

Case No. 08-72642

**IN THE UNITED STATES COURT OF APPEALS
FOR THE NINTH CIRCUIT**

MONTANA SULPHUR & CHEMICAL COMPANY,
Petitioner,
v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

ON PETITION FOR REVIEW OF FINAL RULE OF THE UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY

RESPONDENT'S BRIEF

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January 14, 2011

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GLOSSARY

AERMOD	American Meteorological Society/EPA Regulatory Model
APA	Administrative Procedure Act, 5 U.S.C. § 706(2)(A)
CAA	Clean Air Act, 42 U.S.C. §§ 7401-7671q
EPA or Agency	Respondent U.S. Environmental Protection Agency
ER	Excerpts of Record of Petitioner Montana Sulphur & Chemical Company
FIP	Federal Implementation Plan
GEP	good engineering practice
H ₂ S	hydrogen sulfide
ISC	Industrial Source Complex model
MSCC	Petitioner Montana Sulphur & Chemical Company
NSPS	New Source Performance Standard
NAAQS	National Ambient Air Quality Standards
ppm	parts per million
SER	Respondent U.S. EPA's Supplemental Excerpts of Record in Case No. 08-72642
SIP	State Implementation Plan
SIP ER	Petitioner Montana Sulphur & Chemical Company's Excerpts of Record in Case No. 02-71657

SIP SER	Respondent U.S. EPA's Excerpts of Record in Case No. 02-71657
SO ₂	sulfur dioxide
SRU	sulfur recovery unit
SSM	startup, shutdown and malfunction

JURISDICTION

The promulgation of a “Federal Implementation Plan” (“FIP”) by Respondent U.S. Environmental Protection Agency (“EPA” or “Agency”) under the Clean Air Act (“CAA” or “Act”), 42 U.S.C. §§ 7401-7671q, constitutes final agency action that is “locally or regionally applicable” and subject to review in this Court under § 7607(b)(1).^{1/} The Petition for Review (“Petition”) filed by Montana Sulphur & Chemical Company (“MSCC”) was timely.

ISSUES PRESENTED

1. Whether, having partially disapproved the State of Montana’s implementation plan (“SIP”) through notice and comment rulemaking, EPA reasonably exercised its CAA authority to issue a FIP tailored to address the SIP’s deficiencies and ensure that important air quality standards for sulfur dioxide are attained.

2. Whether, notwithstanding EPA’s statutory obligation to promulgate a FIP following SIP disapproval, EPA lost authority to issue the FIP because it did not issue it within two years, and whether MSCC – which encouraged further delay – waived this issue.

3. Whether, given the great deference afforded to EPA in such circumstances, the FIP’s regulatory provisions addressing complex technical matters such as flaring, modeling, compliance monitoring, stack height, and

^{1/} Statutory references are to Title 42 of the U.S. Code, unless noted.

variable emissions are reasonable.

4. Whether EPA acted reasonably in setting MSCC's emission limits without crediting restrictions found in other sources' consent decrees that are not part of the SIP.

STATUTES AND REGULATIONS

Provided in the Addendum hereto.

STATEMENT OF THE CASE

MSCC, a Billings, Montana company, receives from a nearby ExxonMobil refinery a continuous stream of "high-sulfur" gas from which it recovers 95-98 percent of the sulfur for sale; MSCC emits the non-recovered sulfur through its stacks as sulfur dioxide ("SO₂") air pollution.^{2/} This case involves MSCC's challenge to the 2008 FIP that § 7410 required EPA to promulgate following EPA's partial disapproval of Montana's SIP. *See* "Federal Implementation Plan for the Billings/Laurel, Montana, Sulfur Dioxide Area; Final Rule," 73 Fed. Reg. 21,418 (Apr. 21, 2008).

^{2/} *See* MSCC's Opening Brief ("Br.") 3; *see also* MSCC's opening brief ("MSCC SIP Br.") 5 in Case No. 02-71657, MSCC's related case challenging EPA's partial disapproval of Montana's Billings/Laurel SIP. EPA filed its Respondent's Brief ("EPA SIP Br.") in the SIP case on November 12, 2010. Where record documents in the SIP case are relevant here, they are cited either as "SIP ER" (if contained in MSCC's Excerpts of Record in that case) or "SIP SER" (if contained in EPA's Excerpts). EPA's Supplemental Excerpts of Record in this case are cited "SER."

A. Statutory/Regulatory Background

1. National Ambient Air Quality Standards

EPA has developed a list of “criteria” pollutants that cause or contribute to air pollution that “may reasonably be anticipated to endanger public health or welfare.” § 7408(a)(1)(A). For each criteria pollutant, EPA promulgates “national ambient air quality standards” (“NAAQS”) sufficient to protect public health and welfare. § 7409(b).^{3/}

EPA has promulgated NAAQS for SO₂. 40 C.F.R. pt. 50. The SO₂ primary NAAQS at the time of EPA’s FIP action were 0.14 parts per million (“ppm”) for 24-hour average concentrations and 0.03 ppm for annual average concentrations, per 40 C.F.R. § 50.4; the secondary NAAQS was 0.5 ppm for 3-hour average concentrations. *Id.* § 50.5. EPA has since revised the SO₂ primary NAAQS after finding that revisions were necessary to protect public health.

75 Fed. Reg. 35,520 (June 22, 2010). The revised NAAQS became effective August 23, 2010.

2. SO₂ Pollution Impacts.

SO₂ is a “highly reactive colorless” gas derived primarily from fossil fuel combustion. *Am. Lung Ass’n v. EPA*, 134 F.3d 388, 389 (D.C. Cir. 1998). It is “extremely hazardous,” with “pungent odors” similar to “rotten eggs and burnt

^{3/} EPA sets “primary” standards to protect “public health,” § 7409(b)(1), and “secondary” standards to protect “public welfare.” *Id.* § 7409(b)(2).

matches.” *Texans United v. Crown Cent. Petroleum Corp.*, 207 F.3d 789, 791 n.6 (5th Cir. 2000). Persons particularly vulnerable to SO₂ pollution include children, asthmatics, older adults, and people spending time outdoors at increased exertion levels. *See Cleveland Elec. Illuminating Co. v. EPA*, 572 F.2d 1150, 1164 (6th Cir. 1978) (SO₂ pollution particularly harms the “young,” “sick,” and “old”).^{4/}

3. State/Federal Implementation Plans.

The CAA directs states to develop SIPs that “assure” attainment and maintenance of the NAAQS through enforceable emission limitations. §§ 7407(a), 7410(a)(2)(A), 7410(a)(2)(C). Such limitations are developed primarily through modeling.^{5/}

The CAA requires EPA to review all SIPs for whether they meet the Act’s requirements. *See, e.g., Michigan DEQ v. Browner*, 230 F.3d 181, 183 (6th Cir. 2000) (EPA has “final authority” to determine whether SIP is approvable). Section 7410(l) provides that EPA “shall not” approve any SIP revision that would

^{4/} The record reflects Montana citizens’ desire for an environment safe from SO₂ pollution. *See* 73 Fed. Reg. at 21,443.

^{5/} *See* 40 C.F.R. § 51.112(a)(1): “The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in appendix W of this part (Guideline on Air Quality Models).” MSCC (Br. 4-5) attacks EPA’s reliance on modeling and suggests that EPA should have relied on local air quality monitors instead, but acknowledges that EPA’s regulations “allow EPA to determine attainment through computer models rather than actual measurements.” MSCC Motion for Stay Pending Appeal (July 30, 2008) (“Stay Motion”) at 6.

“interfere” with NAAQS attainment requirements. *See Michigan DEQ*, 230 F.3d at 183 (EPA “must disapprove” proposed SIP if it would interfere with “any requirement concerning the state’s attainment and maintenance of NAAQS”).

Section 7410(a)(2)(H) directs that states provide for plan revisions whenever EPA finds that a SIP is “substantially inadequate to attain” the NAAQS. If a state fails to submit a satisfactory SIP, EPA must promulgate a FIP unless the state corrects any deficiency and EPA approves the SIP revision. § 7410(c). Section 7602(y) defines “Federal implementation plan” as a plan (or portion thereof) that EPA promulgates to “fill all or a portion of a gap or otherwise correct all or a portion of an inadequacy” in a SIP, and that “includes enforceable emission limitations or other control measures, means or techniques.” *See McCarthy v. Thomas*, 27 F.3d 1363, 1365 (9th Cir. 1994) (FIP is “set of enforceable federal regulations that stand in the place of deficient portions of a SIP.”).

4. Stack Height.

Congress enacted § 7423 in response to the proliferation of tall, polluting smoke stacks. *See Conn. v. EPA*, 696 F.2d 147, 161 (2d Cir. 1982) (tall stacks disperse emissions, exacerbating interstate pollution). This provision limits the degree to which a SIP or FIP can rely on dispersion techniques such as tall stacks to meet the NAAQS, rather than on emissions control. § 7423(a)-(b). *See also* 40 C.F.R. § 51.118.

5. EPA's Policy On Excess Emissions During Startup, Shutdown, and Malfunction.

MSCC attacks portions of the FIP reflecting EPA's longstanding CAA interpretation that SIP provisions automatically excusing noncompliance with emission limitations during startup, shutdown and malfunction ("SSM") episodes are improper. EPA's interpretation has been upheld by the Sixth Circuit, which rejected a challenge to EPA's disapproval of a SIP revision that provided an automatic exemption from limitations during SSM episodes (*Michigan DEQ*, 230 F.3d 181), and the Tenth Circuit, which found that EPA's SSM policy embodied a reasonable interpretation of the CAA. (*Ariz. Pub. Serv. Co. v. EPA*, 562 F.3d 1116, 1129 (10th Cir. 2009)).

STATEMENT OF FACTS

A. Modeled Violations, SIP Call, And EPA's Partial SIP Disapproval

The industrial SO₂ sources – including MSCC – in Montana's Billings/Laurel area are located along the Yellowstone River Valley, long plagued by air pollution. 64 Fed. Reg. 40,791, 40,805 (July 28, 1999). EPA designated the Valley's Laurel area "nonattainment" in 1978, due to measured and modeled violations of the primary SO₂ standards. 43 Fed. Reg. 8962 (Mar. 3, 1978).^{6/} In

^{6/} Air emissions from Billings facilities impact Laurel's air quality and vice-versa. See SIP SER 37, 43. Hence, many record documents refer to the "Billings/Laurel" area, and this brief utilizes that convention.

Billings (where MSCC resides) 1970s modeling indicated potential violations of the SO₂ standards due to emissions from MSCC and others. SIP SER 46.

