. 335, 341 (2005)). After all, in a situation like the present, any emissions increase has the potential to cause or contribute to a NAAQS violation.

By effectively adding the word "significantly" to the language in Colorado's SIP, EPA illegally "add[s] words that are not in the statute." *Pub. Citizen v. Rubber Manufacturers Ass'n*, 533 F.3d 810, 816 (D.C. Cir. 2008).

B. The plain language leaves no room for EPA or CDPHE to interject a significance threshold.

EPA may wrongly claim that because the Colorado SIP does not say a source must show it has 'no impact' when a violation of the NAAQS is predicted or preexisting, and that CDPHE has discretion to adopt a significant threshold. There is, however, no room left in the plain language for CDPHE to use its "judgment" or "discretion" to determine when sources may interfere with the NAAQS. The language of the SIP is clear: There is no exception if the source only causes or contributes a little bit. Nor does the Colorado SIP say sources need only demonstrate a violation is unlikely.

EPA may attempt to inject ambiguity into Colorado's SIP, and the Clean Air Act requirements it must meet, by arguing that the SIP and the Act are ambiguous because neither define the terms "cause" or "contribute." But courts, including this Court, have previously rejected the argument from EPA that "Congress's failure to provide a statutory definition" created ambiguity, holding "[t]here is no such rule of law." *NRDC v. EPA*, 489 F.3d 1250, 1258 (D.C. Cir. 2007); *see also Center for Biological Diversity v. EPA*, 82 F.4th 959, 968 (10th Cir. 2023) (rejecting EPA's attempt to interject ambiguity in a Clean Air Act term where there was none).

Nor is there any ambiguity. To cause means "[t]o bring about or effect." Black's Law Dictionary (10th ed. 2014) (defining "cause" as a verb). But CDPHE's use of SILs illegally authorizes permitting authorities to approve new and modified sources that will "cause" violations. In an area that is close to the NAAQS already, a proposed new or modified source could comply with the SIL and still "be responsible for, be the reason for, or result in a violation" (as EPA may define "cause").

Nor is "contribute" ambiguous in the phrase "cause, or contribute to." In another provision using the same phrase, this Court has held "the term ['contribute'] has no inherent connotation as to the magnitude or importance of the relevant 'share' in the effect; certainly it does not incorporate any

'significance' requirement." *Bluewater Network v. EPA*, 370 F.3d 1, 13 (D.C. Cir. 2004) (citations omitted). In this context, "contribute" means simply "to have a share in any act or effect" or "to have a part or share in producing." *Id*. 13 (quoting Webster's Third New International Dictionary 496 (1993) and 3 Oxford English Dictionary 849 (2d ed. 1989)).

Context and structure, as well as statutory purpose, discussed above, confirm the phrase's unambiguous breadth. Even if the phrase "cause, or contribute to," were susceptible of multiple meanings, a statute may still "foreclose an agency's preferred interpretation despite such textual ambiguities if its structure, legislative history, or purpose makes clear what its text leaves opaque." *Catawba Cty*., 571 F.3d 20 at 35; *NRDC*, 489 F.3d at 1373 ("the problem Congress sought to solve should be taken into account to determine whether Congress has foreclosed the agency's interpretation"); *Roberts v. Sea-Land Servs*., 566 U.S. 93, 101 (2012) ("It is a fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the overall statutory scheme.")

C. EPA cannot rely on other means of fixing the NAAQS violations outside of the permit proceeding.

EPA also premises its approval of CDPHE's use of SILs on the unlawful policy argument that CDPHE can issue the permit but "should" take other steps to analyze the NAAQS violations and do something to correct them through the SIP, rather than complying with the SIP's clear requirements for ensuring that Suncor's *permit* protect the NAAQS. In admitting that Petitioners' and CDPHE's modeling shows NAAQS violations, EPA stated:

> This does not mean that the modeled exceedances of the NAAQS can be overlooked. CDPHE should take appropriate steps here to investigate whether there is a NAAQS violation and, if substantiated, should correct this violation through the State Implementation Plan (SIP) or other means.

Order at 59 n.84 [JA__].

But the D.C. Circuit already rejected this approach. *See Sierra Club*, 705 F.3d at 465 ("relying on permitting authorities to address violations, rather than to prevent violations by requiring demonstration that a proposed source or modification will not cause a violation, conflicts with [the Act]'s statutory command."). There already is a clear SIP requirement of rejecting permits that result in NAAQS violations.

Further, even with the best SIP for existing sources, it comes down to effective implementation of the SIP requirements. The SIP does not need to be

rewritten to address this specific problem: CDPHE must ensure proposed new sources and modification projects will not cause a violation of the NAAQS at the permitting stage, as it is presently required to under the SIP.

D. SILs cannot be used to override clear record evidence of NAAQS violations.

Even if SILs were acceptable under the law, which they are not, they are not meant to be used to override all other persuasive evidence in the name of approving a permit. *See Sierra Club*, 705 F.3d at 463–64 (remanding SILs promulgated by EPA, after EPA conceded its mistake, because the SILs automatically exempted a proposed source). Instead, the SILs are meant to serve as a tool indicating whether a source's pollution may threaten the NAAQS. Reliance on SILs alone in the face of clear record, undisputed evidence is arbitrary.

EPA's above-quoted statements regarding the need for CDPHE to conduct an additional NAAQS analysis[12] amount to a concession that further analysis of the NAAQS violation is needed, such that the current record is deficient and EPA failed to consider an important aspect of the problem. *See*

[12] "This does not mean that the modeled exceedances of the NAAQS can be overlooked. CDPHE should take appropriate steps here to investigate whether there is a NAAQS violation." Order at 59 n.84 [JA__].

also Order at 60 [JA__] ("Of course, as with other considerations involving an individual project's anticipated impact on the NAAQS, determining whether it is appropriate for a permitting authority apply the SILs in determining whether a modification will cause a violation of the NAAQS involves a fact-specific analysis.") Such additional analysis is absent from the record.

Indeed, EPA has already determined that CDPHE's refusal to model based on SILs was unjustified, and the permit record does not adequately support a conclusion that the modifications do not violate the NAAQS. EPA determined in its recommendations that "the permit record provided for some of these actions does not appear to sufficiently demonstrate that these projects will meet applicable ambient air quality standards." EPA, *EPA Objection to Suncor Energy, Inc. Plant 2 Title V Operating Permit*, Enclosure B, at 2 (Mar. 25, 2022) [JA__].

EPA explained that "it appears that in some instances the state rejected the use of modeling in assessing permitting actions without sufficient justification." *Id*. at 3. EPA concluded that:

> A reliance on emissions thresholds [(SILs)] to reject the use of modeling could be inappropriate and use of an emissions threshold to reach the conclusion that adverse impacts will not occur does not necessarily provide a record that demonstrates that the permitting action will not cause a NAAQS exceedance.

Id.

EPA made these statements in its objection to the first draft of the Title V permit for Suncor, but in the Order declined to apply that reasoning to CDPHE's use of SILs. There is no such additional analysis in the record. The grounds upon which the agency acted must be clearly disclosed in, and sustained by, the record. *State Farm,* 463 U.S. at 43.

IV. EPA's approval of CDPHE's use of emissions rates instead of actual SILs was arbitrary.

Even if the use of SILs was not contrary to law, CDPHE did not actually rely upon SILs to justify its decision to approve the modifications, despite modeling showing NAAQS violations. Instead, CDPHE, and EPA condoned, the use of pollution emissions rates. These emissions rates that CDPHE relied on to justify approval of the modifications, which it considered to be SILs, are not actually SILs. The emissions thresholds, which take the form of 0.46 lbs/hr for both NOx and SOx, *see* Order at 59 [JA__], do not amount to "impact" levels.

That is because emissions rates are not equivalent to ambient concentrations, in units of parts per billion, which is the form the NAAQS take. EPA's SILs, while problematic, at least take the form of a concentration-based thresholds to enable an apples-to-apples comparison. *See* EPA, *Guidance*

Concerning the Implementation of the 1-hr SO_2 NAAQS for the Prevention of Significant Deterioration Program, at 5 (Aug. 23, 2010) [JA__].

An emissions rate is a faulty proxy for ambient concentration. There are several additional variables needed to translate an emissions rate into an ambient concentration. As EPA's Appendix W recognizes, topographic and meteorological data, atmospheric processes, the height at which the pollution is released, and the flow of air and pollution around structures are examples of factors, beyond an emissions rate alone, that influence how pollution from a source will affect ambient concentrations. *See generally* 40 C.F.R. Part 51 App. W.

The emissions rates EPA condoned fail to capture the "impact" of Suncor's permitted emissions on ambient air quality. Thus, EPA's acceptance of this approach was arbitrary. *State Farm*, 463 U.S. at 43.

Take watering a tomato plant with a hose, by way of analogy. The same amount of water can flow out of the hose over time with a very different impact on the plant, depending on variables like the size and shape of the nozzle, or the amount the water is dispersed. A direct spray of water from the nozzle can harm the plant, whereas a mist will not cause damage. Whether the plant gets water will be affected by whether there is a fence in between

the nozzle of the hose and the plant. Several other factors must be accounted for to understand how the flow of water is impacting the plant.

That is why EPA's SILs, while problematic, at least take the form of a concentration-based threshold. *See* EPA, *Guidance Concerning the Implementation of the 1-hr SO_2 NAAQS for the Prevention of Significant Deterioration Program*, at 5 (Aug. 23, 2010) [JA__] (setting an interim SIL for SO_2 of 3 ppb, a concentration-based threshold). To justify the permitting of sources based on a comparison of to the SILs, a permitting authority must at least determine the impact of the source's emissions on ambient concentrations when relying on EPA's SILs. EPA has not approved of SILs that take the form of emissions rates, rather than ambient concentration thresholds.

For this reason, there is no record evidence that the emissions rates CDPHE applied to justify its approval of the Permit translates, in this specific context, into a non-consequential impact on the NAAQS. *Olenhouse*, 42 F.3d at 1575 ("If the agency has failed to provide a reasoned explanation for its action, or if limitations in the administrative record make it impossible to conclude the action was the product of reasoned decision making . . . it may not simply affirm."). The record, however, does contain undisputed evidence

of modeled violations of the NAAQS resulting from Suncor and the Permit underlying this case.

CONCLUSION

For the above-stated reasons, the Court should (1) vacate EPA's denial of Objections 5 and 6 in the Petition, and (2) remand the Order for EPA to object to the Permit on the basis that it does not adequately protect the NAAQS for nitrogen oxides and sulfur oxides.

ORAL ARGUMENT STATEMENT

The Center believes that oral argument would be useful in this case because it involves complex Clean Air Act issues and issues of first impression.

Dated: March 18, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on March 18, 2024, I electronically filed the foregoing PETITIONER'S PRELIMINARY OPENING BRIEF with the Clerk of the Court using the CM/ECF system, which will send notification of such filing to all Counsel of Record.

CERTIFICATE OF DIGITAL SUBMISSION

I hereby certify that with respect to the foregoing:

(1) All required privacy redactions have been made per 10th Cir. R. 25.5.

(2) If required to file additional hard copies, that the ECF submission is an exact copy of those documents;

(3) The digital submissions have been scanned for viruses with the most recent version of a commercial virus scanning program, Windows Defender, and according to the program are free of viruses.

CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMIT

This document complies with the type-volume limitation and word limit of Fed. R. App. P. 32(g) because, excluding the parts of the document exempted by Fed. R. App. P. 32(f), this document contains 12,943 words. Furthermore, this document complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6) because this document has been prepared in a proportionally spaced typeface using the 2016 version of Microsoft Word in 14-point Cambria font.

Dated: March 18, 2024

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BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Petition Nos. VIII-2022-13 & VIII-2022-14

In the Matter of

Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East)

Permit No. 95OPAD108

Issued by the Colorado Department of Public Health and Environment

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ORDER GRANTING IN PART AND DENYING IN PART PETITIONS FOR OBJECTION TO A TITLE V OPERATING PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received two petitions dated October 11, 2022 (collectively the Petitions) pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The first petition (the Earthjustice Petition) was submitted by counsel from Earthjustice on behalf of Elyria and Swansea Neighborhood Association, Cultivando, Colorado Latino Forum, GreenLatinos, Center for Biological Diversity, and Sierra Club (the Petitioners). The second petition (the 350 Colorado Petition) was submitted by 350 Colorado (the Petitioner). Both Petitions request that the EPA Administrator object to operating permit No. 95OPAD108 (the Permit) issued by the Colorado Department of Public Health and Environment (CDPHE) to the Suncor Energy (U.S.A.), Inc. Commerce City Refinery, Plant 2 (East) (Suncor Plant 2 or Suncor East Plant) in Adams County, Colorado. The operating permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and 5 Code of Colorado Regulations (CCR) 1001-5, Part C. *See also* 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also known as a title V permit or part 70 permit.

Based on a review of the Petitions and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained in Sections IV and V of this Order, EPA grants in part and denies in part the Petitions requesting that the EPA Administrator object to the Permit. Specifically, EPA grants all or part of Claims 1, 3, 6, 7, 8, 11, 12, and 14 of the Earthjustice Petition and denies the rest of the claims.

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

Section 502(d)(1) of the CAA, 42 U.S.C. § 766la(d)(1), requires each state to develop and submit to EPA an operating permit program to meet the requirements of title V of the CAA and EPA's implementing regulations at 40 C.F.R. part 70. The state of Colorado submitted a title V program governing the issuance of operating permits in 1993. EPA granted interim approval of Colorado's title V operating permit program in January 1995 and full approval in August 2000. *See* 60 Fed. Reg. 4563 (January 24, 1995) (interim approval); 61 Fed. Reg. 56368 (October 31, 1996) (revising interim approval); 65 Fed. Reg. 49919 (August 16, 2000) (full approval). This program is codified in 5 CCR 1001-5, Part C.

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. 42 U.S.C. §§ 7661a(a), 7661b, 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting, and other requirements to assure compliance with applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* 42 U.S.C. § 7661c(c). One purpose of the title V program is to "enable the source, States, EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements." 57 Fed. Reg. at 32251. Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

B. Review of Issues in a Petition

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V programs. Under CAA § 505(a) and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states are required to submit each proposed title V operating permit to EPA for review. 42 U.S.C. § 7661d(a). Upon receipt of a proposed permit, EPA has 45 days to object to final issuance of the proposed permit if EPA determines that the proposed permit is not in compliance with applicable requirements under the Act. 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of EPA's 45-day review period, petition the Administrator to object to the permit. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue 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 part 70. 40 C.F.R. § 70.12(a)(2). Any

arguments or claims the petitioner wishes EPA to consider in support of each issue raised must generally be contained within the body of the petition.[1] *Id.*

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also* 40 C.F.R. § 70.12(a)(2)(v).

In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).[2] Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to EPA.[3] The petitioner's demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 505(b)(2) contains both a "discretionary component," under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty on the Administrator's part to object where such a demonstration is made. *Sierra Club v. Johnson*, 541 F.3d at 1265–66 ("[I]t is undeniable [that CAA § 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements."); *NYPIRG*, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that § 505(b)(2) "clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object *if* such a demonstration is made" (emphasis added)).[4] When courts have reviewed EPA's interpretation of the ambiguous term "demonstrates" and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. *See, e.g.*, *MacClarence*, 596 F.3d at 1130–31.[5] Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to EPA's proposed petitions rule. *See* 81 Fed. Reg. 57822, 57829–31 (August 24, 2016); *see also In the Matter of Consolidated Environmental Management, Inc., Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (*Nucor II Order*).

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[1] If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id*.

[2] *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

[3] *WildEarth Guardians v. EPA*, 728 F.3d 1075, 1081–82 (10th Cir. 2013); *MacClarence v. EPA*, 596 F.3d 1123, 1130–33 (9th Cir. 2010); *Sierra Club v. EPA*, 557 F.3d 401, 405–07 (6th Cir. 2009); *Sierra Club v. Johnson*, 541 F.3d 1257, 1266–67 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677–78 (7th Cir. 2008); *cf. NYPIRG*, 321 F.3d at 333 n.11.

[4] *See also Sierra Club v. Johnson*, 541 F.3d at 1265 ("Congress's use of the word 'shall' . . . plainly mandates an objection *whenever* a petitioner demonstrates noncompliance." (emphasis added)).

[5] *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

EPA considers a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether a petitioner has provided the relevant analyses and citations to support its claims. For each claim, the petitioner must identify (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 part 70, that is not met; and (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 part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, EPA is left to work out the basis for the petitioner's objection, contrary to Congress's express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 ("[T]he Administrator's requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and persuasive.").[6] Relatedly, EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g.*, *In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (January 15, 2013).[7] Also, the failure to address a key element of a particular issue presents further grounds for EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g.*, *In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014).[8]

Another factor EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; *see Voigt v. EPA*, 46 F.4th 895, 901–02 (8th Cir. 2022); *MacClarence*, 596 F.3d at 1132–33.[9] This includes a requirement that petitioners address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi). Specifically, the petition must identify where the permitting authority responded to the public comment and explain how the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment. *Id*.

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[6] *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (September 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); *In the Matter of Portland Generating Station*, Order on Petition at 7 (June 20, 2007) (*Portland Generating Station Order*).

[7] *See also Portland Generating Station Order* at 7 ("[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement]."); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (April 20, 2007); *In the Matter of Georgia Power Company*, Order on Petitions at 9–13 (January 8, 2007) (*Georgia Power Plants Order*); *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004–10 at 12, 24 (March 15, 2005).

[8] *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); *Georgia Power Plants Order* at 10.

[9] *See also, e.g.*, *Finger Lakes Zero Waste Coalition v. EPA*, 734 Fed. App'x *11, *15 (2d Cir. 2018) (summary order); *In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (December 14, 2012) (denying a title V petition issue where petitioners did not respond to the state's explanation in response to comments or explain why the state erred or why the permit was deficient); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state's response to comments or provide a particularized rationale for why the state erred or the permit was deficient); *Georgia Power Plants Order* at 9–13 (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

The information that EPA considers in determining whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 40 C.F.R. § 70.13. The administrative record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement required by § 70.7(a)(5) (sometimes referred to as the 'statement of basis'); any comments the permitting authority received during the public participation process on the draft permit; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; and all materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority made available to the public according to § 70.7(h)(2). *Id.* If a final permit and a statement of basis for the final permit are available during the agency's review of a petition on a proposed permit, those documents may also be considered when determining whether to grant or deny the petition. *Id*.

If EPA grants a title V petition, a permitting authority may address EPA's objection by, among other things, providing EPA with a revised permit. 42 U.S.C. § 7661d(b)(3), (c); 40 C.F.R. § 70.8(d); *see id*. § 70.7(g)(4); 70.8(c)(4); *see generally* 81 Fed. Reg. 57822, 57842 (August 24, 2016) (describing post-petition procedures); *Nucor II Order* at 14–15 (same). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. For example, when EPA has issued a title V objection on the ground that the permit record does not adequately support the permitting decision, it may be acceptable for the permitting authority to respond only by providing an additional rationale to support its permitting decision.

When the permitting authority revises a permit or permit record in order to resolve an EPA objection, it must go through the appropriate procedures for that revision. The permitting authority should determine whether its response is a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the modification is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, and regardless of the procedures used to make such revision, the permitting authority's response is generally treated as a new proposed permit for purposes of CAA § 505(b) and 40 C.F.R. § 70.8(c) and (d). *See Nucor II Order* at 14. As such, it would be subject to EPA's 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity for the public to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if EPA does not object during its 45-day review period.

When a permitting authority responds to an EPA objection, it may choose to do so by modifying the permit terms or conditions or the permit record with respect to the specific deficiencies that EPA identified; permitting authorities need not address elements of the permit or the permit

record that are unrelated to EPA's objection. As described in various title V petition orders, the scope of EPA's review (and accordingly, the appropriate scope of a petition) on such a response would be limited to the specific permit terms or conditions or elements of the permit record modified in that permit action. *See In The Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 38–40 (September 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (December 19, 2007).

C. New Source Review

The major New Source Review (NSR) program encompasses two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major modifications of existing major stationary sources for pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and for other pollutants regulated under the CAA. 42 U.S.C. §§ 7470–7479. Part D of title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. 42 U.S.C. §§ 7501–7515. EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains EPA's federal PSD program, which applies in areas without a SIP-approved PSD program. EPA's regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. EPA commonly refers to the latter program as the "minor NSR" program. States must also develop minor NSR programs to, along with the major source programs, attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R. §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

EPA has approved Colorado's PSD, NNSR, and minor NSR programs as part of its SIP. *See* 40 C.F.R. § 52.320(c) (identifying EPA-approved regulations in the Colorado SIP). Colorado's major and minor NSR provisions, as incorporated into Colorado's EPA-approved SIP, are contained in portions of 5 CCR 1001-5, Parts B and D.

III. BACKGROUND

A. The Suncor Plant 2 Facility

Suncor Energy (U.S.A.), Inc. owns and operates the Commerce City Refinery, located north of Denver in Adams County, Colorado. The refinery consists of "Plant 2" or the "East Plant" as

well as "Plants 1 and 3" or the "West Plant." The East and West Plants constitute a single "major source" for title V purposes but operate under separate title V permits. The current Petitions specifically challenge the Plant 2 (East Plant) permit. The Suncor Plant 2 facility is a petroleum refinery that produces various products, including gasoline, diesel fuel, and asphalt. The facility emits various pollutants from numerous emission units, including carbon monoxide (CO), particulate matter (PM), nitrous oxides (NO_x), sulfur dioxide (SO_2), volatile organic compounds (VOC), hydrogen sulfide (H_2S), among other pollutants. In addition to title V, the facility is subject to various other CAA requirements, including New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), preconstruction permitting requirements, and other SIP requirements.

EPA conducted an analysis using EPA's EJScreen[10] to assess key demographic and environmental indicators within a five-kilometer radius of the Suncor facility. This analysis showed a total population of approximately 69,570 residents within a five-kilometer radius of the facility, of which approximately 72 percent are people of color and 37 percent are low income. In addition, EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indices for the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of the State of Colorado.

EJ Index	Percentile in State
Particulate Matter	96
Ozone	89
Diesel Particulate Matter	95
Air Toxics Cancer Risk	97
Air Toxics Respiratory Hazard	97
Toxic Releases to Air	94
Traffic Proximity	87
Lead Paint	92
Superfund Proximity	96
RMP Facility Proximity	96
Hazardous Waste Proximity	96
Underground Storage Tanks	89
Wastewater Discharge	91

B. Permitting History

Suncor first obtained a title V permit for the Plant 2 facility on October 1, 2006, which was last revised on June 5, 2009. On October 1, 2010, Suncor applied for a renewal title V permit, followed by various additional permit applications in the years that followed. On February 1, 2021, CDPHE published notice of a draft renewal permit, subject to a public comment period

[10] EJScreen is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See https://www.epa.gov/ejscreen/what-ejscreen*.

and a public hearing. At the public hearing, the public comment period was extended until May 11, 2021. On February 9, 2022, CDPHE submitted a proposed permit (the Initial Proposed Permit), along with its responses to public comments (contained in several documents) to EPA for its 45-day review. During this review period, on March 25, 2022, EPA objected to the Initial Proposed Permit. EPA Objection to Suncor Energy, Inc. Plant 2 Title V Operating Permit (March 25, 2022) (March 2022 Objection Letter).[11] In response to EPA's objection, CDPHE revised the renewal permit and provided the public an opportunity to review these revisions from May 25, 2022 until June 8, 2022. Then, on June 22, 2022, CDPHE submitted to EPA a revised version of the proposed permit (the Revised Proposed Permit), along with a response to comments on this revision (the Revised Permit RTC). EPA's 45-day review of the Revised Proposed Permit ended on August 8, 2022, during which time EPA did not object. CDPHE issued a final title V renewal permit on September 1, 2022 (the Final Permit). CDPHE also issued a final version of the Technical Review Document (TRD) that had accompanied earlier versions of the permit.

C. Timeliness of Petitions

Pursuant to the CAA, if EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. 42 U.S.C § 7661d(b)(2). Because EPA objected to the Initial Proposed Permit, there was no opportunity for the public to petition EPA to object to that particular version of the permit. *See id*.; 40 C.F.R. § 70.8(d).[12] Instead, the public petition opportunity was delayed until after the state transmitted its second Revised Proposed Permit to EPA in order to resolve EPA's objection. *See, e.g.*, 40 C.F.R. § 70.8(c)(4). Specifically, EPA's 45-day review period of the Revised Proposed Permit expired on August 8, 2022. EPA's website indicated that any petition seeking EPA's objection to the Revised Proposed Permit was due on or before October 11, 2022. Both Petitions were dated and received on October 11, 2022, and, therefore, EPA finds that the Petitioners timely filed the Petitions. The petition opportunity associated with the Revised Proposed Permit includes all issues that could have been raised on the Initial Proposed Permit (including issues to which EPA did not object), as well as changes reflected in the Revised Proposed Permit.

Section IV of this Order responds to the Earthjustice Petition, and Section V responds to the 350 Colorado Petition.

IV. DETERMINATIONS ON CLAIMS IN THE EARTHJUSTICE PETITION

Section III of the Earthjustice Petition includes the Petitioners' "Grounds for Objection." Within this section, the Petitioners specifically identify 14 claims or "Objections" requesting EPA's

[11] This March 25, 2022, objection was issued under authority delegated by the EPA Administrator to EPA Region 8 to object during EPA's 45-day review period. The objection letter is available at *https://www.epa.gov/system/files/documents/2022-03/epa-suncor-plant-2-title-v-objection-letter-2022-03-25.pdf*.

[12] *See also* Letter from Cynthia J. Kaleri, EPA Region 6, to Gabriel Clark-Leach, Environmental Integrity Project, Re: Petition for Objection for Intercontinental Terminals Company (ITC) Permit O3785 (September 8, 2022), available at *https://www.epa.gov/system/files/documents/2022-09/2022%20ITC%20Petition%20Response.pdf*.

objection to the Permit, each of which is addressed in the pages that follow.[13] EPA's discussion of the Petitioners' claims generally follows the organization in the Petition, with Claims 1–4 addressing compliance assurance issues, Claims 5–9 addressing NSR permitting issues, Claims 10–12 addressing Compliance Assurance Monitoring (CAM) issues, and Claims 13–14 addressing miscellaneous issues.

Additionally, Section IV of the Earthjustice Petition enumerates two "Additional Concerns" for which the Petitioners do not request EPA's objection to the Permit, but instead request other actions by EPA. *See* Earthjustice Petition at 89–93. Specifically, the Petitioners request that EPA remove various exemptions related to emissions during startups, shutdowns, and malfunctions (SSM) from a Consent Decree (CD) finalized in 2005. Additionally, the Petitioners request that EPA coordinate with CDPHE to combine the two title V permits that historically have been separately issued to the Suncor East Plant (Plant 2) and West Plant (Plants 1 and 3) into one comprehensive title V permit. EPA's response to the Earthjustice Petition requesting EPA's objection under CAA § 505(b)(2) need not resolve these additional concerns. EPA notes that title V regulations do not prohibit a source from operating with multiple title V permits for operations covering its entire facility. EPA will work with CDPHE to determine whether there are benefits to be achieved by combining the two Suncor title V permits.

A. Compliance Assurance Issues (Claims 1–4)

The first four claims in the Earthjustice Petition all allege that the Permit does not contain conditions sufficient to assure Suncor's compliance with all applicable requirements, pursuant to CAA § 504(a) and (c).[14]

Claim 1: The Petitioners Claim That "EPA Must Object to the Division's Issuance of the Proposed East Plant Permit Because the Plant's Compliance History Demonstrates That It Has Not Been Meeting Applicable Requirements, and the Division Fails to Provide a Reasoned Explanation for How the Proposed Permit Assures that Suncor Nonetheless Will Comply with Applicable Requirements Throughout the Permit Term."

Petitioners' Claim: Claim 1 includes several related arguments involving the facility's alleged historical and current inability to comply with its Permit. To address this pattern of alleged noncompliance, the Petitioners first assert that the Permit must include additional enforceable measures to assure compliance, under the authority of CAA § 504(a), 40 C.F.R. § 70.6(a)(1), and 5 CCR 1001-5, Part C, V.C.1. Second, the Petitioners assert that the Permit must include a compliance schedule to bring the source back in to compliance. Relatedly, the Petitioners claim that CDPHE failed to provide a reasoned explanation for why the Permit will assure compliance with all requirements. *See* Earthjustice Petition at 17–27.

[13] The Petitioners' 14 enumerated claims are grouped together slightly differently in an introductory section of the Earthjustice Petition, which combines some of the claims into nine more general "grounds for objection." *See* Earthjustice Petition at 14–15.

[14] Claim 13 alleges the Permit does not satisfy related regulatory requirements. However, because Claim 13 is contained within a different section of the Petition, it is addressed in turn below.

As a factual backdrop to Claim 1, the Petitioners describe Suncor's "chronic noncompliance" with various requirements. *Id*. at 20; *see id*. at 7–11. Specifically, the Petitioners point to numerous exceedances of CO and opacity limits on the fluid catalytic cracking unit (FCCU) Regenerator vent (occuring in at least 18 out of the last 26 quarterly reports), H_2S emission limits at the flare header (in at least 16 of the last 26 quarters), and other deviations in the main flare (in 12 of the 13 latest semiannual deviation reports). *Id*. at 7–8. The Petitioners also reference an EPA report indicating that Suncor reports more frequent incidents than other comparable refineries. *Id*. at 9.

The Petitioners contend that Suncor's compliance history has not improved since the public comment period in early 2021 and that "incidents continue with the same frequency." *Id*. at 9 (citing Earthjustice Petition Ex. 10). The Petitioners assert this trend continues notwithstanding 14 enforcement activities initiated by CDPHE and/or EPA since 2011. *See id*. at 9–11 (citing Ex. 9 & Ex. 12, among other things). Notably, despite upgrades to the FCCU to install an automated shutdown system (which the Petitioners suggest occurred in April 2021), the Petitioners allege that CO and opacity exceedances have continued at the FCCU since April 2021. *Id*. at 9 (citing Ex. 9). The Petitioners thus conclude: "The automated shutdown system, while necessary, is therefore insufficient to address Suncor's problem of excess emissions: more action is essential." *Id*. at 10.

The Petitioners argue that CDPHE does not, and cannot, dispute that Suncor's East Plant has a long history of CAA noncompliance, and that the facility will continue violating CAA requirements in the future. *Id*. at 19 (citing Earthjustice Petition Ex. 18, RTC [15] at 5, 6). The Petitioners claim that CDPHE provides no support for the state's position that it "fully expects that Suncor can and will comply with emission limitations." *Id*. at 21 (quoting RTC at 5). To the contrary, CDPHE acknowledges "Suncor does have periods of non-compliance with emission limitations" and "the number of violations is not acceptable." *Id*. at 21 (quoting RTC at 6).

The Petitioners conclude that this chronic noncompliance demonstrates that additional permit terms are necessary to assure compliance with all applicable requirements. *Id*. at 20. The Petitioners discuss two bases for creating such additional permit terms.

First, the Petitioners state that title V permits must include enforceable conditions sufficient to "assure compliance" with all applicable CAA requirements. *Id*. at 18–19 (citing 42 U.S.C. §§ 7661a(b)(5)(A), 7661c(a); 40 C.F.R. § 70.6(a)(1); 5 CCR 1001-5, Part C, V.C.1).[16] The Petitioners argue that the title V permit does not satisfy this requirement to "assure compliance" merely by requiring a source to *document* violations with monitoring, recordkeeping, and reporting. *Id*. at 18 (citing 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1)). Rather, the Petitioners contend that title V permits must additionally ensure that a source *avoids* violations by imposing enforceable "[e]mission limitations and standards, including those operational requirements and

[15] As noted previously, CDPHE prepared separate documents responding to comments submitted by different entities or individuals. Unless otherwise noted, references to CDPHE's "RTC" throughout the portions of EPA's Order addressing the Earthjustice Petition refer to CDPHE's responses to the Earthjustice comments, included as Earthjustice Petition Ex. 18. Additionally, some portions of the Earthjustice Petition refer to CDPHE's response to comments submitted by the Center for Biological Diversity, included as Earthjustice Petition Ex. 19. When necessary to avoid confusion, this Order refers to these as the "Ex. 18 RTC" and "Ex. 19 RTC."

[16] The Petitioner also cites C.R.S. § 25-7-114.5(7)(a), a Colorado state statute.

limitations that assure compliance with all applicable requirements at the time of permit issuance." *Id*. at 18–19 (quoting 40 C.F.R. § 70.6(a)(1); citing 42 U.S.C. § 7661c(a); 5 CCR 1001-5, Part C, V.C.1); *see also id*. at 20–21. According to the Petitioners, "These compliance assurance conditions can (and must) be created for the first time in a facility's Title V permit." *Id*. at 19. The Petitioners challenge CDHPE's statement that it is obligated only "to incorporate all applicable requirements for a facility into a permit and to improve compliance by requiring recordkeeping, monitoring, reporting and annual compliance certifications." *Id*. at 20 (quoting RTC at 5). The Petitioners claim that "measures that merely 'improve compliance' are not equivalent to measures that 'assure compliance.'" *Id*. In sum, the Petitioners contend:

> EPA must reject the Division's attempt to water down Congress' unambiguous intent that Title V bring all facilities into compliance and keep them in compliance; the Division cannot limit its statutory obligations to only imposing monitoring requirements that are sufficient to detect violations. While detecting violations is an important Title V component, it does not supplant the Division's responsibility to (i) evaluate what Suncor must do to achieve ongoing compliance, and (ii) include conditions in Suncor's renewal permit sufficient to assure that compliance.

Id. at 21.

Additionally, the Petitioners address CDPHE's commitment to resolve any issues with noncompliance through future enforcement actions. *Id*. at 19–20 (citing RTC at 4, 5). The Petitioner states that, "if enforcement is needed, Suncor presumably will *have already violated* applicable requirements." *Id*. at 20. Thus, the Petitioners claim that any enforcement actions—although important—are insufficient to satisfy the requirement that a title V permit must itself "assure compliance" with all applicable requirements. *Id*.

The Petitioners identify various measures that could be incorporated as additional enforceable permit terms. *See id*. at 23–28. These measures are based on recommendations in a third-party consultant's report, prepared in response to a recent enforcement action, designed "to prevent future violations of the site's environmental permit." *Id*. at 24 (quoting Earthjustice Petition Ex. 12 at 5). As discussed in more detail in the Earthjustice Petition, these measures include: developing a training simulator; digitizing key response procedures; digitalization to allow remote engagement with technical experts; requiring periodic Process Hazards Analysis; and imposing permit conditions to ensure the proper functioning of the automated shutdown system for the FCCU. *See id*. at 25–28. The Petitioners observe that CDPHE admitted that it "agrees that the voluntary measures may aid in minimizing or preventing excess emissions." *Id*. at 25 (quoting RTC at 79). However, the Petitioners note that CDPHE rejected each of these recommendations either because Suncor has not agreed to them, because they are "not an applicable requirement or monitoring for an applicable requirement," or because the types of measures in question are not typically included in title V permits. *Id*. at 24, 27 (quoting RTC at 81; citing RTC at 80). The Petitioners fault CDPHE's refusal to consider the suggestions presented in public comments, asserting that the state's response reflects a misunderstanding of the state's obligations under title V to include permit terms reflecting "whatever it takes to comply," as discussed previously. *Id*. at 24–25.

Second, along with permanent additions to Suncor's Permit, the Petitioners claim that the Permit should include a compliance schedule (with deadlines) outlining shorter-term changes that the facility must make to comply with applicable requirements. *Id*. at 19 (citing 42 U.S.C. § 7661(3), 7661c(a); 40 C.F.R. §§ 70.5(c)(8)(iii), 70.6(c)(3); 5 CCR 1001-5, Part C, III.C.9(c)).

The Petitioners observe that compliance schedules are required "for sources that are not anticipated to be in compliance at the time of permit issuance." *Id*. at 22 (quoting 5 CCR 1001-5, Part C, III.C.9(c); citing 40 C.F.R. § 70.5(c)(8)(iii)). The Petitioners contest CDPHE's apparent suggestion that this requirement only applies for sources that are in continuous non-compliance at the time of permit issuance. *Id*. at 22 (citing RTC at 5). The Petitioners argue that the requirement to include a compliance schedule "must be interpreted to encompass those sources that have been violating a requirement in the past and that are anticipated to continue violating the requirement during the next permit term, either intermittently or continuously." *Id*. The Petitioners assert that this "is the only interpretation that makes practical sense" because many applicable requirements are not monitored continuously and "[i]t would be absurd to restrict the applicability of Title V's remedial compliance schedule requirement to only circumstances where a permitting authority can be confident that a source will be in violation of an applicable requirement at precisely the time that the Title V permit is issued." *Id*. at 22–23.[17] Here, the Petitioner argues that the regularity of Suncor's alleged non-compliance—which the Petitioners describe as "chronic but intermittent"—warrants a compliance schedule. *Id*. at 23.

Additionally, the Petitioners claim that "all available evidence shows Suncor was not in compliance when the permit was issued to Suncor on September 1, 2022." For support, the Petitioners cite the facility's most recent semi-annual compliance report and its most recent quarterly excess emissions report, both of which purportedly show deviations or violations from the same units that are consistently out of compliance (including the FCCU and main flare). *Id*. (citing Earthjustice Petition Ex. 7 & Ex. 9).

In sum, the Petitioners argue that title V permits must include "a combination of new permit conditions establishing improved monitoring and operating practices and corrective action set forth in enforceable compliance schedules." *Id.* at 19. The Petitioners suggest the following framework for establishing such permit terms: "If the necessary corrective actions are short-term (such as installing a new control or monitor), such requirements may be suitable for inclusion in a remedial compliance schedule. If the necessary corrective actions are permanent, such as a new work practice, they should be included in Suncor's permit as enforceable permit conditions." *Id*. at 20. Again, the Petitioners assert that CDPHE did not provide any explanation for its conclusion that Suncor will comply with its permit without these additional requirements. *Id*. at 21.

EPA's Response: For the following reasons, EPA grants in part and denies in part the Petitioners' request for an objection on this claim.

[17] For additional support, the Petitioners note that annual compliance certifications must indicate noncompliance regardless of whether it is intermittent or continuous. *Id*. at 22 (citing 42 U.S.C. § 7414(a)(3)(D) and an EPA Region 6 letter from 1999).

EPA's response first addresses the Petitioners' claim that the Permit must contain additional enforceable requirements necessary to assure compliance with all applicable requirements, followed by the Petitioners' request for a compliance schedule.

Enforceable Requirements to Assure Compliance

The Petitioners have demonstrated that the record is unclear regarding whether additional permit terms are necessary to assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1); 5 CCR 1001-5, Part C, V.C.1.

As the Petitioners observe, CAA § 504(a) requires:

> Each permit issued under this subchapter shall include enforceable emission limitations and standards, a schedule of compliance, a requirement that the permittee submit to the permitting authority, no less often than every 6 months, the results of any required monitoring, *and such other conditions as are necessary to assure compliance with applicable requirements* of this chapter, including the requirements of the applicable implementation plan.

42 U.S.C. § 7661c(a) (emphasis added). EPA's part 70 regulations contain a similar requirement:

> Each permit issued under this part shall include the following elements: (1) Emissions limitations and standards, including those *operational requirements and limitations that assure compliance with all applicable requirements* at the time of permit issuance.

40 C.F.R. § 70.6(a)(1) (emphasis added); *see also* 40 C.F.R. § 71.6(a)(1). State permitting programs must contain similar requirements, and CDPHE's EPA-approved part 70 program rules include essentially the same text as EPA's regulations. 42 U.S.C. § 7661a(b)(5)(A); 5 CCR 1001-5, Part C, V.C.1. For ease of reference, the paragraphs that follow refer to these collective requirements as requirements under CAA § 504(a).

EPA historically has interpreted the statutory and regulatory references to "enforceable emission limitations and standards" and "operational requirements and limitations" in two ways. First, these provisions require that all title V permits generally include the limitations and standards established in the underlying applicable requirements themselves. *E.g.*, 56 Fed. Reg. 21712, 21736 (May 10, 1991). This remains an important function of title V permits. However, CAA § 504(a) and 40 C.F.R. § 70.6(a)(1) are not limited to this function. Instead, second, EPA has interpreted flexibility in CAA § 504(a)'s broad reference to "such other conditions as are necessary to assure compliance," and the similar regulatory text in § 70.6(a)(1), to *allow* for *other* standards or limitations that serve to assure compliance with the underlying applicable requirement. *Id*.[18] The Petitioners' suggested interpretation of CAA § 504(a) extends EPA's

[18] Specifically, EPA has interpreted the relevant language in CAA § 504(a) as follows: "Congress seemed to contemplate that for some types of applicable requirements, the requirements might not have to be incorporated wholesale into the permit; rather, 'conditions' that would assure compliance with those requirements might suffice."

more flexible interpretation to *require* (not just allow) states to include additional (not just different) limitations when necessary to assure compliance with an underlying standard. Subject to the qualifications discussed below, EPA generally agrees with the Petitioners that title V permits *can* be used to establish "such other conditions as are necessary to assure compliance with" underlying applicable requirements. ***The key is determining whether such additional measures are necessary.*** This requires examining this authority in CAA § 504(a) alongside the CAA's well-established compliance assurance requirements.[19] In summary, and as explained in the following paragraphs, EPA views the "such other conditions as are necessary" language of CAA § 504(a) to provide a backstop to impose additional permit requirements in extraordinary situations where traditional mechanisms—namely, supplemental monitoring and the enforcement process—prove insufficient to ensure that a source complies with all applicable requirements.

A particularly important title V compliance assurance mechanism involves the requirement under CAA § 504(c) to include adequate monitoring, recordkeeping, and reporting requirements. *See* 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a)(3), (c)(1). Under this authority, it is well established that title V permits may be used to create or supplement monitoring requirements when necessary to assure compliance with underlying applicable requirements that do not themselves contain sufficient monitoring provisions. *Sierra Club v. EPA*, 536 F.3d 673, 680 (D.C. Cir. 2008).[20] In this manner, supplemental monitoring has historically been viewed as the primary exception to the general rule that title V does not establish new requirements. *See, e.g.*, *In the Matter of Cargill, Inc. Blair Facility*, Order on Petition No. VII-2022-9 at 14, 20–22 (February 16, 2023) (*Cargill Blair Order*).

Notably, both monitoring requirements under CAA § 504(c) as well as other requirements under CAA § 504(a) implement the same core function of title V: to assure compliance with underlying applicable requirements of the CAA. Additionally, as EPA has explained, the precise label or form of such additional requirements—whether "monitoring" or something closer to an operating limitation—is less important than their function: to assure compliance with existing requirements. *See Cargill Blair Order* at 21–22.

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56 Fed. Reg. at 21736. Similarly, this language forms the basis for EPA's longstanding position that permitting authorities may "streamline" multiple applicable requirements by requiring compliance with only the most stringent standard or limitation, provided that such standard or limitation (and any monitoring associated with it) also assures compliance with the other applicable requirements that are streamlined into the more stringent requirements. *See* White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program, 17–18 (March 5, 1996). Note that EPA's White Paper Number 2 contains detailed guidance regarding the streamlining process, including the need to ensure that the permit clearly identifies any applicable requirements that are subsumed by the streamlined requirement. *See id*. at 6–20.

[19] Some of these other well-established compliance assurance requirements are specifically identified within CAA § 504(a) (*e.g.*, compliance schedules, semiannual monitoring reports), as well as within CAA § 504(c) (inspection, entry, monitoring, compliance certification, and reporting requirements). 42 U.S.C. § 7661c(a), (c). EPA does not interpret the presence of these specific examples within the statute to provide the exclusive means by which a permit may assure compliance with all applicable requirements, else these examples would render superfluous the clause "and such other conditions as are necessary." *Id*. § 7661c(a).

[20] EPA acknowledges that the agency, as well as federal courts, have historically focused on the monitoring-based authorities derived from CAA § 504(c) and have provided little guidance to permitting authorities regarding what, if any, additional requirements can or should be imposed under CAA § 504(a).

However, it is important to recognize that using the authority in CAA § 504(a) in the manner suggested by the Petitioners involves a slightly different compliance assurance function than monitoring under CAA § 504(c). Monitoring requirements imposed under CAA § 504(c) (along with the inspection, entry, compliance certification, and reporting requirements imposed under this statutory provision) assure compliance through requirements that are fundamentally designed to gather information to *determine whether* a source complies with all applicable requirements. By contrast, the types of operational requirements that the Petitioners request under CAA § 504(a) to assure compliance would function to more directly *guarantee* compliance (*i.e.*, to avoid or prevent noncompliance) with all applicable requirements. The Petitioners emphasize this distinction and suggest that "a Title V permit does not 'assure compliance' merely by *documenting violations* with monitoring, recordkeeping, and reporting" under CAA § 504(c). Earthjustice Petition at 18. Instead, the Petitioners contend that additional operational requirements and limitations under CAA § 504(a) must also be included in order to "aid in *avoiding violations*." *Id*.

As a general matter, to the extent the Petitioners assert that such additional measures—that is, measures beyond the information-gathering requirements imposed under CAA § 504(c)—must always be included in a title V permit in order to assure compliance, EPA does not agree. Both the statute and EPA's regulations expressly identify monitoring (and related information-gathering requirements) as a mechanism "to assure compliance" with underlying requirements. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(a)(3)(i)(A), (c)(3). Monitoring and related information-gathering requirements may provide the source with data on critical operating parameters, allowing the source to adjust its operations to ensure that it complies with permit limits. Or, in situations where monitoring and related information-gathering requirements reveal noncompliance, this should prompt a source to take corrective action, thereby avoiding similar noncompliance in the future. Finally, evidence obtained by monitoring and related information-gathering requirements may form the basis of enforcement actions that focus on bringing a source back into compliance and avoiding or preventing future noncompliance (as discussed further below). In all these situations, monitoring and related information-gathering requirements are the key element in determining and understanding—and, thus, assuring—compliance. Therefore, along with incorporating applicable requirements and following the other requirements explicitly required by the statute and regulations (*e.g.*, reporting and compliance certification requirements), monitoring under CAA § 504(c) will often be the only additional step necessary to assure compliance.

In summary, EPA agrees with the Petitioner that CAA § 504(a) provides the authority—and, in some cases, an obligation—for states to consider whether title V permit terms *beyond* monitoring, recordkeeping, and reporting are necessary to assure that a facility complies with all underlying applicable requirements of the CAA that are included in the permit. However, EPA views CAA § 504(a) as a backstop when the traditional compliance assurance requirements in CAA § 504(c) prove insufficient. Based on decades of experience implementing and overseeing the title V program, EPA expects that most compliance assurance questions will continue to be solved using monitoring under CAA § 504(c), and it should rarely be necessary to impose additional requirements, such as operational requirements, under CAA § 504(a).

Another prominent compliance assurance tool contemplated by the CAA involves the enforcement process. In general, it is important that any permitting decisions under CAA § 504(a) (and petition response under CAA § 505(b)(2)) do not conflict with or undermine related enforcement activities under CAA §§ 113 or 304. EPA's well-established position is that "once EPA has resolved a matter through enforcement resulting in a CD approved by a court, the Administrator will not determine that a demonstration of noncompliance with the Act has been made in the title V context." *In the Matter of W.E. Energies, Oak Creek Power Plant*, Order on Petition, Permit No. 241007690-P10 at 8 (June 12, 2009) (*Oak Creek Order*). As EPA explained in the *Oak Creek Order*:

> This approach is reasonable for several reasons, including: (1) it avoids conflicts between settlements of enforcement cases and responses to title V petitions (including potentially competing court proceedings); (2) it does not create disincentives for sources to agree to reasonable terms in settling enforcement matters; (3) it does not require EPA to revisit complex applicability issues in the short 60 day timeframe for EPA to respond to title V petitions; (4) it does not unfairly prejudice sources that settled enforcement actions in good faith; and (5) EPA should not be forced to re-litigate issues of compliance with the Act where EPA and the source have settled. Further, the public is afforded an opportunity to comment on CDs, see 28 C.F.R. § 50.7.

2009 *Oak Creek Order* at 8–9. EPA has applied similar reasoning to compliance-related issues subject to CDs that are the subject of ongoing enforcement, choosing "to defer to the resolution of the final steps of the settlement processes." *In the Matter of Wisconsin Public Service Corp., JP Pulliam Power Plant*, Order on Petition No. V-2012-01 at 11 (January 7, 2013) (quoting *In the Matter of Tennessee Valley Authority, Paradise Fossil Fuel Plant*, Order on Petition No. IV-2010-1 at 17 (May 2, 2011)). Once this enforcement process concludes (for example, resulting in a CD) it may be necessary to update the title V permit to include additional requirements, either by (i) incorporating requirements first established in a permanent title I permit, (ii) directly incorporating requirements from a CD into the title V permit, and/or (iii) including a compliance schedule in the title V permit. *See, e.g.*, *In the Matter of CITGO Refining and Chemicals Co., L.P., West Plant*, Order on Petition No. VI-2007-01 at 12–13 (May 28, 2009) (*CITGO Order*). Permit terms established in this manner should satisfy the requirement in CAA § 504(a) to assure compliance with the relevant applicable requirements.

EPA understands the Petitioner's suggestion that title V permits should contain sufficient measures to *avoid* noncompliance, such that enforcement actions are not necessary, instead of relying exclusively on the enforcement process after noncompliance has already occurred. *See* Earthjustice Petition at 20. However, in general, the permitting process is not as well-suited as the enforcement process to identify root causes of noncompliance and devise solutions to prevent future noncompliance. For example, the permitting and petition processes involve limited timelines (*e.g.*, 30-day public comment period, 45-day EPA review period, 60-day petition period, 60-day EPA response period) and therefore limited opportunities for all affected parties to investigate facts, evaluate, contest, and devise solutions to complex compliance issues. By contrast, the enforcement process available to EPA, states, and the public offers significantly more flexible timelines, allowing for more comprehensive fact-finding and engagement of all

relevant parties. Moreover, the enforcement process features mechanisms specifically designed to address and resolve the underlying cause of noncompliance, including administrative orders, orders on consent, and judicial orders, which may include settlements through a CD. These enforcement mechanisms may include requirements like additional injunctive relief if necessary to bring a source back into compliance (*e.g.*, adding extra compressor capacity to a flare gas recovery system). It is unrealistic to expect that the title V permitting process, with its tight timeframes, could effectively be used to achieve the same results prior to resolving—or at least attempting to resolve—these issues via enforcement.[21]

For the reasons stated above, EPA continues to believe that the enforcement process is generally better suited than the permitting process for pursuing alleged noncompliance and devising solutions to prevent similar noncompliance in the future. Thus, EPA generally does not expect it will be necessary to invoke CAA § 504(a), which could have the unintended and potentially undesirable outcome of preempting or undermining ongoing or potential enforcement actions or second-guessing the results of completed enforcement actions. However, EPA acknowledges that there may be cases where, despite the best efforts of those pursuing enforcement (as CDPHE and EPA have done here), the enforcement process does not ultimately result in title V permit terms that assure a source will comply with all requirements. In these extraordinary circumstances, EPA agrees that CAA § 504(a) provides the authority to establish compliance assurance measures through title V similar to those that would normally be obtained through enforcement (*e.g.*, operational requirements that could be imposed as injunctive relief through enforcement). As previously stated, CAA § 504(a) may therefore function as a backstop when more traditional compliance assurance mechanisms are unsuccessful.[22]

Given the well-established compliance assurance tools discussed above (supplemental monitoring and the enforcement process), it is especially important that petitioners requesting additional permit terms under CAA § 504(a) provide a sufficient demonstration that such additional requirements are *necessary* to assure compliance—for example, that the traditional approaches are insufficient to achieve this end. EPA expects this will often entail a *demonstration of persistent noncompliance with the same underlying applicable requirements*.[23]

Turning back to the facts in Suncor, the Petitioners have demonstrated that the permit record is unclear regarding whether additional permit terms are necessary to assure compliance with all applicable requirements. In initial public comments, commenters raised concerns regarding

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[21] The Earthjustice Petition itself illustrates this principle; the additional measures now requested by the Petitioners under CAA § 304(a) are based on recommendations that arose out of a lengthy enforcement process. *See* Earthjustice Petition Ex. 12 and Ex. 24.

[22] Again, this may be appropriate in situations where enforcement efforts have been completed, but compliance problems persist. EPA maintains that it would not be appropriate to employ CAA § 504(a) to establish these types of permit terms to preempt not-yet-initiated potential enforcement actions or to interfere with ongoing enforcement actions.

[23] Claims requesting additional permit terms under CAA § 504(a) are similar to claims requesting a compliance schedule (discussed in the next part of EPA's response), because the underlying premise of both claims is that the source is, was, and/or will continue to be out of compliance unless additional permit terms are imposed to prevent noncompliance. Thus, to demonstrate a basis for EPA's objection under CAA § 504(a), it will generally be necessary for petitioners to present evidence beyond, for example, preliminary allegations of noncompliance. *See, e.g.*, *In the Matter of Public Service Company of Colorado, dba Xcel Energy, Pawnee Station*, Order on Petition No. VIII-2010-XX at 5–7 (June 30, 2011), *upheld by WildEarth Guardians v. EPA*, 728 F.3d 1075 (10th Cir 2013).

allegedly persistent noncompliance with the same applicable requirements (H_2S limits on the main flare and CO and opacity limits on the FCCU). *See* Earthjustice Petition Ex. 6 at 7–12. In supplemental comments, commenters requested that CDPHE include various enforceable measures to "assure compliance" (*i.e.*, avoid or prevent future noncompliance) with the requirements relevant to the FCCU. *See* Earthjustice Petition Ex. 16 at 40–44. Within the Earthjustice Petition, the Petitioners' request for enforceable permit terms under CAA § 504(a) appears focused entirely on the FCCU requirements, so that is what EPA's response will address. *See* Earthjustice Petition at 17–19, 23–28.[24]

After "acknowledge[ing] Suncor does have periods of non-compliance with emission limitations" and "that the number of violations is not acceptable," RTC at 6, CDPHE decided not to impose additional permit terms. In responding to general comments underlying this claim, CDPHE (i) suggested that title V permits can only be used to incorporate all applicable requirements and improve compliance by way of monitoring, recordkeeping, reporting, and compliance certifications,[25] (ii) indicated a preference to resolve noncompliance issues through enforcement,[26] and (iii) concluded that Suncor is expected to comply with all applicable requirements.[27]

For three of the Petitioners' specific requests (developing a training simulator, digitizing key response procedures, and digitalization to allow remote engagement with technical experts), CDPHE further stated:

> The Division's May 20, 2021 letter accepting Suncor's implementation plan specifically noted that the voluntary measures are not explicitly required by the March 2020 Settlement, therefore, we are not including those requirements in a

[24] To the extent these sections of the Petition address specific pieces of equipment or portions of CDPHE's RTC, they address issues related to the FCCU alone. Given the lack of any discussion regarding H_2S emissions from the flare within this part of Claim 1 (*i.e.*, the part alleging the need for enforceable measures under CAA § 504(a)), to the extent this part of Claim 1 intended to address the flare, it is denied. By contrast, the Petitioners' separate discussion of compliance schedules within Claim 1, addressed below, appears to implicate both the flare and FCCU.

[25] *See* RTC at 5 ("The Division considers that the draft Title V permit incorporates all applicable requirements for Suncor Plant 2 and includes sufficient monitoring to assure compliance with those requirements, thus the Division will not deny the permit. . . . The purpose of the Title V permit program is to incorporate all applicable requirements for a facility into a permit and to improve compliance by requiring recordkeeping, monitoring, reporting and annual compliance certifications.").

[26] *See* RTC at 5–6 ("The Division acknowledges Suncor has had intermittent periods of non-compliance with emission limitations in its permits. The Division has taken enforcement action to address these periods of non-compliance, and will continue to do so, as appropriate. . . . In addition, the Division conducts compliance oversight activities of the facility throughout the year, including annual inspections, performance test oversight, review of submitted reports, and more to assess compliance with Suncor's applicable requirements. The Division then takes the appropriate enforcement actions based on the results of these compliance oversight activities and Suncor's self-reporting. . . . The Division acknowledges Suncor does have periods of non-compliance with emission limitations. However, these periods of non-compliance are intermittent and these exceedances are resolved through an enforcement action. The Division has had numerous enforcement actions with Suncor, including the Compliance Order on Consent (Case Nos. 2019-097 & 2019-194) effective March 6, 2020 (March 2020 Settlement). We believe this shows that the Division is enforcing Suncor's permit terms and requirements and reflects the Division's perspective that the number of violations is not acceptable. The Division expects Suncor to improve compliance at the facility and the requirements of the March 2020 Settlement are intended to drive such action.").

[27] *See* RTC at 5 ("As previously noted the Division acknowledges that Suncor has intermittent exceedances, however, [the] Division fully expects that Suncor can and will comply with emission limitations."); *id*. at 79.

> permit. The Division agrees that the voluntary measures may aid in minimizing or preventing excess emissions but these measures are not appropriate for the Title V permit.

RTC at 79; *see id*. at 82 (same). For another requested measure (requiring periodic Process Hazards Analysis), CDPHE similarly stated:

> A process hazards analysis (PHA) was not proposed in the implementation plan or accepted by the Division in our May 20, 2021 letter accepting Suncor's implementation plan. In addition, this type of requirement is not suited for inclusion in a Title V permit as conducting PHAs are not an applicable requirement or monitoring for an applicable requirement. Therefore, this requirement will not be included in the permit.

Id. at 81. For the final requested measure discussed in the Petition (permit terms designed to ensure proper functioning of the automated shutdown system), CDPHE stated:

> Title V permits address the emission unit and its associated control device and/or equipment that is relied upon to monitor emissions or parameters from that emission unit. The Title V permit does not typically address process control features that a given emission unit may be equipped with, such as an automated shutdown system. For example, the Plant 1 FCCU is equipped with an automated shutdown system (upgrades to this system are also part of the approved implementation plan), yet that system isn't listed or addressed in the Plants 1 and 3 Title V permit (96OPAD120), as it is not an emission unit, control device or monitoring system.

Id. at 80.

Thus, CDPHE declined to impose the specific operational requirements suggested in public comments because those requirements either: (i) are not applicable requirements, (ii) do not establish monitoring, recordkeeping, or reporting, (iii) are "voluntary" insofar as a 2020 enforcement settlement is concerned, and/or (iv) are not the type of operational requirement typically included in a title V permit.

EPA agrees with CDPHE's suggestion that the core function of title V is to compile existing applicable requirements and to assure compliance with those requirements, and that this is often accomplished by including sufficient monitoring, recordkeeping, and reporting requirements. 42 U.S.C. § 7661c(a), (c); 40 C.F.R. §§ 70.1(b), 70.6(a)(1), (c)(1). Also, for the reasons explained previously, EPA generally agrees with CDPHE that a facility's alleged noncompliance with permit terms or applicable requirements would be better addressed through the enforcement process, as opposed to the permitting process. These are important and well-established principles. *See supra* pages 14–17. However, because both CAA § 504(a) and 40 C.F.R. § 70.6(a) authorize measures beyond existing applicable requirements and monitoring, recordkeeping, and reporting requirements (*see supra* pages 13–14), CDPHE was incorrect to conclude that those enumerated measures and the enforcement process are the *only* available mechanisms to address persistent problems with a facility's noncompliance. Thus, the various

reasons supplied by CDPHE to reject the commenters' requested operational requirements are insufficient. Critically, CDPHE's response neglects to address the key question: *whether the Permit can be said to assure compliance* ***without additional measures*** *and, if not, whether these operational requirements the Petitioners recommend are* ***necessary*** *to assure compliance with the relevant FCCU limits*. Although CDPHE concludes (without any explanation) that it expects that Suncor will comply with its Permit, it does not explain the basis for this conclusion. *See* RTC at 5, 79.[28] This is especially troubling in light of what appears to be Suncor's consistent history of noncompliance, and the fact that Suncor has continued to report CO and opacity exceedances at the FCCU in the second half of 2021, even after installation and commissioning of the FCCU automated shutdown system. *See* Earthjustice Petition at 9–10, Ex. 9 at 305–306 (as paginated in the exhibit PDF file), Ex. 12 at 2. Additionally, CDPHE itself concedes that some of these measures "may aid in minimizing or preventing excess emissions." RTC at 79, 82.

Overall, because CDPHE's permit record does not address whether the additional operational requirements are necessary to assure compliance with the CO and opacity limits on the FCCU, and in light of Suncor's compliance history, EPA cannot determine whether the Permit assures compliance with all applicable requirements. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1); 5 CCR 1001-5, Part C, V.C.1. Accordingly, EPA grants Claim 1 as it relates to this issue. 40 C.F.R. § 70.8(c)(3)(ii).

Compliance Schedule

The Petitioners not only request permit terms establishing enforceable operational requirements under CAA § 504(a) (and related federal and state regulations), but they also request a compliance schedule under 40 C.F.R. § 70.5(c)(8)(iii) and 5 CCR 1001-5, Part C, III.C.9(c).[29] The Petitioners present two bases for this request: First, that compliance schedules should be required for "sources that have been violating a requirement in the past and that are anticipated to continue violating the requirement during the next permit term, either intermittently or continuously;" and second, that Suncor was out of compliance at the time of permit issuance. Earthjustice Petition at 22–23. Neither argument is persuasive.

Regarding the Petitioners' first argument, the Petitioners' interpretation of compliance schedule requirements runs counter to the plain language of the regulations, which are based on the facility's compliance status *at the time of permit issuance*. As the Petitioners acknowledge, under Colorado's EPA-approved regulations, a compliance schedule is required "for sources that are not anticipated to be in compliance *at the time of permit issuance*." 5 C.C.R. § 1001-5, Part C, III.C.9(c) (emphasis added). This requirement largely tracks EPA's analogous regulation, which requires a compliance schedule "for sources that are not in compliance with all applicable requirements *at the time of permit issuance*." 40 C.F.R. § 70.5(c)(8)(iii) (emphasis added). Thus,

[28] The most specific response on this point is CDPHE's assertion that "The Division expects Suncor to improve compliance at the facility and the requirements of the March 2020 Settlement are intended to drive such action," followed later in the RTC by a brief discussion of requirements added to the Permit as a result of the settlement. RTC at 6; *see id*. at 79. However, that discussion regarding actions designed to *improve* compliance falls short of explaining why these measures, and the Permit as written, are sufficient to *assure* compliance with all applicable requirements.

[29] Note that the compliance schedule-focused portion of Claim 1 addresses Suncor's alleged noncompliance with H_2S limits on the flare as well as CO and opacity limits on the FCCU. *See* Earthjustice Petition at 23.

a compliance schedule is not necessarily required for past instances of intermittent noncompliance that do not persist (and which are not anticipated to persist, under Colorado's rules) to the date of permit issuance. *See In the Matter of Tesoro Refining and Marketing Co.*, Order on Petition No. IX-2004-6 at 17 (March 15, 2005) (*Tesoro Order*);[30] *see also* RTC at 5, 79.

The Petitioners' second argument—that Suncor is not in compliance at the time of permit issuance—is not supported by the record and is insufficient to demonstrate that a compliance schedule is the appropriate remedy at this point in time. The only evidence provided by the Petitioners—self-reported deviations from a semi-annual compliance report and a quarterly excess emissions report—simply indicates that during 3- and 6-month periods *prior to issuance of the permit*, Suncor exceeded its emission limits during discrete exceedance events. *See* Earthjustice Petition Ex. 7 at 1760–82 (as paginated in the exhibit PDF file), Ex. 9 at 334–65 (as paginated in the exhibit PDF file). Notably, although the Petitioners do not explain the nature of any of these exceedances, the exhibits cited by the Petitioners detail the discrete nature and limited duration of the exceedances at issue, as well as actions taken to correct and prevent reoccurrences of each exceedance. *See id*. Overall, the Petitioners have not demonstrated (and the cited evidence does not appear to support a conclusion) that Suncor continued to be in noncompliance *at the time of permit issuance*. Because the Petitioners have not demonstrated that a compliance schedule is required, EPA denies this part of Claim 1.

Direction to CDPHE: CDPHE must evaluate whether additional operational requirements are necessary to assure compliance with the relevant FCCU limits on CO and opacity, or whether the Permit can be said to assure compliance without these measures. At a minimum, CDPHE must amend the permit record to explain the technical basis for this position. For example, CDPHE should explain why each of the additional measures requested in public comments (and again in the Petition) are not *necessary* to assure compliance. CDPHE could also explain *why* the measures taken to date as the result of enforcement actions, and measures that are required to be taken in the near future (including additional requirements related to the FCCU automatic shutdown system) are sufficient to ensure Suncor's compliance. If CDPHE determines that additional operational requirements are necessary to assure compliance, it should revise the Permit accordingly and explain the basis for its decision.

Claim 2: The Petitioners Claim That "EPA Must Object to the Proposed Permit Because the Permit's Compliance Monitoring Provisions Utilize AP-42 Emission Factors That Are Known to Be Unreliable for Measuring Source-Specific Actual Emissions, and the Division Fails to Explain Why These Factors Nonetheless Are Sufficiently Reflective of the East Plant's Emissions to Assure Compliance with Applicable Emission Limits."

[30] Specifically, EPA's 2005 *Tesoro Order* indicated that a permitting authority may "reasonabl[y] determine[e] that no compliance schedule is necessary because (i) the facility has returned to compliance; (ii) the violations were intermittent, did not evidence on-going non-compliance, and the source was in compliance at the time of permit issuance; or (iii) the District has opted to pursue the matter through an enforcement mechanism and will reopen the permit upon a consent agreement or court adjudication of the noncompliance issues." *Tesoro Order* at 17; *see also In the Matter of Valero Refining Co.*, Order on Petition No. IX-2004-07 at 16 (March 15, 2005) (same).

Petitioners' Claim: The Petitioners challenge the sufficiency of using AP-42[31] emission factors to demonstrate compliance with a wide variety of permit limits, as well as the sufficiency of CHPDE's rationale for selecting these AP-42 emission factors. *See* Earthjustice Petition at 28–38.

First, the Petitioners claim that the Permit does not satisfy the requirement that each title V permit include "compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." *Id*. at 30 (quoting 40 C.F.R. § 70.6(c)(1); 5 CCR 1001-5, Part C, V.C.16.a).

The Petitioners identify 23 permit terms associated with emission limits on various pollutants that rely on emission factors as part of their required compliance demonstration methodology. *See id*. at 30–31; *see also id*. at 29. More specifically, the Petitioners provide a bulleted list of each affected permit term, emission unit(s), pollutant, AP-42 section, and AP-42 "rating." *See id*. The Petitioners provide no further information about individual permit terms or specific AP-42 emission factors within Claim 2. Instead, the Petitioners challenge the use of AP-42 emission factors for compliance demonstrations in general. For support, the Petitioners present a number of arguments, many of which are based on EPA's characterizations of AP-42. The Petitioners observe EPA's statement in the introduction to AP-42 that AP-42 emission factors represent long-term average values that may differ significantly from source to source, and that EPA advises against using the emission factors for compliance determinations. *Id*. at 31–32. Additionally, EPA affirmed this position and cautioned against using AP-42 emission factors in a November 2020 Enforcement Alert,[32] which characterized AP-42 emission factors as a "last resort." *Id*. at 32. Further, EPA has granted a prior title V petition and objected to the use of a particular AP-42 emission factor. *Id*. at 32–33 (citing *Tesoro Order* at 32–33). Moreover, performance tests at the Suncor West Plant indicate that AP-42 emission factors (including one with an "A" rating) underestimated NO_x emissions from a boiler, a process heater, and a vapor combustor. *Id*. at 33–34.

The Petitioners further assert that a number of alternatives to using AP-42 emission factors are available. The Petitioners discuss source-specific emission factors obtained through stack testing, and contend that CDPHE has the authority and obligation to impose testing requirements on combustion sources like heaters and boilers. *Id*. at 34–35. The Petitioners also address alternative means of obtaining source-specific data for flares. *Id*. at 35. The Petitioners further contend that CDPHE also has authority to require continuous emission monitoring systems from all stacks at the refinery. *Id*.

Addressing justifications provided by CDPHE in response to public comments, the Petitioners additionally contend that the state ignores the fact that certain emission factors used by the Permit have a rating of "E" (the lowest rating), "D," and "C," or are otherwise described in AP-

[31] AP-42 is EPA's compilation of air emission factors. AP-42 contains emission factors and process information for more than 200 air pollution source categories, developed and compiled from source test data, material balance studies, and engineering estimates. Specific sections of AP-42 may be accessed at *https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors*.

[32] EPA, *Enforcement Alert: EPA Reminder About Inappropriate Use of AP-42 Emission Factors*, Pub. No. EPA 325-N-20-001 (November 2020) ("AP-42 Enforcement Alert"), available at *https://www.epa.gov/sites/production/files/2021-01/documents/ap42-enforcementalert.pdf*.

42 as unreliable. *Id*. at 37. The Petitioners also contest the relevance of the time frame of the emission calculations at issue, asserting that regardless of the time frame, "the ultimate emissions calculation will be equally wrong if the emissions factor used does not adequately represent actual emissions." *Id*. at 38.

Second, alongside the aforementioned substantive challenges to the sufficiency of AP-42, the Petitioners also claim that CDPHE fails to provide a sufficient "statement that sets forth the legal and factual basis for the draft permit conditions" justifying the use of AP-42 emission factors. *Id*. at 30 (quoting 40 C.F.R. § 70.7(a)(5); citing *In the Matter of Valero Refining-Texas, L.P., Valero Houston Refinery,* Order on Petition No. VI-2021-8 at 62 (June 30, 2022) (*Valero Houston Order*)). Specifically, the Petitioners assert that CDPHE "provides no explanation for why it believes AP-42 factors are sufficiently reliable to calculate emissions from Suncor." *Id*. at 35.

The Petitioners acknowledge CDPHE's response to comments, which stated:

> [Petitioners] provide[] no specific examples of those sources where additional testing should be done. In some cases, testing is not feasible, nor practical and absent any comments from Earthjustice on specific permit conditions relying on AP-42 emission factors that would benefit from additional testing, the Division cannot provide a more detailed response.

Id. at 36 (quoting RTC at 19; citing RTC at 53) (alterations in Petition). The Petitioner asserts that this response reflects CDPHE's "attempt[] to improperly shift to Petitioners the burden of justifying the Proposed Permit's monitoring requirements." *Id*. The Petitioners contend that, where "Petitioners have raised a reasonable question on the adequacy of the permit's monitoring requirements, the burden is on the Division to ensure that the permitting record 'contain[s] sufficient information to conclude that there is adequate monitoring to assure compliance with relevant emission limits.'" *Id*. (quoting *Valero Houston Order* at 62).

The Petitioners further challenge CDPHE's suggestion that the justification for monitoring would have been presented in the permit record associated with initial permit issuance, claiming that this response fails to answer the concerns raised in public comments. *Id*. at 37. Additionally, the Petitioners assert that prior permit records associated with the permit are silent as to the reliability of the AP-42 emission factors used in the permit. *Id*.

EPA's Response: For the following reasons, EPA denies the Petitioners' request for an objection on this claim.

Within Claim 2, the Petitioners question (i) the substantive adequacy of numerous permit terms that rely on AP-42 emission factors for purposes of demonstrating compliance, as well as (ii) CDPHE's permit record associated with these permit terms. Neither of the Petitioners' arguments demonstrates a basis for EPA to object to the Permit.

Inadequate Permit Terms

In Claim 2, the Petitioners raise multiple general criticisms of using AP-42 emission factors for compliance demonstration purposes. Based on these general criticisms, the Petitioners conclude that dozens of permit terms that rely on AP-42 are insufficient to assure compliance. However, the Petitioners offer no analysis of any of the potentially affected permit terms. Therefore, as explained further in the following paragraphs, the Petitioners have not demonstrated that any term in the Permit lacks monitoring sufficient to assure compliance with any specific applicable requirements or permit terms. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); 5 CCR 1001-5, Part C, V.C.16.a.

To start, determining whether monitoring contained in a title V permit is sufficient to assure compliance with any term or condition is a context-specific, case-by-case inquiry. *See, e.g., CITGO Order* at 7. To aid permitting authorities and the public in this fact-specific exercise, EPA has identified a non-exhaustive list of factors that may be relevant. *See, e.g.*, *CITGO Order* at 7–8. Specifically, EPA has identified the following factors:

> (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.

Id.

The context-specific nature of monitoring decisions is also relevant to the selection of emission factors used in compliance demonstrations. With respect to emission factors based on AP-42, the Petitioners correctly observe that EPA generally does not recommend using AP-42 emission factors for compliance demonstrations, and EPA has characterized such use as a "last resort." AP-42 Introduction at 2; AP-42 Enforcement Alert at 3. However, those cautionary statements do not equate to an EPA finding that AP-42 may *never* be sufficient to assure compliance with any permit limits, or to a finding that such use is presumptively inadequate to assure such compliance.[33] To the contrary, the cited EPA Enforcement Alert itself acknowledges that "[w]hen source-specific emissions or other more reliable approaches are unavailable, AP-42 emission factors may be the only way to estimate emissions." AP-42 Enforcement Alert at 3. Further, EPA has explained:

> [E]mission factors are often used in compliance demonstrations. In some cases, . . . source-specific emission factors are developed through stack testing; in other cases, emission factors are supplied and guaranteed by a product manufacturer; and in other cases, emission factors may be based on scientific literature, including the EPA's AP-42 publications. As with other considerations concerning title V

[33] If the Petitioners' concerns were universally true—*i.e.*, if using AP-42 emission factors could *never* be sufficient to assure compliance—the Petitioners' general criticisms might have been sufficient to demonstrate a basis for EPA's objection with respect to all permit terms that rely on AP-42. However, this is not the case.

> monitoring and compliance assurance provisions, the determination of whether it is necessary to develop a source-specific emission factor to calculate emissions of a particular pollutant from a particular unit for compliance demonstration purposes is a highly fact-specific inquiry.

In the Matter of Yuhuang Chemical Inc. Methanol Plant, Order on Petition Nos. VI-2017-5 & VI-2017-13 at 15 (April 2, 2018) (*Yuhuang II Order*); *see also In the Matter of ExxonMobil Baytown Refinery*, Order on Petition No. VI-2016-14 at 27 (April 2, 2018) (*ExxonMobil Baytown Refinery Order*) ("[E]mission factors are often used in compliance demonstration calculations, and this may be appropriate in certain situations."); *In the Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 33 (September 14, 2016) (*Hu Honua II Order*) ("EPA has explained that a permitting authority should select the appropriate emission factors, whether AP-42 or industry emission factors (such as NCASI), on a case-by-case basis.").

Similarly, as CDPHE explains in its RTC:

> The Division recognizes that while AP-42 might have certain deficiencies, in the absence of other robust, scientifically sound supporting documentation for source-specific emission factors, EPA's AP-42 is the best source for this type of information. Regulatory agencies have a long-standing practice to accept AP-42 emission factors for emission calculation and permitting purposes and to disregard these factors only when a better, well documented, and scientifically sound emission factor is available for a specific source. . . . In some cases, testing is not feasible, nor practical . . . .

RTC at 18–19. In fact, even the Petitioners concede that "it can be acceptable for a Title V permit to rely on an emission factor for calculating a facility's emissions where continuous emissions monitoring is not required." Earthjustice Petition at 28. Thus, it appears uncontested that selecting the appropriate emission factor—as with many other issues related to title V monitoring—is inherently a context-specific, case-by-case inquiry.

Because this is a context-specific issue, in order to demonstrate a basis for EPA's objection to the use of an emission factor for compliance demonstration purposes, petitioners must provide some fact-specific analysis of the relevant permit terms. *See* 40 C.F.R. § 70.12(a)(2)(iii) (requiring that petitioners provide "[a]n *explanation* of *how* the term or condition in the permit . . . is not adequate . . . ." (emphasis added)). EPA observes that the Petitioners provided just such an analysis within Claim 3, and that analysis was sufficient to demonstrate grounds for EPA to grant that claim in the present Order. Similarly, in the *Tesoro Order* cited by the Petitioners, EPA granted a fact-specific petition claim challenging the use of a specific AP-42 emission factor relevant to VOC emissions from a cooling tower. *See Tesoro Order* at 32–33.[34] By contrast, EPA has denied petition claims similar to the one here where petitioners failed to

[34] EPA notes that the *Piedmont Green Power Order* (cited by the Petitioners, Earthjustice Petition at 28) does not appear directly relevant, as neither that petition, nor EPA's response to that petition, involved a challenge to the use of an AP-42 emission factor. Instead, the emission factor tangentially implicated by that claim was based on source-specific stack testing. In any case, that petition, and EPA's response to that petition, turned on highly fact-specific issues relevant to the emission units at issue. *See Piedmont Green Power Order* at 12–16.

demonstrate that *specific* emission factors were insufficient to assure compliance with *specific* applicable requirements or permit terms. *See, e.g.*, *ExxonMobil Baytown Refinery Order* at 27 ("[T]he Petitioners claim generally that AP-42 emission factors should not be used to demonstrate compliance with permit limits because they represent an average range of facilities and emission rates. This assertion is misplaced; as a general matter, emission factors are often used in compliance demonstration calculations, and this may be appropriate in certain situations. The Petitioners have not demonstrated why, in this case, the AP-42 equations and associated emission factors used to estimate tank emissions are insufficient.").[35]

Here, most of the Petition arguments within Claim 2 (and essentially all of the arguments raised in public comments) rely on the fact that EPA has previously cautioned against using AP-42 emission factors. *See* Earthjustice Petition at 29, 31–33; Earthjustice Petition Ex. 6 at 17–19. As explained earlier in this response, those general cautions do not equate to a finding or determination that any particular application of AP-42 is impermissible or insufficient to assure compliance.[36] Thus, the Petitioners' general criticisms against the use of AP-42 do not, in and of themselves, demonstrate that any individual permit terms employing AP-42 cannot assure

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[35] *See also In the Matter of Motiva Enterprises LLC, Port Arthur Refinery*, Order on Petition No. VI-2016-23 at 19–20 (May 31, 2018) (*Motiva Port Arthur Order*) ("The Petitioners also argue that the permit and permit record fail to demonstrate that AP-42 emission factors are appropriate in this case to assure compliance with emissions from unspecified tanks. . . . Here, the Petitioners' generalized claims, unsupported by any analysis of specific permit terms, have failed to satisfy this burden."); *In the Matter of South Louisiana Methanol, LP*, Order on Petition Nos. VI-2016-24 & VI-2017-14 at 17 (May 29, 2018) (*South Louisiana Methanol Order*) ("The Petitioners appear to challenge the use of [AP-42] emission factors for flare emissions generally, but do not evaluate any of the specific emission factors identified by LDEQ or explain why they are not reliable or how they might underestimate emissions."); *Yuhuang II Order* at 15 ("Here, [the permitting authority] determined, in its professional judgement, that it was appropriate to adopt the EPA's AP-42 emission factor for VOC emissions from natural gas-fired boilers. The Petitioners have offered no information or analysis to rebut this determination other than their generalized concerns with the use of AP-42 emission factors."); *Yuhuang II Order* at 22 ("The Petitioners, in arguing that it is inappropriate for the Permit to rely on AP-42 emission factors for VOC and PM emissions from the flare, present the same general, unsupported arguments as discussed above with respect to VOC emissions from the auxiliary boiler. Again, the Petitioners have provided no evidence or technical analysis to demonstrate that it was inappropriate to use the specific emission factors adopted by [the permitting authority] for calculating flare VOC and PM emissions."); *Hu Honua II Order* at 32 ("Although the Petitioner makes various assertions relating to the adequacy of the HAP emission factors, the Petitioner did not explain how the chosen HAP emission factors fail to assure compliance with one or more applicable requirements of the Act. In this matter, the Petitioner has not identified or analyzed any permit term or applicable requirement for which the emission factor may be inadequate."); *see also In the Matter of El Dorado Energy, LLC*, Order on Petition No. IX-2003-08 at 19 (September 22, 2005).