In the early 1990s, new dispersion modeling predicted that the SO₂ NAAQS were being violated in the Billings/Laurel area. 73 Fed. Reg. at 21,419. Montana confirmed the need for a revised SO₂ SIP that specifies emission limits “on all area industries” and “demonstrates compliance” with the ambient standards based on dispersion modeling. SIP SER at 147. Shortly thereafter, EPA found the Billings/Laurel SO₂ SIP substantially inadequate and requested Montana to submit SIP revisions. *Id.* at 137, 140.⁷

Montana’s responsive SIP submissions reflected federal-state agreement on most, but not all, issues. On May 2, 2002 (67 Fed. Reg. 22,168) and May 22, 2003 (68 Fed. Reg. 27,908), EPA approved some parts of Montana’s submitted revisions, while disapproving others. As relevant here, EPA disapproved the State’s: (1) attainment demonstration due to issues with emission limits, inappropriate stack height credit, and lack of submitted emission limits on flares; (2) emission limits for MSCC’s Sulfur Recovery Unit (“SRU”) 100-meter stack and the “stack height credit” supporting those limits; and (3) emission limits for MSCC’s 30-meter and auxiliary vent stacks. *See* 73 Fed. Reg. at 21,419.

MSCC, alone, challenged EPA’s 2002 partial SIP disapproval. MSCC’s

⁷ Montana confirmed that “reductions in actual and allowable emissions” were “necessary.” SIP SER 40.

petition was held in abeyance pending EPA's promulgation of a FIP to remedy the SIP's disapproved portions.

B. The FIP

In 2006, EPA proposed the Billings/Laurel FIP. 71 Fed. Reg. 39,259 (July 12, 2006). After holding a public hearing and reviewing comments submitted during an extended public comment period, EPA promulgated the FIP. The FIP corrected the SIP's deficiencies and ensures that a complete implementation plan, covering all seven major sources of SO₂ in the Billings/Laurel area, is federally enforceable.

To address the SIP's failure to include flare limits relied on by Montana in its attainment demonstration, the FIP includes flare emission limits (150 lbs SO₂/3-hour period) for four sources. 73 Fed. Reg. at 21,420. Three of the sources (CHS Inc., ConocoPhillips, ExxonMobil) are petroleum refineries; the fourth is MSCC. The FIP does not require these sources to install additional pollution controls, as evidence indicated that no new controls were needed to comply. SER 147.

To determine flare emissions and assess compliance, as required by § 7410 and 40 C.F.R. §§ 51.111 and 51.210-12, the FIP requires both "concentration" monitoring (which can consist of continuous monitoring, grab sampling, or integrated sampling) and "continuous flow" monitoring. 73 Fed. Reg. at 21,420. The FIP includes an affirmative defense to enforcement actions for penalties for

flare limit violations that may occur during SSM episodes. *Id.*

The FIP also establishes emission limits on MSCC's 100-meter stack, based on good engineering practice ("GEP") stack height credit of 65 meters, rather than Montana's improper credit of 97.5 meters. These SO₂ limits are: (a) 2981.7 lbs/3-hour period, (b) 23,853.6 lbs/calendar day, and (c) 9,088,000 lbs/calendar year. 73 Fed. Reg. at 21,451. Emissions data indicate MSCC was already meeting these FIP limits and did not need to install new pollution controls. 71 Fed. Reg. at 39,268. *See also* SER 46-49; SER 42-45.

For MSCC's auxiliary stacks and 30-meter stack (hereinafter, MSCC's "small stacks"), the FIP establishes emission limits and methods for determining compliance with those limits, because those elements were deficient in the SIP. In addition to mass limits, the FIP establishes concentration limits on fuel burned in the units that vent to the small stacks. Here, again, the record indicates that these limits can be met without new controls. 73 Fed. Reg. at 21,447.

The FIP's emission limitations were calibrated through modeling to address the Billings/Laurel airshed situation. With these limits (and the SIP limits EPA previously approved), EPA's modeling resulted in a high 24-hour value of 354 µg/m³ (micrograms/cubic meter), which – accounting for background concentrations of 11 µg/m³ – would exactly meet the 24-hour SO₂ NAAQS of 365 µg/m³. 73 Fed. Reg. at 21,439. Based on the SIP and FIP 3-hour emission limits, EPA modeled a high 3-hour value of 1291.5 µg/m³, which is just below the 3-hour

NAAQS of 1300 $\mu\text{g}/\text{m}^3$. 73 Fed. Reg. at 21,424, n.5.

C. The Litigation

MSCC filed its Petition challenging the FIP in 2008. Neither the State nor any other source regulated by the FIP has challenged it.

MSCC then moved this Court to stay portions of the FIP that “impose emission limitations and monitoring requirements on flares.” Stay Motion 1. This Court denied the stay on March 10, 2010.

EPA moved to consolidate this case with MSCC’s related case challenging EPA’s SIP action (No. 02-71657), but MSCC successfully opposed – claiming its petitions presented “entirely different” issues (*see* MSCC’s 12/9/2009 Opp. 5-6) – and received permission to file full-length opening and reply briefs in each case. MSCC (Br. 66) now acknowledges the obvious: its SIP case “implicates many of the issues addressed in this brief.”^{8/}

SUMMARY OF ARGUMENT

The Court should deny the Petition. The FIP properly fills gaps in the disapproved parts of Montana’s SIP, which EPA previously found failed to demonstrate that the NAAQS would be attained. EPA was obligated to issue the FIP, and MSCC’s arguments that EPA exceeded its authority in issuing the FIP or lost authority altogether because it did not promulgate the FIP within two years of disapproving the SIP lack merit. In any event, by failing to raise it with

^{8/} Per this Court’s 3/10/2010 Order, the two cases will be calendared together.

reasonable specificity during the public comment period, MSCC waived any argument that the FIP was untimely. MSCC's various other arguments – including technical challenges to the FIP's provisions addressing flaring, variable emission limits and stack height credit for MSCC's 100-meter stack; requirements applicable to MSCC's small stacks; and the FIP's approach to modeling and to consent-decree-required reductions at other sources – also lack merit.

Contrary to MSCC's assertions, EPA did not regulate with unlimited license but instead acted reasonably to correct the SIP's deficiencies, adopting emissions limits supporting modeled attainment at the exact level of the 24-hour NAAQS and slightly below the 3-hour NAAQS, and imposing reasonable monitoring requirements to ensure compliance with those limits. In all scenarios, available evidence indicated that MSCC could meet the FIP limits without installing any additional controls. Regarding flare limits, EPA provided relief in the form of an affirmative defense to penalties. Notably, neither any other source subject to the FIP's requirements, nor the State of Montana, challenges the FIP.

MSCC mischaracterizes the applicable law. EPA was not constrained to precisely measure and re-measure every requirement to ensure that the FIP constitutes the bare minimum needed to protect the NAAQS. Courts have not interpreted the CAA as shackling EPA in that way. When issuing a FIP, EPA stands in the state's shoes and, like the state, may produce a superior plan that ensures that air quality is protected. To the extent that the FIP imposes more than

the bare minimum, EPA had a rational basis for its decisions. As the FIP's lone challenger, MSCC has not shown that EPA's FIP decisions were unreasonable.

STANDARD OF REVIEW

EPA's FIP may be overturned only if it is arbitrary or capricious, or in excess of EPA's authority. 7607(d)(9)(A)&(C).^{9/} To prevail, MSCC bears "a heavy burden." *Transmission Access Policy Study Group v. FERC*, 225 F.3d 667, 714 (D.C. Cir. 2000).

For issues of statutory construction, *Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837 (1984), supplies the standard of review. First, the Court must determine whether Congress has "directly spoken to the precise question at issue." *Id.* at 842-43. If so, the Court gives effect to that intent. However, if the statute is ambiguous, the Court must defer to the administering agency's interpretation so long as it is "permissible." *Id.* at 843. *See also MacClarence v. EPA*, 596 F.3d 1123, 1130 (9th Cir. 2010) (in context of petition for review of EPA order denying request that EPA object to CAA permit, this Court stated "*Chevron* provides the guiding principles for according deference to an agency's interpretation of a statute it administers."). When faced with a problem of statutory construction, this Court shows great deference to the interpretation given

^{9/} Section 7607(d)(9) applies to review of FIPs by virtue of § 7607(d)(1)(B). A similar standard of review governs challenges to agency actions brought under the Administrative Procedure Act. 5 U.S.C. § 706(2)(A). *Ethyl Corp. v. EPA*, 51 F.3d 1053, 1064 (D.C. Cir. 1995).

by EPA. *Id.*¹⁰

This Court also accords “very great deference to an agency’s interpretation of its regulations,” *Wickland Oil Terminals v. Asarco*, 792 F.2d 887, 891 (9th Cir. 1986), and even greater deference to EPA’s evaluation of technical data within its area of expertise. *See Ass’n of Irrigated Residents v. EPA*, 423 F.3d 989, 997 (9th Cir. 2005) (where agency’s determination is “scientific in nature,” it is “entitled to the most deference on review”); *Env’tl. Def. Ctr. v. EPA*, 344 F.3d 832, 869 (9th Cir. 2003) (great deference warranted when reviewing EPA’s “technical analysis and judgments, based on an evaluation of complex scientific data within the agency’s technical expertise”).

The Court is “not to substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass’n v. State Farm*, 463 U.S. 29, 43 (1983).

ARGUMENT

I. EPA WAS AUTHORIZED TO ISSUE THE FIP OUTSIDE OF THE STATUTORY DEADLINE FOR SUCH ACTION

Section 7410(c)(1) provides that when EPA disapproves a required SIP, in whole or in part, it must promulgate a FIP. *See Coal. for Clean Air v. S. Cal. Edison Co.*, 971 F.2d 219 (9th Cir. 1992) (§ 7410(c)(1)’s plain language “expresses Congress’ intent that EPA promulgate a FIP when it has previously disapproved a

¹⁰ In challenging EPA’s SIP action, MSCC contended (MSCC SIP Br. 14) that EPA was not entitled to *Chevron* deference. MSCC advances no such argument here, except in connection with its discussion of flares (Br. 28-29) and EPA’s authority to issue the FIP (Br. 49).

SIP”). Notwithstanding this statutory obligation, MSCC argues (Br. 48-49) that the FIP is “in excess of statutory authority” because it was not promulgated, as specified in § 7410(c)(1), within two years of EPA’s SIP disapproval. MSCC claims (Br. 54) EPA lost authority to issue the FIP and must “start the process over.”

In opposing consolidation, MSCC disavowed that it would advance this argument in its merits brief, advising this Court that MSCC’s “2008 petition for review” would be limited to “whether the emissions limitations imposed by the FIP are arbitrary and capricious.” *See* MSCC 12/9/2009 Opp. 8: “This action will not address whether EPA had the authority to issue a FIP, but will address the appropriateness of the emission limitations imposed by the FIP.” The Court should disregard MSCC’s attacks on EPA’s authority to issue the FIP.

MSCC waived this argument for a second reason – it failed to raise it with reasonable specificity during the comment period. Section 7607(d)(7)(B) provides: “Only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review.” Courts enforce § 7607(d)(7)(B) “strictly.” *See NRDC v. EPA*, 571 F.3d 1245, 1259 (D.C. Cir. 2009).