[36] Additionally, the Petitioners appear to misinterpret, or at least overstate the significance of, some of these EPA statements. For example, the Petitioners emphasize EPA's statement that "a permit limit using an AP-42 emission factor would result in half of the sources being in noncompliance." Earthjustice Petition at 32 (quoting AP-42, Introduction at 2). This statement is only true to the extent that the emission factor is used *as a binding, enforceable permit limit*. Where an emission factor is used to c*alculate emissions to demonstrate compliance with some other limit*, the same problem does not necessarily exist. Just because half of the sources would have actual emissions higher than the emission factor would not necessarily mean that half of the sources would be out of compliance with the underlying limit. The impact of any inaccuracy inherent in using emission factors depends on the nature of the underlying limit and, for example, the likelihood that the source would violate the particular limit. If it is unlikely (or impossible) for a facility to violate a limit that contains a substantial margin of compliance, then inaccuracies in the emission factors used to calculate emissions may not have any significant impact on the facility's ability to demonstrate compliance with that limit. *See, e.g.*, *CITGO Order* at 7 (identifying "the likelihood of a violation" as relevant to determining whether more stringent monitoring is necessary to assure compliance).

compliance with the specific applicable requirements and permit terms with which they are associated.

Beyond these arguments, the Petitioners provide little in the way of fact-specific analysis within Claim 2. In both public comments and the Petition, the Petitioners identify dozens of permit conditions that employ AP-42; in the Petition, the Petitioners further identify the specific sections of AP-42 associated with each affected permit term and the "rating" of the corresponding AP-42 emission factors.[37] However, the Petitioners provide no analysis of the individual permit terms and associated emission factors implicated by Claim 2. The closest the Petitioners come to providing such a fact-specific analysis involves data recently obtained from stack testing at the Suncor West Plant (Plants 1 and 3), which showed that NO_x emissions from a boiler, a heater, and a vapor combustor were significantly higher than the corresponding AP-42 emission factors. *See* Earthjustice Petition at 33–34. Notably, none of those cited AP-42 emission factors (relevant to the West Plant) appear to be challenged in the present Petition (which challenges the Permit for the East Plant).[38] Thus, although EPA appreciates that this information illustrates the potential for differences between measured site-specific emission values and nationwide average emission values contained in AP-42, again, that does not amount to a demonstration that use of an AP-42 emission factor is insufficient to assure compliance *as applied to any specific permit terms* in the Permit for the East Plant.

Overall, the Petitioners' generalized criticisms of AP-42, presented without any analysis of the *dozens* of permit terms identified in the Petition and their associated AP-42 factors, are insufficient to demonstrate that the Permit does not assure compliance with any specific applicable requirements or permit terms.[39] Thus, to the extent Claim 2 asserts that the Permit does not satisfy 40 C.F.R. § 70.6(c)(1) and 5 CCR 1001-5, Part C, V.C.16.a, it is denied.

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[37] Notably, with the exception of the AP-42 emission factor separately addressed in Claim 3, the relevant public comments did not identify the specific AP-42 emission factors at issue nor their corresponding ratings. The Petitioners have not alleged, much less demonstrated, that it was impracticable to raise those issues with "reasonable specificity" within the public comment period, and there is no indication that this information arose after the end of that period. Thus, those arguments were not preserved to be raised the Petition. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.8(d), 70.12(a)(2)(v). However, even if these arguments had been preserved, they would not be sufficient to demonstrate that the permit lacks sufficient monitoring, absent further fact-specific analysis.

[38] The Petitioner identifies the NO_x emission factors relevant to the boiler and heater at the West Plant, both of which come from AP-42 Section 1.4. Earthjustice Petition at 33–34. The Petitioners do not challenge the use of those emission factors in the East Plant Permit. *See id*. at 30–31. The Petitioners do not identify the source of the emission factor relevant to the vapor combustor at the West Plant, *see id*. at 34, so it is unclear whether the same (unidentified) emission factor is relevant to the Petitioner's challenges to any units at the East Plant.

[39] *See ExxonMobil Baytown Refinery Order at* 24 ("The permit terms that the Petitioners take issue with span more than two full pages of [the permit], and provide the compliance demonstration methodologies for a wide range of emission limits on different pollutants from different emission units. The Petitioners cite broadly to Conditions 20–22, but do not evaluate any of the individual requirements included in these conditions. Rather, the Petitioners make generalized allegations that apparently apply in the abstract to all of the conditions referenced by the Petitioners. The Petitioners claim that the permit terms at issue 'omit key information necessary to understand and evaluate how emissions are to be calculated' and 'fail to specify relevant monitoring requirements,' but do not identify any particular information that is missing from a particular permit term, or explain why such information would be necessary for compliance demonstrations. These generalized allegations are insufficient to demonstrate a flaw in the Permit; the Petitioners have failed to provide the requisite citation and analysis to demonstrate that the Permit does not assure compliance with specific applicable requirements or permit terms."); *see also supra* notes 6–7 and accompanying text.

Inadequate Permit Record

Instead of attempting to demonstrate why individual permit terms that rely on AP-42 emission factors are *insufficient* to assure compliance, the Petitioners fault CDPHE for failing to explain why AP-42 emission factors are *sufficient* for each of the dozens of permit terms implicated by Claim 2. Underlying this claim is a debate between the Petitioners and CDPHE regarding who has the burden to demonstrate the insufficiency or sufficiency of the individual permit terms at issue. Neither the Petitioners nor CDPHE provide a fact-specific challenge or justification for the individual permit terms at issue, and each party expressly attempts to place the burden to do so on the other.[40] Thus arises the second allegation within Claim 2: that CDPHE failed to satisfy the requirement in 40 C.F.R. § 70.7(a)(5) to provide a "statement that sets forth the legal and factual basis for the draft permit conditions."

Although the Petitioners exclusively invoke 40 C.F.R. § 70.7(a)(5) as the basis for requesting EPA's objection, this allegation implicates several related legal authorities. The following paragraphs summarize the relevant statutory and regulatory requirements before explaining why the Petitioners have not demonstrated that CDPHE failed to satisfy these requirements.

First, as the Petitioners point out, 40 C.F.R. § 70.7(a)(5) requires states to prepare "a statement that sets forth the legal and factual basis for the draft permit conditions"; EPA refers to this as a "statement of basis." Notably, EPA's evaluation of petition claims under § 70.7(a)(5) considers whether "the petitioner has demonstrated that the permitting authority's alleged failure resulted in, or may have resulted in, a deficiency in the content of the permit." *In the Matter of US Steel Seamless Tubular Operations, LLC, Fairfield Works Pipe Mill*, Order on Petition No. IV-2021-7 at 8 (June 16, 2022) (*US Steel Fairfield Order*). Where petitioners have failed to demonstrate that permit record-focused concerns resulted in a permit that does not substantively comply with the CAA, EPA has denied related claims alleging a deficiency with respect to § 70.7(a)(5). *See, e.g.*, *In the Matter of Waelz Sustainable Products, LLC*, Order on Petition No. V-2021-10 at 18–19 (March 14, 2023) (*Waelz Order*); *US Steel Fairfield Order* at 8–10; *In the Matter of U.S. Dep't of Energy, Hanford Operations*, Order on Petition Nos. X-2014-01 & X-2013-01 at 25-26 (May 29, 2015); *Tesoro Order* at 25, 44; *In the Matter of Sirmos Division of Bromante Corp.*, Order on Petition No. II-2002-03 at 15–16 (May 24, 2004).

More information regarding the requirements of 40 C.F.R. § 70.7(a)(5) can be found in a 2014 EPA guidance memorandum addressing the topic (2014 SOB Guidance),[41] as well as various title V petition orders. As relevant to the issues in this Petition, EPA's regulations do not dictate the specific content or level of detail that must be contained in a statement of basis. Instead, "EPA's regulations are intended to provide flexibility to the state and local permitting authorities regarding content of the statement of basis." 2014 SOB Guidance, Att. 2 at 1. For example, EPA

[40] For example, the Petitioners accuse CDPHE of "improperly shift[ing] to Petitioners the burden of justifying the Proposed Permit's monitoring requirements," while CDPHE faults public commenters for not providing specific examples of emission units for which alternatives to AP-42 emission factors should be used, or for which the permit record contains insufficient justification. Earthjustice Petition at 36, RTC at 19.

[41] Memorandum from Stephen D. Page, *Implementation Guidance on Annual Compliance Certification Reporting and Statement of Basis Requirements for Title V Operating Permits*, Att. 2 (April 30, 2014).

has recommended that states consider, "among other factors, the technical complexity of a permit, history of the facility, and the number of *new provisions being added at the title V permitting stage*." *Id*. Att. 2 at 2 (emphasis added). With respect to monitoring, EPA's guidance specifically suggests that permitting authorities should "list anything that *deviates from simply a straight recitation of applicable requirements*," including "any monitoring that is required under 40 C.F.R. § 70.6(a)(3)(i)(B)" (that is, monitoring *added through title V when absent from an underlying applicable requirement*), and any "periodic monitoring decisions, where the decisions *deviate from already agreed-upon levels*." *Id*. Att. 2 at 2–3 (emphasis added) (quoting several prior EPA documents). Similarly, in a 2005 petition order, EPA stated:

> While the Petitioner is correct that EPA requires statements of basis to provide the rationale for monitoring . . . , permitting authorities have discretion as to how this requirement is implemented. It should be noted the requirement that permitting authorities must provide a rationale for the selected monitoring is *only applicable if the permitting authority is gap filling under the periodic monitoring rule* or if the underlying applicable requirement provides for alternative monitoring methods . . . .

In the Matter of Kodak Park Division, Power and Steam Generation, Order on Petition No. II-2003-01 at 15 (February 18, 2005) (emphasis added).

EPA has also interpreted 40 C.F.R. § 70.7(a)(5) to require: "In all cases, the rationale for the selected monitoring requirements must be clear and documented in the permit record." *CITGO Order* at 7;[42] *see also, e.g.*, 2014 SOB Guidance Att. 2 at 3. Thus, EPA has granted title V petitions where a permitting authority failed to explain the basis for its monitoring decisions in response to public comments. In so doing, EPA has clarified:

> EPA is not suggesting that [the state] must go out of its way to explain the technical basis for every condition of every permit it has issued to a source each time it renews a title V permit. However, when a state receives public comments raising legitimate challenges to the sufficiency of [a] monitoring provision, the EPA expects [the state] to engage with these comments and explain the basis for its decisions (or specifically identify where any prior justification may be found).

Valero Houston Order at 62; *see In the Matter of BP Amoco Chemical Company, Texas City Chemical Plant*, Order on Petition No. VI-2017-6 at 18 (July 20, 2021) (same).

In these cases, the obligation for a permitting authority to explain the basis for individual permit terms is inextricably tied to the prompting of public comments. These examples thus illustrate the overlap between the requirements of 40 C.F.R. § 70.7(a)(5) and a state's obligation to

[42] Viewed in the context of EPA's collective guidance on this topic, this statement stands for the proposition that "in all cases" where monitoring has been "selected" by a permitting authority—in other words, when a permitting authority has used the title V permitting process to select monitoring different from or supplemental to that contained in an underlying requirement—it must justify such decision. EPA did not intend this language to mean that permitting authorities must proactively explain the basis for every single monitoring requirement in every single title V permit, particularly those requirements that are not changed (*e.g.*, during permit renewals).

respond to all significant comments under 40 C.F.R. § 70.7(h)(6). Notably, EPA generally evaluates permit record-focused claims under § 70.7(a)(5) by evaluating whether the permit record as a whole—not only the statement of basis, but also the response to comments and potentially other parts of the permit record—supports the terms and conditions of the permit. *See, e.g.*, *US Steel Fairfield Order* at 8–9. Here, the Petitioners' requested objection under § 70.7(a)(5) is largely based on CDPHE's alleged failure to respond to public comments with specific justifications of individual permit terms. When evaluating claims like this alleging that a permitting authority failed to satisfy 40 C.F.R. § 70.7(a)(5) due to an insufficient response to comment, it is reasonable to consider the requirements governing state's response to public comments (even though the Petitioners do not specifically invoke these requirements).

EPA historically relied on general principles of administrative law to address claims alleging insufficient responses to comments. *See, e.g., Home Box Office* v. *FCC*, 567 F.2d 9, 35 (D.C. Cir. 1977) ("[T]he opportunity to comment is meaningless unless the agency responds to significant points raised by the public."). As amended in 2020, EPA's regulations now require: "The permitting authority must respond in writing to all significant comments raised during the public participation process." 40 C.F.R. § 70.7(h)(6). The public comments underlying Claim 2 were significant, as they questioned (albeit generally) the sufficiency of monitoring provisions included the Permit. The comments therefore deserved—and in fact received—a response from CDPHE. *See infra* pages 33–34. The issue, then, is whether CDPHE's response was sufficiently responsive. For questions of this nature, EPA looks to decisions from federal courts and analogous precedent from EPA's Environmental Appeals Board (EAB). As explained by the EAB:

> The adequacy of a permit issuer's response to comments must be evaluated in the context of the content, specificity, and precision of the submitted comments. The Board has held that parties submitting comments on draft permits must present their concerns with sufficient precision and specificity to apprise the permitting authorities of the significant issues so that the permit issuer can make timely and appropriate adjustments to its permit determination, or, if no adjustments are made, can explain why none are necessary in its response to comments. *Where a comment lacks specificity and precision, the permit issuer's obligation to respond is similarly tempered.* It is well settled that permit issuers need not guess the meaning behind imprecise comments and are under no obligation to speculate about possible concerns that were not articulated in the comments.

In re Tuscon Electric Power, 17 E.A.D. 675, 695 (EAB 2018) (internal quotations and citations omitted) (emphasis added); *see also In re Pio Pico Energy Center*, 16 E.A.D. 56, 85–87 (EAB 2013) (citing numerous other EAB and federal court decisions); *Waelz Order* at 20–21; *In the Matter of Georgia-Pacific Consumer Operations LLC, Crossett Paper Operations*, Order on Petition Nos. VI-2018-3 & VI-2019-12 at 15 (February 22, 2023).

In summary, when members of the public articulate specific challenges to individual permit terms (including monitoring provisions), EPA expects states to supplement the permit record to explain the basis of the challenged permit terms. However, EPA's longstanding interpretations and policies regarding 40 C.F.R. § 70.7(a)(5) provide flexibility regarding the necessary content

of permit records. EPA has never interpreted 40 C.F.R. § 70.7(a)(5) to require states to proactively supply a justification for every single permit term (including every single monitoring requirement), particularly for permit terms that are not created or changed through a title V action, and which are simply carried forward during renewal permits like the Suncor Permit.

Underlying all of these permit record-focused considerations are legal authorities dictating the balance of burdens between state permitting authorities and petitioners. The CAA requires that states issue title V permits containing sufficient monitoring to assure compliance with all applicable requirements. 42 U.S.C. § 7661c(c); *see* 40 C.F.R. § 70.6(c)(1). EPA has also codified requirements for states to properly support their decisions in the permitting record and to respond to all significant comments, as discussed in the preceding paragraphs. *See* 40 C.F.R. § 70.7(a)(5), (h)(6). However, Congress specifically placed the burden on *petitioners* to (i) raise all objections to a permit "with reasonable specificity" during the public comment period (in order to preserve such issues in a subsequent petition)[43] and to (ii) "*demonstrate* to the Administrator that the permit is not in compliance with the requirements of" the CAA. 42 U.S.C. § 7661d(b)(2) (emphasis added); *see* 40 C.F.R. §§ 70.8(d), 70.12(a). Here, the burden is on the Petitioners to demonstrate any unsupported permitting decision or insufficient response to a significant comment. EPA has denied petition claims attempting to shift this demonstration burden to a permitting authority. That is, EPA has denied claims requesting EPA's objection to a state's purported failure to justify permit terms in cases where petitioners failed to adequately call into question the validity of the state's decisions. *See, e.g.*, *In the Matter of Suncor Energy, Commerce City Refinery, Plants 1 and 3*, Order on Petition No. VIII-2018-5 at 11 (December 20, 2018) ("[T]he Petitioners have attempted to shift the burden to the Division to demonstrate the adequacy of the chosen emission factor and monitoring method.").[44]

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[43] As EPA stated in the proposal to the original title V regulations: "EPA believes that Congress did not intend for Petitioners to be allowed to create an entirely new record before the Administrator that the State has had no opportunity to address. Accordingly, the Agency believes that the requirement to raise issues 'with reasonable specificity' places a burden on the Petitioner, absent unusual circumstances, to adduce before the State *the evidence that would support a finding of noncompliance with the Act*." 56 Fed. Reg. 21712, 21750 (May 10, 1991). This requirement most often functions to bar specific claims or arguments in petitions that were not raised with reasonable specificity during the public comment period. Here, with some exceptions discussed in note 37, *supra*, EPA is not invoking the "reasonable specificity" requirement to bar or deny issues raised in Claim 2 (because Claim 2 does not attempt to raise more specific arguments than those presented in the public comments). However, this requirement is also relevant to determining the level of detail expected of a state's response to public comments. Public comments often provide the impetus for a permitting authority to consider issues that may later be challenged in a petition. Therefore, if a prospective petitioner wants the permitting authority to provide an explanation of its action with a level of specificity that would reach individual permit terms, it is important that public comments raise any concerns with commensurate specificity in order to allow the permitting authority the first opportunity to fully explain its own position and develop a record for EPA's review of a subsequent petition.

[44] Several other examples involve similar facts to those present here. In the *Motiva Port Arthur* and *ExxonMobil Baytown Refinery Orders*, EPA denied burden-shifting claims specifically challenging the use of AP-42 emission factors to demonstrate compliance. *Motiva Port Arthur Order* at 19–20; *ExxonMobil Baytown Refinery Order* at 27. EPA also denied burden-shifting claims in each of these orders concerning "generalized allegations that apparently apply in the abstract to" numerous "compliance demonstration methodologies for a wide range of emission limits on different pollutants from different emission units." *ExxonMobil Baytown Refinery Order* at 24–25; *see Motiva Port Arthur Order* at 22–23. EPA has made similar determinations for other types of claims, most of which implicated the sufficiency of monitoring requirements. *See Waelz Order* at 25; *In the Matter of Riverview Energy Corp.*, Order on Petition No. V-2019-10 at 10; *Motiva Port Arthur Order* at 25; *South Louisiana Methanol Order* at 12, 14, 18, 21; *In the Matter of Pasadena Refining System*, Order on Petition No. VI-2016-20 at 19–20 (May 1, 2018); *Yuhuang*

The foregoing requirements can be summarized as follows: (i) the CAA requires that states issue title V permits that assure compliance with all applicable requirements; (ii) EPA's regulations require that states develop permit records justifying their decisions, but states are not required to proactively justify all permit terms, especially unchanged permit terms in renewal permits that continue to reflect underlying requirements; (iii) EPA's regulations require that states respond to all significant comments, generally with a level of detail commensurate with the public comments; and (iv) ultimately, the CAA places the burden on the public to identify alleged deficiencies with a permit "with reasonable specificity" during the public comment period (in order to preserve such issues in a subsequent petition) and to "demonstrate" in a petition that the permit does not satisfy the CAA, including for claims challenging the adequacy of a permit record. 42 U.S.C. § 7661d(b)(2).

Turning to the facts at hand, within this part of Claim 2, the Petitioners seek EPA's objection under 40 C.F.R. § 70.7(a)(5), alleging that CDPHE did not explain the basis for its conclusion that the numerous AP-42 emission factors employed by the Permit are sufficient to assure compliance with a variety of emission limits. *See* Earthjustice Petition at 28–29, 30, 35, 36, 38. The Petitioners' arguments regarding 40 C.F.R. § 70.7(a)(5) rely heavily on the "burden shifting" arguments addressed above. *See* Petition at 36. However, Congress clearly placed the burden on the Petitioners to demonstrate that the Permit is not in compliance with the CAA. 42 U.S.C. § 7661d(b)(2). CDPHE did not have a burden to explain the basis for each individual permit term—including all permit terms that rely on AP-42—in this permit renewal proceeding.[45] Thus, the more relevant issue is whether CDPHE sufficiently responded to the concerns raised in public comments. More specifically: *Did the public comments addressing AP-42 articulate specific challenges to the sufficiency of particular monitoring provisions, such that CDPHE was required to provide a specific justification for the dozens of permit terms potentially impacted by these comments?*

Here, for the reasons presented in the following paragraphs, the relevant public comments were not specific enough to necessitate a more specific response than that provided by CDPHE. Central to this conclusion is the fact that AP-42 emission factors are neither inherently sufficient nor presumptively insufficient to assure compliance with any particular applicable requirements. As with other monitoring requirements, this is a context-specific issue that will depend on factors unique to each affected permit term. *See supra* pages 24–26.

The public comments relevant to Claim 2 repeated EPA's general statements cautioning against the use of AP-42 emission factors, but *the comments did not provide any analysis of the potentially affected emission factors or permit terms*. In other words, these general comments did not present a fact-specific basis for calling into question the sufficiency of individual permit terms that rely on AP-42. Because the public comments associated with Claim 2 did not present

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II Order at 11, 13, 21; *In the Matter of Linn Operating Inc., Fairfield & Ethyl D Leases*, Order on Petition Nos. IX-2015-8 & IX-2015-9 at 14 (October 6, 2017).

[45] As CDPHE explained in its RTC: "Again, Earthjustice does not cite any specific monitoring regime for which they believe the Division has not provided a justification. This is a Title V renewal permit; therefore, unless the monitoring provisions were revised with the renewal permit, the justification for the monitoring would have been presented in the TRD for the original permit issuance." RTC at 19.

any fact-specific challenges to individual emission factors or permit terms, CDPHE did not have an obligation to separately analyze and explain the fact-specific basis for each of the potentially affected permit terms.[46]

Concluding otherwise, as the Petitioners suggest, would create a system in which comments mentioning any general concern (which, again, may or may not be legitimate as applied to individual permit terms) could force a permitting authority to explain the basis for potentially dozens of permit terms that remain unchanged from one title V permit renewal to the next. This result would be unprecedented, unintended, and unnecessary. This would also unsettle EPA's expectations for permitting authorities under 40 C.F.R. § 70.7(a)(5), as well as precedent addressing the level of detail required of administrative bodies (including state permitting authorities, as well as EPA) in responding to public comments. *See supra* pages 28–32.

In order to prompt a permitting authority to justify the use of a selected emission factor with respect to any particular permit term, the public must raise with specificity its challenges to how that emission factor is used *with respect to that particular permit term*. This is not an unattainable standard nor an unreasonable request of the public. In fact, the Petitioners' public comments presented just such a fact-specific challenge to the use of a particular AP-42 factor associated with several permit terms, which now forms the basis of Claim 3. Had public commenters provided similar fact-specific challenges to the numerous other AP-42 emission factors and permit terms implicated by Claim 2, EPA would have expected CDPHE to respond with a comparably detailed justification of those permit terms. But the public commenters failed to raise any challenges specific to those additional permit terms,[47] and, accordingly, CDPHE did not further explain the basis of those additional permit terms.

Instead, CDPHE responded to the relevant public comments with a level of generality commensurate with the public comments that prompted it. *Compare* Earthjustice Petition Ex. 6 at 17–18 *with* RTC at 18–19. Specifically, public commenters alleged that the use of AP-42

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[46] The Petitioners rely on discussion in the *Valero Houston Order*, including EPA's statement that "when a state receives public comments raising legitimate challenges to the sufficiency of [a] monitoring provision, the EPA expects [the state] to engage with these comments and explain the basis for its decisions (or specifically identify where any prior justification may be found)." *Valero Houston Order* at 62; *see* Earthjustice Petition at 29, 30, 36. The distinction between EPA's response in *Valero Houston* and the present situation turns on the legitimacy—or, put another way, the quality or specificity—of the public comments. 42 U.S.C. §7661d(b)(2). In *Valero Houston*, EPA granted a claim where the petitioners demonstrated that the permitting authority failed to adequately justify the monitoring associated with various permit terms. *Valero Houston Order* at 62. Notably, this response followed *30 pages* of EPA analysis, corresponding to *54 pages* of petition claims, based on similarly detailed public comments, all of which raised fact-specific challenges to the monitoring associated with individual permit terms. *See id*. at 31–61. That type of fact-specific analysis is precisely what is missing here, both from public comments and the Petition.

[47] The Petitioners identify various comments that ostensibly form the basis of Claim 2, some of which involve challenges to specific permit terms. *See* Earthjustice Petition at 31 (citing Ex. 16, Supplemental Comments at 14–17, 46–48, 54–55). However, the comments challenging specific permit terms raise different issues than those presented within Claim 2; most are unrelated to AP-42, and some do not even relate to monitoring. In any case, to the extent those comments raised more specific challenges to the monitoring associated with individual permit terms, CDPHE responded to those comments with similarly detailed responses, which the Petitioners do not further challenge within Claim 2, or elsewhere within the Petition. Overall, it is clear that the Petitioners were well-equipped to raise specific challenges to individual permit terms; they simply failed to do so with respect to the AP-42 emission factor issues in Claim 2.

throughout the draft permit[48] is insufficient because EPA has recommended against using AP-42 emission factors for compliance demonstrations and has characterized such use as a "last resort," and because other alternatives may be available and should be utilized instead. Earthjustice Petition Ex. 6 at 17–18. In response, CDPHE acknowledged EPA's cautions regarding the use of AP-42 for this purpose, explained the situations in which it is acceptable to use AP-42 emission factors (including situations when the alternatives suggested by the Petitioners are not available),[49] and offered a summary of the types of emission limits and monitoring regimes that rely on AP-42 emission factors. *See* RTC at 18–19. This RTC responded to all of the general arguments supplied in public comments and was therefore consistent with the general principles discussed above. *See Tuscon Electric Power*, 17 E.A.D. at 695. The Petitioners' primary challenge to the state's response is based on the Petitioners' theory of "burden shifting," *see* Earthjustice Petition at 36–37, which is unpersuasive for the reasons previously described.[50] Thus, the Petitioners have not demonstrated that CDPHE's response was insufficient with respect to 40 C.F.R. § 70.7(a)(5), 70.7(h)(6), or any other relevant requirements.

Additionally, for the reasons discussed in the preceding subsection, *supra* pages 24–27, the Petitioners have not demonstrated that their general concerns with AP-42 resulted in any individual permit terms not satisfying the CAA. Accordingly, the Petitioners have not demonstrated that the lack of explanation for these individual permit terms resulted in a flawed Permit. *See, e.g.*, *Waelz Order* at 18–19.

Thus, to the extent that Claim 2 alleges that CDPHE's permit record fails to satisfy 40 C.F.R. § 70.7(a)(5) because CDPHE did not provide a justification for each permit term relying on AP-42 emission factors, it is denied.

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[48] The relevant public comments included a list of permit conditions that rely on AP-42 emission factors, but did not include any information about the relevant permit limits, the pollutants of concern, or the AP-42 emission factors at issue. Earthjustice Petition Ex. 6 at 19. By contrast, as noted previously, the Earthjustice Petition included some of this additional detail, including the specific AP-42 sections associated with different pollutants and their associated AP-42 "ratings." Earthjustice Petition at 30–31.

[49] Specifically, CDPHE stated: "Regulatory agencies have a long-standing practice to accept AP-42 emission factors for emission calculation and permitting purposes and to disregard these factors only when a better, well documented, and scientifically sound emission factor is available for a specific source." RTC at 18–19.

[50] None of the Petitioners' other challenges to CDPHE's RTC are persuasive. The Petitioners take issue with CDPHE's general suggestion that the basis for individual emission factors would have been presented in an earlier title V permit action. Earthjustice Petition at 37. If the public comments had raised more specific challenges to individual emission factors or permit terms, EPA would have expected CDPHE to provide a more detailed description of the specific location of such justifications in those prior title V permit actions. *See Valero Houston Order* at 62. However, because the public comments on this point were general, EPA finds no fault with CDPHE's general response. Additionally, the Petitioners challenge portions of CDPHE's response related to the availability of alternatives and the time frame of emission calculations. Earthjustice Petition at 38. These general technical disputes have no bearing on whether CDPHE was obligated to justify the basis of individual permit terms that rely on AP-42. Finally, the Petitioners criticize CDPHE's failure to address the "ratings" of the various AP-42 emission factors implicated by this claim. Earthjustice Petition at 37. However, this issue was not raised in public comments, *see supra* note 37, so CDPHE cannot be faulted for failing to address it.

Claim 3: The Petitioners Claim That "EPA Must Object to the Proposed Permit's Reliance on the AP-42 Emission Factor for Particulate Matter Because the Division's Explanation for Why This Factor is Adequate is Unreasonable and Unsupported by the Record."

Petitioners' Claim: In Claim 3, the Petitioners first reiterate their two-part allegation from Claim 2: the Permit does not assure compliance with all terms and conditions because it relies on AP-42 for compliance demonstrations, and the permit record fails to justify the use of AP-42 emission factors. Earthjustice Petition at 38–39 (citing 40 C.F.R. §§ 70.6(c)(1), 70.7(a)(5); 5 CCR 1001-5, Part C, V.C.16.a). The Petitioners then specifically challenge the use of an AP-42 emission factor for PM from stationary combustion sources, based on AP-42 Section 1.4. *Id*. at 38.

The Petitioners identify five permit terms, corresponding to five types of emission units that rely on this AP-42 emission factor: crude heater and vacuum heater (Condition 1.1), FCCU preheater (Condition 2.1.1), reformer heaters (Condition 3.1), sulfur recovery unit incinerator (Condition 5.1.1), and East Plant main flare (Condition 8.1). *Id*. at 39. The Petitioners' primary criticism of this AP-42 factor is that it is rated "D," which is considered below average. *Id*. at 38 (citing AP-42 Introduction at 9).

The Petitioners also address CDPHE's justification for the use of the AP-42 factor for PM—specifically, the state's conclusion that the total PM factor "likely overestimates" emissions from the relevant units. *Id*. at 39 (quoting RTC at 20). First, the Petitioners challenge CDPHE's discussion of performance tests conducted on natural gas-burning combustion equipment at other facilities, asserting that the underlying data was not part of the permit record. *Id*. at 40. Moreover, the Petitioners assert that the CDPHE "does not explain (i) how many units were reviewed, (ii) what types of facilities the units were in, (iii) how much lower the performance test results were than the AP-42 test results, or (iv) whether any performance tests reviewed showed PM emissions higher than the AP-42 estimate." *Id*.

Second, the Petitioners contest CDPHE's assumption that, because "refinery fuel gas is not significantly different from natural gas," this emission factor likely overestimates the total PM emissions from units burning refinery fuel gas. *Id*. The Petitioners assert that the state provides no citations to support this conclusion. *Id*. Moreover, the Petitioners claim that this assumption is false. *Id*. The Petitioners observe that AP-42's discussion of process heaters at refineries acknowledges that emissions vary depending on "the type of fuel burned, the nature of the contaminants in the fuel, and the heat duty of the furnace," and that AP-42 does not include emission factors for all fuels, including refinery fuel gas. *Id*. (citing AP-42 section 5.1.2.9 and a 2015 EPA emissions protocol document for refineries[51]). The Petitioners also observe that Colorado regulations recognize the difference between refinery fuel gas combustion and natural gas combustion, as these regulations contain limitations on NO_x from process heaters that are twice as high for refinery fuel gas compared to natural gas. *Id*. at 40 (citing 5 CCR 1001-9:E.II.A.4.g.(i)).

[51] Emissions Estimation Protocol for Petroleum Refineries, Ver. 3 (April 2015) (2015 Refinery Protocol), available at *https://www.epa.gov/sites/default/files/2020-11/documents/protocol_report_2015.pdf*.

EPA's Response: For the following reasons, EPA grants the Petitioners' request for an objection on this claim.

Claim 3, unlike Claim 2, involves a fact-specific challenge to the use of a particular AP-42 emission factor: the 7.6 lb/MMScf emission factor for total PM from AP-42 Section 1.4, Table 1.4-2, as used to demonstrate compliance with limits on the crude heater and vacuum heater (Condition 1.1), FCCU preheater (Condition 2.1.1), reformer heaters (Condition 3.1), sulfur recovery unit incinerator (Condition 5.1.1), and East Plant main flare (Condition 8.1). This emission factor was developed to estimate emissions from the combustion of natural gas in external combustion sources like boilers.

CDPHE justified its reliance on this emission factor as follows:

> Earthjustice notes the total PM emission factor (7.6 lb/MMScf) in Section 1.4 (dated 7/1998), Table 1.4-2 has an AP-42 rating of "D" which is considered below average, per EPA's November 2020 Enforcement Alert. However, the total PM emission factor (7.6 lb/MMscf) is a combination of the filterable PM emission factor (1.9 lb/MMscf) and the condensable PM emission factor (5.7 lb/MMscf). The filterable PM emission factor has a rating of "B" which is considered above average per EPA's November 2020 Enforcement Alert. The condensable PM emission factor has a rating of "D", thus the total PM emission factor rating is brought down by the condensable PM emission factor.
>
> The AP-42 condensable PM emission factor is 3 times the value of the filterable PM emission factor. A review of past performance tests for natural-gas fired combustion equipment addressed in other Title V permits indicate that the total PM emission rates are below that of the total PM emission factor in AP-42 Section 1.4 (7.6 lb/MMscf or 7.45 x 10-3 lb/MMBtu) and that condensable PM emissions are generally not three times the filterable portion. Therefore, the Division considers this emission factor likely over-estimates PM emissions from natural gas-burning combustion equipment. Since refinery fuel gas is not significantly different from natural gas, the Division considers the total PM emission factor in AP-42 Section 1.4 likely overestimates refinery fuel gas combustion equipment and does not consider that further testing is required.

RTC at 20.

Several of the Petitioners' rebuttals to this justification are persuasive. For one, EPA agrees with the Petitioners that CDPHE may not be correct in concluding that "refinery fuel gas is not significantly different from natural gas." RTC at 20. As the Petitioners observe, EPA has indicated that this particular section of AP-42 "does not include emission factors for all fuels (notably refinery fuel gas and coke)." 2015 Refinery Protocol at 4-11. Although EPA has itself used the AP-42 emission factors associated with natural gas combustion to estimate emissions from refinery gas combustion in certain contexts,[52] this may not be appropriate in all contexts, as

[52] For example, the 2015 Refinery Protocol itself uses the natural gas-based emission factors to represent combustion of both natural gas and refinery fuel gas. *See* 2015 Refinery Protocol at 4-12 to 4-17.

emissions of PM (and other pollutants) may vary significantly between natural gas and refinery fuel gas combustion. Differences in PM emissions may depend on the sulfur content in the refinery fuel gas (which may depend on both raw materials as well as the specific processes that create the refinery fuel gas upstream of a particular combustion unit) and/or the presence of other emission controls on individual combustion units (such as selective catalytic reduction for NO_x controls), both of which could contribute to increased condensable PM formation. *See, e.g.*, *In the Matter of BP Products North America, Inc, Whiting Business Unit*, Order on Petition No. V-2021-9 at 17, 19 n.35, 20 (March 4, 2022). Thus, the Petitioners have demonstrated that it may not be appropriate for the units combusting refinery fuel gas to rely on the AP-42 emission factor associated with combusting natural gas.

Second, and relatedly, the Petitioners have demonstrated that CDPHE did not adequately justify its conclusion that the PM emission factor in AP-42 is expected to be conservative. CDPHE does not identify or describe any of the data upon which this conclusion is based. Additionally, this portion of CDPHE's justification relies on comparisons to other units combusting natural gas, so the relevance of this data to the Suncor units combusting refinery fuel gas is not entirely clear (for the reasons explained in the preceding paragraph).

In sum, given CDPHE's acknowledgment that condensable PM emissions likely constitute the majority of PM emissions from these units and condensable PM emissions give rise to the poor "D" rating for this particular emission factor, and given EPA's understanding that condensable PM emissions are most likely to be impacted by any differences between natural gas combustion and refinery fuel gas combustion, and absent additional quantitative support from CDPHE, the record does not support CDPHE's conclusion that this emission factor is necessarily conservative or representative of actual emissions (especially as it relates to condensable PM).

Additionally, it is not clear whether CDPHE's response to the general issues in Claim 2—that AP-42 emission factors are used due to the infeasibility of conducting stack tests, *see* RTC at 19—is relevant or applicable to the combustion sources at issue in Claim 3. It seems likely that stack testing may be possible for at least some of the affected units, and the record contains no explanation for why CDPHE rejected this approach for these units.

Overall, the permit record is unclear regarding whether the PM emission factor in AP-42 Section 1.4, Table 1.4-2 is sufficient to assure compliance with the previously described emission limits on units at the Suncor refinery that burn refinery fuel gas. Thus, EPA grants Claim 3. 40 C.F.R. § 70.8(c)(3)(ii).

Direction to CDPHE: CDPHE must amend the permit record and/or Permit to ensure that the Permit assures compliance with the relevant PM emission limits on the crude heater and vacuum heater (Condition 1.1), FCCU preheater (Condition 2.1.1), reformer heaters (Condition 3.1), sulfur recovery unit incinerator (Condition 5.1.1), and East Plant main flare (Condition 8.1). CDPHE may be able to accomplish this by further explaining why the AP-42 emission factor for PM in Section 1.4, Table 1.4-2 is sufficiently representative of emissions from the cited emission units (or is sufficiently conservative), addressing the issues discussed in EPA's Response. CDPHE should also consider whether it is necessary to revise the Permit to include additional stack testing or other means of obtaining a more representative emission factor.

Claim 4: The Petitioners Claim That "EPA Must Object to the Proposed Permit Because It Violates Applicable Monitoring Requirements by Excluding Higher-Than-Normal Emissions from [SSM] Periods from Its Emission Compliance Calculations."

Petitioners' Claim: The Petitioners claim that the Permit must require Suncor to separately quantify emissions during SSM periods in order to demonstrate compliance with a variety of permit limits. *See* Earthjustice Petition at 41–44. Similar to Claims 2 and 3, the Petitioners assert in Claim 4 that (i) the Permit's emission calculation requirements do not assure compliance with various permit limits and (ii) the permit record fails to justify this calculation methodology. *Id*. at 42 (citing 40 C.F.R. §§ 70.6(c)(1), 70.7(a)(5); 5 CCR 1001-5, Part C, V.C.16.a).

The Petitioners state that throughout the Permit, CDPHE provides equations for Suncor to use to calculate emissions for purposes of demonstrating compliance with applicable emission limits. *Id*. at 41. The Petitioners cite 22 different permit terms and list the emission units associated with these permit terms. *See id*. at 42–43. The Petitioners provide some additional detail with respect to one "example" involving emission limits and compliance calculations for the crude heater and vacuum heater. *Id*. at 41 (citing Permit Condition 1.1). For this example, the Petitioners note that the permit requires emissions to be calculated by multiplying measured fuel usage by an AP-42 emission factor. *Id*.

The Petitioners then fault this (and all similar) equations because they rely on emission factors relevant to normal operations, and these emission factors do not account for excess emissions that occur during periods of SSM. *Id*. The Petitions provide several arguments in support of this claim. According to the Petitioners, "during SSM periods, pollution controls may not be operating normally and other variables impacting emission rates can vary, resulting in higher emissions than usual." *Id*. Additionally, the Petitioners observe that EPA has emphasized that air pollution during SSM events has "real-world consequences that adversely affect public health." *Id*. (quoting 80 Fed. Reg. 33840, 33850 (June 12, 2015)). The Petitioners contend that the Permit fails to include a variable or adjustment to account for increased emissions during SSM. *Id*.

Additionally, as with Claims 2 and 3, the Petitioners challenge CDPHE's permit record, asserting that it fails to satisfy 40 C.F.R. § 70.7(a)(5). The Petitioners restate parts of CDPHE's RTC, in which the state noted that public commenters did not "specifically indicat[e] why, for each of those permit conditions listed, . . . [SSM] emissions are significant and should be included in assessing compliance." *Id*. at 43 (quoting RTC at 22). More specifically, the Petitioners claim that state demanded that the Petitioners provide in their comments evidence of higher emissions during SSM periods, information about the length of SSM periods, and details about how additional emissions would affect Suncor's compliance status. *Id*. (citing RTC at 23). The Petitioners argue that "[t]hese pieces of information, however, are not the Petitioners' burden to supply," and that the state's response "improperly attempts to shift the burden onto Petitioners." *Id*. The Petitioners further assert that "Petitioners could never meet the burden that the Division seeks to place on them," because "[t]he very provisions that Petitioners are asking for would provide Petitioners the data necessary to meet the burden that the Division claims is required." *Id.* at 44. The Petitioners claim that it is instead the state's burden to "explain why it believes

that, for each of the listed conditions, SSM periods will *not* affect the permit's compliance equations' ability to assure compliance." *Id*. at 43–44. Specifically, as with Claim 2, the Petitioners claim that where "Petitioners have raised a reasonable question on the adequacy of the permit's monitoring requirements, the burden is on the Division to ensure that the permitting record 'contain[s] sufficient information to conclude that there is adequate monitoring to assure compliance with relevant emission limits.'" *Id*. at 44 (quoting *Valero Houston Order* at 62; citing *In the Matter of Cash Creek Generation, LLC*, Order on Petition No. IV-2010-4 (June 22, 2012) (*Cash Creek II Order*)).

EPA's Response: For the following reasons, EPA denies the Petitioners' request for an objection on this claim.

Although the subject matter of Claim 4 differs somewhat from Claim 2, the structure of the two claims is similar. In Claim 4, the Petitioners again request EPA's objection to dozens of permit terms based on a general concern that may or may not be relevant to whether the monitoring associated with any of those permit terms is sufficient to assure compliance with various unidentified emission limits. Moreover, again, not only do the Petitioners request EPA's objection on the merits (per 40 C.F.R. §70.6(c)(1)), but the Petitioners also request EPA's objection due to CDPHE's alleged failure to explain the basis of all potentially affected permit terms (per 40 C.F.R. § 70.7(a)(5)). For reasons similar to those presented in EPA's response to Claim 2, neither argument demonstrates a basis for EPA's objection.

Inadequate Permit Terms

First, the Petitioners have not demonstrated that it is necessary for any specific permit terms to require separate quantification of emissions during SSM in order to assure compliance with any particular applicable requirements or permit terms. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1); 5 CCR 1001-5, Part C, V.C.16.a. Claim 4 is based on the general premise that emissions during SSM may be higher than during normal operations. *See* Earthjustice Petition at 41, 43. This may very well be true in some cases. However, it is not universally true that higher-than-normal-emissions during SSM will necessarily undermine a facility's compliance with all emission limits, such that it would be necessary to separately quantify SSM emissions in order to assure compliance with every emission limit in a permit (or at least the dozens of permit limits cited by the Petitioners). Instead, again, determining whether this is necessary requires a fact-specific analysis of the relevant permit terms. *See, e.g., CITGO Order* at 7. Moreover, again, in seeking EPA's objection, the Petitioners bear the burden to demonstrate that additional or more specific monitoring is necessary to satisfy the CAA. 42 U.S.C. § 7661d(b)(2).

Here, the Petitioners do not provide any fact-specific explanations for why they believe it is necessary to separately quantify emissions during SSM in order to assure compliance with any of the dozens of potentially affected emission limits implicated by this claim.

For example, as with Claim 2, the Petitioners include virtually no discussion about the relevant limits with which the cited permit terms are designed to assure compliance. Addressing the limits themselves is important. One of the prior orders cited by the Petitioner dealt with a specific type of limit designed to ensure that facility-wide emissions did not exceed relevant thresholds that

would trigger applicability of additional requirements (often called a "synthetic minor limit"). *See Cash Creek II Order* at 15.[53] For that particular type of limit, EPA has emphasized that "to effectively restrict a facility's [potential to emit] under the relevant major stationary source threshold, a permit's emission limits must apply at all times to all actual emissions, and all actual emissions must be considered in determining compliance with the respective limits." *Piedmont Green Power Order* at 8 (citing, among others, the *Cash Creek II Order*). Whether the same rigor is required to assure compliance with other types of limits depends on the nature of the underlying limit, among other site-specific factors, such as those identified in EPA's *CITGO Order*. Again, those factors may include:

> (1) the variability of emissions from the unit in question; (2) the likelihood of a violation of the requirements; (3) whether add-on controls are being used for the unit to meet the emission limit; (4) the type of monitoring process, maintenance, or control equipment data already available for the emission unit; and (5) the type and frequency of the monitoring requirements for similar emission units at other facilities.

CITGO Order at 7–8. As CDPHE reasonably suggests, other factors that might be relevant to this particular allegation include: whether a particular emission unit would have higher emissions during periods of SSM, whether SSM periods are lengthy, and how those emissions would impact the compliance status of annual (tons per year) emission limitations. RTC at 23.

Contrary to the Petitioners' suggestion that "Petitioners could never meet the burden" to supply this type of information, Earthjustice Petition at 44, essentially all of the above-referenced factors or facts should be discernable to some extent from publicly available information (including information in the Permit, permit application, and other parts of the permit record). EPA is not suggesting that petitioners are expected to supply perfect data quantifying the precise emissions impacts of SSM events. However, in order to provide a basis for EPA to object to a permit on these grounds, petitioners would need to present some fact-specific analysis to demonstrate that *not* separately quantifying SSM emissions from a particular emission unit would undermine a source's demonstration of compliance with a specific applicable requirement or permit term. Here, with one exception (concerning Condition 1.1, discussed in the following paragraph), the Petitioners provide no specific facts regarding any of the permit terms identified in Claim 4; instead, the Petitioners rely on generalized arguments—which effectively amount to "emissions during SSM are probably higher than normal operation." Such general arguments are insufficient to satisfy the demonstration burden under CAA. 42 U.S.C. § 7661d(b)(2).[54]

Regarding the more specific "example" provided by the Petitioners (which concerns Condition 1.1, governing the crude heater and vacuum heater), the Petitioners have also failed to

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[53] Moreover, EPA's conclusions regarding the permit terms and permit record relevant to the *Cash Creek II Order*, as with the *Valero Houston* and *Piedmont Green Power Orders* (addressed in EPA's response to Claim 2), were based on a petitioner's fact-specific demonstration concerning a specific permit term, and EPA's response was custom-tailored to the specific pollutants and type of emission units at issue. *See Cash Creek II Order* at 15, 18–19; *Valero Houston Order* at 62, 31–61; *Piedmont Green Power Order* at 12–15.

[54] *See supra* notes 6–7 and accompanying text.

demonstrate that the Permit does not contain sufficient monitoring to assure compliance with the relevant limits. In response to public comments identifying this example, CDPHE explained:

> Earthjustice doesn't explain why they believe the crude or vacuum heaters would have higher emissions during periods of [SSM], whether periods of [SSM] are lengthy and how those emissions would affect the compliance status for annual (tons per year) emission limitations. The heaters are not equipped with any add-on control device that would need to "warm-up" in order to properly reduce emissions and Earthjustice doesn't list the "variables" impacting emissions that may vary during [SSM]. In addition, there is no indication that startup or shutdown of this equipment would take an extended period of time, or that gas-fired heaters suffer frequent malfunctions such that emission rates would be significantly higher than the emission factors. Given that the applicable emission limits are annual (tons per year) limits, the emission calculations rely on actual fuel consumption and that operating rates are generally below 8760 hours per year (the operating rate on which the vacuum and crude heaters limits are based), the Division considers that separate emission factors for periods of [SSM], as well as normal operations are not necessary.

RTC at 23. The Petitioners' only response to CDPHE's technical explanations was a single conclusory statement: "The Division's response regarding Condition 1.1 suffers from the deficiencies described above." Earthjustice Petition at 44. However, it is unclear to which "deficiencies" the Petitioners refer, as they do not identify any deficiencies with respect to Condition 1.1.[55] In fact, the Petitioners do not dispute or otherwise discuss any of CDPHE's technical explanations in this response, much less "explain how the permitting authority's response to the comment is inadequate to address the issue raised in the public comment." 40 C.F.R. § 70.12(a)(2)(vi).[56]

Overall, the Petitioners' generalized criticisms, presented without any analysis of the *dozens* of potentially impacted permit terms, are insufficient to demonstrate that the Permit does not assure compliance with any specific applicable requirements or permit terms.[57] Thus, to the extent Claim 4 asserts that the Permit does not satisfy 40 C.F.R. § 70.6(c)(1) and 5 CCR 1001-5, Part C, V.C.16.a, it is denied.

Inadequate Permit Record

In Claim 4, instead of attempting to demonstrate why individual permit terms that do not require separate quantification of SSM emissions are *insufficient* to assure compliance, the Petitioners again fault CDPHE for failing to explain why the dozens of affected permit terms are *sufficient*. Specifically, as with Claim 2, the Petitioners allege that CDPHE failed to satisfy the requirement in 40 C.F.R. § 70.7(a)(5) to provide a "statement that sets forth the legal and factual basis for the

[55] In light of CDPHE's technical explanation of Condition 1.1, the "deficiencies" alleged elsewhere in Claim 4—namely, CDPHE's alleged failure to explain the basis for its decision—do not appear relevant to Condition 1.1.
[56] *See supra* note 9 and accompanying text.
[57] *See supra* notes 6, 7, and 39 and accompanying text.

draft permit conditions." This part of Claim 4 again primarily relies on the Petitioners' attempted "burden-shifting" arguments.

EPA's response to Claim 2 summarizes the relevant statutory and regulatory requirements and EPA interpretations and policies relevant to this type of allegation. *See supra* pages 28–32. In summary: (i) the CAA requires that states issue title V permits that assure compliance with all applicable requirements; (ii) EPA's regulations require that states develop permit records justifying their decisions, but states are not required to proactively justify all permit terms, especially unchanged permit terms in renewal permits that continue to reflect underlying requirements; (iii) EPA's regulations require that states respond to all significant comments, generally with a level of detail commensurate with the public comments; and (iv) ultimately, the CAA places the burden on the public to identify alleged deficiencies with a permit "with reasonable specificity" during the public comment period (in order to preserve such issues in a subsequent petition) and to "demonstrate" in a petition that the permit does not satisfy the CAA, including for claims challenging the adequacy of a permit record. 42 U.S.C. § 7661d(b)(2).

Turning to the facts at hand, the issue is as follows: *Did the public comments addressing the potential for higher SSM emissions articulate specific challenges to the sufficiency of particular monitoring provisions, such that CDPHE was required to provide a specific justification for the dozens of permit terms potentially impacted by these comments?*

Here, for the reasons presented in the following paragraphs, the relevant public comments were not specific enough to necessitate a more specific response than that provided by CDPHE. Central to this conclusion (as with EPA's similar conclusion in Claim 2) is the fact that it is not always necessary to separately quantify SSM emissions for purposes of demonstrating compliance with all emission limits. As with other monitoring requirements, this is a context-specific issue that will depend on factors unique to each affected permit term. *See supra* pages 39–40. Thus, in order to prompt a permitting authority to justify the monitoring associated with respect to any particular permit term, the public must raise with specificity its challenges *with respect to that particular permit term*.

Here, the relevant public comments alleged generally that emissions during SSM may be higher than normal emissions, but *the comments did not provide any analysis of the potentially affected permit terms*.[58] In other words, these general comments did not present a fact-specific basis for calling into question the sufficiency of individual permit terms that do not require separate quantification of SSM emissions in compliance demonstrations. Because the public comments associated with Claim 4 did not present any fact-specific challenges to individual permit terms,

[58] As discussed earlier in this response, public comments did include one "example" of a permit term (Condition 1.1) accompanied by slightly more detailed fact-specific discussion. CDPHE responded to that comment with a specific justification for the permit term at issue, and the Petitioners do not present any substantive challenges to that response. *See supra* pages 40–41. Thus, EPA does not interpret this portion of Claim 4—alleging that CDPHE failed to present a justification for the numerous other affected permit terms—to apply to that example (Condition 1.1).

CDPHE did not have an obligation to separately analyze and explain the fact-specific basis for each of the potentially affected permit terms.[59]

CDPHE's RTC responded to the relevant public comments with a level of generality similar to the public comments that prompted it. *Compare* Earthjustice Petition Ex. 6 at 21–22 *with* RTC at 22–23. Specifically, public commenters alleged that the compliance demonstration methodologies throughout the permit were inadequate because they relate to normal operations and do not account for emissions during SSM, which are higher than during normal operations. *See* Earthjustice Petition Ex. 6 at 21–22. In response, CDPHE acknowledged that emissions during SSM may be higher, suggested that the difference between these emissions may not always be significant and would not necessarily impact a source's ability to comply with the relevant emission limits, and, again, explained some of the technical considerations underlying this conclusion in relation to the crude heater and vacuum heater specifically mentioned in comments. *See* RTC at 22–23. This RTC responded to all of the general arguments supplied in public comments, and was therefore consistent with the general principles discussed above. *See Tuscon Electric Power*, 17 E.A.D. at 695. The Petitioners have not demonstrated that this response was insufficient with respect to 40 C.F.R. § 70.7(a)(5), 70.7(h)(6), or any other relevant requirements.

Additionally, for the reasons discussed in the preceding subsection, *supra* pages 39–41, the Petitioners have not demonstrated that their general concerns with SSM emissions resulted in any individual permit terms not satisfying the CAA. Accordingly, the Petitioners have not demonstrated that the lack of explanation for these individual permit terms resulted in a flawed Permit. *See, e.g.*, *Waelz Order* at 18–19.

Thus, to the extent that Claim 4 alleges that CDPHE's permit record fails to satisfy 40 C.F.R. § 70.7(a)(5) because CDPHE did not provide a justification for each permit term that does not require Suncor to separately quantify emissions during SSM, the Petitioners' claim is denied.

B. NSR Permitting Issues (Claims 5–9)

Claims 5 through 9 of the Earthjustice Petition all implicate permitting decisions related to NSR "minor modifications" that were incorporated into Suncor's title V permit renewal. The Petitioners acknowledge that EPA does not ordinarily have a formal opportunity to review or object to minor NSR permits. Earthjustice Petition at 46. However, based in part on unique aspects of CDPHE's EPA-approved NSR and title V regulations, the Petitioners present three arguments for why EPA should consider these NSR-related issues in the present title V permitting action.

[59] *See* RTC at 22 ("Earthjustice considers that emissions during periods of [SSM] would all be higher and the emission factors do not take those higher emissions into account. While the Division does not necessarily disagree with this statement, for some emission units and pollutants, Earthjustice has not specifically indicated why, for each of those permit conditions listed, they believe [SSM] emissions are significant and should be included in assessing compliance with annual (tons per year) emission limits. As noted in the above example, Earthjustice's general comment is flawed and so the Division cannot reasonably provide a detailed response to these general concerns, absent more specific information, however, we can respond to the one specific example Earthjustice provided.").

Petitioners' Arguments

First, the Petitioners assert that NSR issues are reviewable during the title V permit renewal process because there were no separately issued NSR permits, and because it is instead *the title V renewal permit* that authorizes Suncor's minor NSR modifications. Earthjustice Petition at 45. The Petitioners observe that CDPHE's construction permit regulations provide:

> Owners or operators of sources that have valid operating permits . . . may construct or modify such source without obtaining a construction permit prior to construction or modification, provided the construction or modification qualifies for a minor permit modification or for operational flexibility, and the applicable provisions as set forth in Sections X . . . of Part C [of Regulation No. 3] are met.

Id. (quoting 5 C.C.R. § 1001-5, Part B, II.A.6). The Petitioners explain that Section X of Part C generally recites the language in EPA's title V regulations governing title V minor permit modifications. *Id*. From this, the Petitioners conclude that "the approval process for the state's minor NSR construction permit program *is* the Title V permit modification procedure." *Id*.

Regarding Suncor's permit(s), the Petitioners dispute any suggestion by CDPHE that the minor NSR modifications are not subject to review because they are "past permitting actions" or "complete." *Id*. at 45 (citing RTC at 36–40). The Petitioner asserts that CDPHE has not issued (and will not issue) any separate "minor NSR permits" authorizing various physical and operational changes. *Id*. at 44–45. The Petitioners assert that there are no decision documents embodying CDPHE's approval of any minor modifications (but instead, only indications that CDPHE determined that the relevant permit applications were complete). *Id*. at 46. The Petitioners contend that determinations of completeness do not amount to final permit approvals. *Id*.; *see id*. at 67. Additionally, the Petitioners claim that, as a legal matter, CDPHE could not finalize approval of any minor modifications until after they were submitted to EPA for review—an event Petitioners assert did not occur until the present title V permit renewal action. *Id*. at 46, 47 (citing 5 CCR 1001-5, Part C, X.F, and Part C, X.H). Thus, the Petitioners suggest that the current title V renewal permit is the first permit action to formally approve the various minor modifications being incorporated into the Permit. *Id*. at 47.

Relatedly, the Petitioners claim that the minor NSR modifications could not be approved until they go through the title V public participation requirements. *Id*. (citing 5 CCR 1001-5, Part B, III.C.2.c). Although the Petitioners acknowledge that a public comment opportunity is not required at the time a minor permit modification application is submitted, the Petitioners claim that "all conditions proposed for incorporation into a source's renewal Title V permit are subject to public comment, including those initially deemed subject to minor modification procedures." *Id*. at 48 (citing 5 CCR 1001-5, Part C, VI.A; 40 C.F.R. § 70.7(c)(1)(i)). The Petitioners also assert that the public's right to comment on minor NSR modifications during title V renewal permits was part of the reason for designing the integrated NSR and title V permitting structure described above. *Id*.

Additionally, the Petitioners assert that Colorado state law provides no other mechanism (beyond the title V renewal process) for the public to challenge the minor NSR modifications. *Id*. at 48–49 (citing 5 CCR 1001-1:VII.E.1, 1001-5, Part C, VI.B.10, Part C, VI.D–E, and Part D, IV.A.2).

The Petitioners summarize their first argument as follows:

> In sum, Colorado's regulations specifically provide that a Title I minor modification that is initially processed without a public comment opportunity is subject to Title V public participation requirements at the point that the source applies for renewal of its Title V permit. Therefore, the Title I minor modifications incorporated into the Proposed Permit are subject to review during the Title V process, including the opportunity for public comment and the right to petition EPA for an objection.

Id. at 49.

Second, the Petitioners observe that EPA recently reviewed an NSR-related claim in a title V petition where "no NSR permit had been issued by the permitting authority." *Id*. (quoting *In the Matter of Salt River Project Agricultural Improvement and Power District, Agua Fria Generating Station*, Order on Petition No. IX-2022-4 at 11 n.18 (July 28, 2022) (*SRP Agua Fria Order*)). The Petitioners assert that "EPA's rational[e] for granting Title V review in that circumstance applies equally to the minor modifications at issue in this proceeding," since "there is no separate 'NSR permitting process' under which the Division has or will approve the Title I modifications at issue in this petition." *Id*.

Third, the Petitioners argue that even if the minor NSR modifications had been issued under title I, case law from the U.S. Court of Appeals for the Tenth Circuit would require EPA to object to the title V permit if it omits an applicable requirement (including a NSR-related requirement of the SIP). *See id*. at 50–51 (citing *Sierra Club v. EPA*, 964 F.3d 882 (10th Cir. 2020)). The Petitioners acknowledge that the *Sierra Club* case specifically confronted a question of whether modifications that were treated as "minor" should have been treated as "major" modifications, but argue that the case's holding should be applied more broadly to embrace all of the NSR-related claims in the Earthjustice Petition. *Id*. at 51. According to the Petitioners, "under the Tenth Circuit's opinion, EPA must object if Petitioners demonstrate that a provision of the permit does not comply with the SIP, including the validity of the minor modifications." *Id*. at 51.

EPA's Response

For the following reasons, EPA generally agrees with the Petitioners that the NSR-related issues, as presented in the Earthjustice Petition, are within the scope of EPA's review in the current title V permit proceeding.

EPA continues to maintain that in many situations, it is not appropriate for EPA to use the title V permitting process (including the petition process) to re-evaluate "applicable requirements" established through the title I NSR permitting process. However, there are situations where NSR-related issues are properly before EPA in a title V petition. For example, EPA has reviewed NSR-related issues when the relevant permit terms were established for the first time through a title V permit—*e.g.*, where there was no NSR permit action to establish or define the relevant

"applicable requirements" of the SIP—or where the NSR permitting process did not involve public notice and the opportunity for public comment and judicial review.[60]

Here, EPA agrees that, given the unique structure of Colorado's NSR and title V permitting programs, CDPHE has not issued any title I NSR permits that would establish the NSR-related "applicable requirements" of the SIP.[61] Several points support this conclusion:

First, CDPHE never issued any formal approvals of the minor NSR modifications at issue through a legally distinguishable title I minor NSR permit action. This is consistent with the EPA-approved regulations authorizing CDPHE's integration of NSR and title V permitting, which specifically state that when the title V minor modification process is used, the source "may modify or construct such source *without obtaining a construction permit* prior to construction or modification." 5 CCR 1001-5, Part B, II.A.6 (emphasis added).[62]

Second, it does not appear that CDPHE ever formally approved the minor NSR modifications at issue through finalized minor modifications to Suncor's *title V* permit (even though this is required by CDPHE's minor modification regulations). *See* 5 CCR 1001-5, Part C, X.H. EPA observes that for many of the NSR modifications at issue, CDPHE did transmit to EPA notice that the facility had submitted a complete application for the respective modifications. However, within those notices, CDPHE also indicated that the minor modifications to the title V permit would "be incorporated into the renewal permit and not processed as a separate modification to

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[60] *See SRP Agua Fria Order* at 11 n.18 (reviewing NSR applicability issues where no NSR permit had been issued); *In* the Matter of Salt River Project, Desert Basin Generating Station, Order on Petition No. IX-2022-3 at 12 n.20 (July 28, 2022) (same); *In the Matter of BP Products North America, Inc. Whiting Business Unit*, Order on Petition No. V-2021-9 at 13 n.24 (March 4, 2022) (reviewing an NSR-related emission limit that was established in a title V, as opposed to an NSR, permit action); *In the Matter of Coyote Station Power Plant*, Order on Petition Nos. VIII-2019-1 & VIII-2020-8 at 12–13 (January 15, 2021) (*Coyote Station Order*) (reviewing NSR-related issues "where no public notice was provided of the underlying NSR permit action," among other reasons). EPA has also reviewed issues that involve an overlap between NSR and title V requirements. *See, e.g., In the Matter of South Louisiana Methanol, LP*, Order on Petition Nos. VI-2016-24 and VI-2017-14 at 10–11 (May 29, 2018) (reviewing monitoring issues associated with a PSD permit); *Coyote Station Order* at 12–13 (reviewing source determination issues potentially relevant to both title V and NSR); *In the Matter of ExxonMobil Corp., Baytown Chemical Plant*, Order on Petition No. VI-2020-9 at 14 (March 18, 2022) (reviewing an NSR Plantwide Applicability Limit where a SIP rule specifically provided for adjustments to the limit in a title V renewal permit action).

[61] In light of this conclusion, EPA need not address the extent to which the reasoning in the Tenth Circuit's *Sierra Club* decision (cited by the Petitioners) applies to individual NSR-related claims in the Earthjustice Petition. EPA's conclusion in that case involved materially different facts. There, an NSR permit *had* been issued to a source and, in EPA's view, that NSR permit defined which NSR-related requirements of the SIP were "applicable requirements" for title V purposes. Here, since no NSR permits have been issued to Suncor (insofar as the Petition claims are concerned), EPA is reaching a different conclusion and the Tenth Circuit's holding is not applicable.

[62] Regarding this regulation, as EPA stated in an Enclosure accompanying EPA's March 2022 Objection Letter, "EPA is concerned about the manner in which the approved title V combined operating/construction permit program has, in practice, deprived the public of meaningful participation in the activities subject to minor NSR permit requirements, including the opportunity to comment on the impact of emissions subject to minor NSR permit requirements or APCD's analyses of whether those emissions will meet health-based ambient air quality standards. EPA's concern about the lack of public involvement is exacerbated by the protracted delay in renewing the title V permits for the facility. . . . EPA has significant concerns about the existing approved title V combined operating/minor NSR construction permit program and will also be reviewing and examining possible actions to revise the program. EPA would like to work closely with the state to implement program revisions that will provide for public notice and comment on all minor NSR permitting." March 2022 Objection Letter, Encl. B at 2–3.

the Title V permit."[63] Thus, the current title V renewal permit appears to be the first *final* permit action to contain permit terms that ostensibly satisfy any NSR-related requirements of the SIP.

Third, EPA understands that sources are generally permitted under title V regulations to undertake changes associated with a title V minor modification after submitting a permit application. 40 C.F.R. § 70.7(e)(2)(v). Where a change to a source requires a preconstruction permit, preconstruction permitting programs may separately limit the extent to which changes can be made after only submitting a permit application. Here, Colorado's minor source preconstruction permitting program allows a source to begin construction of certain modifications to the source prior to obtaining the state's approval of either a preconstruction permit or a title V minor modification. 5 CCR 1001-5, Part C, X.I. But that permission does not amount to a permit "approval," which could only occur after the title V permit modification is forwarded to EPA for its review and finalized by the state thereafter (assuming no EPA objection). *See* 40 C.F.R. § 70.7(e)(2)(iv); 5 CCR 1001-5, Part C, X.H. Until then, sources undertake such changes at their own risk (*i.e.*, the risk that the state might not approve the changes). *See* 40 C.F.R. § 70.7(e)(2)(v); 5 CCR 1001-5, Part C, X.I. That risk—and the risk of a subsequent challenge—is especially notable here, since there are no underlying final NSR permits authorizing the changes to the source and CDPHE did not finalize the minor modifications to the title V permit until issuing the present title V renewal permit.

Thus, EPA disagrees with CDPHE's statement that "the facility already has received construction permits for its operations"; EPA disagrees with CDPHE's characterization of "previous permitting decisions made for these modifications"; and EPA disagrees with CDPHE's statement that individual projects were previously "approved" simply because the state determined that Suncor's applications were complete. RTC at 34, 36, 38, 39, 40, 41, 42.

In addition to the lack of any previously issued title I permits that would establish the NSR-based "applicable requirements" of the SIP, it also does not appear to EPA that the current title V renewal permit should be considered a "combined" title V operating permit and title I preconstruction permit.[64] For one, again, CDPHE's regulations expressly state that when this permit mechanism is used, the source "may construct or modify such source *without obtaining a construction permit* . . . ." 5 C.C.R. 1001-5, Part B, II.A.6. Additionally, construction of the modifications at issue has already occurred, so it would be difficult to describe the current permit as a title I "preconstruction permit" or a permit authorizing construction. Moreover, the Permit

[63] *E.g.*, Letter From Jaqueline Joyce, CDPHE, to DJ Law, EPA Region 8 (November 4, 2019).

[64] This distinction is relevant because in other jurisdictions, EPA has declined to review certain NSR-related issues even in situations where a title I NSR permit was issued in the same document as a title V permit. *See In the Matter of Waelz Sustainable Products, LLC*, Order on Petition No. V-2021-10 at 13–15 (March 14, 2023); *In the Matter of Riverview Energy Corp.*, Order on Petition No. V-2019-10 at 24–27 (March 26, 2020); *In the Matter of Big River Steel, LLC*, Order On Petition No. VI-2013-10 at 11–12 (October 31, 2017). In each of those prior situations, it was clear that there were two legally distinct permitting actions occurring: a NSR preconstruction permit action authorized under (and designed to satisfy) title I and an operating permit authorized under (and designed to satisfy) title V. The same cannot be said here.

itself does not purport to be anything other than a title V "operating permit" or "Colorado Operating Permit." *See* Final Permit, *passim*.[65]

EPA also observes that the current title V renewal proceeding is the first permit action in which these NSR issues have been subject either to public notice and comment or the opportunity for judicial review.

Given the foregoing, EPA will review the NSR-related claims that follow and will object to the Permit to the extent the Petitioners demonstrate that it does not comply with or assure compliance with the relevant "applicable requirements" of the SIP or the requirements of part 70. EPA has previously explained the framework it uses to assess such NSR-related issues (in the limited situations where it *is* appropriate to review these issues). More specifically:

> Where a petitioner's request that the Administrator object to the issuance of a title V permit is based in whole, or in part, on a permitting authority's alleged failure to comply with the requirements of its approved [NSR] program (as with other allegations of inconsistency with the Act), the burden is on the petitioner to demonstrate to the Administrator that the permitting decision was not in compliance with the requirements of the Act, including the requirements of the SIP. As the EPA has explained in describing its authority to oversee the implementation of the [NSR] program in states with approved programs, such requirements include that the permitting authority: (1) follow the required procedures in the SIP; (2) make [NSR] determinations on reasonable grounds properly supported on the record; and (3) describe the determinations in enforceable terms. As the permitting authority for [the state's] SIP-approved [NSR] program, [the state agency] has substantial discretion in issuing [NSR] permits. Given this discretion, in reviewing a [NSR] permitting decision in the title V petition context, the EPA generally will not substitute its own judgment for that of [the state]. Rather, consistent with the decision in *Alaska Dep't of Envt'l Conservation v. EPA*, 540 U.S. 461 (2004), in reviewing a petition to object to a title V permit raising concerns regarding a state's [NSR] permitting decision, the EPA generally will look to see whether the petitioner has shown that the state did not comply with its SIP-approved regulations governing [NSR] permitting, or whether the state's exercise of discretion under such regulations was unreasonable or arbitrary.

In the Matter of Appleton Coated, LLC, Order on Petition Nos. V-2013-12 & V-2013-15 at 5 (October 14, 2016) (*Appleton Order*) (citations omitted); *see In the Matter of PacifiCorp Energy,*

[65] *See also* Earthjustice Petition Ex. 1, Proposed TSD (titled "Renewal/modifications to operating permit 95OPAD108"). Note that the Proposed TSD also described the NSR-related permit applications at issue as "applications . . . to modify [Suncor's] title V permit," while also observing that the "applications were minor modifications for purposes of PSD and/or [NNSR]." *Id*. at 124. Consistent with other discussion in the TSD, EPA interprets the latter quote to reflect CDPHE's conclusion that the physical or operational changes to the source associated with the various modifications to the title V permit did not constitute major modifications that would have been subject to PSD or NNSR. *See id*. EPA does not interpret this quote to indicate that the current title V renewal permit constitutes or includes legally distinct title I permit authorizations.

Hunter Power Plant, Order on Petition No. VI-2022-2 at 17 (September 27, 2022) (*PacifiCorp-Hunter III Order*) (same).[66]

Claims 5 & 6: The Petitioners Claim That "EPA Must Object to the Proposed Permit Because Modeling Shows That Suncor's Modifications Cause or Contribute To Violations of the NAAQS, so the Proposed Permit Does Not Meet Applicable Requirements" and "EPA Must Object to the Proposed Permit Because It Incorporates Minor Modifications That Cannot Be Approved Because the Division Failed to Model the Modifications for Potential Violations of the NAAQS Without Adequate Justification and Failed to Offer Any Other Reasonable Basis for Determining That the Modifications Will Not Cause or Contribute to NAAQS Violations."

Petitioners' Claim: Claims 5 and 6 raise substantially overlapping issues regarding the impact of various minor NSR modifications (associated with this title V permit renewal) on the NAAQS. In Claim 5, the Petitioners claim that the overall source—and by implication, any emission increases associated with individual modifications—will cause a violation of the 2010 1-hour NO_2 and SO_2 NAAQS. In Claim 6, the Petitioners fault CDPHE for not conducting modeling that would demonstrate that individual modifications would not cause such violation. *See* Earthjustice Petition at 54–64. Both claims are addressed together below.

Reviewability

Both before and within Claims 5 and 6, the Petitioners elaborate on why EPA should specifically review the NAAQS modeling-focused issues in these claims. *See id*. at 52–54.[67] The Petitioners contest CDPHE's suggestion that the available NAAQS impacts modeling data "does not provide a legal basis for denying the Title V renewal since the facility already has received construction permits for its operations and the NAAQS is not considered an applicable requirement for Title V purposes." *Id*. at 57 (quoting Earthjustice Petition Ex. 19 RTC at 5; citing Ex. 18 RTC at 34).

[66] EPA has applied similar principles in numerous title V petition orders between 1999 and 2017. *See PacifiCorp-Hunter III Order* at 17 n.30; *see, e.g.*, *In the Matter of Roosevelt Regional Landfill*, Order on Petition at 9 (May 4, 1999) ("In determining [Best Available Control Technology, or BACT] under a minor NSR program, as in implementing other aspects of SIP preconstruction review programs, a State exercises considerable discretion. Thus, EPA lacks authority to take corrective action merely because the Agency disagrees with a State's lawful exercise of discretion in making BACT-related determinations. State discretion is bounded, however, by the fundamental requirements of administrative law that agency decisions not be arbitrary or capricious, be beyond statutory authority, or fail to comply with applicable procedures."). Applying this framework, EPA has also drawn an analogy between this approach and the standard used by the EPA Environmental Appeals Board in reviewing EPA-issued PSD permits, described as a "clearly erroneous" standard. *See, e.g.*, *In the matter of East Kentucky Power Cooperative, Inc., Hugh L. Spurlock Generating Station*, Order on Petition at 4–5 (August 30, 2007) (citing *In re Prairie State Generating Company*, 13 E.A.D. 1 (EAB 2006); *In re Kawaihae Cogeneration*, 7 E.A.D. 107 (EAB 1997)).

[67] Most of these arguments are distinct from the issues discussed in the preceding pages regarding EPA's review of NSR issues more broadly (though the Petitioners reiterate some of those general arguments with respect to these NAAQS-focused issues). *See id*. at 52, 58.

The Petitioners begin by acknowledging that "NAAQS modeling is not a generally applicable requirement for all Title V sources." *Id*. at 52; *see id*. at 57–58. However, The Petitioners assert that Colorado SIP requirements prohibiting modifications that would cause a NAAQS violation are "applicable requirements" with which the Suncor title V permit must assure compliance. *Id*. at 52. For support, the Petitioners cite a host of statutory and regulatory provisions to support their argument that such modeling is reviewable here—many of which are unique to Colorado's integrated program and found either in the Colorado SIP or the state's EPA-approved part 70 program rules.

Regarding the SIP, The Petitioners state that NSR minor modifications processed through a title V minor modification must satisfy Part B, Sections III.D.1.a. through III.D.1.g. *Id*. at 53, 54, 56, 60 (citing 5 CCR 1001-5, Part B, II.A.6). In turn, the Petitioners explain that, under Section III.D.1, an NSR minor modification may only be approved if "[t]he proposed source or activity will not cause an exceedance of any [NAAQS]" and "will meet any applicable ambient air quality standards." *Id*. at 61 (quoting 5 CCR 1001-5, Part B, III.D.1.c–d); *see id*. at 51, 53, 54, 56, 60.[68]

Regarding Colorado's EPA-approved part 70 program rules, the Petitioners state that applicants for a "combined construction/operating permit" are required to provide "[d]ata necessary to allow the Division to determine whether the source complies with . . . [a]ny applicable ambient air quality standards." *Id*. at 52 (quoting 5 CCR 1001-5, Part C, III.C.12); *see id*. at 51, 54, 56, 60. Similarly, the Petitioners note that applicants for title V minor permit modifications must include "[d]ata necessary to allow the Division to determine whether the source complies with . . . [a]ny applicable ambient air quality standards and all applicable regulations." *Id*. at 54, 56 (quoting 5 CCR 1001-5, Part C, X.D.5.d); *see id*. at 51, 58–59, 59–60. Thereafter, CDPHE may only issue a title V permit if it has received a complete permit application. *Id*. at 51, 54, 56, 60 (citing 5 CCR 1001-5, Part C, V.B.1). More to the point, CDPHE may only approve a combined construction/operating permit application if it determines, among other things, that the source "will comply with . . . applicable ambient air quality standards." *Id*. at 54 (quoting 5 CCR 1001-5, Part C, IV.A). Additionally, according to the Petitioners, CDPHE may only issue a minor modification to a title V permit "for those permit modifications that . . . [d]o not violate any applicable requirement," which the Petitioners claim includes the SIP requirement preventing minor modifications from interfering with attainment or maintenance of the NAAQS. *Id*. at 57, 60 (quoting 5 CCR 1001-5, Part C, X.A.1); *see id*. at 51, 54.[69]

According to the Petitioners, not only do these regulations provide a basis for EPA to review the NAAQS-focused issues in the Petition, but also, CDPHE's failure to satisfy these regulations provides a basis for EPA to object to Suncor's title V permit. *See id*. at 56–57, 59–60.

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[68] The Petitioners also note that EPA's regulations require that SIPs "must include means by which the State or local agency responsible for final decisionmaking on an application for approval to construct or modify will prevent such construction or modification if . . . (2) It will interfere with the attainment or maintenance of a national standard." *Id*. at 53 (quoting 40 C.F.R. § 51.160(b)).

[69] The Petitioners also cite other legal authorities, including 42 U.S.C. § 7410(a), (a)(2)(c), (l), and C.R.S. § 25-7-114.5(7)(a)(III).

Modeled Violations of NAAQS

Turning to the merits of the Petitioners' claims, the Petitioners contend the following in Claim 5: "EPA must object to the Proposed Permit because it includes permit modifications that increase emissions and therefore cause or contribute to violations of the 2010 one-hour averaging time NO_2 and SO_2 NAAQS." *Id*. at 54.[70]

The Petitioners base this contention on ambient air dispersion modeling, including modeling commissioned by the Petitioners as well as modeling performed by CDPHE. *Id*. at 54–55. According to the Petitioners' modeling, Suncor's total allowable emissions—including increased emissions from several permit modifications—will cause violations of both the 1-hour NO_2 and SO_2 NAAQS. *Id*. at 55.[71] The Petitioners claim that CDPHE's modeling confirms this result, returning NO_2 violations in 16 out of 20 scenarios and SO_2 exceedances in all modeled scenarios. *Id*. at 56. The Petitioners note CDPHE's statement that "[i]t is expected that this facility will continue to contribute and/or cause a modeled violation of the 1hr NO_2 and 1hr SO_2 NAAQS due to the facility alone exceeding over 100% of the NAAQS for both 1hr NO_2 and SO_2." *Id*. at 56 (quoting Earthjustice Petition Ex. 31, CDPHE Modeling Review Comments). Similarly, the Petitioners reproduce CDPHE's statement that the state's preliminary modeling "showed lower values than the [report commissioned by the Petitioners] but still showed the facility was exceeding the SO_2 and NO_x NAAQS." *Id*. at 57 (quoting Ex. 19 RTC at 5; citing Ex. 18 RTC at 34).

The Petitioners contest CDPHE's position that "the first step of the modeling process is to model the project, not the entire facility." *Id*. at 61 (quoting Ex. 18 RTC at 37). The Petitioners characterize this statement as "false," and assert that "[a] NAAQS analysis must be based on emissions from the source, not a change in emissions." *Id*. For support, the Petitioners reiterate that CDPHE is required to determine that "[t]he proposed source or activity will not cause an exceedance of any [NAAQS]" and "will meet any applicable ambient air quality standards." *Id*. at 61 (quoting 5 CCR 1001-5, Part B, III.D.1.c–d). Further, the Petitioners observe that EPA's Appendix W Guideline describes the first stage of the modeling analysis as "a single-source impact analysis, since this stage involves considering only the impact of the new or modifying source." *Id*. (quoting EPA's Guideline on Air Quality Models at 40 C.F.R. part 51, App. W § 9.2.3.a.i). The Petitioners assert that these regulations say nothing about the "change in emissions" or individual projects, but instead focus on "the source." *Id*. The Petitioners remark that CDPHE's focus on changed emissions improperly disregards some, or most, of Suncor's emissions. *Id*.

Project-specific Impacts Analysis

Notwithstanding the Petitioners' focus on modeling that includes Suncor's total allowable emissions, the Petitioners identify five specific modifications (Modifications 1.28, 1.29, 1.33,

[70] The Petitioners suggest that CDPHE could remedy this problem by adding enforceable 1-hour emission limits to resolve the alleged NAAQS violations. *Id*. at 54 n.69.

[71] The Petitioners further assert that their modeling analysis was updated based on feedback from Suncor, accepted CDPHE's preferred approach to modeling (with which the Petitioners do not necessarily agree) and relied on non-conservative assumptions, thus likely underestimating emissions. *Id*. at 55.

1.36, and 1.39[72]) that give rise to the issues discussed in Claims 5 and 6. *Id*. at 57, 60. The Petitioners also identify the specific permit conditions associated with these modifications, *id*., and later identify each modification and the pages of the TRD that discuss each modification, *id*. at 60, 61.