In its November 2006 comments on EPA’s FIP proposal, MSCC did not argue that the passage of time deprived EPA of authority to issue the FIP. MSCC merely noted (ER 246) that § 7410(c)(1) directs EPA to promulgate a FIP within

two years of SIP disapproval; stated that EPA had not met that deadline; and asserted that in the period between SIP disapproval and FIP issuance, circumstances involving “modeling technology” and “cleanup” had changed, rendering the overdue FIP “arbitrary and capricious.” That is not the argument MSCC now seeks to advance. *See* Br. 48, 54 (contending only that FIP is “in excess of statutory jurisdiction, authority, or limitations.”).

Even assuming that MSCC did not waive the issue, its argument misses the mark. Although § 7410(c)(1)(A) instructs EPA to promulgate a FIP “within two years” after SIP disapproval, a FIP issued after that time is not “unauthorized.”^{11/}

National Petrochemical & Refiners Ass’n v. EPA, No. 10-1070, 2010 WL 5155819 (D.C. Cir. Dec. 21, 2010), is persuasive. There, the D.C. Circuit stated that in the face of “congressional silence” in the applicable provision on the effect of EPA’s delay in promulgating regulations by a prescribed date, the court “should not presume Congress intended EPA would lose authority to act upon missing statutory deadlines.” *Id.* at *8. Instead, the court must determine what Congress “would have intended” in such situation. The court held that the CAA’s purpose and structure are “contraindications of a congressional intent to divest EPA of authority to act” when it misses a statutory deadline for issuing a regulation. *Id.* at *11. Here, Congress intended that EPA issue a FIP after it disapproves a SIP, and

^{11/} Section 7604(a) gives citizens the right to sue and the district courts authority to order EPA performance if EPA fails to meet the two-year time line for a FIP. MSCC never sought such an order.

nothing in the CAA suggests that EPA loses that authority (or obligation) because two years have passed.

This Court's decision in *Coalition for Clean Air* is instructive. There, this Court held – in 1992 – that EPA was “obligated” to promulgate FIPs for California's South Coast “under the plain terms” of § 7410(c)(1)(B), “based on its disapproval of California's proposed SIPs in January 1988.” 971 F.2d at 228-29. Four years after EPA's 1988 SIP disapproval, this Court remanded with instructions to the district court to establish an “expeditious schedule” for EPA to promulgate FIPs for the South Coast. This Court stated that, in establishing that schedule, the district court should bear in mind that promulgation of the FIPs had already been delayed “beyond the statutory deadline.” *Id.* at 229.

Under MSCC's logic, this Court erred in *Coalition for Clean Air* when it determined that the CAA imposes a continuing duty on EPA to issue a FIP after the statute's deadline passes. There is no indication in that opinion, however, that this Court considered the approach that MSCC advocates (Br. 49), notwithstanding MSCC's assertion that it would effectuate the legislature's “clear” intent. Rather, this Court found that § 7410(c)(1)'s “plain language” expresses “Congress' intent that EPA promulgate a FIP when it has previously disapproved a SIP.” 971 F.2d at 228.

It would defy congressional intent if EPA were precluded from fulfilling its duty to promulgate a FIP after two years unless a “deadline” suit is filed. Such an

outcome would cause further delay and deprive the public of the CAA's protections. *See Brock v. Pierce County*, 476 U.S. 253, 260 (1986) ("When, as here, there are less drastic remedies available for failure to meet a statutory deadline, courts should not assume that Congress intended the agency to lose its power to act.").

Nothing suggests MSCC wanted EPA to promulgate a FIP earlier than it did. After EPA proposed the FIP in 2006 – four years after SIP disapproval – MSCC asked EPA to extend the comment period for "at least one year." SER 142-45. MSCC did not mention its currently avowed belief that EPA had by then lost authority to issue the FIP. Nor did MSCC advance that argument in its 2006 comment letter (ER 212) urging EPA to delay the FIP.^{12/}

II. EPA'S FIP WAS RATIONALLY RELATED TO ENSURING NAAQS ATTAINMENT AND MAINTENANCE

The Act's FIP provision ensures "that progress toward NAAQS attainment will proceed notwithstanding inadequate action at the state level." *NRDC v. Browner*, 57 F.3d 1122, 1124 (D.C. Cir. 1995). Having disapproved Montana's SIP, EPA had to impose a FIP under §§ 7410(c) and 7602(y).

As EPA explained (73 Fed. Reg. at 21,419), the FIP does not entirely

^{12/} MSCC (Br. 49) asks the Court to require EPA to "give the State another chance to exercise its primary authority." The State has always been free under the CAA to revise and resubmit the SIP but it has not done so. *See* 73 Fed. Reg. at 21,424 (Montana remains free to submit for EPA's review "a SIP revision that reflects a different mix of controls across all the sources.").

replace the SIP. EPA corrected the SIP's deficiencies by promulgating flare limits that Montana had not included in the SIP, imposing limits for MSCC's 100-meter stack based on proper stack height credit, and imposing limits on MSCC's small stacks. EPA did not revisit SIP limits it had already approved and EPA considered the mix of controls that Montana had negotiated and imposed, only making changes to meet CAA requirements and ensure attainment and maintenance of the NAAQS. Thus, EPA selected a flare limit – 150 lbs/3-hours – that Montana had already negotiated and imposed under State law. The same premise held for the mass limits that EPA adopted for the small stacks. To ensure continuous protection of the NAAQS, EPA specified that the 150 lbs/3-hours flare limit applies at all times (unlike the State limit), but provided appropriately tailored relief through an affirmative defense. To ensure enforceability of the FIP limits, EPA also imposed reasonable monitoring requirements.

Based on the FIP limits and approved SIP limits, EPA modeled attainment of the 24-hour NAAQS right at the standard and the 3-hour NAAQS just below it. Thus, MSCC's assertion that EPA regulated "at will" is unfounded. The FIP is reasonably calculated to ensure attainment and maintenance of the NAAQS, and EPA's judicious approach is reflected in its proposed and final FIP.

If MSCC's argument is that EPA may do no more in a FIP than is minimally

“necessary” to attain the NAAQS (Br. 9-11), MSCC errs.^{13/} In *Central Arizona Water Conservation District v. EPA*, 990 F.2d 1531, 1541 (9th Cir. 1993), this Court stated that when EPA issues a FIP, it ““stands in the shoes of the defaulting State, and all of the rights and duties that would otherwise fall to the State accrue instead to EPA.”” (Citation omitted.)

Similarly, the First Circuit stated that the CAA’s “statutory scheme would be unworkable were it read as giving to EPA, when promulgating an implementation plan for a state, less than those necessary measures allowed by Congress to a state to accomplish federal clean air goals. We do not adopt any such crippling interpretation.” *S. Terminal Corp. v. EPA*, , 504 F.2d 646, 668 (1st Cir. 1974) (citing previous version of § 7410(c)).

Most recently, in *Arizona Public Service Co. v. EPA*, 562 F.3d 1116, 1130 (10th Cir. 2009), a challenge to a “source-specific” FIP, the court stated that “there is no requirement that a gap-filling federal plan can be only as strict as necessary to meet national air standards.” After explaining that states may “surpass national air standards as long as their plans satisfy all of the minimal Clean Air Act requirements,” the court explained that EPA possessed comparable authority: “We have found no authority saying that we can prevent the agency to which we owe substantial deference from implementing the same type of superior plan.” *Id.*

^{13/} Amici (Br. 6, 12) similarly err in asserting that EPA “must show” that each “limitation” in a FIP is “necessary” to attain the NAAQS.

MSCC (Br. 10) appears to read the Act's use of the word "necessary" in provisions such as § 7410(a)(2)(A) as narrowly restricting EPA's ability to exercise its discretion, but MSCC omits full reference to § 7410(a)(2)(A)'s direction that SIPs and FIPs include such emissions limitations "as may be necessary *or appropriate* to meet the applicable requirements of this chapter." (Emphasis added.) This language provides EPA with broad discretion to determine appropriate emissions limitations in a FIP.

Agency interpretations of statutory provisions directing actions EPA deems "appropriate" receive significant judicial deference. In *NACCA v. EPA*, 489 F.3d 1221, 1229 (D.C. Cir. 2007), the D.C. Circuit read such language in § 7571(a)(3), directing EPA to adopt aircraft emissions standards it deems "appropriate," as conferring an "express delegation" of authority, entitling EPA to the broadest deference.

Further, when EPA promulgates a FIP, courts have accorded the Agency fair latitude and not required it to demonstrate explicit authority for specific measures. *See, e.g., S. Terminal Corp.*, 504 F.2d at 669 ("We are inclined to construe Congress' broad grant of power to the EPA as including all enforcement devices reasonably necessary to the achievement and maintenance of the goals established by the legislation."). As this Court stated in a case involving a FIP with far-reaching consequences in Los Angeles: "The authority to regulate

pollution carries with it the power to do so in a manner reasonably calculated to reach that end.” *City of Santa Rosa v. EPA*, 534 F.2d 150, 155 (9th Cir.), *vacated and remanded on other grounds sub nom. Pacific Legal Found. v. EPA*, 429 U.S. 990 (1976).

MSCC’s assertion (Br. 14) that EPA lacks “unlimited authority to regulate even beyond what is required to attain NAAQS,” is a straw man. EPA does not contend it has “unlimited” authority when it issues a FIP, but that when, as here, a state fails to submit a SIP ensuring that the NAAQS will be attained, EPA’s FIP may not be set aside if it is “reasonably calculated” to achieve that end.

III. THE FIP’S FLARE PROVISIONS ARE REASONABLE

A. Flare Emissions, Whether Routine or SSM-Related, Are Properly Subject To Regulation Under The FIP

“Flaring” provides for “process equipment to immediately release gases to a device (a flare)” for incineration. SIP SER 216. Although sometimes used in emergencies, flaring routinely occurs in non-emergencies or is used to bypass pollution control equipment. *Id.*

Sulfur recovery plants like MSCC can produce “very large uncontrolled releases” of SO₂. *Id.* at 217. MSCC’s reports to Montana reflect flare emissions over 12,000 pounds of SO₂ in a 2-hour period, a value 80 times greater than the 150-pound value that Montana and EPA relied on to model attainment of the NAAQS. SER 50.

Montana found that routine flaring events “happen quite frequently.”

Testimony of Bob Raisch, Montana Air Quality Division (SIP SER 71). Mr. Raisch testified that non-routine flaring – such as occurs during malfunctions – can cause “large amounts” of SO₂ emissions that, based on dispersion modeling, were “a real concern” to State regulators. *Id.* at 71-72.^{14/} Montana set an SO₂ emission standard of 150 lbs/3-hours for MSCC’s flares, finding that routine flare emissions occur on a “continuous basis,” and included the emissions in its compliance modeling demonstration. *Id.* at 74.

Montana’s 1996 SIP submittal contained flare-related requirements – including emission limitations – but EPA found inadequacies. *Id.* at 203.^{15/} In particular, Montana’s provisions contained automatic exemptions for SSM episodes, which conflicted with EPA’s longstanding interpretation that since SIPs must provide for attainment of the NAAQS at all times, excess emissions during such episodes constitute CAA violations.^{16/}

Montana agreed that the SIP was “incomplete without enforceable emission limitations applicable to flares,” and that “such limitations should correspond to the emission rates used in the attainment demonstrations.” *See* 73 Fed. Reg. at

^{14/} Two flaring incidents had caused known, monitored exceedances of the SO₂ NAAQS. SER 28-34; SER 36.