Within Claim 6, the Petitioners allege that CDPHE improperly failed to require modeling for the individual NSR modifications being incorporated into the title V permit. *Id*. at 58. The Petitioners suggest modeling was necessary to ensure that those modifications do not violate the NAAQS. *Id*. The Petitioners also address CDPHE's suggestion that NAAQS attainment is generally evaluated with air quality monitoring, not modeling. *Id*. at 58. The Petitioners do not disagree, but argue that this is beside the point, as single-source *impacts* on the NAAQS can only be effectively understood through modeling. *Id*. at 58, 59 (citing 40 C.F.R. part 51, App. W §§ 1.0(b), 9.1(c)). Moreover, the Petitioners assert that EPA and CDPHE regulations specifically require modeling for this purpose, where appropriate. *Id*. at 58 (citing 40 C.F.R. § 51.160(f), 5 CCR 1001-5, Part C, X.D.5.d). The Petitioners further assert that EPA has already determined that the Division's refusal to model was unjustified, as the agency stated that "the permit record provided for some of these actions does not appear to sufficiently demonstrate that these projects will meet applicable ambient air quality standards," and that "it appears that in some instances the state rejected the use of modeling in assessing permitting actions without sufficient justification." *Id*. at 59 (quoting March 2022 Objection Letter, Encl. B at 2).

The Petitioners challenge CDPHE's decision not to conduct project-specific modeling on two more specific grounds. First, the Petitioners argue that CDPHE was unjustified in refusing to model projects with emission increases below the significant impact level (SIL) for the one-hour NO_2 and SO_2 NAAQS. *Id*. at 62 (citing Ex. 18 RTC at 37, 42–43; Ex. 19 RTC at 9, 13–15). As a general matter, the Petitioners assert that CDPHE could not establish SILs for NO_2 and SO_2 under current law. *Id*. at 63. The Petitioners assert generally that states do not have "the power to approve a modification without considering the modification's potential impact on ambient air quality." *Id*. (citing 42. U.S.C. § 7410(a)(2)(C); 40 C.F.R. § 51.160(a)–(b); C.R.S. § 25-7-114.5(7)(a)(III); 5 CCR 1001-5, Part B, III.D.1; *Sierra Club v. EPA*, 705 F.3d 458, 465 (D.C. Cir. 2013)). For support, the Petitioners focus primarily on the fact that neither the CAA, EPA regulations, nor Colorado laws contain any mention of SILs or significance thresholds for modeling purposes (despite explicitly discussing significance in other contexts). *Id*. at 63; *see id*. at 63–64.

More specifically, the Petitioners argue that there are no SILs specific to the one-hour NO_2 and SO_2 NAAQS. *Id*. at 63. The Petitioners observe that an EPA guidance document containing potential interim SILs for the one-hour NO_2 and SO_2 NAAQS cautions: "The application of any SIL that is not reflected in a promulgated regulation should be supported by a record in each instance that shows the value represents a *de minimis* impact on the 1-hour [] standard." *Id*. at 64 (quoting EPA, Memorandum, *General Guidance for Implementing the 1-hour SO_2 National Ambient Air Quality Standard in Prevention of Significant Deterioration Permits, Including an*

[72] This numbering system for modifications, supplied by the Petitioners, is based on the section of the TRD that discusses each respective modification. For example, what the Petitioners label "Modification 1.28" is the modification discussed in Section 1.28 of the TRD. For ease of reference, this Order uses the same labeling system.

Interim 1-hour SO_2 Significant Impact Level, 5 (August 23, 2010) (2010 SO_2 SIL Guidance). The Petitioners assert that CDPHE failed to do that here. *Id*.

Second, for three of the modifications at issue (Modifications 1.28, 1.29, and 1.36), the Petitioners challenge CDPHE's reliance on a now-retired guidance memorandum (PS Memo 10-01) to determine that no modeling was necessary. *Id*. at 61 (citing TRD at 83, 93, 117, 164). The Petitioners observe that PS Memo 10-01 instructed that no modeling was required where a modification involved a change in emissions under 40 tons per year (tpy). *Id*. The Petitioners offer various critiques. The Petitioners argue that there is no rational relationship between the 40 tpy threshold and the 2010 1-hour NO_2 and SO_2 NAAQS, as this threshold predated those NAAQS. *Id*. The Petitioners also argue that any ton-per-year threshold is not rationally related to a NAAQS using a one-hour averaging time. *Id*. at 62. Further, the Petitioners observe that PS Memo 10-01 was rejected by a state investigation as well as EPA. *Id*. (citing Earthjustice Petition Ex. 34 and March 2022 Objection Letter, Encl. B at 4).

The Petitioners contest CDPHE's suggestion that it cannot reevaluate decisions that were based on PS Memo 10-01 because it was in place at the time Suncor applied for the modifications. *Id*. (citing Ex. 18 RTC at 36–37, 38–39; Ex. 19 RTC at 7–8). Instead of basing permit decisions at the time of Suncor's applications, the Petitioners assert that CDPHE must "apply the rules in effect at the time of the permitting decision." *Id*. (quoting *Sierra Club v. EPA*, 762 F.3d 971, 979 (9th Cir. 2014)). According to the Petitioners, as explained previously, "the permitting decision is being made now." *Id*. Because PS Memo 10-01 was retired before CDPHE transmitted the Proposed Permit to EPA, the Petitioners claim it was arbitrary to make permitting decisions based on that memorandum.

In summary, in Claims 5 and 6, the Petitioners assert the following:

> [T]the Proposed Permit does not assure compliance with the applicable SIP requirement prohibiting modifications that cause or contribute to a NAAQS violation because (1) modeling shows NAAQS violations, and (2) the Division's decision to not require modeling for the modifications was not adequately justified and the Division failed to offer any other reasoned basis for determining that the modifications will not cause or contribute to a NAAQS violation.

Id. at 64.

EPA's Response: For the following reasons, EPA grants in part and denies in part the Petitioners' request for an objection on these claims.

Reviewability

EPA agrees with the Petitioner that specific questions concerning whether the modifications addressed in this title V permit renewal would cause an exceedance of the NAAQS are within the scope of issues subject to review, for reasons additional to those in the previous discussion of NSR-related "applicable requirements." *See supra* pages 45–48.

As an initial matter, CDPHE is correct that the NAAQS are not themselves title V "applicable requirements" with which a source must directly comply, and the promulgation of a NAAQS does not, in and of itself, automatically result in actionable measures applicable to a source. RTC at 33.[73] Instead, the relevant "applicable requirements" are the specific measures contained in each state's EPA-approved SIP to achieve the NAAQS, as they apply to emission units at a part 70 source. *See* 40 C.F.R. § 70.2 (definition of "applicable requirement"). Moreover, as the Petitioners acknowledge, modeling to demonstrate compliance with the NAAQS is also not a generally applicable requirement for all title V sources. *See* 40 C.F.R. § 70.2; Earthjustice Petition at 52; *see also, e.g.*, RTC at 33. Analysis addressing a source or project's impacts on the NAAQS is typically associated with the NSR (not the title V) permitting process.[74]

However, there may be situations in which specific SIP regulations (or, as is the case here, EPA-approved state part 70 regulations) give rise to an obligation to consider a source or project's impact on the NAAQS through a title V permit proceeding.[75] Whether this is necessary, and whether such an evaluation is required prior to a modification or during operation, depends on the specific EPA-approved state regulations at issue.

Here, the Petitioners cite a number of SIP-based and part 70-based regulations unique to Colorado. These regulations collectively provide that, when a minor NSR modification is processed using the title V minor modification process, CDPHE may only issue the title V permit if "the source or activity will not cause an exceedance of" and would "compl[y] with" the NAAQS. 5 CCR 1001-5, Part B, II.A.6 and III.D.1.c–d (SIP regulations); 1001-5, Part C, III.C.12, IV.A, V.B.1, X.A.1, and X.D.5.d (part 70 regulations). Given that CDPHE's EPA-approved part 70 regulations explicitly require CDPHE's consideration of NAAQS impacts resulting from a modification through certain types of title V permit proceedings, EPA agrees that such issues may be reviewable in a petition challenging those title V permits. Further, as

[73] *See* 40 C.F.R. § 70.2 (definition of "applicable requirement"); 57 Fed. Reg. at 32276 ("Under the Act, NAAQS implementation is a requirement imposed on States in the SIP; it is not imposed directly on a source. In its final rule, EPA clarifies that the NAAQS and the increment and visibility requirements under part C of title I of the Act are applicable requirements for temporary sources only."); 56 Fed. Reg. at 21732–33 ("The EPA does not interpret compliance with the NAAQS to be an 'applicable requirement' of the Act."); *see also, e.g.*, *In the Matter of Lucid Energy Delaware, LLC, Frac Cat Compressor Station and Big Lizard Compressor Station*, Order on Petition Nos. VI-2022-5 & VI-2022-11 at 13 (*Lucid Order*).

[74] *See Lucid Order* at 13–14 (questioning whether certain NAAQS-focused SIP regulations governing a permitting authority's issuance of NSR permits qualify as "applicable requirements" as that term is defined in the title V regulations, given that the SIP regulations at issue do not apply directly to emission units at the source).

[75] *See In the Matter of Alabama Power Company, Barry Generating Plant*, Order on Petition No. IV-2021-5 at 11 (June 14, 2022). Similarly, certain SIP requirements might also be interpreted to require permitting authorities to establish limits necessary to protect the NAAQS through the title V process. *See In the Matter of Duke Energy, LLC Asheville Steam Electric Plant*, Order on Petition No. IV-2016-06 at 11–12 (June 30, 2017); *In the Matter of Duke Energy, LLC Roxboro Steam Electric Plant*, Order on Petition No. IV-2016-07 at 10–11 (June 30, 2017); *In the Matter of Public Service of New Hampshire, Schiller Station*, Order on Petition No. VI-2014-04 (July 28, 2015). Here, the Petitioners do not specifically claim that the relevant SIP or Colorado part 70 regulations establish such an obligation, but the Petitioners nonetheless suggest that the addition of permit limits could resolve the concerns underlying these claims. *See* Earthjustice Petition at 54 n.69.

explained previously, EPA agrees with the Petitioners that the present title V renewal permit appears to be the first such permit action in which these issues are reviewable.[76]

Legal Framework

EPA recently discussed the issues underlying Claims 5 and 6 in a July 2022 report addressing CDPHE's minor NSR program (July 2022 EPA Report).[77] There, EPA explained:

> EPA regulations promulgated to implement the CAA require that each SIP include a Minor NSR program. Under the regulations, each SIP must include "legally enforceable procedures" – that is, a Minor NSR program – that will inform the state whether the construction or modification of a minor source will (1) result in a violation of applicable portions of the state's control strategy, or (2) interfere with attainment or maintenance of any NAAQS in the state or a neighboring state. As a part of these procedures, each SIP must require owners or operators of minor sources to submit applications that will allow the state to determine whether the construction or modification of the source will result in a violation of the control strategy or interfere with attainment of a NAAQS. States have significant flexibility in designing and implementing Minor NSR programs to meet the requirements of the CAA and the regulations.

July 2022 EPA Report at 10 (citing 42 U.S.C. § 7410(a)(2)(C); 40 C.F.R. §§ 51.160–51.164).

Here, the relevant aspect of Colorado's minor NSR program is the requirement that the proposed "source or activity will not cause an exceedance of any [NAAQS]." 5 CCR 1001-5, Part B, III.D.1.c; *see* 40 C.F.R. § 51.160(a) (similar language, focusing on "the construction or modification of a facility").[78] Importantly, for an existing source, this requirement applies on a project-by-project basis, each time a facility proposes a modification. *See, e.g.*, 5 CCR 1001-5, Part B, II.A.6 (imposing the above-described requirements on each "construction *or modification*" of a source (emphasis added)).[79] Thus, for each modification of the source

[76] Under CDPHE's EPA-approved regulations, EPA would normally expect this review process to occur during each individual title V permit modification action that proposes to approve each specific physical or operational change at the source. *See* 5 CCR 1001-5, Part C, X.F, X.H. Notwithstanding that this title V minor modification process would not involve the opportunity for public notice and comment, such minor modifications would still be subject to both EPA's review and a public petition opportunity. 40 C.F.R. §§ 70.7(e)(2)(iv), 70.7(h), 70.8(a)(1), 70.12(a)(1). However, as previously explained, CDPHE does not appear to have separately approved the individual modifications at issue (either through NSR or title V). Instead, the present title V renewal permit appears to be the first permit in which the underlying NSR minor modifications at issue have been formally approved and incorporated into the title V permit, and the first such action subject to the public's review. *See supra* pages 46–48.

[77] EPA Region 8 Review of EPA's Office of Inspector General Hotline Complaint No. 2021-0188 (July 2022), available at *https://www.epa.gov/system/files/documents/2022-07/EPA_Region8_CDPHE_NSR_Complaint_Report.pdf*. Note that this report did not specifically address the Suncor facility.

[78] Although the various EPA-approved Colorado SIP and part 70 regulations (identified previously) contain slightly different language concerning this requirement, those differences do not appear substantive.

[79] See Claim 8 for additional discussion about when multiple physical and operational changes to a facility should be evaluated as a single project, *i.e.*, modification.

incorporated into the present title V permit, CDPHE was obligated to assess whether the modification of the source would cause an exceedance of the NAAQS.

This begs the question: how was CDPHE required to make this assessment? In the context of minor NSR, neither EPA's nor CDPHE's regulations mandate a specific approach—such as modeling—for determining whether individual minor modifications would cause an exceedance of the NAAQS. As explained in the July 2022 EPA Report:

> The . . . Colorado regulations do require that when ambient air quality estimates are used, the estimates must be based on approved air quality models. But the regulations do not require air quality modeling in every case. It may be possible for a permitting authority to use means other than modeling to justify a conclusion that a permit will not interfere with attainment of the NAAQS. This option is within the scope of the state's discretion as the permitting authority under its SIP-approved Minor NSR program.
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> We emphasize that such a conclusion must be justified in the supporting record for the permit.

July 2022 EPA Report at 13 (citations omitted).

Although neither EPA's nor CDPHE's regulations mandate a specific approach for this inquiry in the minor NSR context, EPA regulations and guidance documents addressing similar requirements in the major NSR permitting context may be instructive.[80] For example, as discussed further below, EPA has provided guidance regarding the use of SILs as a screening tool to determine whether additional cumulative modeling is necessary. *E.g.*, 2010 SO_2 SIL Guidance. Additionally, CDPHE has established and revised various policies concerning similar thresholds for determining whether modeling is necessary. Specific examples of this guidance are discussed further below, as relevant.[81]

Collectively, these documents guide EPA's analysis of whether the Petitioners have demonstrated, with respect to the individual modifications at issue, CDPHE failed to make its minor NSR "determinations on reasonable grounds properly supported on the record" or whether CDPHE's "exercise of discretion under [its] regulations was unreasonable or arbitrary." *Appleton Order* at 5.

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[80] Note that some of the statements quoted below use terminology associated with major NSR requirements, including the "cause or contribute" language often repeated by the Petitioners. As EPA has previously explained, it would be incorrect to "assert[] that the state's regulations impose a cause-or-contribute standard for evaluating NAAQS in minor source permitting. Instead, the state regulation requires CDPHE to grant the permit if the new source 'will not cause an exceedance of the NAAQS' and will meet other requirements. 5 CCR 1001-5, Part B, III.D.1.c. Thus, 'or contribute' is not a part of the state's SIP-approved requirements for evaluating minor source impact on the NAAQS." July 2022 EPA Report at 13 n.56.

[81] For additional information about the various relevant CDPHE guidance documents, see: the September 2021 independent investigative report included as Earthjustice Petition Ex. 34; the July 2022 EPA Report; and CDPHE's October 21, 2022, response to the July 2022 EPA Report, available at *https://www.epa.gov/system/files/documents/2022-10/CDPHE%20Response%20to%20EPA%20Review%20of%20PEER%20Complaint_FINAL%2010.21.pdf*.

Modeled Violations of NAAQS

The Petitioners' claims are largely based on modeling by both the Petitioners and CDPHE that included the total allowable emissions from the source and showed (in all or nearly all modeled scenarios) an exceedance of the 2010 1-hour NO_2 and SO_2 NAAQS. The implicit (but unexplained) premise of the Petitioners' argument appears to be that, because modeling that includes the total allowable emissions from the source shows a NAAQS exceedance, then any "modifications that increase emissions" also necessarily "cause . . . violations of" those NAAQS. Earthjustice Petition at 54. The Petitioners' arguments based on this type of modeling are not persuasive for the following reasons.

EPA generally agrees with CDPHE that the first step in determining whether a modification causes an exceedance of the NAAQS is to assess whether the emission changes associated with the specific proposed project have a significant impact on air quality concentrations. *See* RTC at 37. Again, the relevant regulation requires an analysis of whether the proposed "source *or activity* will not cause an exceedance of any [NAAQS]." 5 CCR 1001-5, Part B, III.D.1.c (emphasis added); *see* 40 C.F.R. § 51.160(a) (similar language, focusing on "the construction *or modification* of a facility" (emphasis added)). EPA's use of the word "source" in various regulations is intended to refer to new sources, while the term "modification" is used to address the types of changes at issue here. For example, although the Petitioners are correct that EPA describes the first step of a PSD modeling exercise as "a single-source impact analysis," the language immediately following this phrase makes clear that "this stage generally involves considering only the impact of the new *or modifying* source." Earthjustice Petition at 61 (quoting 40 C.F.R. part 51, App. W § 9.2.3.a.i) (emphasis added). More specifically, the EPA regulations on this subject state: "Under the PSD permitting program, an air quality analysis for criteria pollutants is required to demonstrate that emissions from the construction or operation of a proposed new source or modification will not cause or contribute to a violation of the NAAQS or PSD increments." 40 C.F.R. part 51, App. W § 9.2.2; *see, e.g.*, *id*. at §§ 8.3.2.c (referring to the "impact of the project"), 9.2.4.f (referring to the impact "from the construction or operation of the modification"). EPA has explained this requirement in numerous guidance documents, which consistently explain that the relevant first step involves assessing the emissions *increases* associated with *the modification* being authorized.[82] Thus, the approach in EPA's modeling Guideline calls for first evaluating whether the emissions increases associated with individual projects are significant enough to cause or contribute to any exceedance of a NAAQS.

Even where modeling predicts a NAAQS violation, this does not necessarily mean that any emissions increases from an individual modification are the cause of that NAAQS violation. For example, in EPA's 2010 SO_2 SIL Guidance, EPA stated:

[82] *See, e.g.*, Memorandum, *Guidance for Ozone and Fine Particulate Matter Permit Modeling*, 17 (July 29, 2022) ("The first stage is a single-source impact analysis or a source impact analysis. This involves assessing whether the allowable emissions increase(s) from the affected emissions units at the proposed new or modifying source could cause or contribute to a NAAQS or PSD increment violation."); 2010 SO_2 SIL Guidance at 1 ("[A] source must demonstrate that its proposed emissions increase will not cause or contribute to a violation of 'any NAAQS.'"); *id*. at 2, 4, 5, 6 (repeatedly referring to a proposed project's emissions increase).

> Under the PSD program, a proposed new major stationary source or major modification must, among other things, complete an air quality impact analysis that involves performing an analysis of air quality modeling and ambient monitoring data, where appropriate, to demonstrate compliance with applicable NAAQS. In order to implement this requirement, EPA traditionally has provided a screening tool known as the [SIL] to help applicants and permitting authorities determine whether a source's modeled ambient impact is significant so as to warrant a comprehensive, cumulative air quality analysis to demonstrate compliance with the NAAQS. Accordingly, where a proposed source's modeled impact is deemed insignificant, or *de minimis*, using the SIL as a threshold for significance, the applicant is not required to model anything besides its own proposed emissions increase to show that the proposed source or modification will not cause or contribute to a violation of the NAAQS.
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> In cases where the air quality analysis predicts violations of the 1-hour SO_2 NAAQS, but the permit applicant can show that the SO_2 emissions increase from the proposed source will not have a significant impact at the point and time of any modeled violation, the permitting authority has discretion to conclude that the source's emissions will not contribute to the modeled violation. As provided in the July 5, 1988 guidance memo, because the proposed source only has a *de minimis* contribution to the modeled violation, the source's impact will not be considered to cause or contribute to such modeled violations, and the permit could be issued. This concept continues to apply, and the [SIL] . . . may be used as part of this analysis.

2010 SO_2 SIL Guidance at 4, 7.

EPA has long applied this interpretation of the relevant statutory and regulatory criteria (dating back to 1978).[83]

Without further analysis of the added effect of individual modifications at the location and time of the predicted violations, the modeling information presented as the basis for Claim 5 of the Earthjustice Petition (along with related discussion within Claim 6) is insufficient to demonstrate that any increased emissions resulting from the individual modifications at issue are the cause of

[83] *See Prairie State Generating Company*, 13 E.A.D. at 104–09 (citing 40 C.F.R. pt. 51, App. W, § 11.2.3.2(a)); Draft NSR Workshop Manual (October 1990); Memorandum, *Air Quality Analysis for Prevention of Significant Deterioration (PSD)* (July 5, 1988); Memorandum, *Interpretation of "Significant Contribution"* (December 16, 1980); 43 Fed. Reg. 26,379, 26,398 (June 19, 1978)); *see also Sur Contra La Contaminacion v. EPA*, 202 F.3d 443,448-49 (1st Cir. 2000) (upholding EPA's use of SIL to allow permit applicant to avoid a full impact analysis). Note that CDPHE relies on these same principles. *See* RTC at 42.

exceedances of the NAAQS, in violation of 5 CCR 1001-5, Part B, III.D.1.c (and the other relevant authorities).[84]

Project-specific Impacts Analysis

The Petitioners' arguments within Claim 6 regarding CDPHE's alleged failure to evaluate whether individual projects caused an exceedance of the NAAQS deserve further scrutiny. CDPHE's justification for not conducting modeling differs among the five modifications identified by the Petitioners (Modifications 1.28, 1.29, 1.33, 1.36, and 1.38) and the pollutants at issue (NO_2/NO_x[85] and SO_2). CDPHE offers three different justifications:

First, with respect to NO_x emissions from Modification 1.28 and NO_x and SO_2 emissions from Modification 1.33, CDPHE's justification is straightforward. For Modification 1.28, CDPHE explains that "there was no increase in NO_x emissions from this project (there was a 2.37 ton/yr decrease in NO_x emissions); therefore, modeling was not required." RTC at 38; *see* TRD at 82. For Modification 1.33, CDPHE explains that "this project results in a 12.7 [tpy] decrease in NO_x emissions and a decrease in SO_2 emissions of nearly 1 [tpy]." RTC at 40; *see* TRD at 105–106. The Petitioners do not explain why modifications resulting in a *decrease* in permitted emissions would cause an exceedance of the relevant NAAQS. The Petitioners do not acknowledge CDPHE's reasoning regarding emissions decreases, much less demonstrate that CDPHE's decision was not based "on reasonable grounds properly supported on the record" or was "unreasonable or arbitrary." *Appleton Order* at 5; *see* 40 C.F.R. § 70.12(a)(2)(vi). Thus, EPA denies Claims 5 and 6 to the extent they implicate NO_x emissions from Modification 1.28 and NO_x and SO_2 emissions from Modification 1.33.

Second, regarding SO_2 from Modification 1.29, SO_2 from Modification 1.36, and NO_x and SO_2 from Modification 1.38, CDPHE determined that no modeling was necessary because emissions increases were below short-term modeling thresholds established by CDPHE. *See* RTC at 42; TRD at 93, 117, 120–121. In other words, for those modifications, CDPHE "is utilizing SILs for the 1-hr NO_2 and SO_2 NAAQS in our modeling analyses." RTC at 43. CDPHE's SIL thresholds at issue (0.46 lb/hr for both NO_2 and SO_2) are equal to or lower than the levels recommended by

[84] This does not mean that the modeled exceedances of the NAAQS can be overlooked. CDPHE should take appropriate steps here to investigate whether there is a NAAQS violation and, if substantiated, should correct this violation through the State Implementation Plan (SIP) or other means. *See* Memorandum from Gerald A. Emison, *Air Quality Analysis for Prevention of Significant Deterioration (PSD)* (July 5, 1988); *Prairie State Generating Company*, 13 E.A.D. at 107 n.122 ("[T]he identification through modeling of a potential violation of the NAAQS requires the permitting authority to address the causes of the violation (i.e., the other sources that significantly contribute to the violation) as a matter independent of the permitting action in which the modeling was conducted"). CDPHE has also stated that nearby monitors of NO_2 (four locations) and SO_2 (three locations) "show values that are well below" the relevant NAAQS. RTC at 33. CDPHE should investigate these conditions, considering the results of both modeling and monitoring, and determine whether remedial action is needed.

[85] The NAAQS at issue applies to oxides of nitrogen, as measured by nitrogen dioxide (NO_2). *See, e.g.*, 75 Fed. Reg. 6474, 6476 n.4 (February 9, 2010). When discussing the NAAQS or SILs associated with the NAAQS, the permit record generally refers to NO_2. When discussing emissions from Suncor, the permit record generally refers to oxides of nitrogen or nitrogen oxides (NO_x).

EPA in 2010 as interim SILs. *See* RTC at 40–41, 43.[86] This translates to roughly 2 tpy. *Id*. at 40. As CDPHE explains in its RTC, a September 2021 independent investigative report found that the modeling guideline containing these short-term SILs was properly justified, if potentially overly conservative. RTC at 41; *see* Earthjustice Petition Ex. 34 at 26–28. That investigative report, in turn, discusses the technical analysis underlying CDPHE's establishment of these SIL levels. *See* Earthjustice Petition Ex. 34 at 26–28. CDPHE further identified the basis for applying these SILs in describing individual modifications. *See* RTC at 40–42; TRD at 93–94, 117–18, 120–21.

The Petitioners present general challenges to the use of SILs, alleging that states cannot rely on SILs to "approve a modification without considering the modification's potential impact on ambient air quality." Earthjustice Petition at 63. However, as explained above, EPA's longstanding position is that permitting authorities may be able to reasonably rely on tools like SILs to determine whether additional analysis (*e.g.*, cumulative modeling) is needed to determine whether a modification would cause a violation of the NAAQS; that is different from *not considering* whether the modification would impact the NAAQS.[87] Of course, as with other considerations involving an individual project's anticipated impact on the NAAQS, determining whether it is appropriate for a permitting authority apply the SILs in determining whether a modification will cause a violation of the NAAQS involves a fact-specific analysis.

The Petitioners do not present any specific challenges to numeric NO_2 and SO_2 SIL values employed by CDPHE, nor to the manner in which CDPHE applied its short-term SILs to individual modifications with emission increases below 0.46 lb/hr. As discussed above, CDPHE provided technical support for the SILs it used in this analysis. The Petitioners do not specifically address or challenge CDPHE's technical explanations underlying the state's conclusion that the individual modifications at issue would not cause a violation of the NAAQS by virtue of their emissions falling below these short-term thresholds. 40 C.F.R. § 70.12(a)(2)(vi); *see* RTC at 40–42; TRD at 93–94, 117–18, 120–21. In fact, the Petitioners do not even acknowledge the numerical emissions increases associated with any of these projects (which, again, were permitted to result in increases below the SIL values of 0.46 lb/hr, or roughly 2 tpy of NO_2 and/or SO_2).

In sum, the Petitioners' general criticisms of the use of SILs in this context are not persuasive. The Petitioners have not presented any specific challenges to the SIL values selected by CDPHE,

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[86] These SIL thresholds are reflected in CDPHE's "Interim Modeling Guideline," in effect as of October 25, 2021. This October 2021 document replaced a prior guideline containing identical SIL values, which was withdrawn on March 15, 2021. *See* RTC at 37, 40. The current Interim Modeling Guideline is available at *https://apcd.state.co.us/permits/InterimColoradoModelingGuidelines_10.25.21_Updated.5.25.22.pdf*.

[87] The court decision cited by the Petitioners, *Sierra Club v. EPA*, 705 F.3d 458 (D.C. Cir. 2013), vacated and remanded an EPA rule (upon EPA's request) that established SILs in a way that "*automatically* exempt[ed] sources with projected impacts below the SILs from having to make the demonstration" that projected impacts would not cause or contribute to a NAAQS violation. *Id*. at 465 (emphasis added). The court's decision focused on the fact that the vacated regulations did "not allow a permitting authority sufficient discretion" in situations where "sources that are below the SIL, but could nevertheless cause a violation of the NAAQS or increment." *Id*. at 464–65. That court did not address EPA's authority to establish SILs in general. *Id*. at 464. Additionally, the Petitioner's general arguments concerning the lack of explicit statutory reference to "significance" levels with respect to modeling are not persuasive, for the reasons explained in the EAB's *Praire State* decision. *See Prairie State Generating Company*, 13 E.A.D. at 104–09.

nor to the technical basis of these values (as explained and supported in the documents CDPHE cites in its RTC, described above), nor to the application of those SILs to individual projects. Therefore, the Petitioners have not demonstrated that CDPHE's decision was not based "on reasonable grounds properly supported on the record" and/or was "unreasonable or arbitrary." *Appleton Order* at 5; *see* 40 C.F.R. § 70.12(a)(2)(vi). Thus, EPA denies Claims 5 and 6 to the extent they relate to SO_2 from Modification 1.29, SO_2 from Modification 1.36, and NO_x and SO_2 from Modification 1.38.

Third and finally, regarding SO_2 emissions from Modification 1.28, NO_x emissions from Modification 1.29, and NO_x emissions from Modification 1.36, the Petitioners challenge CDPHE's reliance on much higher annual emission thresholds—40 tpy of each pollutant, established in PS Memo 10-01—to determine that the modifications at issue would not cause a violation of the 2010 1-hour NO_2 and SO_2 NAAQS. *See* RTC at 38, 40; TRD at 82–83, 93, 117. In other words, these are situations where emission increases associated with individual modifications exceeded the SILs described above, but CDPHE nonetheless determined that the modifications would not cause or contribute to a violation of the NAAQS without conducting any modeling. The Petitioners' arguments with respect to these modifications are more persuasive.

CDPHE does not offer, and EPA cannot discern, any rational relationship between the 40 tpy thresholds in PS Memo 10-01 and a CDPHE's conclusion that the modifications would not cause a violation of the 1-hr SO_2 and NO_2 NAAQS. As the Petitioner observes, a September 2021 independent investigative report analyzing CDPHE's reliance on this memorandum made clear that "PS Memo 10-01 lacked a proper justification." Earthjustice Petition Ex. 34 at 28. More specifically, that report found that PS Memo 10-01: (i) improperly relied on annual thresholds (designed for determining whether a project constitutes a major modification) as a minor source modeling threshold for 1-hour standards; (ii) directly conflicted with CDPHE's own analysis of the appropriate SIL levels to be used for modeling (the thresholds in PS Memo 10-01 are 20 times higher than the SILs established by CDPHE); and (iii) lacked a justified means of satisfying the relevant SIP requirement to ensure that permits do not cause an exceedance of the NAAQS. *Id*. at 31. EPA agrees that CDPHE's reliance on PS Memo 10-01 is problematic for the reasons described in that report. *See* March 2022 Objection Letter, Encl. B at 4 (discussing concerns with CDPHE's reliance on PS Memo 10-01 to reject the use of modeling); *see also* July 2022 EPA Report at 26–28.

Notably, following the September 2021 independent investigative report described above, CDPHE retired PS Memo 10-01. Notwithstanding these clear problems with PS Memo 10-01 and the fact that the state had retired this memo *before the Permit was issued* (or even proposed to EPA), CDPHE nonetheless maintained its reliance on PS Memo 10-01 in justifying its present permitting decisions. CDPHE suggests that it was appropriate to rely on the thresholds in PS Memo 10-01 because "[t]he previous permitting decisions made for these modifications were based on policies in place at the time and those policies were consistent with the practices in many states across the country and EPA's own major source modeling requirements." RTC at 36. This argument fails for several reasons. First, as explained previously, it is inaccurate to describe the various minor NSR modifications at issue as "previous permitting decisions." The present title V renewal permit is the first permit action in which CDPHE has formally approved

those modifications. *See supra* pages 46–48. Second, even if the modifications at issue had been formally authorized during a time preceding retirement of PS Memo 10-01, reliance on this memorandum would have arguably been unsupported and unreasonable, for the reasons discussed in greater detail in the September 2021 independent investigative report. *See* Earthjustice Petition Ex. 34 at 28–32.

Overall, to the extent CDPHE relied exclusively on the thresholds in PS Memo 10-01 in determining that individual projects would not cause a violation of the NAAQS, the Petitioners have demonstrated that this decision was not based "on reasonable grounds properly supported on the record" and appears "unreasonable or arbitrary." *Appleton Order* at 5. For the foregoing reasons, EPA grants Claims 5 and 6 with respect to SO_2 emissions from Modification 1.28, NO_x emissions from Modification 1.29, and NO_x emissions from Modification 1.36.

Direction to CDPHE: CDPHE must reevaluate whether it was correct to conclude that SO_2 emissions from Modification 1.28, NO_x emissions from Modification 1.29, and NO_x emissions from Modification 1.36 would not cause an exceedance of the relevant NAAQS, pursuant to 5 CCR 1001-5, Part B, II.A.6 and III.D.1.c–d, and Part C, III.C.12, IV.A, V.B.1, X.A.1, and X.D.5.d. As explained above, CDPHE has some discretion to determine precisely how to satisfy these regulations. At a minimum, however, CDPHE must ensure that the permit record provides adequate documentation for CDPHE's conclusion that these projects will not cause an exceedance of the NAAQS—more specifically, a justification not based on PS Memo 10-01. If CDPHE cannot justify its decision based on the information currently in the permit record, the state may decide that additional modeling is necessary for each of these modifications. If CDPHE is unable to conclude that these modifications would not cause an exceedance of the relevant NAAQS, CDPHE may need to consider imposing unit-specific limits to reduce emissions affecting the NAAQS. Any such limits which would need to be processed through the appropriate NSR permitting process.

EPA notes the efforts that CDPHE has begun to undertake to improve its process for assessing NAAQS impacts for projects subject to minor NSR. In particular, the Colorado Air Quality Control Commission has begun a rulemaking process that would provide for enhanced modeling and monitoring requirements for construction permits in disproportionately impacted communities.[88] EPA will continue to work with CDPHE to ensure that the state's minor NSR permitting decisions comply with the CAA and the SIP, are supported by an adequate record, and provide adequate opportunities for involvement by affected communities. *See, e.g.*, March 2022 Objection Letter, Encl. B at 2–4.

[88] Additional information about this planned rulemaking is available at *https://cdphe.colorado.gov/disproportionately-impacted-community-permitting-rulemaking* (last accessed June 21, 2023) and at *https://cdphe.colorado.gov/aqcc-current-and-recent-commission-hearings* (under Rulemaking Hearing: Regulation Number 3) (last accessed June 21, 2023); see description of proposed revisions in Air Pollution Control Division Prehearing Statement at 2–3 (available at *https://drive.google.com/drive/u/0/folders/1sap9ew51Grr3QQqeM85rDPy3Lz6NsgD4* (last accessed June 21, 2023).

Claim 7: The Petitioners Claim That "EPA Must Object Because the Proposed Permit Violates Applicable Requirements by Applying Outdated Significance Thresholds for Determining Whether a Modification Is Major."

Petitioners' Claim: In Claim 7, the Petitioners contend that several modifications incorporated into the title V renewal permit should have been deemed "major modifications" subject to PSD, and that CDPHE incorrectly determined that these projects were minor modifications by applying the wrong significance thresholds. *See* Earthjustice Petition at 64–68.

The Petitioners explain that determining whether a physical or operational change is a "major modification" subject to NNSR depends on whether the modification would result in a significant emissions increase and a significant net emissions increase. *Id*. at 64–65 (citing 5 CCR 1001-5, Part D, II.A.23). The Petitioners further note that the SIP identifies the level of emissions deemed "significant" in this context. *Id*. at 65 (citing 5 CCR 1001-5, Part D, II.A.23.a). As relevant to Claim 7, the Petitioners observe that the significance threshold for VOC was previously 40 tpy, but the threshold was reduced to 25 tpy following a change in the attainment status for the area surrounding Denver. *Id*. (citing 5 CCR 1001-5, Part D, II.A.44.a; 84 Fed. Reg. 70897 (December 26, 2019) (effective January 27, 2020)). The Petitioners claim that CDPHE improperly applied the higher 40 tpy threshold—instead of the 25 tpy threshold the Petitioners claim was applicable—in determining that two modifications were not major. *Id*.

The Petitioners contend that the applicable significance threshold was the one that applied "at the time of the permitting decision." *Id*. at 67 (quoting *Sierra Club v. EPA*, 762 F.3d 971, 979 (9th Cir. 2014); citing *Ziffrin, Inc. v. United States*, 318 U.S. 73, 78 (1943)). The Petitioners note that CDPHE recognized this general rule, at least with respect to significant permit modifications. *Id*. (citing RTC at 72). The Petitioners criticize CDPHE's decision to instead apply the significance thresholds that were in effect at the time that Suncor *applied for* the relevant permit modifications. *Id*. at 66. The state's decision was based on the fact that, per 5 CCR 1001-5, Part B, II.A.6 and Part C, X.I, "sources can proceed with projects that qualify for the Title V minor modification upon submittal of a complete application." *Id*. (quoting RTC at 71). Additionally, this decision was apparently based on the fact that CDPHE sent completeness letters confirming that "the application did qualify as a Title V minor modification and that the application as complete as received." *Id*. at 67 (quoting RTC at 39).

The Petitioners challenge CDPHE's logic. First, as discussed earlier, the Petitioners argue that the minor modifications were not previously finalized because they were not subject to public or EPA review, and there is no evidence in the permit record that CDPHE took one of the four final actions specificized in the relevant regulations (including to "issue the minor modification as proposed"). *Id*. (quoting 5 CCR 1001-5, Part C, X.H.1); *see id.* at 47. Second, the Petitioners assert that CDPHE's application completeness letters were not approvals and did not make the modifications final under either Colorado or federal regulations. *Id*. at 67; *see id*. at 46. Third, according to the Petitioners, the fact that Suncor was entitled to make the modifications at issue after submitting an application is irrelevant. *Id*. at 67 (citing 5 CCR 1001-5, Part C, X.I); *see id*. at 45. As explained previously in the Petition, the Petitioners claim that the current title V renewal permit is the first time any of the modifications at issue have been formally approved.

See id. at 46–47. Thus, the Petitioners contend that the appropriate VOC significance threshold to use was 25 tpy, which has been in effect since January 27, 2020. *Id*. at 65.

With respect to the specific modifications at issue, first, the Petitioners state that Modification 1.28 (which involved adding new equipment to allow miscellaneous process vents to be routed to the East Plant main flare) resulted in a 28.08 tpy increase in VOC emissions, exceeding the 25 tpy threshold. *Id*. at 65 (citing TRD at 80; RTC at 73). The Petitioners dismiss statements by CDPHE relating to permit approvals for similar changes at Suncor's West Plant (Plants 1 and 3), arguing that those approvals are irrelevant to whether the present Suncor Plant 2 Permit satisfies applicable requirements. *Id*. at 68.

Second, the Petitioners state that Modification 1.33 (which involved changes to emission calculation, throughput limits, and emission limits for the existing liquefied petroleum gas (LPG) loading rack) resulted in "an emission limit of 39.51 tpy of VOCs." *Id*. at 65. The Petitioners assert that a change to the permitted emissions that exceeds the significance threshold amounts to a relaxation of enforceable requirements, which would be subject to major NSR. *Id*. at 65 (citing TRD at 104–05; 5 CCR 1001-5, Part D, V.A.7.b). The Petitioners contest CDPHE's statement that the change in *actual* VOC emissions from this project were only 13.52 tpy. *Id*. at 68 (citing RTC at 73). The Petitioners again argue that because there was a relaxation of permit limits, the applicability test depends on whether *permitted* emissions exceed the relevant threshold. *Id*.

The Petitioners conclude that CDPHE's application of the incorrect significance thresholds resulted in four problems with the Permit. *See id*. at 66. First, the Permit violates the requirement that CDPHE apply a 25 tpy significance threshold. *Id*. Second, the Permit violates a requirement that a major modification may only be authorized if "[t]he proposed source will achieve the lowest achievable emission rate for the specific source category." *Id*. (quoting 5 CCR 1001-5, Part D, V.A.2). Third, the Permit violates the requirement that no significant permit modification (*e.g.*, incorporating a modification that is "major" for NSR into the title V permit) may use minor permit modification procedures. *Id*. (citing 5 CCR 1001-5, Part C, I.A.7). Fourth, the permit record fails to contain adequate justification for the decision to treat these modifications as minor. *Id*. (citing 40 C.F.R. § 70.7(a)(5)).

EPA's Response: For the following reasons, EPA grants the Petitioners' request for an objection on this claim.

As an initial matter, EPA observes that this issue would not have arisen if not for the unique nature of CDPHE's integrated minor NSR and title V programs and the manner in which CDPHE has implemented (or failed to implement) those regulations. In most NSR programs across the nation, a source must obtain a preconstruction permit prior to beginning actual construction on a new or modified source. Under those programs, the date of final preconstruction permit issuance typically establishes which requirements must be included in

such a permit, and the date a source applied for the permit has limited relevance.[89] However, as previously discussed, CDPHE's permitting program allows sources to begin actual construction of a minor modification of the source without receiving a preconstruction permit in certain situations. 5 CCR 1001-5, Part B, II.A.6. Specifically, after applying for a minor modification of a title V permit, sources may begin actual construction of such a project at their own risk prior to receiving CDPHE's formal approval for that construction. 5 CCR 1001-5, Part C, X.I. Although this apply-and-proceed construction permitting scheme gives rise to various concerns,[90] EPA would expect these concerns to be mitigated by the requirement that CDPHE must take final action on the title V minor modification applications shortly after they are received (specifically, within 90 days after receiving a complete application, or within 15 days after the end of EPA's 45-day review period, whichever is later). CCR 1001-5, Part C, X.H; *see also* 40 C.F.R. § 70.7(e)(2)(iv). Given this short turnaround time, in most cases the relevant legal requirements or thresholds would not be expected to change between the time a source applies for a title V permit modification, begins actual construction, and receives a final title V permit modification. However, as explained previously, *CDPHE delayed taking final action on the permits at issue here until the present title V permit proceeding*,[91] which occurred several years after Suncor applied for the modifications at issue. This delay was not without consequence, as the relevant NNSR applicability thresholds changed after the source applied for (and potentially began actual construction of) several modifications to the source but before CDPHE issued final permit decisions to approve those modifications. Thus, it is ultimately CDPHE's delayed action on these permit modifications that gives rise to Claim 7.

CDPHE's Position: Date Suncor Submitted Permit Applications

CDPHE processed the two modifications at issue based on the NNSR applicability threshold that existed at the time Suncor applied for the two modifications: 40 tpy VOC. Explaining its decision, CDPHE states:

> The Division considered the appropriate significance level for the various modifications were relied upon to determine PSD and/or [NNSR] applicability. For Title V minor modifications, the Division relied upon the significance level at the time the application was submitted, because as noted in Colorado Regulation No. 3, Part C, Section X.I . . . , a source can make the changes in the application prior to issuance of the Title V permit:

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[89] *See* Memorandum from Stephen D. Page, EPA, *Applicability of the Federal Prevention of Significant Deterioration Permit Requirements to New and Revised National Ambient Air Quality Standards* (April 1, 2010) ("EPA generally interprets the CAA and EPA's PSD permitting program regulations to require that each final PSD permit decision reflect consideration of any NAAQS that is in effect at the time the permitting authority issues a final permit. As a general matter, permitting and licensing decisions of regulatory agencies must reflect the law in effect at the time the agency makes a final determination on a pending application."); *Ziffrin,* 318 U.S. at 78; *Sierra Club* 762 F.3d at 979 (9th Cir. 2014); *Alabama* v. *EPA,* 557 F.2d 1101, 1110 (5th Cir. 1977); *In re Dominion Energy Brayton Point, LLC,* 12 E.A.D. 490, 614–616 (EAB 2006); *In re Phelps Dodge Corp.,* 10 E.A.D. 460, 478 n. 10 (EAB 2002).

[90] Substantive concerns include CDPHE's ability to prevent noncompliant construction in a timely manner, 40 C.F.R. § 51.160(b), as well as the level of risk a source must accept when moving forward with construction absent final approval. EPA has voiced other concerns with this integrated permitting program, including the inability for the public to participate in these decisions. *See* March 2022 Objection Letter, Encl. B at 2–3.

[91] *See supra* pages 46–47.

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> Since sources can proceed with projects that qualify for the Title V minor modification upon submittal of a complete application, it is appropriate to rely on the significance level at the time of a complete application submittal in order to assess whether or not the projects trigger PSD and/or [NNSR] review. The Division sent completeness letters to Suncor indicating the relevant modification applications qualified as Title V minor modifications.
>
> For significant modifications, the Division relies on the significance level at the time of permit issuance, since sources are not allowed to proceed with the changes in those modifications until permit issuance.

RTC at 71–72.

In sum, CDPHE attempts to distinguish between minor modifications (for which it applies significance thresholds at the time of *permit application*) and significant modifications (for which it applies the significance thresholds at the time of *final permit issuance*). RTC at 71–72. At the heart of this distinction is the fact that, under Colorado's regulations, a source may proceed with proposed minor modifications to the source immediately after filing an application for a title V minor modification. *Id*. at 71 (citing 5 CCR 1001, Part B, II.A.6 and Part C, X.I); *see also* TRD at 80 n.4.

The Petitioners have demonstrated that this attempted distinction is inconsistent with CDPHE's regulations. The Petitioners present two convincing arguments. *See* Earthjustice Petition at 67. First, the source's ability to proceed with construction of a minor modification prior to receiving a final permit approval does not convert a permit application (or CDPHE's determination that an application is complete) into a final permit approval. Instead, as previously noted, CDPHE's EPA-approved regulations expressly require CDPHE to take an additional step to approve (*i.e.*, issue) a minor permit modification. 5 CCR 1001-5, Part C, X.H; *see* 40 C.F.R. § 70.7(e)(iv). CDPHE's explanation fails to acknowledge this requirement. Second, other CDPHE (and EPA) regulations undermine the notion that a permit application could permanently cement the relevant applicable requirements simply because a source may proceed—at its own risk—with its proposed construction. Notably, a source in this situation (i) assumes the risk that the permitting authority will ultimately deny the permit application or take final action on the application with potentially significant changes, (ii) must comply with the underlying applicable requirements, and (iii) is not entitled to a "permit shield" based on its application. 5 CCR 1001-5, Part C, X.H, I, J; *see* 40 C.F.R. § 70.7(e)(iv), (v), (vi).

Thus, the Petitioners have demonstrated that it was incorrect for CDPHE to base its NNSR applicability decisions solely on the date Suncor filed its respective permit applications. Determining the correct date that CDPHE *should* have used depends on the nature of the two modifications at issue, addressed in turn below.

Modification 1.28 (Physical Change): Date Suncor Began Actual Construction

Modification 1.28 involves a series of physical changes to re-route various miscellaneous process vents to the main flare at the East Plant (known as the "MPV project").[92] Using the relevant test to determine NNSR applicability, this project was calculated to result in a 28.08 tpy increase in VOC emissions. TRD at 80. Thus, this change was projected to fall below the 40 tpy major modification threshold favored by CDPHE, but above the 25 tpy threshold favored by the Petitioners.

For physical changes at an existing major stationary source, major NSR applicability questions implicate the requirement to obtain a major NSR permit prior to beginning actual construction of a major modification. Specifically, the relevant SIP requirement states: "Any . . . major modification, to which the requirements of this Part D apply, shall not *begin actual construction* in a nonattainment, attainment, or unclassifiable area unless a permit has been issued containing all applicable state and federal requirements." 5 CCR 1001-5, Part D, I.A.1 (emphasis added).[93] Thus, for a change that would constitute a major modification, (i) a source is required to obtain a major NSR permit prior to beginning actual construction, and (ii) a source would be in violation of major NSR requirements from the moment it began actual construction without obtaining the required NSR permit. Viewed from either angle, the relevant inquiry is whether the project constitutes a major modification at the time the source *begins actual construction*. This reading of the regulation is supported by the universal principle that "the legal effect of conduct should ordinarily be assessed under the law that existed when the conduct took place." *Landgraf v. USI Film Products*, 511 U.S. 244, 255 (1994).

EPA addressed similar issues in the preamble to the 2010 rule titled "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule" (the Tailoring Rule), which explained how EPA's existing regulations would apply to sources that begin actual construction prior to the date when new triggers for major NSR applicability took effect. *See* 75 Fed. Reg. 31513, 31593–94 (June 3, 2010).[94] In sum, EPA stated:

> Since a permit must be obtained before a major source may begin actual construction, the major source preconstruction permitting requirements in 40 CFR 51.166 and 52.21 of the regulation do not generally apply to a source that begins actual construction at a time when it was not a major source required to obtain a PSD permit. . . .

[92] CDPHE includes discussion of two purportedly separate modifications (*i.e.*, projects) within Section 1.28 of the TRD, including the physical changes associated with the MPV project as well as changes to emission factors that impacted emissions from the same flare. The Earthjustice Petition only challenges the MPV project.

[93] *See also* 40 C.F.R. §§ 51.166(a)(7)(iii) ("No . . . major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall *begin actual construction* without a permit that states that the major stationary source or major modification will meet those requirements." (emphasis added)), 52.21(a)(2)(iii) (similar).

[94] Parts of the Tailoring Rule were subsequently repealed by EPA based on the Supreme Court decision in *Utility Air Regulatory Group v. EPA*, 573 U.S. 302 (2014). However, the Court's decision was not related to (and did not impact) EPA's discussion of the general NSR applicability principles summarized in the preamble to that rule, which was based on existing regulations and guidance.

75 Fed. Reg. at 31594.[95]

Likewise, the major NSR permitting requirements are not generally applicable to a modification that does not qualify as major under laws applicable at the time construction begins. Overall, the NSR regulations require evaluating the laws governing applicability at the time the source begins actual construction.[96]

Here, pursuant to CDPHE's EPA-approved SIP and part 70 regulations, Suncor was allowed under Colorado's regulations to begin actual construction after submitting an application reflecting the source's determination that the modification would not be a major modification. 5 CCR 1001-5, Part B, II.A.6, Part C, X.I. Although this permit application did not reflect a final permit authorization of the construction by CDPHE (as explained previously), it was sufficient to allow the source to proceed, at its own risk, with beginning actual construction.[97] The issue, therefore, is whether Suncor began actual construction on a minor modification or a major modification. For the reasons explained in the preceding paragraphs, this requires evaluating the project against the significance thresholds that applied at the time the source began actual construction. Because the record does not identify when Suncor began actual construction on the MPV project associated with Modification 1.28, and because CDPHE was incorrect to rely on the date Suncor submitted a permit application, EPA cannot determine whether CDPHE applied the correct applicability thresholds. Accordingly, because EPA cannot determine whether

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[95] Similarly, EPA stated: "[A] . . . source that was not required to obtain a PSD permit before [the relevant date] would need to obtain a PSD permit addressing [newly applicable requirements] if it has not yet begun actual construction prior to [the relevant applicability date], even if the source had obtained any preconstruction approvals that were necessary to authorize construction prior to [the relevant applicability date]. This is because such a . . . source that begins actual construction after [the relevant applicability date] would likely be doing so without having any permit meeting the requirements of paragraphs (j) through (r)(5) of 40 CFR 52.21 or 51.166, or a state equivalent. A source that has obtained only a minor source permit prior to [the relevant date] but that begins actual construction after [the relevant applicability date] would violate the requirements of 40 CFR 52.21(a)(2)(iii) or 51.166(a)(7)(iii), or a state equivalent . . . ." 75 Fed. Reg. at 31594.

[96] Notably, the preceding discussion specifically applies to a source that began actual construction of a project qualifying as a minor modification, and accordingly did *not* obtain a major NSR permit, prior to the date upon which a new law governing major NSR applicability took effect. By contrast, in situations where a source *does* obtain a final *major* NSR permit authorization before a source begins actual construction, EPA has explained that the legal requirements in effect at the time of *final permit issuance*—including the attainment designation status at the time of permit issuance—would govern the content of that permit. *See* 75 Fed. Reg. at 31593. That is because issuance of a final major NSR permit would satisfy the requirement to obtain a major NSR permit prior to beginning actual construction. *See id*.; *see also* 40 C.F.R. §§ 51.166(a)(7)(iii), 52.21(a)(2)(iii). Here, because no major NSR permit was issued to Suncor for the MPV project, the same reasoning does not apply. Thus, EPA disagrees with the Petitioners' suggestion that the date of final title V permit issuance is relevant to determining the applicability of major NSR to the MPV project. Additionally, because the date of final permit issuance does not appear relevant for determining the NSR requirement that apply to the MPV project, EPA need not resolve whether CDPHE's issuance of a title V permit addressing related changes in the final title V permit for the West Plant (Plants 1 and 3) amounted to an authorization of the MPV project relevant to the East Plant (Plant 2). *See* RTC at 73 (citing Permit No. 96OPAD120).

[97] In deciding to proceed under this permitting scheme, there is always a risk that CDPHE could dispute the source's conclusion that major NSR does not apply, even after the source begins actual construction. For example, CDPHE might have determined that the modification for which the source had begun actual construction was actually a major modification, not a minor modification, based on discrepancies in calculations of emissions increases. But again, the assumed risk would relate back to whether it was permissible to begin actual construction without an NSR permit, based on the rules applicable at the time the source began actual construction.

CDPHE's NNSR non-applicability determination "compl[ied] with its SIP-approved regulations governing [NSR] permitting" and was based "on reasonable grounds properly supported on the record," EPA grants Claim 7 with respect to this modification. *Appleton Order* at 5.

Modification 1.33 (Relaxation of Enforceable Limit): Date of Final Permit Issuance

Modification 1.33 involved revised emission calculations and throughput and emision limits relevant to the LPG loading rack. CDPHE evaluated whether these changes would trigger major NSR on two different bases. First, CDPHE analyzed whether the changes at issue would result in an emissions increase over the relevant significance threshold, using the actual-to-projected-actual calculation methodology. *See* Proposed RTD at 103. This analysis indicated a 13.25 tpy increase in VOC, which would be under either the 40 tpy or 25 tpy threshold. *Id*. The Petitioners do not challenge that aspect of CDPHE's analysis.

Second, CDPHE separately evaluated the changes to the throughput and emission limitations as a relaxation of enforceable requirements. Specifically, CDPHE explained:

> Colorado Regulation No. 3, Part D includes the source obligation requirements which requires sources that were permitted as minor sources or modifications to undergo major stationary source permitting requirements if they became major solely by relaxing enforceable limitations. This source obligation is often referred to as the relaxation restriction.
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> Since permitted emissions from the LPG loading rack were below the major source level when the equipment was constructed in 1989, if emissions from the LPG loading rack exceed the significance level due to the relaxation of any enforceable requirement, then major stationary source [NNSR] requirements apply. In this application, the source is requesting a revision to the emission calculation procedures for LPG rail rack loading, as well as changes to the throughput and emission limitations. Since there are no other physical changes, this would be considered a relaxation in enforceable requirements, thus the allowable . . . emissions from LPG loading rack have to remain below the significance level in order to avoid major [NNSR] requirements.

TRD at 104. CDPHE then concluded: "the requested emissions from the LPG loading are below the significance level as indicated in the table below. Therefore, this modification does qualify as a minor modification." *Id*. at 105. The cited table indicates that VOC emissions are now restricted to 39.51 tpy. *Id*. CDPHE's RTC does not provide any additional relevant information.[98]

[98] In addressing public comments noting that this revised 39.51 tpy limit would exceed the 25 tpy VOC threshold (which the Petitioners claim is now applicable), CDPHE provides a puzzling response. Specifically, CDPHE suggests that "Earthjustice is not relying on appropriate information" because the 39.51 tpy value "is a summary of permitted emissions," while "the [NNSR] applicability test is based on the change in actual emissions" (*i.e.*, the separately analyzed 13.52 tpy increase in actual emissions). RTC at 73. CDPHE's RTC thus appears to suggest that the change in permitted emissions associated with the relaxation of enforceable limits could not form a basis for NNSR applicability. This directly conflicts with CDPHE's own TRD, in which the state acknowledges that this relaxation could form the basis for NNSR applicability. CDPHE offers no explanation for its apparent change in position, which appears baseless.

This type of NSR applicability trigger based on a "relaxation in any enforceable limitation" is governed by a Colorado SIP provision that states the following:

> The requirements of Section V.A [governing major NNSR] shall apply at such time that any stationary source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation that was established after August 7, 1980 on the capacity of the source or modification to otherwise emit a pollutant, such as a restriction on hours of operation.

5 CCR 1001-5, Part D, V.A.7.b; *see also* 40 C.F.R. §§ 51.165(a)(5)(ii), 51.166(r)(2), 52.21(r)(4).

Because this applicability trigger is not based on the date a source "begins actual construction," the discussion above concerning Modification 1.28 does not apply here.[99] Instead, applicability is expressly triggered "at such time that any . . . modification becomes a . . . major modification solely by virtue of a relaxation in any enforceable limitation." 5 CCR 1001-5, Part D, V.A.7.b (emphasis added). Thus, the key is determining when "a relaxation in any enforceable limitation" occurs.

In general, EPA agrees with the Petitioner that the relevant date of relaxation is the date a final permit action authorizes the change to the limitation.[100] CDPHE's apparent position that the relaxation occurred earlier—when the source submitted its permit application—is unpersuasive. As previously explained, CDPHE's minor modification regulations allow a source to begin implementing applied-for changes immediately after submitting a permit application, at its own risk. However, such action does not amount to final permit approval, which requires an additional step by CDPHE—a step that could involve changes to the source's proposed revisions. 5 CCR 1001-5, Part C, X.H, I. This lack of finality is particularly relevant to the type of change at issue here, as neither EPA's nor CDPHE's regulations allow sources to change limits taken to

[99] *See* 75 Fed. Reg. at 31594 ("Since a permit must be obtained before a major source may begin actual construction, the major source preconstruction permitting requirements in 40 CFR 51.166 and 52.21 of the regulation do not generally apply to a source that begins actual construction at a time when it was not a major source required to obtain a PSD permit. One exception, however, is the unique circumstance when a source becomes a major source solely by virtue of the relaxation of an enforceable limitation on the source's PTE. 40 CFR 51.166(r)(2); 40 CFR 52.21(r)(4).").

[100] *See U.S. v. Louisiana-Pacific Corp.*, 682 F. Supp. 1141, 1162 (D. Colo. 1988) ("[S]hould the relaxation of its permit limitations cause its potential to emit to exceed 250 TPY, it will become subject to the PSD program *as soon as the new permits are issued*. This is because the regulations currently provide that when a particular source becomes a major source solely by virtue of the relaxation of a federally enforceable limitation on operations, the source shall *at that time* become subject to the permit requirements of the PSD program. *See* 40 C.F.R. § 52.21(r)(4)." (emphasis added)); *see also* the authorities cited *supra*, in note 87.

restrict major NSR applicability prior to a formal permit approval.[101] In this situation, the existing limit in the permit does not officially change—and thus, relaxation of the limit is not fully effectuated—until a permitting authority formally approves the revised (relaxed) limit via final permit issuance.

From the record before EPA, it does not appear that any such final action occurred until CDPHE issued Suncor's title V renewal permit on September 1, 2022. Accordingly, EPA agrees with the Petitioner that CDPHE should have applied the 25 tpy VOC significance threshold in effect at that time when evaluating whether this "relaxation in any enforceable limitation" on the LPG loading rack triggered NNSR. Because CDPHE's NNSR non-applicability determination appears to not "comply with its SIP-approved regulations governing [NSR] permitting" and was not based "on reasonable grounds properly supported on the record," EPA grants Claim 7 with respect to this modification. *Appleton Order* at 5.

Direction to CDPHE: CDPHE must ensure that its NNSR applicability determinations concerning the MPV project associated with Modification 1.28, and the relaxation of enforceable limitations associated with Modification 1.33, are consistent with the SIP and based on reasonable grounds properly supported by the record.

Regarding Modification 1.28, CDPHE should evaluate the relevant physical changes under the NNSR applicability thresholds that existed at the time the source began actual construction of the MPV project. Provided the facility began actual construction prior to the effective date of redesignation (January 27, 2020), CDPHE may reasonably conclude that the 40 tpy VOC threshold was the correct NNSR applicability threshold. In this situation, CDPHE would simply need to amend the permit record to explain the proper basis for this conclusion. On the other hand, if construction began after the effective date of redesignation, CDPHE should assess whether the modification was major based on the 25 tpy threshold. If the modification was major, CDPHE should take all necessary steps to ensure that Suncor complies with all NNSR requirements including receiving the necessary NNSR permit and that all applicable requirements are timely incorporated into the source's title V permit.

Regarding Modification 1.33, CDPHE should evaluate the relaxation in the LPG loading rack VOC limit (and any other relevant enforceable limitations) based on the NNSR applicability thresholds that existed at the time the relevant permit revision was finalized. Since it appears that

[101] In justifying its decision to process this change as a title V minor modification, CDPHE cites one portion of its regulations governing when this process can be used. *See* TRD at 104 (citing 5 CCR 1001-5, Part C, X.A.6). However, CDPHE neglects to address potentially more relevant sections of the regulations, which specifically prohibit the use of title V minor modifications for changes that would "violate any applicable requirement" (such as the terms of a preconstruction permit) or that would "seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include: . . . A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Act, including but not limited to modifications under Part 2 of the state Act (prevention of significant deterioration), Part 3 of the state Act (attainment), ..." 5 CCR 1001-5, Part C, X.A.1 and .4; *see also* 40 C.F.R. § 70.7(e)(2)(i)(A)(*1*) and (*4*). This issue was not raised as a basis for EPA's objection to the Permit, and thus EPA is not objecting to the Permit on this basis. Nonetheless, the potentially improper processing of this modification reinforces EPA's conclusion that it would be especially unreasonable to consider this particular type of change—relaxing a limit taken to avoid major NSR applicability—to be final or effective at the time Suncor applied for it.

no final permit action authorized this revision until the present title V renewal permit, CDPHE will need to evaluate that change according to the current 25 tpy VOC threshold. Any changes to the existing emissions limits and associated requirements would likely not be eligible for treatment as a title V minor modification. 5 CCR 1001-5, Part C, X.A.4; *see also* 40 C.F.R. § 70.7(e)(2)(i)(A)(*4*).

Claim 8: The Petitioners Claim That "EPA Must Object Because the Proposed Permit Fails to Apply Major New Source Review Requirements to Modification 1.29 by Improperly Disaggregating It from Substantially Related Projects to Upgrade Refinery Flares to Comply with MACT CC Regulations."

Petitioners' Claim: The Petitioners claim that allegedly related changes to multiple flares at the Suncor East Plant (Plant 2) and West Plant (Plants 1 and 3) should be considered a single project for purposes of determining major NSR applicability, and that combined emissions increases from these changes triggered major NSR. *See* Earthjustice Petition at 68–72.

The Petitioners' arguments rest on EPA statements regarding what is known as "project aggregation," as discussed in a 2009 action by EPA. *Id*. at 68 (citing 74 Fed. Reg. 2376 (January 15, 2009)). The Petitioners summarize and quote the following EPA guidance from that action:

> The aggregation decision is based on whether the supposedly separate changes are "substantially related." The substantial relationship analysis is highly case-specific. "To be 'substantially related,' there should be an apparent interconnection—either technically or economically—between the physical and/or operational changes, or a complementary relationship whereby a change at a plant may exist and operate independently, however its benefit is significantly reduced without the other activity." However, nominally separate changes are not required to be dependent on one another to be substantially related. "Technical or economic dependence may be evidence of a substantial relationship between changes, though projects may also be substantially related where there is not a strict dependence of one on the other." "The test of a substantial relationship centers around the interrelationship and interdependence of the activities, such that substantially related activities are likely to be jointly planned (i.e., part of the same capital improvement project or engineering study) and occur close in time and at components that are functionally interconnected."

Id. at 68–69 (quoting 74 Fed. Reg. at 2378–79).

Turning to the specific changes at issue, the Petitioners observe that CDPHE treated Modification 1.29 as a separate project from similar—and allegedly related—changes to other emission units. *Id*. at 69 (citing TRD at 97–98). Specifically, Modification 1.29 involves changes to the East Plant's (Plant 2) Main Flare in order to bring it into compliance with 2015 revisions to EPA's NESHAP applicable to refineries, 40 C.F.R. part 63, subpart CC (called "MACT CC" by the Petitioners and CDPHE). *Id*. The allegedly related project involves changes to three flares at the West Plant (the Plant 1, Plant 3, and Gasoline Benzene Reduction (GBR) flares), which

were similarly undertaken to bring those flares into compliance with the revisions to the subpart CC NESHAP. *Id*.

The Petitioners advance multiple reasons for why these projects should have been analyzed as a single project. For example, the Petitioners state that the changes occurred very close in time, noting that Suncor filed the respective permit applications within a few months of each other. *Id*. (citing TRD at 97–98). Additionally, despite the fact that the East Plant and West Plant flare changes were separately funded, the Petitioners allege that the changes were "jointly planned." *Id*. Specifically, the Petitioners observe that both sets of changes were designed to satisfy the same regulatory revisions, the changes were initially identified as a capital project to coordinate updates to all of the affected flares, and the initial approval for expenditure named the project "P1,2,3 Units RSR Rule Flare." *Id*. at 69 (citing Earthjustice Petition Ex. 36 at 472, 592–93).

The Petitioners also assert that the flares at issue are physically interconnected. *Id*. at 70. The Petitioners repeat CDPHE's statements that "more than one flare may receive waste streams from a specific refinery process unit" and "excess hydrogen from the Plants 1 and 2 reformers and the hydrogen plant (part of Plant 1) . . . can be routed to the GBR flare, in lieu or either the Plant 1 or Plant 2 flares." *Id*. (quoting TRD at 98; RTC at 70). The Petitioners also address CDPHE's statement that the interconnection involves "a very specific waste stream," questioning whether this is the only interconnection and arguing that, even if so, the flares are nonetheless interconnected. *Id*. at 72 (quoting RTC at 70).

Relatedly, the Petitioners claim that the flares at issue are practically interrelated. *Id*. at 70. The Petitioners note that each flare is used as a control device to limit emissions from various emission units. *Id*. The Petitioners note that the subpart CC NESHAP revisions required Suncor to either (i) upgrade these flares to comply with the rule or (ii) re-route emissions from affected units to a flare that complied with the rule. *Id*. The Petitioners assert that Suncor took advantage of both approaches, upgrading the four flares at issue here and re-routing gas away from other flares that were not upgraded. *Id*. The Petitioners remark that if Suncor had *not* upgraded one of the four flares at issue, emissions directed to that flare would have been re-routed to a different flare. *Id*. The Petitioners suggest that this shows the interrelatedness of these four flares. *See id*.

Additionally, the Petitioners note that CDPHE did aggregate certain other facility-wide changes (specifically, changes to miscellaneous process vents authorized by Modification 1.28). *Id*. at 70 (citing Proposed RTD at 78–79). The Petitioners assert that those changes, similar to the changes at issue in this claim, (i) involved connections to all four flares, (ii) were made to comply with the subpart CC NESHAP revisions, and (iii) were jointly planned. *Id*. The Petitioners characterize CDPHE's failure to treat the Modification 1.29 changes the same way as "unjustifiable." *Id*.

The Petitioners contest various additional rationales provided by CDPHE. Specifically, the Petitioners discount the fact that the flare projects "do not rely either technically or economically on the other flare projects to be viable," arguing that EPA's project aggregation policy does not require strict dependence for projects to be considered substantially related. *Id*. at 71–72 (quoting RTC at 70; citing 74 Fed. Reg. at 2378–79). The Petitioners also dismiss as irrelevant CDPHE's assertion that neither project is expected to increase production or produce any economic benefit

for Suncor. *Id*. at 72 (citing RTC at 70). The Petitioners argue that this is irrelevant to whether the projects are substantially related. *Id*.

The Petitioners claim that if the changes to the four flares at issue had been properly aggregated as a single project, they would have resulted in a VOC increase of 28.78 tpy, greater than the 25 tpy significance threshold for VOCs. *Id*. at 70. The Petitioners conclude that this would have triggered major NSR requirements. Similar to Claim 7, the Petitioners assert that CDPHE's failure resulted in three flaws in the title V permit. *See id*. at 71. First, the Permit violates an NSR requirement that a major modification may only be authorized if "[t]he proposed source will achieve the lowest achievable emission rate for the specific source category." *Id*. (quoting 5 CCR 1001-5, Part D, V.A.2). Second, the Permit violates the title V requirement that no significant title V permit modification (e.g., incorporating a modification that is "major" for NSR into the title V permit) may use minor permit modification procedures. *Id*. (citing 5 CCR 1001-5, Part C, I.A.7). Third, the permit record fails to contain adequate justification for the decision to treat these modifications to the title V permit as minor. *Id*. (citing 40 C.F.R. § 70.7(a)(5)).

EPA's Response: For the following reasons, EPA grants the Petitioners' request for an objection on this claim.

As an initial matter, EPA observes that neither EPA's nor CDPHE's regulations currently specify criteria for determining which physical or operational changes should be aggregated as a single "project" or modification for purposes of determining major NSR (*e.g.*, NNSR) applicability. Both the Petition and CDPHE's justification follow EPA's interpretations and policies concerning this topic, which recommend considering whether changes are "substantially related." As EPA explained in a 2018 action affirming the 2009 action cited by the Petitioners:

> In summarizing what it means for projects to be substantially related, the 2009 NSR Aggregation Action provided that "in most cases, activities occurring in unrelated portions of a major stationary source (*e.g.,* a plant that makes two separate products and has no equipment shared among the two processing lines) will not be substantially related. The test of a substantial relationship centers around the interrelationship and interdependence of the activities, such that substantially related activities are likely to be jointly planned (*i.e.,* part of the same capital improvement project or engineering study), and occur close in time and at components that are functionally interconnected." The 2009 NSR Aggregation Action added, "[t]o be 'substantially related,' there should be an apparent interconnection—either technically or economically—between the physical and/or operational changes, or a complementary relationship whereby a change at a plant may exist and operate independently, however its benefit is significantly reduced without the other activity. We note that these factors are not necessarily determinative of a substantial relationship, but are merely indicators that may suggest that two or more activities are likely to be substantially related and, therefore, candidates for aggregation."

83 Fed. Reg. 57324, 57327 (November 15, 2018) (quoting 74 Fed. Reg. at 2378).

Notably, in EPA's 2018 action, EPA made clear that these interpretations and policies are not binding on state permitting authorities like CDPHE.[102] Thus, EPA's interpretations and policies on this topic may be instructive, but they are not determinative. In the absence of specific SIP regulations dictating CDPHE's decision, the relevant question is whether the Petitioners demonstrated that "the state's exercise of discretion . . . was unreasonable or arbitrary" or that the state's decision was not based "on reasonable grounds properly supported on the record." *Appleton Order* at 5. CDPHE's failure to consider or provide a rational basis for dismissing a potentially relevant fact could present a basis for EPA's objection to the permit.

CDPHE's justification is summarized in three points:

> [1] The various flare [refinery sector rule, or RSR] projects are independent and do not rely either technically or economically on the other flare projects to be viable. [2] The flare RSR projects are not expected to increase the production at the refinery, nor is the refinery expected to receive any economic benefit from the projects. [3] The flare RSR projects are related only in that the projects must be done in order to comply with the requirements in MACT CC.

Proposed TSD at 98; RTC at 70.

Regarding CDPHE's first point, the state's rationale appears to be largely based on a conclusion that the changes to the flares at issue are not technically or economically dependent on each other. The record does not provide sufficient support for this conclusion. The flares at issue are physically interconnected at least with respect to one waste stream—excess hydrogen from reformers at both the East and West Plants, and from the hydrogen plant at the West Plant—which could be routed to either the East Plant or West Plant's flare(s). *See* TRD at 98; RTC at 70. CDPHE's sole explanation is: "That path is an option and does not make the flares technically dependent upon each other." RTC at 70. CDPHE suggests that its own concerns on this issue were resolved from a submission by the company, but CDPHE does not discuss the merits of Suncor's arguments that CDPHE apparently found persuasive; nor does CDPHE otherwise explain the basis for this reversal in position. *See* TRD at 98.[103] In any case, the logic behind CDPHE's conclusion is hard to discern. To take the Petitioners' example, if Suncor had *not* upgraded the East Plant main flare to conform with the subpart CC NESHAP, then it likely would have been necessary to route the shared waste stream at issue to a flare that *had* been upgraded (like one of the West Plant flares). CDPHE's record does not acknowledge or rebut this possibility, which appears to demonstrate a technical interrelationship, interdependence, or interconnection between the flare upgrade projects associated with Modification 1.29.

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[102] 83 Fed. Reg. at 57329, 57332–33.

[103] In relevant part, CDPHE's explanation states: "The Division expressed some remaining concerns that more than one flare may receive waste streams from a specific refinery process unit, which appear to be contrary to the claims in the Plant 3 RSR flare application which indicated that each flare receives vent gases from specific, separate process units (see discussion on page 97). In response to these concerns, the source submitted a memo on August 3, 2018 providing further justification that the flare RSR projects should be considered separate projects. . . . Based on the February 14, 2018 memo submitted by the source, the information in the 2018 flare RSR applications, the source's responses to the Division's inquiries regarding project funding, and the August 3, 2018 memo, the Division agrees that the flare RSR projects (Plant 2, Plant 3, Plant 1, GBR and Plant 1 OMD rack (Plant 1 rail rack)) are separate projects." TRD at 98.

Regarding CDPHE's second point, the purported absence of an economic *benefit* from the collective flare upgrades does not necessarily support a conclusion that the individual changes to flares are not "substantially related" to each other. EPA's guidance, which CDPHE purports to follow, highlights the importance of an economic *interrelationship* between different changes. Moreover, it is not clear that CDPHE's conclusion regarding the absence of economic benefits is sound. Although the projects at issue may not increase production at the Suncor refinery (providing a direct economic benefit), they collectively provide a means of complying with EPA's subpart CC NESHAP requirements and thereby avoiding penalties for noncompliance (providing an indirect economic benefit). Thus, CDPHE's discussion of economic impacts is not sufficient to support its non-aggregation decision.

Regarding CDPHE's third point, is not clear from the record that the "only" relationship between these flare changes is that they were all motivated by the subpart CC NESHAP revisions. Even if CDPHE's record did support this point, CDPHE does not explain why it does not view this common motivation relevant to assessing substantial relatedness. The fact that the flare changes are all subject to the NESHAP provisions may suggest an interrelatedness between the activities, as compliance with that rule potentially depends on the performance of all the flares, as explained in the preceding paragraphs. Moreover, the NESHAP required Suncor to make similar changes to similar units on a similar timeframe. CDPHE acknowledges that the projects proceeded along similar timeframes and were initially contemplated together during early stages of Suncor's planning process. *See* RTC at 69; TRD at 97–98. CDPHE apparently discounts these facts based on Suncor's subsequent clarification that the projects were separately funded, *see* TRD at 98, but it is unclear whether or why CDPHE found the separate funding decision to be persuasive. Additionally, CDPHE does not explain the state's disparate treatment of the potentially similar changes at issue in Modification 1.29 (the subject of this claim) and Modification 1.28 (which were similarly motivated by the subpart CC NESHAP revisions, and which were aggregated as a single project).

Overall, the permit record indicates that CDPHE initially approached this project aggregation issue with a healthy degree of skepticism, raising various concerns that now form the basis of this Petition claim. CDPHE then engaged in a deliberate back-and-forth with Suncor to obtain more information. Based on several submissions from the company, CDPHE was eventually convinced to abandon its concerns and conclude that the projects were not substantially related. However, the basis for this apparent change in position is not sufficiently documented in the permit record, nor is it otherwise clear that there is a rational basis to support that conclusion. Thus, the Petitioners have demonstrated that CDPHE's decision was not based "on reasonable grounds properly supported on the record" and was potentially "unreasonable or arbitrary." *Appleton Order* at 5. Accordingly, EPA grants Claim 8.

Direction to CDPHE: CDPHE must ensure that its NNSR applicability determination concerning the flare upgrades associated with Modification 1.29, including the decision not to aggregate those changes with similar changes to flares at Suncor's West Plant, is based on reasonable grounds properly supported by the record. CDPHE should further explain its conclusions regarding the issues described in EPA's Response. The most relevant issue to EPA appears to be the potential physical interrelationship, interdependence, or interconnection

between the flares that potentially serve the same process stream(s), but CDPHE should consider and explain all facts and factors relevant to its decision.

After further analysis, if CDPHE concludes that the flare upgrades should be aggregated as a single project, CDPHE should evaluate the applicability of NNSR to that project, and take any necessary permitting actions through the appropriate NSR permitting processes.

Claim 9: The Petitioners Claim That "EPA Must Object Because EPA Has Already Determined That the Permitting Record for the Minor Modifications Is Inadequate."

Petitioners' Claim: The Petitioners argue that "EPA must object to the Proposed Permit because EPA has already concluded that the permitting record is insufficient to support the Division's decision to incorporate the modifications into the Proposed Permit." Earthjustice Petition at 72.

For support, the Petitioners reproduce various EPA statements provided in an enclosure to EPA's objection to the Initial Proposed Permit, including:

> The record supporting a minor NSR permitting action must include the preliminary analysis addressing the elements described in section III.B.5; must state the Division's determinations as to compliance with NAAQS, applicable regulations, and other required elements; and must contain sufficient information to support those determinations.
>
> ***
>
> [T]he permit record provided for some of these actions does not appear to sufficiently demonstrate that these projects will meet applicable ambient air quality standards.
>
> ***
>
> [T]he state does not provide the record for the minor NSR permit determinations to EPA, but instead provides only the minor NSR construction permit application and (where applicable) the title V minor modification used to process the application.

Id. at 72–73 (quoting March 2022 Objection Letter, Encl. B at 2, 4). The Petitioners also describe EPA's recommendation that CDPHE reevaluate whether modifications processed as minor should have been processed as such. *Id*. at 72 (citing March 2022 Objection Letter, Encl. B at 3).

From these prior EPA statements, the Petitioners conclude that "EPA has already determined that the permitting record provided to EPA was insufficient to justify the Division's decision to incorporate the minor modifications into the Proposed Permit; therefore, EPA must object." *Id*. at 73 (citing 5 CCR 1001-5, Part B, III.B.5, III.D.1, and III.F, and Part C, V.B.6.c and III.C.12; 40 C.F.R. §§ 70.7(a)(5), 70.8(a)(1), 70.8(c)(3)(ii)). The Petitioners also allege that CDPHE did not respond to EPA's recommendations. *Id*. at 74.

EPA's Response: For the following reasons, EPA denies the Petitioners' request for an objection on this claim.

EPA's response to Claims 5 through 8 fully address the Petitioners' allegations—and, as appropriate, contain EPA's conclusions—regarding the sufficiency of CDPHE's permit record associated with various specific NSR permitting decisions. In Claim 9, the Petitioners do not identify any additional deficiency in CDPHE's permit record that would provide a basis for EPA to object to the Permit Beyond the issues already addressed in Claims 5 through 8.

To the extent that the Petitioners intended to suggest in Claim 9 that EPA's prior statements provide a different or additional basis to object to the Permit, this claim is denied. The Petitioners are incorrect to characterize those prior statements as reflecting a "conclu[sion]" or "determin[ation] that the permitting record provided to EPA was insufficient," warranting EPA's objection. Earthjustice Petition at 71, 73. Rather, those prior EPA statements were, on their face, characterized as "comments and recommendations" and "concerns," not conclusions or determinations. *E.g.*, March 2022 Objection Letter, Encl. B at 2. Additionally, prior EPA statements regarding issues upon which EPA contemporaneously *declined* to base an objection do not—in and of themselves, and with no further analysis by the Petitioners—provide a basis for EPA to object in response to this Petition. To the extent that further consideration of the issues underlying EPA's prior statements provide a basis for EPA's objection, the agency has done so in response to the arguments raised in Claims 5 through 8.

EPA also observes that, on November 14, 2022 (after the Petitions were submitted), CDPHE did provide a response to the concerns raised in Enclosure B to EPA's March 2022 Objection Letter.

C. CAM Plan Issues (Claims 10–12)

Claims 10, 11, and 12 all involve alleged deficiencies in the CAM plans that CDPHE added to the Permit in response to EPA's March 2022 Objection Letter. Claims 10 and 11 are closely related and challenge the CAM plan applicable to VOC emissions from the East Plant's main flare. *See* Earthjustice Petition at 74–82. Claim 12 challenges the CAM plan applicable to VOC emissions from the railcar dock flare. *See id*. at 82–84.