^{15/} MSCC’s assertion (Br. 19) that Montana did not propose flare limits in the SIP is misleading.

^{16/} *See* EPA’s Sept. 20, 1999 *State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup, and Shutdown* (sometimes referred to as EPA’s “Excess Emissions Policy”). ER 248-57.

21,433. However, Montana did not address EPA's concerns and in its 1998 SIP submittal removed its flare emission limitations, while continuing to rely on limited flare emissions rates in its attainment demonstration. *Id.*; SIP SER 202-03. Consequently, Montana's flare limitations were enforceable only by the State and could not be relied on by EPA to support approval of the attainment demonstration. *See, e.g.*, § 7410(a)(2)(A); 40 C.F.R. § 51.112. Thus, EPA was forced to disapprove Montana's attainment demonstration. 67 Fed. Reg. at 22,171.

EPA's disapproval triggered its obligation to fill the gap Montana left by omitting flare limits from the SIP. To quote MSCC (Br. 14), EPA did "tread lightly" when it filled this gap, promulgating the same limit (150 lbs SO₂/3 hours) that Montana imposed and MSCC agreed to meet under State law, and that (as explained *supra*) resulted in modeled attainment of the NAAQS.¹⁷

EPA only modified Montana's provisions to ensure that the NAAQS were protected at all times. The FIP removed Montana's outright exemption from the flare limit during SSM and instead provided an affirmative defense to penalties for violations during SSM. EPA also established monitoring requirements that were

¹⁷ MSCC's contention (Br. 26) that EPA "seized upon" and accepted the State's decision to impose a 150 lbs/3-hour limitation on flares, and "adopted the limit simply because it was the limit used by the State," runs counter to MSCC's admonitions that EPA should not second-guess the State. And while EPA was able to model attainment of the 3-hour NAAQS assuming greater flare emissions (500 lbs/3 hours), its modeling reflected that the area would just meet the 24-hour NAAQS assuming flare emissions of 150 lbs/3 hours. 73 Fed. Reg. at 21,439-441. In any event, under the cases cited in section II, *supra*, EPA was not required to continue modeling until it found the least stringent 3-hour limit possible.

lacking in the SIP. EPA's modifications were reasonable.

MSCC argues (Br. 18) that all flare limitations (even the State's) are "unnecessary" because the emissions are inconsequential (MSCC's flaring has "never threatened NAAQS") and beyond its control ("MSCC must flare during SSM"). MSCC's own comments (ER 214) indicate that Montana's limit was a reasonably developed standard and that sources have found means to reduce flaring.¹⁸ And, as EPA explained (73 Fed. Reg. at 21,433), flaring events have not been infrequent in Billings/Laurel. Source reports from 2005 to 2007 indicated that MSCC and the three refineries experienced over 150 flaring events with SO₂ emissions greater than 150 pounds over 3 hours, with some releases as high as 12,400 lbs/2-hours, and 40,800 lbs over an unknown duration. SER 50-54.

EPA properly decided in the FIP to set flare limits to ensure that sources, including MSCC, have full incentive to design, operate, and maintain their facilities to minimize flare emissions by minimizing the conditions that lead to flaring, whether routine or SSM-related. 73 Fed. Reg. at 21,433.

B. The FIP Reasonably Regulates Excess Emissions From Flares During SSM Episodes

The FIP embodies a reasonable approach to regulating excess emissions at MSCC during SSM episodes. Conflicts can arise – during flaring and in other

¹⁸ Admitting that "flares can be used for handling streams other than those arising from SSM," MSCC stated that Billings industries, including MSCC, have taken "various steps over time to identify and reduce, minimize or eliminate such routine/predictable events." ER 214.

pollutant discharge situations – between “a source’s ability to control emissions during certain operating conditions and the CAA’s requirement to attain and protect the NAAQS.” 73 Fed. Reg. at 21,431. However, EPA’s “fundamental responsibility” regarding SIPs and FIPs is to ensure that the NAAQS are attained and maintained. *Id.* (citing CAA §§ 7410(a) and (l)).¹⁹ MSCC never explains how its approach – an outright exemption for flare emissions during SSM – would achieve these requirements.

The FIP is consistent with EPA’s longstanding and judicially sanctioned approach to SSM events in the implementation plan context. EPA stated: “As we explained as long ago as 1977, the appropriate approach in SIPs/FIPs is to require continuous compliance in order to create an incentive for sources to properly operate and maintain their facilities and to improve their operation and maintenance practices over time.” 73 Fed. Reg. at 21,431.

EPA explained that “while flares may have unique characteristics, the underlying conflict between the ability to comply and need to meet the NAAQS is the same.” *Id.* at 21,432. The nature of the emission point should not dictate a different approach to protecting the NAAQS:

¹⁹ Echoing its SIP Brief, MSCC asserts (Br. 18) that other plans do not contain “short-term numerical emission limits on flares,” which is not persuasive. When an area is not attaining the NAAQS, it is reasonable to apply extra measures to assure that it does. Since Montana identified a concern with flare emissions and its attainment demonstration assumed that flare emissions would be limited, EPA appropriately made restrictions on flares federally enforceable. 67 Fed. Reg. at 22,181.

Whether considering stack emissions at a power plant or other source, or flare emissions at a refinery, the SIP/FIP should be structured to provide the source with the incentive to properly design, operate, and maintain its facility. An outright exemption from the emission limits would not do this.

Id. EPA added that, to “provide relief to the sources for truly unavoidable violations, while still maintaining appropriate incentives for compliance,” the FIP provides an affirmative defense to actions for penalties for violations of flare limits during SSM events. *Id.* The elements of that defense are enumerated in the FIP and are consistent with the elements described in longstanding EPA guidance.²⁰ “The gist of these elements is that a source must take all possible steps to prevent exceedances of the limits and to minimize the amount, duration, and impact of those exceedances.” *Id.* The facility’s owner or operator must document its responsive actions and promptly notify EPA of the event. 40 C.F.R. § 52.1392(i).

MSCC argues EPA deserves no deference on this issue because the Agency’s position has been discussed in guidance documents that have “never been subject to formal rule making procedures such as a notice and comment period” and therefore are unworthy of “dispositive” “*Chevron*-style deference.” *See Br. 29* (referring to *Chevron USA Inc. v. NRDC*, 467 U.S. 837 (1984)). The

²⁰ Amici argue that EPA imposed one of those elements without benefit of notice and comment, but MSCC makes no such argument and therefore Amici are precluded from doing so. In any event, the element Amici complain of was a reasonable outgrowth of EPA’s proposal.

Tenth Circuit rejected such an argument in *Arizona Public Service Co. v. EPA*, 562 F.3d at 1129-30, involving a challenge to EPA's treatment of excess emissions resulting from malfunctions. New Mexico's SIP did not treat excess emissions from malfunctions as CAA violations, but the FIP in that case did. *Id.* However, consistent with EPA's longstanding policy, the FIP allowed the source an affirmative defense to penalties if it could show that the malfunction resulted from a sudden and unavoidable failure of a process or equipment. *Id.* In upholding the FIP, the court stated: "We defer to the EPA's longstanding policy, for the policy is a reasonable interpretation of the Clean Air Act." *Id.*

MSCC ignores that, in promulgating the FIP, EPA simply referred to the guidance as part of its explanation of the legal and policy rationale for its approach. The FIP rulemaking process provided the very notice and comment process on the application of EPA's interpretation that MSCC demands. That EPA's prior guidance was not developed through such a process is thus irrelevant. Moreover, EPA's final action on the FIP is founded on its interpretation of the statute itself, not the guidance. Because the FIP was promulgated in the exercise of EPA's delegated authority to make rules carrying the force of law under the CAA, its interpretation of the applicable CAA provisions is entitled to *Chevron* deference under *United States v. Mead Corp.*, 533 U.S. 218, 226-27 (2001).

The FIP also comports with EPA's approach in other implementation plan rulemakings involving SSM provisions. In *Michigan DEQ*, 230 F.3d at 183, the

Sixth Circuit found that EPA properly disapproved a SIP revision containing an automatic exemption for violations during SSM. EPA's disapproval of Michigan's SSM exemption reflected EPA's interpretation of § 7410 and application of its SSM guidance memoranda. 230 F.3d at 183-85. The court cited "the deference we owe to the EPA's decision," found EPA's application of its policy reasonable, and faulted Michigan for failing to prove that its exemption would not interfere with NAAQS attainment. *Id.* at 185. This Court should likewise defer to EPA's statutory interpretation and notice-and-comment application of Agency guidance in promulgating the FIP.^{21/}

Although *Michigan DEQ* is on point, MSCC relegates it to a footnote (Br. 29 n.6), suggesting it carries no weight because it predates *United States v. Mead Corp.*, 533 U.S. 218 (2001). However, in promulgating the FIP, EPA undertook notice-and-comment rulemaking pursuant to the express congressional delegation of authority in § 7410, and was not bound by the guidance memorandum.

MSCC also cites (Br. 29 n.6) *Sierra Club v. Georgia Power Co.*, 443 F.3d 1346, 1354 (11th Cir. 2006), arguing that the court there declined to accord EPA's guidance "the same level of deference as formally adopted rules." *Sierra Club*

^{21/} To the extent that MSCC challenges EPA's technical decision that federally enforceable flare limits are needed to ensure NAAQS attainment (*see, e.g.*, MSCC Br. 22, asserting that the limits are unnecessary), this Court should also defer to EPA's findings.

does not help MSCC. In that case, a citizens group sued a power company for alleged CAA violations. The court explained that the current EPA-approved SIP – which allowed excess emissions under certain conditions during SSM episodes – was still in effect and had yet to be revoked by EPA. *Id.* at 1353. The court stated that a 2001 EPA “clarification” memorandum enunciated that EPA’s guidance was “meant to apply prospectively,” in the context of future rulemakings, and that absent “formal” regulatory action (such as a SIP revision), the EPA policy did not constitute a change to the existing SIP. *Id.* at 1354. In the court’s words, EPA policy guidance that is not embodied in a formal rule does not “trump” an existing EPA-approved SIP provision. *Id.* The Eleventh Circuit further stated that, if “EPA believes that its current interpretation of the Clean Air Act requires Georgia to modify its SSM Rule, the EPA should require the state to revise its SIP to conform to EPA policy.” *Id.* at 1355. EPA’s FIP action here was entirely consistent with the holding in *Sierra Club*. Through its FIP – a “formal” rule – EPA applied its SSM interpretations prospectively.