Claim 10: The Petitioners Claim That "The CAM Plan for the East Plant's Main Flare Does Not Meet Applicable Requirements Because Flares Are Not Appropriate Control Devices and the Division Has Not Justified Its Assumed 98% VOC Destruction Efficiency."

Petitioners' Claim: In Claim 10, the Petitioners first contest whether open-stack flares can be considered adequate control devices that satisfy the CAM requirement in 40 C.F.R. § 64.3(a) to provide a "reasonable assurance of compliance," and then specifically question whether such flares can achieve a 98 percent VOC destruction efficiency. *See* Earthjustice Petition at 74–79.

The Petitioners observe that the Permit establishes an 84.8 tpy VOC emission limit on the East Plant main flare, which assumes a 98 percent destruction efficiency. *Id*. at 76 (citing Permit

Condition II.8). The Petitioners also cite Appendix J of the Permit, which contains the CAM plan associated with this limit. *See id*. at 77, 81.

The Petitioners first suggest generally that *no* open-stack flares can be considered adequate control devices under CAM, because "performance of open-stack flares varies substantially with conditions and cannot provide reliable emissions reductions." *Id*. at 74; *see id*. at 76, 77. For support, the Petitioners state that a flare's ability to control emissions depends on (i) minimum temperatures and (ii) minimum residence times. *Id*. at 74–75. The Petitioners identify various additional factors that can affect flare performance, including "over-steaming, excess aeration, high winds, and flame lift-off" as well as "rapidly varying flow rates and waste gas compositions." *Id*. at 75. The Petitioners, quoting a report they commissioned, further suggest that "*no* open-flame stack is designed to meet the basic thermally-based air pollution control device requirements of minimum temperature and minimum residence time at or above this minimum temperature" because "in *any* open-flame flare, there is no way to assure that the flame region will provide assurances of stable combustion conditions (under all ambient weather and atmospheric conditions, including strong cross-winds at height)." *Id*. at 76 (quoting Earthjustice Petition Ex. 38) (first emphasis added).

The Petitioners next attempt to connect these broad conclusions regarding open-stack flares to more specific arguments regarding the alleged inability of flares to achieve 98 percent VOC destruction efficiency. *See id*. at 75-76, 78–79.[104] For support, the Petitioners cite a chart in another study; according to the Petitioners, the chart shows that flare control efficiency can drop to very low values (approximately 55%) even under controlled conditions. *Id*. at 75. The Petitioners also reference EPA testing of flares at oil and gas well pads in Wyoming, which found that some flares have actual combustion efficiency less than 20 percent. *Id*. at 76. The Petitioners state that some brand-new enclosed combustion devices have not been able to achieve 98 percent VOC destruction efficiency. *Id*. The Petitioners also allege that EPA previously questioned CDPHE's assumption that the Main Plant East Flare will achieve 98 percent VOC control efficiency. *Id*. (citing March 2022 Objection Letter, Encl. A at 3–4).

Moreover, the Petitioners contest CDPHE's position that Suncor's compliance with the requirements in the subpart CC NESHAP will assure a 98 percent destruction efficiency for all VOCs. *Id*. at 78. The Petitioners state that the requirements in subpart CC were promulgated to address HAPs (a smaller class of compounds than all VOCs). *Id*. The Petitioners therefore suggest that these measures are insufficient for all VOCs. *Id*. The Petitioners challenge CDPHE's suggestion that it is the Petitioners' burden to explain why these measures are insufficient with respect to specific VOCs. *Id*. at 78. Additionally, the Petitioners argue that a statement in AP-42 Section 13.5 (cited by CDPHE) does not support CDPHE's position that the subpart CC NESHAP requirements are sufficient to control all VOCs. *Id*. at 78–79. Third, the Petitioners dispute the relevance of EPA's *BP Amoco Order*, arguing that this order did not conclude that the subpart CC requirements would be sufficient to control all VOCs. *Id*. at 79. Thus, the

[104] The Petitioners also highlight the magnitude of VOC emissions increases that would occur if the East Plant main flare's destruction efficiency was only slightly lower than 98 percent. *See id*. at 76.

Petitioners conclude that CDPHE cannot assume that the flare will achieve 98 percent VOC control efficiency. *Id*. at 75.[105]

EPA's Response: For the following reasons, EPA denies the Petitioners' request for an objection on this claim.

First, EPA disagrees with Petitioners' general suggestion that *no* open stack flares can ever be considered adequate control devices under CAM. Earthjustice Petition at 74, 76. This type of flare is well-recognized as a control device under numerous EPA regulations (including the subpart CC NESHAP requirements the Petitioners discuss in this claim). Requirements concerning such flares have also been specifically identified by EPA as sufficient to satisfy CAM since the time the CAM rule was promulgated. *See, e.g.*, 62 Fed. Reg. 54900, 54925 (October 22, 1997). Moreover, EPA's objection to the Initial Proposed Permit was primarily based on CDPHE's failure to consider this flare *to be a control device*, subject to CAM. *See* March 2022 Objection Letter, Encl. A at 2–4.

Second, the Petitioners' more specific allegations regarding the ability of the East Plant main flare to achieve 98 percent VOC destruction efficiency are also unpersuasive. EPA recognizes that various studies have identified different types of flares with below-expected performance, and that multiple factors can affect flare performance, including over-steaming, excess aeration, high winds, and flame lift-off, as well as rapidly varying flow rates and waste gas compositions. However, the regulatory requirements EPA promulgated in the 2015 subpart CC NESHAP revisions (and similar requirements for other industry sectors) were specifically designed to account for those issues and ensure that flares at refineries achieve a 98 percent destruction efficiency. *See* 80 Fed. Reg. 75178, 75211 (December 1, 2015); 79 Fed. Reg. 36879, 36904–09 (August 29, 2014); *see also BP Amoco Order* at 21–23. Those requirements are included in Suncor's Permit. *See* Final Permit at 240–251.

The Petitioners suggest that these requirements may not be sufficient to ensure a 98 percent destruction efficiency with respect to certain non-HAP VOCs. However, CDPHE explains:

> The Division considers that the MACT CC flare requirements are appropriate to rely on for a VOC emission limit that is based on 98% control efficiency since the HAP emissions expected to be emitted from the flare (e.g. hexane, benzene) are also VOCs.

Final Permit App. J at 10. In its RTC, CDPHE elaborates as follows:

> The Division has justified that the MACT CC monitoring will achieve a 98% control efficiency for VOC emissions. Regarding Earthjustice's first point, many of the 27 HAPs addressed in MACT CC are also VOCs. While VOCs are a larger class of pollutants than HAPs, Earthjustice does not list VOCs that would likely be encountered at the refinery that are not the same or similar to the HAPs already regulated under MACT CC. The Division considers that the heat content, rather

[105] Given the flare's alleged inability to achieve a 98 percent VOC destruction efficiency, the Petitioners suggest that Suncor's use of flaring should be subject to various restrictions. *See id*. at 76–77.

> than the composition of the materials combusted is more important in ensuring that those pollutants are destroyed in the flare. The CAM plan requires monitoring of the heat content of the materials combusted to ensure that materials are properly combusted in the flare.

Revised Permit RTC at 18–19.

The Petitioners challenge this conclusion but do not present any information to question the sufficiency of the subpart CC measures with respect to any non-HAP VOCs. 40 C.F.R. § 70.12(a)(2)(vi).

Moreover, as a technical matter, the Petitioners' concerns in this regard are unfounded. Nothing in the subpart CC regulations or the preamble accompanying promulgation of those regulations indicates that the 98 percent destruction efficiency conclusions were restricted to any specific HAPs. *See* 80 Fed. Reg. at 75209–13. Moreover, neither the data underlying EPA's analysis of flare destruction efficiency nor EPA's analysis of that data was limited to specific VOC HAPs. Rather, the underlying data—and EPA's analysis of that data in determining what would be necessary to achieve a 98 percent destruction efficiency—evaluated flare performance with respect to the combustion efficiency and destruction efficiency of various hydrocarbons combusted in refinery flares—including non-HAP VOCs.[106] Thus, EPA's conclusions underlying the subpart CC rule regarding flare hydrocarbon destruction efficiency can reasonably be applied to non-HAP VOCs emitted from refinery flares. Again, the Petitioners have not provided any reason to question those conclusions with respect to any non-HAP VOCs emitted by Suncor.

That is why, as CDPHE observes, EPA specifically suggested in the *BP Amoco Order* that the state consider "adding permit terms mirroring the monitoring and calculation methodologies in the EPA's refinery regulations" (specifically, the subpart CC provisions implicated here) "before presuming that BP Amoco's flares achieve a 98 percent VOC destruction efficiency." *BP Amoco Order* at 25. EPA went on to state that "Such a monitoring regime, in conjunction with the existing conditions of Permit No. 1176/PSDTX782, *should provide sufficient information to indicate whether the flares are achieving a 98 percent VOC destruction efficiency*." *Id*. (emphasis added).

The Petitioners are also incorrect to suggest that EPA's March 2022 Objection Letter questioned the flare's ability to achieve a 98 percent destruction efficiency for all VOCs. Earthjustice Petition at 76. Again, EPA's objection to the Initial Proposed Permit was primarily based on

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[106] *See* EPA OAQPS, Parameters for Properly Designed and Operated Flares: Report for Flare Review Panel, 2–3 to 2-4, 2-11, App. A (April 2012) (describing the variety of hydrocarbon compounds analyzed for combustion and destruction efficiency across numerous studies analyzed by EPA), available at *https://www.regulations.gov/document/EPA-HQ-OAR-2010-0682-0191*; Texas Commission on Environmental Quality (TCEQ) 2010 Flare Study: Final Report, 91–94, 124–126 (August 1, 2011) (testing flare destruction efficiency with the non-HAP VOC flare waste gases propylene, propane, and mixtures of these compounds), available at *https://www.regulations.gov/document/EPA-HQ-OAR-2010-0682-0172*. Additionally, although AP-42 Section 13.5 does not explicitly address VOC destruction efficiency in the context of the subpart CC regulatory requirements, the chapter does address VOC destruction efficiency more generally, based on some of the same data collected in the subpart CC rulemaking effort. *See* AP-42 Section 13.5 at 13.5-7 note b, 13.7-10 through -13 (2018), available at *https://www.epa.gov/sites/default/files/2020-10/documents/13.5_industrial_flares.pdf*.

CDPHE's failure to consider this flare to be a control device, subject to CAM. *See* March 2022 Objection Letter, Encl. A at 2–4. EPA's only discussion of destruction efficiency was an observation that the Permit assumes a 98 percent efficiency, presented for purposes of indicating that the flare was indeed being used as a control device. *See id.* at 4. EPA's Objection Letter did not question the 98 percent efficiency assumption in any way. *See id*.

Overall, EPA agrees with CDPHE that it is reasonable to assume a 98 percent destruction efficiency for VOCs from the Main Flare so long as Suncor complies with all relevant subpart CC requirements. *See* Final Permit App. J at 10–11; RTC at 26–27; Revised RTC at 18–20.[107] Accordingly, the Petitioners have not demonstrated that the issues raised in Claim 10 present a basis for EPA's objection, and EPA denies Claim 10.

Claim 11: The Petitioners Claim That "The CAM Plan for the Main East Plant Flare Does Not Comply with the CAM Rule Because the Division Does Not Adequately Justify the Monitoring Requirements and Improperly Relies on 'Presumptively Acceptable Monitoring.'"

Petitioners' Claim: Claim 11 presents an additional ground for objecting to the CAM plan for the East Plant main flare discussed in Claim 10. Within Claim 11, the Petitioners argue: "Even if the Main East Plant Flare were a proper control device," and "[e]ven if the Division is correct that the MACT CC monitoring requirements are sufficient" to assure a 98 percent VOC destruction efficiency, the CAM plan is still insufficient because it does not include all applicable subpart CC NESHAP requirements. Earthjustice Petition at 79, 80.

This claim is focused on the concept of "presumptively acceptable monitoring," which allows a source to provide "no further justification for the appropriateness of monitoring" for CAM purposes in certain situations. *Id*. at 80 (quoting 40 C.F.R. § 64.4(b)). As the Petitioners explain, one category of "presumptively acceptable monitoring" is for "[m]onitoring included for standards exempt from this part pursuant to § 64.2(b)(1)(i) or (vi) to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the pollutant-specific emissions unit." *Id*. (quoting 40 C.F.R. § 64.4(b)(4)). The Petitioners interpret this provision to mean: "Monitoring provisions incorporated into a CAM Plan from other standards only qualify as 'presumptively acceptable monitoring' if the permit incorporates all monitoring in the other standards that is 'applicable to the performance of the control device (and associated capture system) for the pollutant specific emission unit.'" *Id*. The Petitioners argue that CDPHE's contrary interpretation—"there is no requirement that all of the monitoring for a standard that is exempt from CAM need to be included in the CAM plan [in] order for the monitoring to be considered 'presumptively acceptable,'"—lacks support and is at odds with the rule's language. *Id*. at 81 (quoting Revised Permit RTC at 17).

[107] Suncor's East Plant main flare *is* required to comply with all relevant requirements of subpart CC. *See* Final Permit at 240–251. It is also worth noting that, in response to public comments, CDPHE added a requirement to the permit that effectively requires Suncor to assume a *zero* percent VOC destruction efficiency during periods when the facility does not comply with certain subpart CC requirements. Final Permit at 65 (Condition II.8.1).

Consequently, the Petitioners dispute CDPHE's conclusions that the subpart CC NESHAP monitoring in Suncor's CAM plan qualifies as "presumptively acceptable monitoring" because CDPHE did not include all applicable subpart CC monitoring requirements. *Id*. The Petitioners note that the CAM plan requires monitoring of two relevant parameters in subpart CC (presence of pilot flame and net heating value of the combustion zone gas), but does not include monitoring of other relevant parameters in subpart CC (visible emissions, flare tip velocity). *Id*. The Petitioners contest CDPHE's statement that the presence of a pilot flame and net heating value "are the most important parameters" to monitor. *Id*. at 80 (quoting Permit App. J at 9). The Petitioners emphasize EPA's statement that net heating value requirements are sufficient "to ensure that refinery flares meet 98-percent destruction efficiency at all times *when operated in concert with the other suite of requirements refinery flares need to achieve (e.g., flare tip velocity requirements, visible emissions requirements, and continuously lit pilot flame requirements)*." *Id*. at 80–81 (quoting 80 Fed. Reg. 75178, 75211 (December 1, 2015)) (emphasis in Petition). Thus, the Petitioners contend that all of those elements are important for the performance of the flare. *Id*. at 81–82.

According to the Petitioners, because "[t]he CAM plan for the Main East Plant Flare does not qualify as 'presumptively acceptable monitoring,'" CDPHE's "reliance on 'presumptively acceptable monitoring' to satisfy its obligation to justify the monitoring in the CAM Plan renders the CAM insufficient on its face." *Id*. at 82.

EPA's Response: For the following reasons, EPA grants the Petitioners' request for an objection on this claim.

To start, EPA agrees with the Petitioners that the CAM Rule's exception for "presumptively acceptable monitoring" only applies if *all* relevant monitoring provisions from the applicable NSPS or NESHAP regulation are carried forward to the CAM plan. The regulation refers to "monitoring included" in an NSPS or NESHAP standard "to the extent such monitoring is applicable to the performance of the control device . . ." 40 C.F.R. § 64.4(b)(4). If a CAM plan excludes some of the relevant monitoring, the CAM plan would not contain the "monitoring included" in the standard, and would therefore not qualify for the presumptively acceptable monitoring exception. To conclude otherwise (as CDPHE does without any support, *see* Revised Permit RTC at 17) would create a loophole whereby a state could incorporate only one of many important monitoring requirements from an NSPS or NESHAP and declare it sufficient without further explanation.

CDPHE's interpretation could be especially problematic in the context of the flare requirements at issue here. As the Petitioners correctly observe, EPA's conclusions regarding an assisted flare's ability to achieve 98 percent destruction efficiency were contingent on the entire suite of relevant requirements reflected in the subpart CC NESHAP, not just the two that CDPHE included in Suncor's CAM plan. *See* 80 Fed. Reg. at 75211. Specifically, Suncor's CAM plan only includes monitoring of two relevant parameters from the subpart CC NESHAP: presence of pilot flame and net heating value in the combustion zone. The CAM plan omits monitoring of two others: visible emissions and flare tip velocity. Final Permit App. J at 7, 9; *see* 40 C.F.R.

§ 63.670(b)–(n).[108] Because the CAM plan does not include all applicable monitoring requirements from subpart CC, CDPHE erred in concluding that the CAM plan for the East Plant main flare includes "presumptively acceptable monitoring" under 40 C.F.R. § 64.4(b)(4).

Additionally, given the importance of all relevant subpart CC requirements to EPA's conclusions regarding flare destruction efficiency, the lack of certain subpart CC requirements from the CAM plan not only impacts CDPHE's "presumptively acceptable monitoring" conclusion, but also brings into question the substantive adequacy of the CAM plan. CDPHE has not provided a sufficient rationale for why the CAM plan provides a "reasonable assurance of compliance" absent all relevant subpart CC requirements. 40 C.F.R. § 64.3(a).

EPA appreciates that Suncor's East Plant main flare *is* already required to comply with all relevant requirements of subpart CC, notwithstanding their absence from the CAM plan. *See* Final Permit at 240–251; Revised RTC at 17, 20. This gives EPA (and should give the Petitioners) an assurance regarding this flare's ability to achieve a 98 percent VOC destruction efficiency. See EPA's response to Claims 10 and 13. However, the presence of those requirements *elsewhere in the Permit* does not resolve the issue here: whether *the CAM plan itself* satisfies 40 C.F.R. part 64.

Overall, it was incorrect for CDPHE to conclude that the CAM plan qualifies for presumptively acceptable monitoring because it does not include all relevant monitoring requirements from subpart CC. Moreover, without the missing subpart CC requirements, the record is inadequate to determine whether the CAM plan provides a "reasonable assurance of compliance" and complies with all part 64 requirements. Thus, EPA grants Claim 11.

Direction to CDPHE: CDPHE could resolve this objection by incorporating into the CAM plan for the East Plant main flare all relevant monitoring requirements from the subpart CC NESHAP. Such monitoring would qualify for "presumptively acceptable monitoring" and would require no further explanation by Suncor or CDPHE. Absent that, because the current CAM plan monitoring does not qualify for the presumptively acceptable monitoring exception, CDPHE must comply with the justification requirement in 40 C.F.R. § 64.4(b) by submitting information to explain why the CAM plan provides a reasonable assurance of compliance with the VOC emission limit and 98 percent destruction efficiency assumption at issue.

Claim 12: The Petitioners Claim That "The Railcar Dock Flare CAM Plan Does Not Comply with the CAM Rule Because It Does Not Adequately Assure Compliance with VOC Emissions Limitations."

Petitioners' Claim: Claim 12 involves a CAM plan associated with another flare at the East Plant: the railcar dock flare. Earthjustice Petition at 82. Similar to Claim 11, the Petitioners assert: "[T]he CAM Plan is inadequate because (i) it does not qualify as 'presumptively acceptable monitoring' under 40 C.F.R. § 64.4(b), and (ii) the Division does not otherwise justify that the monitoring is sufficient to assure compliance. Therefore, the permit does not comply

[108] EPA thus disagrees with CDPHE's suggestion that "the monitoring in this CAM plan is consistent with the monitoring in MACT CC," since it clearly lacks some of the monitoring in subpart CC. Final Permit App. J at 9.

with the justification requirement of 40 C.F.R. § 64.4(b).” For support, the Petitioners present two arguments.

First, the Petitioners challenge CDPHE’s reliance on the requirements in 40 C.F.R. § 60.18. *Id* at 83. Similar to the Petitioners’ arguments in Claim 11, the Petitioners argue that the CAM plan’s requirements do not include all of the requirements in § 60.18. Specifically, the Petitioners allege that § 60.18 requires Suncor to monitor four factors, including (1) presence of a flame, (2) presence of visible emissions, (3) heat content of the gas, and (4) tip velocity of the flare. Id. (citing 40 C.F.R. § 60.18(c)(1)–(4)). The Petitioners observe that the CAM plan only requires monitoring of the presence of a flame. *Id*. The Petitioners contest CDPHE’s suggestion that § 60.18 only requires continual monitoring of this one parameter, and argue that the Permit itself requires monitoring of other parameters: visible emissions and heat content. *Id*. (citing Permit Conditions II.9.14, II.43.9). The Petitioners conclude that the CAM plan does not qualify as “presumptively acceptable monitoring” because it does not include all requirements of § 60.18. *See id*.

Second, the Petitioners challenge CDPHE’s reliance on the requirements in the 40 C.F.R. part 63, subpart R NESHAP. *Id*. at 83–84. The Petitioners first allege that the subpart R NESHAP requirements cannot qualify as “presumptively acceptable monitoring” because these requirements do not apply to the emission unit in question. *Id*. at 84. The Petitioners disagree with CDPHE’s suggestion that “[i]t is not necessary for the underlying regulation to apply to the subject equipment in order for the monitoring to be justified for CAM.” *Id*. (citing Revised RTC at 7–8). According to the Petitioners, “the ‘presumptively acceptable monitoring’ exception on its face applies only to monitoring from standards applicable to the same unit.” *Id*.

Additionally, and similar to the previously discussed arguments concerning the subpart CC NESHAP and 40 C.F.R. § 60.18, the Petitioners assert that the CAM plan does not contain all of the relevant monitoring requirements of the subpart R NESHAP. *Id*. As the Petitioners state, subpart R incorporates the requirements of § 63.11(b), which contain effectively the same requirements as § 60.18 (discussed previously), but the CAM plan only requires monitoring of a pilot flame. *Id*.

EPA’s Response: For the following reasons, EPA grants the Petitioners’ request for an objection on this claim.

As with Claim 11, Claim 12 invokes various principles associated with “presumptively acceptable monitoring.” However, in Claim 12, it is not entirely clear from the permit record whether Suncor and CDPHE are, in fact, relying on “presumptively acceptable monitoring” to avoid the justification requirements in 40 C.F.R. § 64.4(b). On one hand, the “Justification” section of the CAM plan itself specifically invokes the “presumptively acceptable monitoring” principle with respect to both 40 C.F.R. § 60.18 and the subpart R NESHAP. *See* Final Permit App. J at 5–6.[109] On the other hand, CDPHE attempts to distance itself from the strict

[109] *See also* Revised RTC at 7–8 (Therefore, the “presumptively acceptable monitoring” in § 60.18 is monitoring for the presence of a pilot flame. . . . The monitoring in MACT R is considered “presumptively acceptable monitoring” as specified in 64.4(b)(4). . . . Similar to § 60.18, the “presumptively acceptable monitoring” in § 63.11(b) is for the presence of a pilot flame.”).

requirements of "presumptively acceptable monitoring," stating: "The Division is not asserting that the monitoring in the CAM plan *is* 'presumptively acceptable monitoring' but that monitoring in the CAM plan is *consistent with* monitoring that is considered 'presumptively acceptable' such as the monitoring in 40 CFR § 60.18." Revised Permit RTC at 6 (emphasis added); *see* Final Permit App. J at 6 ("Since the monitoring for the rail rack flare is *consistent with* the monitoring in 60.18 and MACT R, the Division considers that the monitoring is acceptable."). This reasoning is unavailing. It would not be appropriate to use this "consistent with" principle to circumvent otherwise applicable restrictions on the relatively narrow universe of requirements that qualify as "presumptively acceptable monitoring." This does not mean that monitoring ineligible for "presumptively acceptable" treatment cannot be used to satisfy the substantive requirements of CAM (*i.e.*, to provide a "reasonable assurance of compliance"). *See* 40 C.F.R. § 64.3(a). However, this does mean that the permittee or permitting authority must provide additional justification for using monitoring that is not presumptively acceptable. *See* 40 C.F.R. § 64.4(b). As discussed in the following paragraphs, the monitoring in the railcar dock flare CAM plan does not qualify for "presumptively acceptable" treatment, and CDPHE has not provided sufficient additional justification.

To start, EPA agrees with the Petitioners that, in order to qualify for the "presumptively acceptable monitoring" exception in 40 C.F.R. § 64.4(b) by relying on an NSPS or NESHAP, such NSPS or NESHAP must itself be applicable to the unit in question.[110] The plain language of the CAM Rule allows this exception for "[m]onitoring included for [NSPS or NESHAP] standards . . . to the extent such monitoring *is applicable to* the performance of the control device (and associated capture system) for the pollutant-specific emissions unit[.]" 40 C.F.R. § 64.4(b)(4) (emphasis added). The regulations also provide for other types of presumptively acceptable monitoring.[111] Regardless of the type of presumptively acceptable monitoring, when this exception applies, one must still include "an explanation of the applicability of such monitoring to the unit in question." *Id*. § 64.4(b).

It does not appear that either of the federal regulations relied upon by CDPHE are directly applicable to the railcar dock flare. Regarding the subpart R NESHAP, CDPHE admits that this subpart is no longer applicable to the railcar dock flare. *See* Final Permit App. J at 6; Revised RTC at 8. Regarding 40 C.F.R. § 60.18, it is important to understand that § 60.18 is a general provision that does not independently apply to all flares. As explained within 40 C.F.R. § 60.18 itself, "This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and *apply only to facilities covered by subparts referring to this section*." 40 C.F.R. § 60.18(a)(1) (emphasis added); *see also id*. § 63.11(b)(1).[112] Although other portions of the

[110] CDPHE's statement that "[i]t is not necessary for the underlying regulation to apply to the subject equipment *in order for the monitoring to be justified* for CAM," Revised RTC at 7 (emphasis added), is true. However, again, the initial issue is not whether the CAM plan's monitoring *can be justified* at all, but rather whether it qualifies as "presumptively acceptable monitoring" that can be selected *without further justification*.

[111] For example, EPA can identify presumptively acceptable monitoring via guidance, as the Agency has done for 40 C.F.R. § 60.18. 40 C.F.R. § 64.4(b)(5); *see* 62 Fed. Reg. at 54924; Compliance Assurance Monitoring Rulemaking (40 CFR Parts 64, 70, and 71) Responses to Public Comments (Part II) at 7 (October 2, 1997); *id*. Part III at 15, 98.

[112] Note that the CAM plan does not directly rely on any requirements of § 63.11(b) as "presumptively acceptable monitoring," but CDPHE's RTC and the Petition discuss these requirements, as they are referenced within subpart R. *See* 40 C.F.R. §§ 63.425(a)(2), 63.427(a)(4), 63.428(c)(2)(ii), Table 1 to subpart R; Revised RTC at 8.

Permit require Suncor to comply with the requirements of § 60.18,[113] it is not clear why CDPHE believes those provisions are applicable, as CDPHE does not identify any specific NSPS subpart(s) that apply to the railcar dock flare and which refer to 40 C.F.R. § 60.18.[114] Overall, for both the subpart R NESHAP and 40 C.F.R. § 60.18, CDPHE has failed to provide an "explanation of the applicability of such monitoring to the unit in question," which would be necessary to the extent that CDPHE intended to rely on the "presumptively acceptable monitoring" exception. 40 C.F.R. § 64.4(b).

Regarding the Petitioners' allegation that the CAM plan does not include all relevant requirements from 40 C.F.R. § 60.18 or the subpart R NESHAP (via 40 C.F.R. § 63.11(b)), EPA need not resolve this particular issue, since neither set of requirements appear to be directly applicable to this flare. However, for the sake of clarity, EPA offers the following information.

As explained with respect to Claim 11, the CAM Rule's exception for "presumptively acceptable monitoring" only applies if *all* relevant monitoring provisions from the applicable NSPS or NESHAP regulation are carried forward to the CAM plan. *See supra* page 83. Applying this general principle to 40 C.F.R. § 60.18 is more complicated than the analogous issue in Claim 11 regarding the subpart CC NESHAP. As CDPHE correctly states, § 60.18 does not specifically require *monitoring* of any operating parameters beyond the presence of a pilot flame. *See* 40 C.F.R. § 60.18(f)(2); Revised RTC at 7.[115] Instead, this regulation requires that sources relying on a flare as a control device *comply with* other operating limits, including limits concerning visible emissions, gas heat content, and flare tip velocity. 40 C.F.R. § 60.18(c)(1), (3), (4). This regulation also specifies compliance demonstration or calculation methodologies associated with these three other operating parameters. *Id*. § 60.18(f)(1), (3), (4). But the rule does not prescribe any specific monitoring or recordkeeping requirements for these additional parameters. Instead, it specifically states: "Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. *Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices*." *Id*. § 60.18(d) (emphasis added); *see also id*. § 63.11(b)(1). Thus, when a specific NSPS subpart applies to a source, that subpart may reference the requirements from § 60.18 while specifying additional monitoring requirements, as

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[113] *See* Final Permit at 77 (Condition 9.11) ("The railcar dock flare (C002) is subject to the provisions of 40 CFR Part 60, 60.18, as set forth in Condition 43 of this permit").

[114] Note that the Permit indicates that the flare is subject to the subpart J NSPS, as set forth in Condition 31. Final Permit at 74 (Condition 9.2), 133–137 (Condition 31). Neither Condition 31 nor subpart J specifically references the requirements in 40 C.F.R. § 60.18.

[115] EPA was cognizant of this when promulgating the CAM rule and addressing "presumptively acceptable monitoring." First, EPA stated "After considering comments received on the monitoring requirements for flares in 40 CFR 60.18, EPA is designating, at this time, that monitoring as presumptively acceptable." 62 Fed. Fed. Reg. 54900, 54924 (October 22, 1997). Two years later, in EPA's guidance regarding CAM, EPA provided further clarification: "Rules that require flares to meet 40 CFR 60.18 (general control device requirements) have been determined to be presumptively acceptable for CAM. These rules do not specifically meet all of the Part 64 criteria (specifically, neither the rules nor Part 60.18 establish QA/QC practices or a frequency of calibration). Nonetheless, because the required monitoring is limited to the continuous monitoring of the presence of a pilot flame (yes/no) and because Part 60.18 stipulates design criteria for flares, the lack of specific QA/QC practices is not considered a deficiency for this control device/monitoring combination. If the sensor fails, the lack of a pilot flame will be indicated and corrective action will be required." Technical Guidance Document: Compliance Assurance Monitoring, 3-9 (August 1998), available at *https://www.epa.gov/sites/default/files/2016-05/documents/cam-tgd.pdf*.

necessary to assure compliance with the specific requirements of that subpart. This is one reason why it is important that an NSPS or NESHAP standard be applicable to an emission unit prior to relying on "presumptively acceptable monitoring." That is, the applicable NSPS or NESHAP regulations might include additional monitoring requirements that would need to be incorporated into the CAM plan in order to qualify as "presumptively acceptable monitoring" (or they might not).[116]

Overall, CDPHE has not provided a valid basis for concluding that the requirements in the CAM plan qualify as "presumptively acceptable monitoring" under 40 C.F.R. § 64.4(b). Again, although monitoring requirements in non-applicable standards may not be relied upon as the exclusive basis for determining that no further justification is necessary, monitoring included in those standards could nonetheless be relevant to justifying the sufficiency of monitoring selected in a CAM plan. *See* 40 C.F.R. § 64.4(b) ("To justify the appropriateness of the monitoring elements proposed, the owner or operator may rely *in part* on existing applicable requirements that establish the monitoring for the applicable pollutant-specific emissions unit or a similar unit." (emphasis added)). However, to satisfy § 64.4(b), the record must explain why the monitoring from a non-applicable standard would be sufficient to provide a "reasonable assurance of compliance" with the relevant emission limits on the pollutant-specific emision unit that is subject to CAM.

Here, CDPHE does not provide a sufficient rationale. The majority of the justification for the CAM plan relies on the fact that the selected monitoring is "consistent with" monitoring in 40 C.F.R. § 60.18 and the subpart R NESHAP, which would be considered presumptively acceptable if those requirements were still applicable to this unit. *See* Final Permit App. J at 5–6; Revised Permit RTC at 6–8. The only relevant additional information provided by CDPHE is the following:

> The rail loading rack was previously subject to the requirements in MACT R, until the source ceased loading gasoline at the rail rack. The Division considers it is appropriate to rely on monitoring in MACT R for a loading rack equipped with a flare.
>
> ***
>
> Since VOC reduction is based on combustion and combustion does not occur without a pilot flame, the lack of a flame or failure of the pilot monitoring device are appropriate indicators that the flare may not be functioning properly.

Final Permit App. J at 6.

[116] EPA understands portions of the Permit not directly associated with the CAM plan require Suncor to monitor some of the other parameters in 40 C.F.R. § 60.18. *See* Final Permit at 288–290 (Conditions 43.1–43.9); Revised RTC at 7. However, as discussed with respect to Claim 11, the presence of those requirements *elsewhere in the Permit* does not resolve the issue here: whether *the CAM plan itself* satisfies 40 C.F.R. part 64.

Notably absent from this justification is whether other indicators of combustion performance should be monitored, in light of the destruction efficiency assumptions embedded within the Permit and the specific gas streams that are now routed to this flare.

Overall, the Petitioners have demonstrated that it was not appropriate for CDPHE to rely on "presumptively acceptable monitoring" to justify the sufficiency of this CAM plan and the permit record does not otherwise contain a sufficient rationale for the selected monitoring. Thus, EPA grants Claim 12.

Direction to CDPHE: CDPHE must ensure that the permit record contains a sufficient justification for the monitoring in the CAM plan for the railcar dock flare. 40 C.F.R. 64.4(b). For example, EPA would expect an explanation of why the monitoring contained in the federal requirements referenced by CDPHE (which do not appear to be directly applicable) are sufficient to assure compliance with the specific VOC limit and VOC destruction efficiency assumptions supported by this CAM plan. CDPHE may also consider whether it is necessary to require monitoring of additional parameters related to flare performance in order to support the VOC destruction efficiency and assure compliance with the VOC limit.

D. Miscellaneous Issues (Claims 13–14)

The final two claims in the Earthjustice Petition are presented under the header "Miscellaneous Grounds for Objection."

Claim 13: The Petitioners Claim That "Monitoring Provisions for the Main East Plant Flare Are Insufficient to Assure Compliance Because They Are Based on Unsupported Assumptions About Destruction Efficiencies."

Petitioners' Claim: The Petitioners claim that the Permit does not assure compliance with the VOC limit on the East Plant main flare discussed in Claims 10 and 11 because CDPHE has not adequately justified its conclusion that this flare will achieve a 98 percent VOC destruction efficiency. Earthjustice Petition at 85 (citing Permit Condition 8). For support, the Petitioners reference their arguments in Claim 10 in order to demonstrate that the permit does not satisfy the requirements in 40 C.F.R. § 70.6(a)(1) and (c)(1) to include conditions sufficient to assure compliance with all permit requirements. *Id*. The Petitioners also claim that CDPHE's permit record is insufficient to satisfy 40 C.F.R. § 70.7(a)(5). *Id*.

EPA's Response: For the following reasons, EPA denies the Petitioners' request for an objection on this claim.

This brief claim is based on the same factual underpinnings as Claim 10: the same emission unit (East Plant main flare), the same emission limit (94.8 tpy VOC), the same 98 percent VOC destruction efficiency assumption, and the same Petition arguments regarding Suncor's alleged inability to achieve this VOCs destruction efficiency. The only difference is that in Claim 10, the Petitioners contend that the alleged problems with VOC destruction efficiency result in the CAM plan not satisfying part 64 regulations, while in Claim 13, the Petitioners argue that the same alleged problems result in the Permit not satisfying the relevant part 70 regulations related to

compliance assurance. The Petitioners do not provide any additional factual basis for objection within Claim 13 beyond the VOC destruction efficiency concerns discussed in Claim 10.[117]

As explained in EPA's response to Claim 10, it is reasonable to assume a 98 percent destruction efficiency for VOCs from the East Plant main flare so long as Suncor complies with all relevant subpart CC requirements. *See supra* pages 80–82. The Permit specifically requires the facility to comply with the relevant requirements of the subpart CC NESHAP. *See* Final Permit at 240–251.[118] Thus, the Petitioners have not demonstrated that the Permit, as written, is insufficient to comply with the VOC emission limit on the East Plant main flare, or that CDPHE's explanation of the relevant permit terms was deficient. Accordingly, EPA denies Claim 13.

Claim 14: The Petitioners Claim That "The Proposed Permit Improperly Incorporates a [SSM] Exemption to [Reasonably Available Control Technology] Requirements for the FCCU."

Petitioners' Claim: The Petitioners claim that the Permit is ambiguous regarding whether Suncor is exempt from a Reasonably Available Control Technology (RACT) limit on CO emissions during periods of SSM. *See* Earthjustice Petition at 86–89.

The Petitioners assert that RACT requirements from the Colorado SIP must apply at all times and cannot include exemptions during periods of SSM. *Id*. at 88 (citing 42 U.S.C. §§ 7402(k), 7502(c)(1); 5 CCR 1001-5, Part D, III.D.2.a; 80 Fed. Reg. 33840, 33977 (June 12, 2015)). The Petitioners express concern that the Permit's RACT limit for CO from the FCCU may contain an impermissible exemption during SSM, alleging that the Permit and CDPHE's RTC are vague and ambiguous regarding this issue. *Id*. at 86.

As the Petitioners explain:

> [A] 2009 construction permit (i) imposed the RACT requirement for CO on the FCCU, and (ii) determined that a pre-existing emissions limit from a 2005 consent decree was sufficient to satisfy the RACT requirement. The Proposed Permit incorporated the RACT and related emission limitation provisions from the construction permit. However, the Proposed Permit also incorporated an SSM exemption for CO limits created by the 2005 consent decree. The way the Proposed Permit is worded, it is ambiguous whether the Division is interpreting the SSM exemption to apply to the CO RACT provision."

Id.

More specifically, the Petitioners note that Permit Condition 2.15 establishes that RACT for CO "has been determined to be . . . the emission limitations in Condition [] 2.12" *Id*. at 86–87

[117] More specifically, the only concerns re-raised within Claim 13 are the allegations that "the destruction efficiency of flares is unreliable, and the Division has not justified its assumption of a 98% destruction efficiency." Earthjustice Petition at 85.

[118] Moreover, the Permit requires Suncor to assume a zero percent VOC destruction efficiency during periods when the facility does not comply with certain subpart CC requirements. Final Permit at 65 (Condition 8.1).

(quoting Permit Condition 2.15). Condition 2.12, in turn, establishes that "[CO] emissions from the FCCU reactor-regenerator (P004) shall not exceed 500 ppmvd, at 0% O2, on a 1-hr block average," and indicates that this requirement is derived from "Construction Permit 09AD0961 and Consent Decree, No. SA-05CA-0569, entered November 23, 2005, paragraph 94." *Id*. at 87 (quoting Permit Condition 2.12).

The Petitioners concede that none of these conditions are problematic in their own right. *Id*. However, the Petitioners observe that another permit term specifies: "The CO, opacity and particulate limits established pursuant to the Consent Decree shall not apply during periods of startup, shutdown or malfunction of the FCCUs or malfunction of the applicable CO or particulate control equipment . . . ." *Id*. (quoting Permit Condition 2.13).

The Petitioners summarize their concern as follows:

> Because Condition 2.13 adopts an SSM exemption for CO limits "established pursuant to the Consent Decree" and Condition 2.15 and the Construction Permit rely on an emissions limit in the Consent Decree to satisfy the CO RACT requirement, it is unclear whether the Division is intending to apply a SSM exemption to the CO RACT requirement established by Condition 2.15.

Id.

Additionally, the Petitioners allege that CDPHE did not respond to comments requesting clarification of whether this exemption applies to the CO RACT limit. *Id*. at 88–89.

EPA's Response: For the following reasons, EPA grants the Petitioners' request for an objection on this claim.

In general, the Petitioners are correct that SIP-based RACT limits must apply at all times and cannot be subject to exemptions; if the default numerical emission limit does not apply during SSM, there must be an alternative limit that applies during periods of SSM and satisfies RACT. 80 Fed. Reg. at 33842; *see* 42 U.S.C. §§ 7402(k), 7502(c)(1); 5 CCR 1001-5, Part D, III.D.2.a.[119]

The Petitioners have also demonstrated that the terms of the Permit are ambiguous regarding whether the exemption in Condition 2.13 applies to the limit in Condition 2.12, which the Permit relies on to satisfy RACT.