MSCC cites several of this Court’s decades-old decisions pre-dating EPA’s development of its position on SSM events. *See* Br. 32-34 (citing *Bunker Hill Co. v. EPA*, 572 F.2d 1286 (9th Cir. 1977), and *Marathon Oil Co. v. EPA*, 564 F.2d 1253 (9th Cir. 1977)). MSCC fails to mention that EPA adopted the SSM interpretation on which the FIP’s flare limits are largely grounded in 1977 as part of EPA’s response to this Court’s remand in *Bunker Hill*. *See* 42 Fed. Reg. at

58,171 (Nov. 8, 1977). In other words, EPA's 1977 SSM interpretation was the corrective action on the *Bunker Hill* remand.

Marathon Oil is even less relevant. That case did not involve EPA's SSM interpretation for implementation plans or an affirmative defense provision, and dealt with exemptions to technology-based standards under a different statute (the Clean Water Act). Moreover, unlike the FIP, *Marathon Oil* addressed EPA rules treating "upset" conditions only through the exercise of enforcement discretion, depending entirely on the absence of prosecution to provide sources relief from any liability for violations occurring during upsets. The FIP operates differently.

MSCC also asserts (Br. 8, 18) that the FIP improperly "limits" flaring during SSM events because flares are "a critical safety device" and postulates that compliance with the FIP will have dire consequences. However, the FIP acknowledges the role of flaring in the refining process and imposes reasonable limits that MSCC never disputes can be met during normal operations.

MSCC argues (Br. 32) that it will commit "inevitable violations" of the flare limits and faces the possibility of lawsuits following SSM episodes. While some violations may be unavoidable, "sources have a responsibility to do their best to achieve continuous compliance and to minimize the number, duration, and severity of malfunctions and other events leading to excess emissions."

73 Fed. Reg. at 21,432. MSCC has available to it an affirmative defense that would insulate it in appropriate circumstances from monetary penalties. 40 C.F.R. § 52.1392(i).

EPA explained why it limited the affirmative defense to monetary penalties: “We believe it is reasonable to retain the authority to seek injunctive relief for all exceedances of emission limits so that we remain able to protect the NAAQS, regardless of source ‘culpability’ for any specific exceedance.” 73 Fed. Reg. at 21,435. MSCC does not explain how the potential of facing claims for injunctive relief renders EPA’s action arbitrary and capricious. Injunctive relief is not automatic – it must be awarded by a court in a specific case and tailored to the facts at hand. Nor does MSCC explain why its “need” to pollute supercedes attainment of the NAAQS.

MSCC suggests (Br. 32) that potential liability might be great because SSM events are “inevitable” and of such magnitude that the limit will be violated. At the same time, MSCC downplays the significance of its flares’ SO₂ emissions, implying that they are not of a frequency, extent or duration to have any negative air quality impacts. Similarly, in its SIP Brief (at 56), MSCC states that SSM events occur only “very infrequently.” Yet here, MSCC claims (Br. 21) that the flare limits “will cause MSCC to repeatedly violate the Act.” Moreover, MSCC substantiates none of these claims.

MSCC argues that the FIP is at odds with EPA’s New Source Performance Standards (“NSPS”) promulgated under CAA § 7411(a)(1)²² – technology-based

²² Section 7411(a)(1) provides that a new source “performance standard” must reflect “the degree of emission limitation achievable through the application of the
(continued...) ”

standards that do not have to show attainment of a NAAQS. *See* Br. 23-24 (citing “Standards of Performance for Petroleum Refineries; Final Rule,” 73 Fed. Reg. 35,838 (June 24, 2008)). MSCC’s reliance on this rule is misplaced. First, MSCC repeatedly cites the non-final NSPS proposal (72 Fed. Reg. 27,178), as if it represents EPA’s final NSPS rule. *See* Br. 24-25.^{22/} Second, MSCC omits that EPA’s treatment of flares under the NSPS remains in flux. In response to petitions to reconsider the NSPS, EPA on September 26, 2008, issued a stay for the issues raised, and on December 22, 2008, published a new set of proposed amendments for flares, for which EPA has not yet taken final action. *See* 73 Fed. Reg. 78,522. Therefore, the NSPS’ still non-final approach to flares in no way undermines EPA’s reasoning in not promulgating an SSM exemption in the FIP. Nor does MSCC’s reliance on EPA’s actions in the NSPS context rebut EPA’s conclusion that, under implementation plans, emission limitations must ensure that ambient levels of criteria pollutants such as SO₂ do not ever exceed specified healthful levels.

Further, the June 2008 NSPS rule that MSCC cites and relies on was not

^{22/}(...continued)

best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements)” EPA determines has been “adequately demonstrated.”

^{23/} MSCC asserts (Br. 24, emphasis added) that in the “NSPS *rules*,” EPA noted that flares are a safety device. MSCC then cites not the NSPS rule but the *proposal*.

promulgated (and subsequently stayed) until *after* the April 2008 FIP was issued. Case law compels disregarding MSCC's reliance on such post-decisional information. The Court's role is to determine whether EPA's decision is "sustainable on the administrative record." *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 549 (1978) (citing *Camp v. Pitts*, 411 U.S. 138, 142 (1973), for axiom that "focal point for judicial review should be the administrative record already in existence, not some new record made initially in the reviewing court"). *See also Ctr. for Biological Diversity v. Fish & Wildlife Serv.*, 450 F.3d 930, 943 (9th Cir. 2006) (challengers in record review cases may not use post-decisional information to attack agency's decision). This Court should disregard MSCC arguments relying on information post-dating the FIP. *See Rybachek v. EPA*, 904 F.2d 1276, 1296 n.25 (9th Cir. 1990) (granting EPA's request to strike portions of appellant's briefs relying on extra-record information).

MSCC ignores an important recent case involving another technology-based CAA program – EPA's "National Emissions Standards for Hazardous Air Pollutants" (or "NESHAPs") program under CAA § 7412. In *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), the court held that EPA rules exempting major sources from emission standards during SSM periods violated the CAA's requirement in § 7412 that "some standard" meeting that provision's substantive requirements "apply continuously." *Id.* at 1028. The court relied in part on the fact that § 7602(k) defines "emission limitation" to mean "a requirement established by the State or the Administrator which limits the quantity, rate, or

concentration of emissions of air pollutants on a continuous basis.” *Id.* While the level of required control under § 7412 is not relevant here, that case’s outcome is consistent with EPA’s position that automatic exemptions from SIP and FIP emissions limits during SSM episodes is at variance with § 7410’s requirement that implementation plans ensure NAAQS attainment via “enforceable emission limitations” controlling emissions on a continuous basis. § 7410(a)(2)(A).

C. The FIP’s Flare Monitoring Requirements Are Reasonable

As explained in the FIP (73 Fed. Reg. at 21,449), EPA proposed that compliance with the flare emission limits would be determined by continuous measurement of the (1) total sulfur concentration and (2) volumetric flow rate of the gas stream to the flare(s), followed by calculation of SO₂ emitted per 3-hour period. Sources would be required to install and operate a “continuous flow monitoring” system” to measure the total volumetric flow of the gas stream combusted in a flare, and an “online analyzer” system to measure the total sulfur concentration of the gas stream sent to a flare.

In the final FIP, EPA also allowed use of other methods – grab or integrated sampling – to determine total sulfur concentration. The FIP also allows sources to use a means other than the flow monitor to determine that the flare is not operating when the monitor registers low flow.²⁴

²⁴ Sources may use devices that monitor the integrity of the flare water seal. If these devices indicate that no flow is going to the flare even though the monitor
(continued...)

EPA advised that estimating flare emissions is not a “sufficient substitute for real-time monitoring” under the FIP. 73 Fed. Reg. at 21,424. EPA explained that appropriate flow meters are available and that “other regulatory authorities are requiring such flow meters with success.” *Id.* at 21,425. EPA identified sources where sulfur analyzers were employed and noted successful results from a South Coast pilot study, including the fact that two refineries had already placed orders for analyzers. *Id.* at 21,427.

MSCC argues (Br. 35) that the FIP’s volumetric flow monitoring requirements are “technically infeasible.”^{25/} However, during public comment, MSCC conceded that the “core flowmeter technology application for flare systems seems to be an established technology.” 73 Fed. Reg. at 21,425; ER 202.

Although MSCC questioned the capabilities of the flare flow monitors during low-flow conditions, EPA considered those comments and adjusted the monitoring requirements accordingly. 73 Fed. Reg. at 21,425-27.^{26/}

^{24/}(...continued)

indicates there is flow, the presumption will be that no flow is going to the flare.

^{25/} MSCC offhandedly contends (Br. 34) the requirements are “onerous” and “expensive” but fails to support that assertion.

^{26/} MSCC now advances a new claim (Br. 35) that EPA conceded in the refinery NSPS rulemaking proposal that “monitoring extremely low rates of flow to flares during routine operations is technically infeasible.” However, the passage from the *proposed* rule that MSCC cites for that proposition (72 Fed. Reg. at 27,178, 27,182 (May 14, 2007)) contains no such EPA statement. Furthermore, EPA did promulgate continuous flare gas flow and concentration monitoring provisions in
(continued...)

Regarding total sulfur concentration monitoring, MSCC suggests (Br. 35) that compliant technology is “merely in pilot testing” and unavailable for continuous monitoring, but MSCC fails to acknowledge that EPA revised the FIP to allow sources alternative means – grab sampling or integrated sampling — to monitor total sulfur concentrations in the gas stream to flares. 40 C.F.R. § 52.1392(h)(3)(i)(B). *See also* 73 Fed. Reg. at 21,462, 21,428-29. These alternative methods are similar to those allowed by California’s Bay Area Air Quality Management District in its flare monitoring rule. *Id.* at 21,429. The FIP’s inclusion of alternative means to monitor total sulfur concentrations in the flare gas moots MSCC’s concerns about continuous concentration monitors.

Also, MSCC (Br. 35) focuses on one aspect of the record – the South Coast pilot study. However, EPA relied on multiple factors in addition to that study to conclude that compliant continuous total sulfur monitors were available. EPA considered information provided by vendors and regulators; a local government report that South Coast refineries had placed orders for total sulfur analyzers; and ExxonMobil’s statements that it intended to use gas chromatography instruments (similar to those it was using on flares at its refineries elsewhere) to meet

²⁶(...continued)

the final NSPS rule. *See* 73 Fed. Reg. at 35,843, 35,855-56, and 35,880. Further, as stated *supra*, EPA granted reconsideration and issued a stay for issues regarding process heaters and flares, and on December 22, 2008, proposed further amendments regarding flares but has not yet taken final action on that proposal. 73 Fed. Reg. 78,522.

requirements to monitor sulfur going to its flare. *See* 71 Fed. Reg. at 39,264-65; 73 Fed. Reg. at 21,427-30. EPA therefore had ample record support to conclude that continuous total sulfur monitoring is feasible.

IV. EPA REASONABLY IMPOSED A “FIXED” EMISSION LIMIT ON MSCC’S 100-METER STACK

As EPA discussed in its proposed SIP rule, Montana’s SIP adopted a “novel” strategy for three Billings/Laurel sources. For MSCC and Montana Power, emission limitations would vary depending on the “buoyancy flux” of the SO₂ gas plume exiting their stacks. Buoyancy flux is a function of the gas’s flow rate and temperature, which fluctuate within certain parameters. 64 Fed. Reg. at 40,794-95.^{27/} ExxonMobil’s emission limitations for its fluid catalytic cracking unit would vary depending on feed rate.

Montana’s strategy was highly complex because it was based on computer dispersion modeling involving many variables and would require constant attention by plant operators to determine emissions limitations at any point in time and keep pollution within those limitations. EPA proposed approval of the variable limitations for Exxon and Montana Power, citing Montana’s assurances that they could be monitored and enforced and noting that Montana had addressed concerns regarding back-up monitoring systems and data availability to determine

^{27/} To determine their emission limitation on a real-time basis, Montana Power and MSCC would use continuous flow-rate monitors and in-stack thermometers; Exxon would use data from a continuous feed rate meter, with actual SO₂ emissions monitored in-stack.

the emission limitations. EPA proposed disapproval, however, of variable limitations for MSCC, and reaffirmed that position in its final SIP disapproval. 67 Fed. Reg. at 22,206.

As EPA explained in the SIP case (EPA SIP Br. 34, n.35), it disapproved variable limits for MSCC because Montana had erroneously set limits for MSCC's 100-meter stack based on stack height credit that exceeded good engineering practice ("GEP"), leaving EPA unable to approve *any* emission limits – fixed or variable – for that stack. 67 Fed. Reg. at 22,206-07. Although not the reason EPA disapproved MSCC's stack limits, EPA noted that variable limits generally increase regulatory workload and "add a layer of complexity that is not found with fixed emission limitations," *id.* at 22,207, and explained that because of this "enforcement complexity" it disagreed with comments that variable limits are generally a "superior" approach to setting emission limits. *Id.* Despite these reservations, EPA approved the variable limitations for Exxon and Montana Power, but with the caveat that if it finds it too difficult to enforce, EPA would reconsider its approval. *Id.* EPA could not take this approach regarding MSCC's variable limits, due to the improper stack height credit Montana had granted.

For MSCC's 100-meter stack, EPA proposed fixed FIP emission limits, which it found "less complicated to model, monitor, and enforce" than variable ones. 71 Fed. Reg. at 39,268. EPA noted that Montana's modeling to determine emission limits for the three variable emission-limited sources required 1320

modeling runs, a substantial regulatory effort. *Id.*²⁸ EPA determined that based on actual emissions data for 2003-2005, MSCC could meet EPA's proposed fixed 3-hour and 24-hour limits, without installing additional pollution controls. *Id.* See also SER 46-49; SER 42-45; SER 41. MSCC acknowledged that it was able to meet the fixed limits [ER 181] and, notably, did not seek a stay of those limits.

In the final FIP (73 Fed. Reg. at 21,445), EPA reaffirmed its proposal and noted that "fixed limits are the norm in SIPs throughout the country."²⁹ EPA added that since it was assuming responsibility for establishing emission limitations for the 100-meter stack and enforcing the FIP, its exercise of discretion to "simplify FIP development and enforcement" was reasonable, particularly where data showed that MSCC was able to comply with fixed limits without any additional controls. 73 Fed. Reg. at 21,445. Also, as this Court noted in *Central Arizona*, 990 F.2d at 1541, EPA "stands in the shoes" of the State when it issues a FIP. Because Montana could have imposed fixed limits as a means to attain the NAAQS, the same discretion accrued to EPA in issuing the FIP.

MSCC does not dispute that variable emissions limits are more complex to

²⁸ In comparison, by using a fixed rather than a variable buoyancy flux value for modeling MSCC, EPA needed to model only approximately 50 scenarios in issuing the FIP. 73 Fed. Reg. at 21,444.

²⁹ EPA stated that, to its knowledge, the Billings/Laurel SIP limits for Exxon Mobil and Montana Power are unique: "The thousands of other emission limitations nationwide are based on a single fixed buoyancy flux value similar to what we proposed for MSCC." 73 Fed. Reg. at 21,444.

model, monitor, and enforce, but argues (Br. 37) that such complexity is not “insurmountable” and that it was arbitrary for EPA to impose a fixed limit on MSCC while allowing variable limits for ExxonMobil and Montana Power. MSCC misses the mark. EPA never contended that variable limits pose insurmountable difficulties. Rather, as EPA pointed out, EPA is required to assure that its FIP is enforceable. In addition to confirming that the variable emission limitation was determined correctly, a regulator needs to confirm that the source is in compliance with that limitation. As the regulatory authority assuming the lead in enforcing the FIP, EPA reasonably chose not to take on the increased burdens, particularly with respect to enforcement, inherent in variable limits. 73 Fed. Reg. at 21,445.³⁰

V. THE FIP REASONABLY REGULATES MSCC’S POLLUTION-EMITTING 30-METER AND AUXILIARY VENT STACKS

MSCC has five auxiliary vent stacks and a 30-meter stack, all of which discharge air emissions from MSCC boilers and heaters. 67 Fed. Reg. at 22,169, 22,202-04; 64 Fed. Reg. at 40,800. EPA disapproved the SIP’s auxiliary stacks emission limitation for MSCC because it (1) did not restrict the sulfur content of the fuel burned in the boilers and heaters when they are exhausting through the auxiliary stacks, and (2) lacked a monitoring method to make the limitation practically enforceable. Without sulfur restrictions and a monitoring method,

³⁰ Regarding MSCC’s claim (Br. 38-39) that EPA “punished” MSCC and had a “retaliatory motive” in assigning MSCC a fixed limit, EPA denies those assertions and directs the Court to the Agency’s reasoned basis for its decision.

emission limitation violations could go undetected. 67 Fed. Reg. at 22,170.^{31/}

The 30-meter stack presents similar issues. EPA limitedly approved the 30-meter stack's SO₂ emission limitation (12 lbs/3-hour period, the same limitation as applies to the auxiliary stacks) but also limitedly disapproved it because it neither adequately limited the amount of hydrogen sulfide (H₂S) in the fuel burned in the boilers and heaters that exhaust from that stack, nor provided a method for measuring that fuel's H₂S concentrations. 67 Fed. Reg. at 22,171, 22,205.^{32/}

The FIP remedies those deficiencies by establishing mass emission limitations and compliance-determining methods for both the auxiliary stacks and the 30-meter stack.^{33/} To determine compliance, the FIP establishes concentration limits on the fuel burned in the units that vent to these stacks – 160 ppm H₂S/3-hours (an increase from the proposed 100 ppm/3-hours limit) and 100 ppm H₂S/calendar day.^{34/} 73 Fed. Reg. at 21,446-47, 21,452. EPA found that these fuel

^{31/} EPA also disapproved Montana's attainment demonstration because it relied on the disapproved auxiliary stacks limitation. *Id.* at 22,171.

^{32/} In a limited approval/disapproval, the provision is incorporated into the federally-enforceable SIP for its strengthening effect but is simultaneously disapproved because it does not meet CAA requirements.

^{33/} The FIP adopted the same SO₂ mass emission limits for the six stacks that the State imposed in the SIP – 12 lbs/3-hours, 96 lbs/day, and 35,040 lbs/calendar year. 73 Fed. Reg. at 21,451-52.

^{34/} When specified trigger events occur, MSCC must measure the H₂S

(continued...)

limits could be monitored at reasonable cost and would ensure protection of the NAAQS. *Id.* at 21,447.

MSCC argues (Br. 40-41) that SO₂ emissions from its boilers and heaters are “trivial,” especially compared to the larger amounts of pollution its 100-meter stack discharges, and that it is “unnecessary” to regulate them. MSCC asserts (Br. 42) that EPA unreasonably “seized upon a State limit” and added “expensive” monitoring requirements applicable to the stacks.^{35/}

EPA must assume that emission limitations on the small stacks, like the SIP’s other emission limitations, were established to assure that the NAAQS are attained. Montana included those limitations in its SIP as part of its control strategy supporting attainment, and such limitations must be enforceable. *See* 67 Fed. Reg. at 22,202, 22,204. *See also* FIP proposal, 71 Fed. Reg. at 39,268-69.

^{34/}(...continued)

concentration in its fuel utilizing widely used and available “length-of-stain” detector tubes. EPA crafted these requirements to track those in MSCC’s State operating permit. 73 Fed. Reg. at 21,446.

^{35/} MSCC asserts (Br. 42) that EPA “exempted” the vent stacks of other “local” sources from such limits. However, MSCC ignores the basis for EPA’s approach in its SIP disapproval – *i.e.*, that MSCC’s auxiliary stacks are part of a major source already controlled in the SIP, whereas other local vent stacks appeared to be truly minor sources whose emissions were included in the background concentration that was used in the area’s modeling. 67 Fed. Reg. at 22,203. EPA “typically include[s] minor emission points (where the emission point is the entire source) in the background concentration.” *Id.* Other emission points covered by the SIP also have emission limits in the same order of magnitude as MSCC’s small stacks. Compliance with the emission limit is determined through SO₂ and flow rate continuous emission monitors and annual source testing. SER 1-9.

By restricting the sulfur content of the fuel burned in the boilers and heaters when they are exhausting through the small stacks, and adding monitoring requirements, the FIP accomplishes that end.

EPA decided that the simplest and least expensive way to determine compliance with the 12 lbs/3-hours emissions limit was through an H₂S ppm limit, which EPA assumed to be consistent with the lb/hr limit assuming that all units were venting to stacks. This simplifies matters for MSCC, which only has to measure H₂S ppm concentration to determine compliance with the lb/hr limit, rather than measuring concentration and flow to determine compliance with the limit. Determining direct compliance with the mass limits would either require additional monitoring equipment or methods and/or would be unreliable due to potential variation in boiler use and venting practices. 73 Fed. Reg. at 21,446, 21,452.

MSCC (Br. 42-43) asserts that the FIP's fuel concentration limits are based on the "false premise" that all five of MSCC's boilers would vent to the small stacks at the same time. MSCC's concern is that it could violate the concentration limits even when venting only one boiler and the resulting emissions are less than 12 lb/3 hours. However, the SIP did not restrict how many MSCC boilers could vent to its small stacks at any one time; thus, to be conservative EPA reasonably assumed that all boilers could be venting to these stacks at once. 71 Fed. Reg. at 39,268; 73 Fed. Reg. at 21,447. Further, while MSCC avows (Br. 43) that it "cannot vent all five boilers to the auxiliary stacks or 30 meter stack," MSCC's

own comments indicate that such an event is possible. ER 235.