As the Petitioners explain, the Permit establishes RACT limits by way of cross-referencing limits established in an underlying preconstruction permit and CD. Specifically, Condition 2.15 (the RACT requirement itself) references the CO limitations in Condition 2.12.[120] Condition 2.12

[119] *See also* Memorandum from Janet McCabe, *Withdrawal of the October 9, 2020, Memorandum Addressing Startup, Shutdown, and Malfunctions in State Implementation Plans and Implementation of the Prior Policy*, 3–4 (September 30, 2021), available at *https://www.epa.gov/system/files/documents/2021-09/oar-21-000-6324.pdf* (reinstating the policies and interpretations discussed in the 2015 SSM SIP Action cited above).

[120] The RACT requirement in Condition 2.15 also references Condition 2.1.5. However, Condition 2.1.5 refers to a table that refers back to Condition 2.15. Thus, Condition 2.1.5 does not appear to add any meaning to the RACT requirement.

contains the relevant limit: 500 ppmvd CO, at 0% O2, on a 1-hr block average. Neither of these permit terms establish any exemption or qualification on the limit's applicability. However, Condition 2.12 indicates that this limit *originated in a 2005 CD* (a point CDPHE affirms, RTC at 90). The next permit term, Condition 2.13, includes the SSM exemption and specifies that the exemption applies to "[t]he CO, opacity and particulate limits *established pursuant to the Consent Decree*." Final Permit at 26 (emphasis added). Thus, it seems that the SSM exemption in Condition 2.13 applies to the CO limit in Condition 2.12.

This presents two possible interpretations of the Permit: First, one could read the Permit such that the RACT requirement in Condition 2.15 simply incorporates the CO limit in Condition 2.12 without the attached exemption contained in Condition 2.13 (since neither Condition 2.15 nor Condition 2.12 reference the exemption in Condition 2.13). This interpretation would be consistent with the CAA. Second, the Permit could be read such that the exemption in Condition 2.13 applies to the limit in Condition 2.12, *and by extension, to any other permit terms that reference or rely on that limit, including the RACT requirement in Condition 2.15*. The problem is not that the exemption applies to the limit in Condition 2.12 itself, but that the exemption might carry over to the RACT requirement embodied in Condition 2.15 (which incorporates Condition 2.12). This would create an exemption to RACT, contrary to the CAA.

CDPHE failed to address this comment regarding whether the Permit establishes an exemption to the RACT requirements. *See* RTC at 90. This comment was significant and warranted a response. 40 C.F.R. § 70.7(h)(6).

Overall, given the ambiguity in the Permit and the lack of any explanation within the permit record (including CDPHE's failure to respond to comments on this issue), EPA cannot determine whether the Permit assures compliance with the RACT limit on CO from the FCCU. Thus, EPA Grants Claim 14. 40 C.F.R. §§ 70.7(h)(6), 70.8(c)(3)(ii).

Direction to CDPHE: CDPHE must ensure that the Permit assures compliance with the RACT limit on CO from the FCCU. More specifically, CDPHE must ensure that the Permit does not contain an exemption to this limit. At a minimum, CDPHE must respond to the public comment raising this issue and amend the permit record to clarify that the ambiguous permit terms at issue do not establish such an exemption insofar as CO RACT requirements are concerned. CDPHE should also consider amending the Permit to specify that the CD-based exemption in Condition 2.13 does not apply to the CO RACT limit on the FCCU.

V. DETERMINATIONS ON CLAIMS IN THE 350 COLORADO PETITION

Introductory sections of the 350 Colorado Petition ostensibly request EPA's *objection* to the Permit under CAA § 505(b)(2). 350 Colorado Petition at 1, 3, 4, 5.[121] However, throughout the Petition—including within the section identifying three "Grounds for Objection"—the Petitioner instead repeatedly requests that EPA "*terminate* the permit" under CAA § 505(e) and other statutory and regulatory authorities. *Id*. at 1, 3, 5, 7, 8, 9. This may reflect a misunderstanding on the part of the Petitioner. For example, the Petitioner suggests that the 60-day statutory petition

[121] Note that the 350 Colorado Petition does not include page numbers. The page numbers cited in this Order are taken from the PDF document reflecting the 350 Colorado Petition.

deadline applies to petitions requesting EPA to both "object to the proposed permit renewal and terminate the permit for cause." *Id*. at 3. That is incorrect. The 60-day statutory petition opportunity, EPA's statutory obligation to respond to such petitions, and the criteria for evaluating such petitions (as established by CAA § 505(b)(2) and EPA's implementing regulations) apply to *petitions to object*. *See* 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.8(d), 70.12, 70.13, 70.14. These requirements do not apply to requests for EPA take some other discretionary action on a permit, such as to *terminate* (or reopen) a permit for cause under CAA § 505(e); such proceedings are guided by different statutory and regulatory criteria. *See* 42 U.S.C. § 7661d(e); 40 C.F.R. § 70.7(f), (g).

Although it is not entirely clear whether the issues raised in the 350 Colorado Petition were intended to present a basis for EPA's objection to the Permit under CAA § 505(b)(2), EPA's response below addresses each of the claims as if they were. EPA is under no statutory or regulatory obligation to address the Petitioner's requests for EPA to terminate the Permit within this section 505(b)(2) petition response. Nonetheless, for the sake of completeness, EPA's response below also addresses those requests.

Claim I: The Petitioner's Claims Regarding "Procedural Rules Not Followed by CDPHE."

Petitioner's Claim: The Petitioner alleges that CDPHE did not follow two procedural rules: one related to the timing of permit issuance, and another related to the state's alleged failure to respond to a significant comment. *See* 350 Colorado Petition at 5–6.

First, the Petitioner claims that CDPHE did not comply with 40 C.F.R. § 70.7(a)(2), which requires that "the program shall provide that the permitting authority take final action on each permit application (including a request for permit modification or renewal) within 18 months, or such lesser time approved by the Administrator, after receiving a complete application." *Id*. at 5. The Petitioner notes that Suncor's previous title V permit was set to expire on October 1, 2011, and that despite receiving a timely renewal application, CDPHE failed to take action on the renewal permit application for over 10 years. *Id*. The Petitioner asserts that this delay presents sufficient grounds for EPA to terminate the permit pursuant to 40 C.F.R. § 70.7(c)(2), which states: "If the permitting authority fails to act in a timely way on a permit renewal, EPA may invoke its authority under section 505(e) of the Act to terminate or revoke and reissue the permit." *Id*.[122] The Petitioner requests that EPA now terminate the permit (as opposed to revoking and reissuing it) due to CDPHE's delayed issuance, as well as the Petitioner's concerns regarding the facility's compliance history and environmental justice issues. *Id*.

Second, the Petitioner claims that CDPHE violated 40 C.F.R. § 70.7(h)(6), which requires that states must "respond in writing to all significant comments raised during the public participation process . . . ." *Id*. at 6. Specifically, the Petitioner asserts that CDPHE did not respond to the Petitioner's comments "raising the issue of an outdated, illegal memo about modelling and ambient air analysis" *Id*. at 5. The Petitioner asserts that this comment was "significant" according to EPA guidance on the topic, therefore warranting a written response. *Id*. at 6.

[122] After quoting language from 40 C.F.R. § 70.7(c)(2) (reproduced in the text), the 350 Colorado Petition incorrectly attributes this language to § 70.7(a)(2). The citation in the Petition appears to be a typographical error.

EPA's Response: For the following reasons, EPA denies this claim.

The first part of this claim specifically requests EPA to exercise its discretionary authority under CAA § 505(e) to "terminate, modify, or revoke and reissue a permit" upon a finding that cause exists to do so. Most of the criteria relevant to determining whether "cause" exists to take one of these actions—most often initiated by an action to "reopen" a permit for cause—are contained in 40 C.F.R. § 70.7(f) and (g). Additionally, as the Petitioner correctly states, 40 C.F.R. § 70.7(c)(2) provides: "If the permitting authority fails to act in a timely way on a permit renewal, EPA may invoke its authority under section 505(e) of the Act to terminate or revoke and reissue the permit." As its plain text suggests, this latter regulation allows EPA the discretion to step in and either terminate or revoke and reissue a permit in situations where a state permitting authority *has failed to act* on a permit renewal application after more than 18 months have passed. *See* 40 C.F.R. § 70.7(a)(2), (c)(2). Here, notwithstanding CDPHE's considerable delay, the state did eventually act on Suncor's renewal permit application, culminating in the current permit action and the issuance of the Final Permit. Given that the state *has acted* on the permit application, cause no longer exists for EPA to terminate the already-issued Suncor Plant 2 renewal permit under 40 C.F.R. § 70.7(c)(2). In other words, the problem that allegedly would have formed the basis for EPA to exercise its discretion to terminate the permit—delayed permit issuance—is now moot and no longer needs EPA's intervention.

For the same reasons, to the extent that the Petitioner's concerns with CDPHE's delayed permit issuance could be considered a claim requesting EPA's objection to the permit, this claim is denied as moot. CDPHE submitted a proposed renewal permit to EPA and subsequently issued that permit in 2022.

The second part of this claim alleges that CDPHE violated 40 C.F.R. § 70.7(h)(6) by failing to respond to a significant comment. Although the Petitioner does not specifically request EPA's objection to the Permit, EPA will treat it as such because the alleged deficiency relates to a requirement that *could* form a basis for EPA's objection. As the Petitioner correctly states, permitting authorities have an obligation to respond to all significant comments. This longstanding requirement was recently codified at 40 C.F.R. § 70.7(h)(6). The Petitioner alleges that CDPHE did not respond to a comment relating to CDPHE's use of a particular guidance document related to NSR permit modeling. The Petitioner is incorrect.

CDPHE received multiple sets of comments from multiple commenters during various stages of the public participation process. Other commenters, including Earthjustice and the Center for Biological Diversity, raised similar comments criticizing CDPHE's use of the same guidance document related to NSR permit modeling (PS Memo 10-01) that 350 Colorado (the Petitioner) also raised in its comment. CDPHE responded to those comments, and CDPHE's responses to those comments therefore effectively addressed the nearly identical comments submitted by 350 Colorado. *See* Earthjustice Petition Ex. 18 at 36–37; Earthjustice Petition Ex. 19 at 4–5; 350 Colorado Petition at 3 n.7 (acknowledging CDPHE's responses to comments raised by other commenters and including a link to these documents, including the two identified herein). EPA acknowledges that CDPHE's responses to those comments were contained within separate documents that were not specifically addressed to 350 Colorado. EPA appreciates that this

practice may have caused confusion when CDPHE did not address the comment at issue within the specific document containing the state's response to 350 Colorado's other public comments. However, CDPHE's failure to specifically *direct* its response on this issue to all relevant commenters does not mean that CDPHE did not respond to comments raising this issue or that CDPHE failed to satisfy 40 C.F.R § 70.7(h)(6). Thus, the Petitioner is incorrect that CDPHE did not respond to this comment. Moreover, the Petitioner has not alleged, much less demonstrated, that CDPHE's response was inadequate to address the issue as raised in the Petitioner's comment. 40 C.F.R. § 70.12(a)(2)(vi). Therefore, EPA denies this portion of Claim I.

Note that EPA's response to Claims 5 and 6 of the Earthjustice Petition addresses the substantive issue underlying this part of the 350 Colorado Petition, as well as the adequacy of CDPHE's response to all comments relevant to this issue. Specifically, as described earlier in this response, EPA is granting part of Earthjustice Petition because CDPHE has not justified its reliance on the since-retired guidance document at issue (PS Memo 10-01) in determining that several projects at the Suncor East Plant would not cause an exceedance of the NAAQS.

Claim II: The Petitioner's Claims Regarding "Environmental Justice Concerns Not Adequately Addressed."

Petitioner's Claim: The Petitioner requests that EPA terminate the Permit because CDPHE has not sufficiently addressed environmental justice concerns. *See* 350 Colorado Petition at 6–7.

The Petitioner recounts its public comments raising concerns related to environmental justice, as well as related statements included within EPA's March 2022 Objection Letter. *Id*. at 6. The Petitioner acknowledges various actions taken by CDPHE in response to these comments and suggestions, but alleges that CDPHE's responses are inadequate. *Id*. Specifically, the Petitioner asserts that CDPHE has not yet changed the way it analyzes or provides public comment on minor modifications. *Id*. Additionally, the Petitioner asserts that CDPHE has not made "changes that address substantive rights of the people to live free from harmful pollution" because the Permit does not decrease or prevent an increase of pollution in the surrounding communities. *Id*. The Petitioner suggests that CDPHE should have modified its permit decisions to decrease environmental burdens for disproportionately impacted communities, citing a state statute. *Id*. at 7 (citing C.R.S. § 24-4-109). The Petitioner further suggests that CDPHE should have denied the Suncor Plant 2 Permit, and now requests that EPA terminate the Permit. *Id*.

EPA's Response: For the following reasons, EPA denies this claim.

To the extent this claim could be considered a request for objection under CAA § 505(b)(2), it does not identify any CAA-based authority with which the Permit does not comply and which would provide a basis for EPA's objection. 40 C.F.R. § 70.12(a)(2). EPA's authority to object to a title V permit is limited to situations where a petitioner demonstrates that a permit does not comply with an applicable requirement of the CAA or a part 70 requirement. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.2 (definition of "applicable requirement"), 70.8(c)(1), 70.12(a)(2). Here, the Petitioner does not cite any federally enforceable, CAA-based legal authorities with which the Permit does not comply. 40 C.F.R. § 70.12(a)(2)(ii). Instead, the Petitioner suggests that CDPHE has not satisfied a Colorado state statute associated with

environmental justice. *See* 350 Colorado Petition at 7 (citing C.R.S. §24-4-109). However, this state law is not part of the EPA-approved SIP or part 70 program and is not otherwise a federally enforceable "applicable requirement" or part 70 requirement. Therefore, whether CDPHE satisfied this state statute is not an issue EPA can address in the present petition response.[123]

As with the first part of Claim I, Claim II also expressly requests that EPA terminate the Permit. However, the basis for this request is not clear. Presumably, the Petitioner wants EPA to determine that cause exists to terminate the permit under CAA § 505(e). Again, the situations associated with EPA's exercise of authority under CAA § 505(e) are listed in 40 C.F.R. § 70.7(f) and (g). These regulations (and EPA's historical exercise of this authority) generally center on ensuring that the title V permit includes and assures compliance with all applicable CAA requirements. The Petitioner does not allege, much less demonstrate, that any of the criteria contained in those regulations are applicable here, or that any other "cause" exists for EPA to exercise its discretionary authority under § 505(e). For example, the Petitioner does not allege, much less demonstrate, that the Permit "must be revised or revoked to assure compliance with the applicable requirements" of the CAA. 40 C.F.R. § 70.7(f)(1)(iv).

Notably, the Petitioner acknowledges that "there is not a specific issue with the draft permit," 350 Colorado Petition at 7, and suggests that the Petitioner's concern is that the Permit allows the facility to continue to operate and emit air pollution that impacts the surrounding community. This type of general concern—however legitimate it may be—does not present a CAA-based reason for EPA to object to (or terminate) the Permit under title V.[124]

Although the Petitioner has not presented a basis for EPA to object to or terminate the Permit, EPA appreciates the Petitioner's concerns regarding the impact of the Suncor facility on the surrounding communities. To the extent that deficiencies in Suncor's title V permit contribute to those problems, EPA's objections to various issues raised in the Earthjustice Petition (including minor NSR issues alluded to in this part of the 350 Colorado Petition) will help address these problems. Other avenues outside of the title V petition process may also help address these and other concerns. For example, EPA notes that in response to the Colorado Environmental Justice Act, the Colorado Air Quality Control Commission has begun a rulemaking process that would provide for enhanced modeling and monitoring requirements for construction permits located in disproportionately impacted communities.[125] Additionally, the EPA Office of External Civil

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[123] *See* 42 U.S.C. § 7661d(b)(2); 40 C.F.R. §§ 70.2 (definition of "applicable requirement"), 70.8(c)(1), 70.12(a)(2); *see also, e.g.*, *SRP Agua Fria Order* at 14; *In the Matter of Colton Power, LP, Drews and Century Power Generating Facilities*, Order on Petition No. IX-2020-12 at 9 (May 10, 2021); *cf.* 40 C.F.R. § 70.6(b)(2) (providing that state-only permit terms are not subject to various federal requirements, including the EPA's review).

[124] For example, to the extent the Petitioner seeks EPA action to reduce (or prevent increases in) pollution from Suncor Plant 2, the Petitioner has not identified any title V-based tools to achieve that end. In general, title V permits are designed to include and assure compliance with all federally-enforceable applicable requirements of the CAA; "title V does not impose substantive new requirements" on sources. 40 C.F.R. § 70.1(b); *see* 42 U.S.C. § 7661c(a), (c), 40 C.F.R. § 70.6(a)(1), (c)(1).

[125] Additional information about this planned rulemaking is available at *https://cdphe.colorado.gov/disproportionately-impacted-community-permitting-rulemaking* (last accessed June 21, 2023) and at *https://cdphe.colorado.gov/aqcc-current-and-recent-commission-hearings* (under Rulemaking Hearing: Regulation Number 3) (last accessed June 21, 2023); see description of proposed revisions in Air Pollution Control Division Prehearing Statement at 2–3 (available at *https://drive.google.com/drive/u/0/folders/1sap9ew51Grr3QQqeM85rDPy3Lz6NsgD4*, (last accessed June 21, 2023).

Rights Compliance has initiated a compliance review concerning various permitting practices by CDPHE in the context of title VI of the Civil Rights Act. EPA Region 8 intends to continue to coordinate and work collaboratively with CDPHE to support both agencies' efforts to ensure environmental justice.

Claim III: The Petitioner Claims That "Renewing the Permit Will Not Meet Colorado Law and Clean Air Act Requirements."

Petitioner's Claim: The Petitioner urges EPA to terminate the Permit based on concerns that the facility will continue to violate permit requirements. 350 Colorado Petition at 8.

The Petitioner recounts its public comments requesting that CDPHE terminate Suncor's Permit, along with the state's response to those comments. *Id*. at 7. In sum, the Petitioner characterizes CDPHE's position as leaving the state no choice but to issue the Permit so long as the source or activity will meet various requirements. *Id*. (citing 350 Colorado Petition Ex. 5; C.R.S. § 25-7-114.5(7)(a) (which requires that CDPHE grant the permit if it finds that the source or activity will meet the requirements specified therein). The Petitioner contests CDPHE's determination that Suncor "will meet" all applicable regulations, given that the facility was in "High Priority Violation" of the CAA in 12 out of 12 prior quarters. *Id*. at 7–8; *see id*. at 2. Moreover, the Petitioner asserts that CDPHE's determination that Suncor will meet requirements related to preconstruction permits was based on incomplete information. *Id*. at 8 (citing EPA's March 2022 Objection Letter). Overall, the Petitioner contends that "CDPHE cannot show that Suncor 'will' meet the requirements in C.R.S. § 25-7114.5(7)(a)." *Id*. The Petitioner further challenges CDPHE's overall position that it was bound to grant the permit renewal, asserting that the state does have the authority to terminate the permit. *Id*. (citing 42 U.S.C. § 7661a(b)(5)(D)). Absent termination by CDPHE, the Petitioner "call[s] upon EPA to use its authority to terminate the permit due to the high likelihood Suncor will continue its pattern of violation." *Id*.

EPA's Response: For the following reasons, EPA denies this claim.

As with Claims I and II of the 350 Colorado Petition, to the extent this claim could be considered a request for objection under CAA § 505(b)(2), it does not identify any CAA-based authority with which the Permit does not comply and which would provide a basis for EPA's objection. 40 C.F.R. § 70.12(a)(2). The Petitioner argues generally that CDPHE is bound by the CAA to prevent Suncor from operating due to Suncor's history of alleged permit violations. 350 Colorado Petition at 8. For support, the Petitioner cites CAA § 502(b)(5)(D). This provision requires, as a prerequisite to EPA's approval of state programs, that state permitting authorities have the authority to "terminate, modify, or revoke and reissue permits for cause." 42 U.S.C. § 7661a(b)(5)(D). The Petitioner acknowledges that CDPHE's program provides such authority and argues that CDPHE was wrong not to exercise this authority. However, the Petitioner does not explain why CDPHE's refusal to exercise this authority presents any basis for EPA's

objection to the Permit, and it is not clear why it would.[126] In other words, the Petitioner has not demonstrated that CDPHE's decision resulted in *the Permit* or *permit process* not complying with an applicable requirement of the CAA. 40 C.F.R. § 70.12(a)(2).

The Petitioner's suggestion that CDPHE cannot satisfy C.R.S. § 25-7-114.5(7)(a) due to Suncor's history of noncompliance is similarly unavailing. As with the Colorado statute discussed in Claim II, this state statute is not part of the EPA-approved SIP or part 70 program and is not otherwise a federally enforceable "applicable requirement" or part 70 requirement. Therefore, whether CDPHE satisfied this state statute is not an issue EPA can address in the present petition response.[127]

As with other claims in the 350 Colorado Petition, Claim III also expressly requests that EPA terminate the Permit. However, again, the basis for this request is not clear. Presumably, the Petitioner wants EPA to determine that cause exists to terminate the permit under CAA § 505(e). Again, the situations associated with EPA's exercise of its discretionary authority under CAA § 505(e) are identified in 40 C.F.R. § 70.7(f) and (g). These regulations (and EPA's historical exercise of this authority) generally center on ensuring that the title V permit includes and assures compliance with all applicable CAA requirements. The Petitioner does not allege, much less demonstrate, that any of the criteria contained in those regulations are applicable here, or that any other "cause" exists for EPA to exercise its discretionary authority under § 505(e). For example, the Petitioner does not allege, much less demonstrate, that the Permit "must be revised or revoked to assure compliance with the applicable requirements" of the CAA. 40 C.F.R. §70.7(f)(1)(iv).

Note that Claim 1 of the Earthjustice Petition raises similar, but significantly more detailed, arguments regarding how the facility's compliance history might impact the validity of the current Permit. As described earlier in this Order, EPA is granting that claim. EPA expects that CDPHE's response to EPA's objection will address the compliance issues underlying the concerns in Claim III of the 350 Colorado Petition.

[126] The statutory requirement cited by the Petitioner is primarily relevant to EPA's approval of state operating programs, and not to EPA's authority to object to an individual operating permit. *See* 42 U.S.C. § 7661a(b)(5)(D). This statutory authority does not specify that CDPHE is required to exercise this authority in any specific situation, nor does it identify any consequences if CDPHE declines to exercise this authority. *See id*. Note that this requirement related to EPA's approval of state programs is similar to, but does not directly govern, EPA's exercise of its own authority to terminate, modify, or revoke and reissue permits under CAA § 505(e).

[127] *See supra* note 123 and accompanying text.

VI. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby grant in part and deny in part the Petitions as described in this Order.

Dated: JUL 3 1 2023

Michael S. Regan
Administrator

www.ferc.gov/resources/guides/how-to/intervene.asp.

All timely, unopposed motions to intervene are automatically granted by operation of Rule 214(c)(1). Motions to intervene that are filed after the intervention deadline are untimely and may be denied. Any late-filed motion to intervene must show good cause for being late and must explain why the time limitation should be waived and provide justification by reference to factors set forth in Rule 214(d) of the Commission's Rules and Regulations. A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies (paper or electronic) of all documents filed by the applicant and by all other parties.

Comments

Any person wishing to comment on the project may do so. The Commission considers all comments received about the project in determining the appropriate action to be taken. To ensure that your comments are timely and properly recorded, please submit your comments on or before November 13, 2023. The filing of a comment alone will not serve to make the filer a party to the proceeding. To become a party, you must intervene in the proceeding.

How To File Protests, Interventions, and Comments

There are two ways to submit protests, motions to intervene, and comments. In both instances, please reference the Project docket number CP23–537–000 in your submission.

(1) You may file your protest, motion to intervene, and comments by using the Commission's eFiling feature, which is located on the Commission's website (*www.ferc.gov*) under the link to Documents and Filings. New eFiling users must first create an account by clicking on ''eRegister.'' You will be asked to select the type of filing you are making; first select ''General'' and then select ''Protest'', ''Intervention'', or ''Comment on a Filing''; or [6]

(2) You can file a paper copy of your submission by mailing it to the address below. Your submission must reference the Project docket number CP23–537–000.

To file via USPS: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426.

To file via any other method: Kimberly D. Bose, Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852.

The Commission encourages electronic filing of submissions (option 1 above) and has eFiling staff available to assist you at (202) 502–8258 or *FercOnlineSupport@ferc.gov.*

Protests and motions to intervene must be served on the applicant either by mail or email (with a link to the document) at: David A. Alonzo, Manager, Project Authorizations, 700 Louisiana Street, Suite 1300, Houston, Texas 77002–2700, or by *david_alonzo@tcenergy.com.* Any subsequent submissions by an intervenor must be served on the applicant and all other parties to the proceeding. Contact information for parties can be downloaded from the service list at the eService link on FERC Online.

Tracking the Proceeding

Throughout the proceeding, additional information about the project will be available from the Commission's Office of External Affairs, at (866) 208–FERC, or on the FERC website at *www.ferc.gov* using the ''eLibrary'' link as described above. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. For more information and to register, go to *www.ferc.gov/docs-filing/esubscription.asp.*

Dated: September 12, 2023.

Kimberly D. Bose,

Secretary.

[FR Doc. 2023–20114 Filed 9–15–23; 8:45 am]

BILLING CODE 6717–01–P

[6] Additionally, you may file your comments electronically by using the eComment feature, which is located on the Commission's website at *www.ferc.gov* under the link to Documents and Filings. Using eComment is an easy method for interested persons to submit brief, text-only comments on a project.

ENVIRONMENTAL PROTECTION AGENCY

[FRL–11371–01–R8]

Clean Air Act Operating Permit Program; Order on Petitions for Objection to State Operating Permit for Suncor Energy, Inc. Plant 2 (East Plant)

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final order on petitions.

SUMMARY: The Environmental Protection Agency (EPA) Administrator signed an order dated July 31, 2023, granting in part and denying in part a petition dated October 11, 2022, from Earthjustice on behalf of Elyria and Swansea Neighborhood Association, Cultivando, Colorado Latino Forum, GreenLatinos, Center for Biological Diversity, and Sierra Club, and denying a petition dated October 11, 2022, from 350 Colorado. The petitions requested that the EPA object to a Clean Air Act (CAA) operating permit issued by the Colorado Department of Public Health and Environment (CDPHE) to Suncor Energy, Inc. for its Refinery Plant 2 Facility in Adams County, Colorado.

FOR FURTHER INFORMATION CONTACT: Donald Law, EPA Region 8, telephone number: (303) 312–7015, email address: *law.donald@epa.gov*. The final order and petition are available at: *https://www.epa.gov/title-v-operating-permits/title-v-petition-database.*

SUPPLEMENTARY INFORMATION: The EPA received a petition from Earthjustice on behalf of Elyria and Swansea Neighborhood Association, Cultivando, Colorado Latino Forum, GreenLatinos, Center for Biological Diversity, and Sierra Club dated October 11, 2022, and a petition from 350 Colorado dated October 11, 2022, requesting that the EPA object to the issuance of operating permit no. 95OPAD108, issued by CDPHE to Suncor Energy, Inc. in Adams County, Colorado. On July 31, 2023, the EPA Administrator issued an order granting in part and denying in part the petition from the Elyria and Swansea Neighborhood Association and other groups, and denying the petition from 350 Colorado. The order itself explains the basis for the EPA's decision.

Under sections 307(b) and 505(b)(2) of the CAA, a petitioner may request judicial review of those portions of an order that deny issues in a petition. Any petition for review must be filed in the United States Court of Appeals for the appropriate circuit no later than November 17, 2023.

Dated: August 31, 2023.

KC Becker,

Regional Administrator, Region 8.

[FR Doc. 2023–20146 Filed 9–15–23; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–11255–01–OA]

Public Meeting of the Science Advisory Board CASTNet Review Panel

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Environmental Protection Agency (EPA) Science Advisory Board (SAB) Staff Office a public meeting of the Science Advisory Board CASTNet Review Panel. The purpose of the public meeting is to review and discuss the draft report prepared by the review panel. The draft report incorporates briefings and a report from EPA on the CASTNet monitoring network, public comments, and deliberations of the panel on the charge questions posed by the Agency. Additional information, materials, background, meeting agendas, and activities are, and will be, posted on SAB's website at *https://sab.epa.gov.*

DATES:

Public meeting: The Science Advisory Board CASTNet Review Panel will meet on October 11, 2023, from 3:30 p.m. until 6:00 p.m. Eastern Time.

Comments: See the section titled ''Procedures for providing public input'' under **SUPPLEMENTARY INFORMATION** for instructions and deadlines.

ADDRESSES: The October 11, 2023, meeting will be conducted virtually. Please refer to the SAB website at *https://sab.epa.gov* for information on how to attend the meeting.

FOR FURTHER INFORMATION CONTACT: Any member of the public who wants further information concerning this notice may contact Dr. Bryan Bloomer, Designated Federal Officer (DFO), via telephone (202) 564–4222, or email at *bloomer.bryan@epa.gov.* General information about the SAB, as well as any updates concerning the meetings announced in this notice can be found on the SAB website at *https://sab.epa.gov.*

SUPPLEMENTARY INFORMATION:

Background: The SAB was established pursuant to the Environmental Research, Development, and Demonstration Authorization Act (ERDDAA), codified at 42 U.S.C. 4365, to provide independent scientific and technical advice to the EPA Administrator on the scientific and technical basis for agency positions and regulations. The SAB is a Federal Advisory Committee chartered under the Federal Advisory Committee Act (FACA), 5 U.S. Code 10. The SAB will comply with the provisions of FACA and all appropriate SAB Staff Office procedural policies. Pursuant to FACA and EPA policy, notice is hereby given that the Science Advisory Board CASTNet Review Panel will hold a public meeting to review a draft report prepared responding to the charge questions, to receive public comments, and to deliberate upon the panel's recommendations regarding the CASTNet monitoring network.

Availability of meeting materials: All meeting materials, including the agenda, will be available on the SAB web page at *https://sab.epa.gov.*

Procedures for providing public input: Public comment for consideration by EPA's federal advisory committees and panels has a different purpose from public comment provided to EPA program offices. Therefore, the process for submitting comments to a federal advisory committee is different from the process used to submit comments to an EPA program office. Federal advisory committees and panels, including scientific advisory committees, provide independent advice to the EPA. Members of the public can submit relevant comments pertaining to the committee's charge or meeting materials. Input from the public to the SAB will have the most impact if it provides specific scientific or technical information or analysis for the SAB to consider or if it relates to the clarity or accuracy of the technical information. Members of the public wishing to provide comments should follow the instruction below to submit comments.

Oral statements: In general, individuals or groups requesting an oral presentation at a meeting conducted virtually will be limited to five minutes. Each person making an oral statement should consider providing written comments as well as their oral statement so that the points presented orally can be expanded upon in writing. Persons interested in providing oral statements should contact the DFO, in writing (preferably via email) at the contact information noted under **FOR FURTHER INFORMATION CONTACT**, by October 4, 2023, to be placed on the list of registered speakers.

Written statements: Written statements will be accepted throughout the advisory process; however, for timely consideration by SAB members, statements should be submitted to the DFO by October 4, 2023, for the October 11th meeting. Written statements should be supplied to the DFO at the contact information above via email. Submitters are requested to provide an unsigned version of each document because the SAB Staff Office does not publish documents with signatures on its websites. Members of the public should be aware that their personal contact information if included in any written comments, may be posted to the SAB website. Copyrighted material will not be posted without the explicit permission of the copyright holder.

Accessibility: For information on access or services for individuals with disabilities, please contact the DFO, at the contact information noted above, preferably at least ten days before the meeting, to give the EPA as much time as possible to process your request.

V Khanna Johnston,

Deputy Director, Science Advisory Board Staff Office.

[FR Doc. 2023–20073 Filed 9–15–23; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL–11398–01–OW]

National Drinking Water Advisory Council; Meeting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of a public meeting.

SUMMARY: The U.S. Environmental Protection Agency's (EPA) Office of Ground Water and Drinking Water is announcing a meeting of the National Drinking Water Advisory Council (NDWAC or Council) as authorized under the Safe Drinking Water Act (SDWA). The purpose of the meeting is to allow members of the NDWAC's Microbial and Disinfection Byproducts (MDBP) Rule Revisions Working Group to present their emergent recommendations to the Council on issues included in EPA's November 2021 charge to the NDWAC on potential revisions to MDBP rules. Additional details will be provided in the meeting agenda, which will be posted on EPA's NDWAC website prior to the meeting. The NDWAC will meet again at a later date to review the Working Group's final report to the Council and to develop advice and recommendations from the Council to EPA. See the **SUPPLEMENTARY INFORMATION** section of this announcement for more information.

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

No. 23-9603

CENTER FOR BIOLOGICAL DIVERSITY,
Petitioner – Appellant,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY *et al.*,
Respondents – Appellees.

STATE OF COLORADO,
Intervenor – Respondent,

and

SUNCOR ENERGY (U.S.A), INC.,
Intervenor – Respondent.

Petition for Review of Final Action of the U.S. Environmental Protection Agency (Agency/Docket No. FRL-11371-01-R8)

DECLARATION OF RICHARD READING

I, Richard P. Reading, declare that the following statements are true and correct to the best of my knowledge, information, and belief, and are based on my personal experiences and my review of publicly available information:

1. I am over 18 years of age.

2. I am a member of the Center for Biological Diversity.

3. I live in Denver, Colorado. I have lived in Denver since 1996. I live on Hudson Street, about 4.5 miles south of Suncor's East Plant. I drive past the Suncor plant every day on my way to and from work.

4. I received three master's degrees and a Ph.D. in Wildlife Ecology from Yale University. I am the Vice President of Science and Conservation at the Butterfly Pavilion.

5. I regularly enjoy running, bicycling, gardening, and walking my dog. I engage in these activities primarily at or near my home in Denver, Colorado.

6. I regularly spend time in the Rocky Mountain Arsenal National Wildlife Refuge, which is located just over two miles from Suncor. I recreate frequently in the Refuge and along the Sand Creek Regional Greenway, which adjoins Suncor. I am concerned about the negative impacts to my health, as well as the health of the wildlife in the refuge, from air pollution, including air pollution emitted directly from Suncor.

7. All my outdoor activities are negatively impacted by poor air quality, in some cases causing me serious respiratory distress and even asthma attacks. I can no longer exercise outdoors on bad air quality days, or I will suffer an asthma attack and require heavy medication. I particularly note that after traveling away from Denver, my asthma problems lessen,

and they immediately worsen again upon returning to the region. These impacts seriously affect my quality of life.

8. To address the problems I face with Denver's bad air quality, I have had to spend significant amounts of money for a) doctor and hospital (or urgent care) visits; b) medication (I am currently using four different medications to control my asthma); c) central air conditioning to filter the air coming into my home (I made this significant purchase on the advice of my doctor); and the need to use sick and vacation time to permit myself to heal from asthma attacks.

9. I regularly follow the daily air report on local media, both television and the newspaper. If there is an air quality alert for the Greater Denver Metropolitan Area, I will limit my outdoor activities. For example, I restrict any activities that require exertion outdoors. This means I cannot run, bike, or garden and, in some cases, even walk my dog on bad air quality days. In some cases, I have stopped running or biking in the middle of workout or ride because of the breathing problems I faced.

10. I am frustrated that I live in an area with excessive air pollution, and that not enough is being done to remedy that pollution. I frequently worry about the health impacts on my family, and I also worry that my ongoing exposure to dirty air, including when I travel past or spend time

in the proximity of Suncor, is impacting my health and shortening my life.

11. I understand that the Clean Air Act requires EPA to set National Ambient Air Quality Standards, or NAAQS, for pollutants considered harmful to public health and the environment. Nitrogen oxides, sulfur oxides, ozone, and particulate matter are such pollutants. I understand that nitrogen oxides and sulfur oxides are harmful in their own right, but also lead to the formation of ozone and particulate matter.

12. I understand that a source of pollution, like Suncor, cannot be permitted to pollute by the state if it will cause or contribute to a violation of any NAAQS.

13. I know the Center for Biological Diversity filed a suit against EPA because EPA approved the Title V operating permit for Suncor's East Plant despite clear evidence that the permit allows violations of the NAAQS.

14. I understand that EPA has determined, based on scientific evidence, that exposure to nitrogen oxides, sulfur oxides, ground-level ozone, and particulate matter pollution causes and aggravates numerous human respiratory problems, including decreased lung function, asthma, bronchitis, emphysema, and can inflame the lining of the lungs. I have

also read that repeated exposure can lead to permanent scarring of the lungs. I understand that people with lung disease, children, older adults, and people who are actively outdoors, such as myself, may be particularly sensitive to the effects of this pollution.

15. I can see the effects of air pollution in the Denver metropolitan area, and I find them aesthetically displeasing. I know that the particles that result from nitrogen oxides and sulfur oxides pollution make the air hazy and difficult to see through.

16. I am concerned that the problems caused by this air pollution will negatively impact my family and my pets.

17. I am concerned that this illegal air pollution will harm wildlife in the region.

18. I support the Center's lawsuit. If EPA is required to reject a permit that allows NAAQS violations, I will benefit from the resulting required additional requirements to regulate air pollution in a legal permit. The improved air pollution will better benefit my health, and I will worry less about my health.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 15, 2024.

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Richard P. Reading

UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

No. 23-9603

CENTER FOR BIOLOGICAL DIVERSITY,
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v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY *et al.*,
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STATE OF COLORADO,
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Intervenor – Respondent.

Petition for Review of Final Action of the U.S. Environmental Protection Agency (Agency/Docket No. FRL-11371-01-R8)

DECLARATION OF LORI ANN BURD

I, Lori Ann Burd, declare that the following statements are true and correct to the best of my knowledge, information, and belief, and are based on my personal experiences and my review of publicly available information:

1. I am over 18 years of age.

2. I am the director of the Environmental Health Program at the Center for Biological Diversity ("the Center"). I am also a member of the Center.

3. The Center's mission is to ensure the preservation, protection, and restoration of biodiversity, native species, ecosystems, public lands and water, and public health through science, policy, and law. Based on the understanding that the health and vigor of human societies and the natural environment are closely linked, the Center is working to protect natural resources like air to secure a future for animals and plants hovering on the brink of extinction, for the ecosystems they need to survive, and for the people that interact with, depend on, and cherish these natural resources. The Environmental Health Program is focused on protecting biodiversity and human health from toxic substances.

4. In my role at the Center, I am involved in strategic decision making and setting policy priorities for the work that the Center does to reduce the threats to the environment and public health from toxic substances, including air pollution.

5. The Center's Environmental Health Program works to help reduce the threats posed by air pollution through scientific, legal, and policy mechanisms. I strive to represent the interests of our members in areas affected and am concerned about how the negative air quality is impacting them, their families, and the environment that they enjoy.

6. Combating air pollution is an issue that is very important to me because I understand the health impacts of air pollutants. I am deeply troubled by the effects that they have on the environment and human health. I am aware of studies linking air pollution to a range of health impacts, such as respiratory problems, increased incidences of hospitalization, and premature mortality. I have a close friend, a physician, who suffers from severe asthma, and on many occasions have witnessed the devastating effects asthma has had on her ability to work, care for her young child, and function. I have seen specific instances where increased air pollution has exacerbated her asthma.

7. I am further aware that air pollution can also negatively affect the health of wildlife and plant life that I and the Center's other members appreciate viewing in the outdoors. I am further aware that air pollution can lead to haze and negatively affect my and the Center's other members' experiences in nature and the outdoors, and can lead to broader ecosystem effects by affecting water quality and nutrient cycles.

8. I am aware that EPA failed to object to the Title V permit for the Suncor Refinery, when the permit does not protect the National Ambient Air Quality Standards, which results in excess and illegal air pollution.

9. I support the Center's lawsuit. The Center's mission of protecting human health and the environment will be advanced if the Court vacates EPA's final action allowing NAAQS violations.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on March 12, 2024.

Lori Ann Burd