To ameliorate MSCC's concern, EPA increased its proposed H₂S concentration limit from 100 ppm to 160 ppm per 3-hour period in the final FIP.³⁶ EPA selected 160 ppm for two main reasons: first, modeling showed it was consistent with protection of the 3-hour NAAQS; second, evidence indicated that MSCC should already be complying with it and the 100 ppm 24-hour limit, based on the fuel gas scrubbing technology used (amine unit) and the restriction in the SIP that MSCC burn only "low sulfur" gas. 73 Fed. Reg. at 21,446-47.³⁷

In restricting the sulfur content of the fuel burned in MSCC's boilers and heaters when they exhaust through the small stacks, and adding a monitoring method that would make the limit practically enforceable, EPA acted reasonably.³⁸

³⁶ Previously, in discussing MSCC's (and other sources') potential to violate stack emission limitations if they burn fuel high in H₂S, EPA noted that other sources controlled by the SIP have continuous emissions monitors or other methods to measure the sulfur content of the fuel they burn. "Therefore, for the other sources there is a better tool to assess whether emission limitations are being met." 67 Fed. Reg. at 22,203. EPA added that the SIP required MSCC to periodically report estimated 3-hour and 24-hour SO₂ emissions from its auxiliary vent stacks (SIP SER 124-25), so MSCC already needed to know H₂S concentrations in fuel burned in its boilers and heaters.

³⁷ Notably, MSCC did not comment that it could not comply with EPA's proposed 100 ppm limit; nor did it seek to stay the final FIP limits for its small stacks.

³⁸ Assuming *arguendo* that the small stack limits and monitoring methods exceeded what was minimally necessary, EPA's actions were reasonable under *Central Arizona* and *Arizona Public Service*.

VI. EPA PROPERLY USED A STACK HEIGHT CREDIT OF 65 METERS TO SET LIMITS FOR MSCC'S 100-METER STACK

Once EPA disapproved Montana's SIP limits for MSCC's 100-meter stack due to excessive stack credit, EPA was required to establish FIP limits for that stack using the stack's valid GEP height. 40 C.F.R. § 51.118 ("the degree of emission limitation required of any source . . . must not be affected by so much of any source's stack height that exceeds good engineering practice"). *See also* § 7423(a).³⁹ This restriction favors emissions controls over the dispersive effects of tall stacks as the means to meet the NAAQS. *See, e.g., Sierra Club v. EPA*, 719 F.2d 436, 439-41 (D.C. Cir. 1983).⁴⁰

GEP stack height is the greater of: (1) 65 meters ("de minimis" height); (2) the height determined using the applicable formula ("formula height") (in this case, the applicable formula being $H + 1.5L$, where H is the height and L is the lesser of the height or width of a nearby structure, as defined at 40 C.F.R. § 51.100(jj)); or (3) the height demonstrated using fluid modeling (wind tunnel testing using a scale model) or a field study conducted in accordance with the regulations. 40 C.F.R. § 51.100(ii)(1)-(3).⁴¹

³⁹ GEP stack height is one of many inputs that states and EPA plug into the computer dispersion models used in attainment demonstrations.

⁴⁰ For a complete discussion of the stack height legal framework, *see* EPA's SIP Br. 34-48.

⁴¹ 40 C.F.R. § 51.100(ii)(2) provides that EPA or the state may also require a fluid
(continued...)

MSCC alleges (Br. 45) that EPA failed to make “an independent determination” of GEP stack height credit and consider MSCC’s various stack height demonstrations. MSCC misunderstands the FIP and its relationship to EPA’s SIP action.

EPA’s FIP proposal announced its intent to set limits for MSCC’s stack using GEP credit of 65 meters. 71 Fed. Reg. at 39,269. This resulted from EPA’s 2002 SIP action, which fully analyzed and rejected Montana’s 97.5 meter stack height determination and all of MSCC’s alternative GEP demonstrations (*see* 67 Fed. Reg. at 22,209-38), and reasonably concluded that 65 meters was GEP height for MSCC’s stack. *See* 67 Fed. Reg. at 22,231-32, 22,236. EPA received no information between its 2002 SIP disapproval and 2008 FIP supporting a higher value.

In comments on EPA’s proposal, MSCC submitted “summaries” of the stack height comments it had submitted in the SIP context and referred “the reader” to those comments for further detail. ER 170, 226-29. In response, EPA incorporated by reference its responses from its SIP action. 73 Fed. Reg. at 21,445.^{41/} In commenting on EPA’s proposed FIP, MSCC submitted no new

^{41/}(...continued)
modeling study “to verify” formula height.

^{42/} MSCC repeatedly cites (Br. 44-47) another set of its comments (ER 330-54), but it did not submit those until March 13, 2008, 16 months *after* the comment period closed, and just two weeks before the Administrator signed the final FIP

(continued...)

information, identified no new nearby structures supporting formula height greater than 65 meters, and submitted no new fluid modeling demonstrations.

Consequently, EPA reasonably relied on the information and analysis from its SIP action, and determined that GEP height for MSCC's stack was 65 meters.^{43/}

EPA explained that Montana had calculated formula height at 47.8 meters (157 feet). 73 Fed. Reg. at 21,446. Before MSCC began arguing that the 94.5-meter tall, 8-foot wide stack support could be used to calculate a formula height of 98.15 meters, MSCC agreed that 47.8 meters (157 feet) was formula height. *See* EPA SIP Br. 37; SIP SER 173.

In its SIP action, EPA properly rejected MSCC's assertion that the stack support structure could be used to calculate formula height. 67 Fed. Reg. at 22,223-29; EPA SIP Br. 47-48. Thus, heights of 97.5 meters, 98.15 meters, and 100 meters – indeed, any heights above 47.8 meters – were “above-formula.”

^{42/}(...continued)

action. (MSCC misdates those comments as March 13, 2006 in its ER index.) EPA included these late-filed comments in its administrative record but was not required to consider them. *See, e.g., Bd. of Regents of Univ. of Wash. v. EPA*, 86 F.3d 1214, 1222 (D.C. Cir. 1996) (EPA was “under no obligation to consider petitioners’ comments in the first place, as they were submitted well after the close of the comment period.”). Under §§ 7607(d)(4)(B)(i) and (7)(A), the record for judicial review includes only timely-submitted public comments. In any event, MSCC's late comments merely summarized its previous comments on EPA's proposed SIP action, to which EPA did respond at length.

^{43/} That analysis was based on EPA's interpretation of its stack height regulations and EPA's exercise of technical expertise and thus is entitled to “great deference.” *Wickland Oil*, 792 F.2d at 891; *Env'tl. Def. Ctr.*, 344 F.3d at 869. *See also* EPA SIP Brief 43, 45.

Accordingly, any heights above de minimus height (65 meters) could be justified only through valid above-formula fluid modeling demonstrations under 40 C.F.R. § 51.100(kk)(1). 67 Fed. Reg. at 22,226-27, 22,231-33; SIP Br. 47-48. However, MSCC's above-formula fluid modeling demonstration for the SIP was invalid. 67 Fed. Reg. at 22,209-23. MSCC could not avail itself of the demonstration provisions of § 51.100(kk)(2) and (3) because they only apply to within-formula fluid modeling demonstrations. 67 Fed. Reg. at 22,226-27, 22,231-33; EPA SIP Br. 38, 47-48.

MSCC argues that EPA never considered its alternative GEP theories (Br. 44), but in every instance EPA did consider and respond to them. *See, e.g.*, 67 Fed. Reg. at 22,223 (“Nonetheless, we respond to the comments on the first issue and explain why we believe the stack support structure may not be used to calculate formula height.”); 22,229 (“Although we believe these comments are irrelevant to our action, we respond to them here.”). EPA's responses extensively discussed the legal deficiencies in MSCC's demonstrations. Thus, MSCC's statements (Br. 45, 47) that EPA provided “some general comments” but never explained “how the other demonstrations were deficient or inconsistent with regulations” are untrue. *See* 67 Fed. Reg. at 22,209-38.

MSCC makes several other misleading statements. It suggests (Br. 46) that EPA merely “questioned” the formula's application to MSCC's stack and should have allowed verification through fluid modeling. In fact, EPA determined that the formula *could not be* applied to the stack support. 67 Fed. Reg. at 22,223-28.

Thus, there was no 98.15 meter formula height to verify through fluid modeling.

Referring to its late comment letter (Br. 47), MSCC cites a 1985 EPA guidance document for the proposition that formula height based on unusually shaped structures like the stack support structure should be verified through fluid modeling. But the cited guidance does not address stack supports that are not a separate, nearby structure. The support is part of MSCC's stack, and allowing use of part of the stack in formula calculations would lead to the absurd result that a source could justify any stack height simply by appending a support structure to the desired height. 67 Fed. Reg. at 22,223-24; EPA SIP Br. 47.⁴⁴ Further, EPA's 1985 stack height Technical Support Document specifically states that stacks, TV towers, and radio towers, as distinct from the cooling towers referred to in the guidance that MSCC cites, "should not be considered in GEP stack height determinations." SER 27.

MSCC claims (Br. 47-48) that the power plant next to MSCC built major structures after EPA's SIP disapproval "that have an enormous downwash effect on emissions from MSCC's main stack." MSCC offers no record support for this statement, other than citing a section of EPA's final FIP that is unrelated to stack height credit or MSCC's fluid modeling. MSCC cites no record evidence that such unspecified structures are within the definition of "nearby" under 40 C.F.R. §

⁴⁴ As EPA noted (EPA SIP Br. 47), the formula – H plus 1.5L – always yields a value that exceeds the height (H) of the nearby structure to which the formula is applied.

51.100(jj) for purposes of calculating formula height or performing fluid modeling demonstrations. And, because this assertion was not raised with reasonable specificity during the comment period, MSCC may not raise it for the first time on appeal. § 7607(d)(7)(B).

MSCC also claims (Br. 48) EPA arbitrarily approved Montana's grant of stack height credit for Exxon based on fluid modeling under 40 C.F.R. § 51.100(kk)(3) but denied credit to MSCC based on a similar demonstration. That objection goes to EPA's SIP action, not to EPA's FIP. EPA fully explained in its SIP action that Exxon was seeking within-formula credit (to raise its existing stack to 76.7 meters under § 51.100(kk)(2)), not above-formula credit, and that the nearby structures were significantly different from MSCC's stack support and not part of the stack. *See* 67 Fed. Reg. at 22,215-16. EPA's treatment of MSCC was not arbitrary or unfair.^{45/}

VII. EPA ACTED REASONABLY IN SETTING MSCC'S EMISSION LIMITS WITHOUT RELYING ON RESTRICTIONS FOUND IN OTHER SOURCES' CONSENT DECREES

MSCC argues the FIP arbitrarily "ignores" the effects of consent decrees that several area refineries (but not MSCC) entered with the State. MSCC asserts (Br. 55) EPA unlawfully "modeled as if the decrees (and resulting emission reductions) simply did not exist."

^{45/} MSCC's argument that it needs greater stack height credit appears to be academic given the emissions data showing that MSCC would meet the FIP's short-term limits without installing additional control equipment. *See* SER 46-50, SER 42-45.

The CAA requires that stationary source emission limits necessary to demonstrate attainment must be included in the SIP or FIP. 73 Fed. Reg. at 21,421, citing §§ 7410(a)(2)(A), (i), (k)(3)-(6), and (l). Likewise, a SIP must demonstrate that the “measures, rules, and regulations contained in it” are adequate to provide for the timely attainment and maintenance of the NAAQS. 40 C.F.R. § 51.112(a). This “ensures that changes to those limits will only be made with EPA’s approval as a SIP or FIP revision, following notice and comment rulemaking.” 73 Fed. Reg. at 21,421-22. The consent decrees, however, have never been submitted to EPA for approval into the SIP.

MSCC ignores the FIP’s appropriate scope and the deficiencies in the consent decree limits for SIP/FIP purposes. The FIP’s purpose was to fill gaps in the SIP, not replace it. *See id.* at 21,419, 21,421-422. EPA approved most of the SIP limits for the refineries that later entered into consent decrees. 67 Fed. Reg. at 22,240-41. EPA was not obligated to upset the State’s control strategy for these sources or assert authority to establish tighter limits in the FIP where no “gap” in the SIP existed (*See* 73 Fed. Reg. at 21,424), especially where EPA would have to substantially change the consent decree limits to support a new attainment demonstration.

The consent decree limits were deficient for SIP/FIP purposes for several reasons. *See* 73 Fed. Reg. at 21,422, 21,435, 21,438. First, some consent decree limits have averaging periods (*e.g.*, 7 or 365 days) that are longer than the averaging periods for the applicable SO₂ NAAQS (3 hours and 24 hours). *Id.* at

21,422. Short-term limits are necessary to ensure attainment of the SO₂ NAAQS. *Id.* at 21,422, 21,424, n.6, 21,438. *See also* EPA's "General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990," 57 Fed. Reg. at 13,498, 13,568 (Apr. 16, 1992) ("source-specific limits should be permanent and must reflect the assumptions used in the SIP demonstrations.")⁴⁶

Second, some of the consent decree limits are concentration-based limits (*e.g.*, 25 ppm or 50 ppm), not mass limits (*e.g.*, 150 lbs/3 hours). *See* 73 Fed. Reg. at 21,422. Flow rates are needed to translate ppm values into pounds of SO₂ for a given period of time. *Id.* at 21,435. Given the potentially great variation in flow rates to flares, EPA could not conclude that the consent decree concentration limits for flares would be sufficient to ensure attainment of the NAAQS. *Id.*

Third, some consent decree limits are subject to exceptions, for example during SSM periods. *See, e.g., id.* at 21,435; (CHS consent decree) – ER 394 (7-day FCCU SO₂ limit does not apply during hydrotreater outages); SER 37-39 (compliance with 40 C.F.R. § 60.104(a)(2) limits for sulfur recovery plant not required during SSM episodes at sulfur recovery plant or malfunction of tail gas treating unit). Emission limits relied on to attain and maintain the NAAQS must apply at all times.

⁴⁶ MSCC asserts (Br. 57) that EPA "could" have modeled emissions at the consent decree limits "however they were stated," but MSCC's comments did not suggest a method for doing so. As EPA stated, no commenter "suggested these limits be converted to FIP mass limits that would apply over a 3-hour averaging period." 73 Fed. Reg. at 21,422.

Fourth, even though the consent decrees and permits issued pursuant to the decrees are federally enforceable, the decrees have limited durations and Montana may revise the required construction permits without EPA approval.

MSCC (Br. 56) misunderstands EPA's concerns regarding the potential impermanence of the decrees and the permits reflecting them. As EPA explains (73 Fed. Reg. at 21,421), the decrees will terminate, if they have not already done so, and Title V permits merely reflect underlying applicable requirements. After the decrees terminate, the repositories for the underlying applicable requirements are the construction permits, modification of which EPA lacks authority to veto. *Id.* n.2.

MSCC's claim (Br. 56) that the underlying requirements are "carved into federally-enforceable stone" overstates the permanence of the consent decrees' terms. States can and have changed the terms of construction permits over EPA's objections. Protection of the NAAQS should not be subject to such vagaries. As EPA stated, "[t]o protect the integrity of the attainment demonstration, and our statutory role in assessing SIP/FIP adequacy, we believe that stationary source emission limits necessary to demonstrate attainment must be included in the FIP (or approved SIP)." 73 Fed. Reg. at 21,421.

VIII. EPA REASONABLY RELIED ON THE ISC MODEL, WHICH MONTANA USED TO DEVELOP THE SIP

Montana developed the SIP using the then-preferred Industrial Source Complex ("ISC") model, and EPA approved various emission limits based on the

State's modeling effort. In the FIP, EPA was not required to re-do the entire SIP but only to correct deficiencies. Accordingly, EPA relied on the same model that Montana used to develop its SIP.

Montana tested the ISC model's performance when developing the SIP and it exceeded the performance criteria for models of this type. Overall Montana found that the SIP modeling under-predicted the highest 24-hour SO₂ values by about 11 percent, and over-predicted the highest 3-hour SO₂ values by about 5 percent (Coefield, March 21, 1994 at 254). SER 13. Errors of 10 to 40 percent in highest estimated concentrations are typical in dispersion models such as ISC. *See* 40 C.F.R. Part 51, Appendix W, Section 9.1.2.

EPA's FIP modeling represents only a minor change to Montana's approach. The sources were characterized in the SIP modeling inputs as 25 point and volume sources, and EPA made minor corrections the sources suggested. The only major change involved MSCC's 100-meter stack to correct for MSCC's excessive stack height credit in the SIP modeling. Otherwise, the FIP modeling used meteorology data, receptors, and stack parameters for sources that are nearly identical to those in the SIP modeling. 73 Fed. Reg. at 21,437-38.

In 2005, EPA revised its *Guideline on Air Quality Models* ("Guideline"), which addresses the regulatory application of air quality models for assessing CAA criteria pollutants. The rule recommended a new dispersion model – "AERMOD" – for adoption in appendix A of the *Guideline* to replace ISC. 70 Fed. Reg. 68,218 (Nov. 9, 2005). EPA instituted a one-year "grandfathering"

transition period (through Nov. 8, 2006), and advised that during that period AERMOD “may” be substituted for ISC “for appropriate applications.”

AERMOD was not required and ISC remained a preferred EPA model when EPA proposed the FIP in July 2006.

EPA provided that even after the one-year transition period ended, “applications of ISC3 with approved protocols may be accepted.” *Id.* at 68,226; *see also, id.* at 68,218. Given that EPA was conducting the modeling and promulgating the FIP, there was no need to “approve” a protocol (and the model’s performance had already been tested). Thus, when EPA used the ISC model in the FIP, it was following its Guideline.

It was reasonable for EPA to finalize the FIP based on the model it used in the proposal, and that the State had used to develop the SIP. Switching models would have required re-proposal and further delayed the FIP’s promulgation. And, as EPA noted, use of the same model allowed “all emission limits” in the SIP and FIP to “have been established on the same basis.” 73 Fed. Reg. at 21,437. *See also id.* at 21,439-40. Nothing in the CAA or EPA’s regulations requires EPA to re-examine every permit and SIP every time EPA identifies new preferred models.^{47/}

MSCC argues (Br. 58) that ISC is “an outdated and inaccurate model which it’s [sic] rules no longer even allowed States to use to predict dispersion.” In

^{47/} In commenting on the proposed FIP, Montana continued to affirm use of the ISC model for the Billings/Laurel area emissions. 73 Fed. at 21,439.

MSCC's view (*id.* 59-60), EPA was legally required to utilize the newer AERMOD. However, while AERMOD is now available and EPA expects states to use it for new SIPs, Billings/Laurel presented a "unique" timing situation. 73 Fed. Reg. at 21,437. The ISC model was in use during Montana's and EPA's SIP actions, and was the preferred model when the FIP was proposed. EPA reasonably declined to re-model the area's emissions using AERMOD, particularly since no commenter submitted evidence that the result would have been materially different one way or the other. *See* 73 Fed. Reg. at 21,423 ("The commenter has not identified any modeling that contradicts our attainment demonstration, which forms the basis for the FIP's emission limitations; nor has the commenter shown that a different model would result in substantially different emission limitations.").

MSCC (Br. 61) cites *Chemical Manufacturers Ass'n v. EPA*, 28 F.3d 1259 (D.C. Cir. 1994), and asserts that the court in that case rejected EPA's "argument that it could rely on its preferred model in the face of evidence that the model would not accurately represent the pollutant's behavior." The opinion does not support MSCC. After stating that EPA has "broad discretion to make simplifying assumptions" in models, *id.* at 1264, the D.C. Circuit held that the Agency's application of the "generic air dispersion model" there in question could be deemed arbitrary and capricious only "if there is simply *no rational relationship* between the model and the known behavior of the hazardous air pollutant to which it is applied." *Id.* at 1265 (emphasis added). MSCC has not made that showing.

MSCC's statement (Br. 60) that EPA, in revising the Guideline in 2005, found multiple "instances" when AERMOD's predictions were about the same as measured pollutant concentrations, whereas ISC's predicted maximum concentrations were "about 9 times higher" than the measured concentrations, mischaracterizes the record. However, that situation only obtained in a single "most dramatic case." 70 Fed. Reg. at 68,222. EPA noted that in another situation ISC "performed better than AERMOD," with the latter's predictions even coming in "higher than the observed data" (*id.*) – a result that offers MSCC no comfort.

In short, AERMOD and ISC are both Gaussian dispersion models. AERMOD represents an incremental advance in that technology, not an entirely new modeling approach. EPA reasonably used ISC, the same model the State used to set the emission limits in the SIP, to determine emission levels consistent with attainment and to establish corresponding emission limits.

CONCLUSION

MSCC's Petition should be denied.

Respectfully submitted January 14, 2011:

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CERTIFICATE OF COMPLIANCE

I certify that this brief complies with the type-volume limitation of Federal Rule of Appellate Procedure 32(a)(7)(B) and the typeface requirements of Rule 32(a)(5) & 32(a)(6) because it is proportionally spaced, has a 14-point font Times New Roman typeface, and contains 13,921 words, as counted by Corel WordPerfect X3, excluding the portions of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

DATED: January 14, 2011

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STATEMENT OF RELATED CASES

As noted in Petitioner's Statement of Related Cases (Br. 66), Petitioner has also petitioned this Court for review of EPA's 2002 SIP action. *See Montana Sulphur & Chemical Co. v. United States Environmental Protection Agency*, Case No. 02-71657. Under the CAA, Respondent EPA is required to promulgate a FIP if it disapproves a SIP in whole or in part, unless the state corrects the deficiency, and EPA approves the plan or plan revision, before EPA promulgates the FIP. EPA therefore agrees with Petitioner that Case No. 02-71657 is related to this case. As also indicated in Petitioner's Statement of Related Cases, on March 10, 2010, this Court denied EPA's motion to consolidate Case No. 02-71657 with this case, No. 08-72642. EPA is unaware of any other "related" case, as defined in Circuit Rule 28-2.6, pending in this Court.

DATED: January 14, 2011

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CERTIFICATE OF SERVICE

I hereby certify that I electronically filed the foregoing RESPONDENT'S BRIEF and STATUTORY AND REGULATORY ADDENDUM with the Clerk of Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system on January 14, 2011. In addition, copies of RESPONDENTS' SUPPLEMENTAL EXCERPTS OF RECORD were sent this day by overnight express mail to the Court for filing, and by first class mail to counsel of record. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

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