

CASE NO. 07-9546 (CONSOLIDATED WITH NO. 07-9547)

IN THE UNITED STATES COURT OF APPEALS
FOR THE TENTH CIRCUIT

ARIZONA PUBLIC SERVICE COMPANY, Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Respondent.

SIERRA CLUB, *et al.*, Intervenors.

SIERRA CLUB, *et al.*, Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Respondent.

ARIZONA PUBLIC SERVICE COMPANY, Intervenor.

On Petitions For Review Of A Final Rule Of The
United States Environmental Protection Agency

**REPLY BRIEF OF PETITIONER
ARIZONA PUBLIC SERVICE COMPANY**

FINAL WITH
REFERENCES
TO THE JOINT
APPENDIX

January 22, 2008

Thomas Sayre Llewellyn
LAW OFFICE OF
THOMAS SAYRE LLEWELLYN
5125 MacArthur Boulevard, NW
Suite 32-A
Washington, DC 20016
(202) 237-7291
t.llewellyn@att.net

TABLE OF CONTENTS

TABLE OF AUTHORITIES	iv
SUMMARY OF ARGUMENT.....	1
ARGUMENT	3
I. THE COURT SHOULD VACATE AND REMAND THE FUGITIVE DUST LIMIT ON CONSENT, AND SHOULD NOT IMPOSE A DEADLINE FOR FURTHER ACTION.....	3
A. Conservation Groups’ Real Dispute Is With The CAA And The NAAQS.....	4
B. Because EPA’s Adoption Of The Fugitive Dust Limit Was Discretionary, The Court Lacks Jurisdiction To Impose A Deadline For Further Action.....	4
II. THE UNIT 4 AND 5 OPACITY LIMIT LACKS A RATIONAL BASIS.....	5
A. EPA Identifies No Rational Explanation For The PM Limit, Upon Which The Validity Of The Opacity Limit Depends.....	5
B. The Record Reflects No Specific Correlation Between The Twenty Percent Opacity Limit And The PM Limit.....	10
III. EPA CANNOT JUSTIFY ITS DEMAND THAT APS COMPLY WITH A LIMIT THAT IS UNACHIEVABLE AS CURRENTLY DEFINED.....	12
A. Review Of The Problem.....	12
B. Encouraging “Proper Operation” Of Equipment Is To Be Distinguished From Outlawing Unavoidable Equipment Malfunctions.....	14

C.	EPA Has The Discretion Not To Outlaw Equipment Malfunctions.....	17
D.	EPA Ignored APS’ Suggested Alternative, Even Though EPA Has Approved Similar Alternatives Elsewhere.....	23
E.	EPA’s Position On Malfunctions Is Inconsistent With Its Position On Unit Startup And Shutdown.....	27
F.	EPA Has No Defense For Its Decision To Shift The Burden Of Proof To APS.....	27
CONCLUSION		28
CERTIFICATE OF COMPLIANCE.....		29
CERTIFICATE OF DIGITAL SUBMISSION.....		30
CERTIFICATE OF SERVICE.....		30

TABLE OF AUTHORITIES

Cases

<i>Appalachian Power Co. v. EPA</i> , 135 F.3d 791 (D.C. Cir. 1998).....	11
<i>Dithiocarbamate Task Force v. EPA</i> , 98 F.3d 1394 (D.C. Cir. 1996).....	21
<i>Edison Electric Inst. v. EPA</i> , 2 F.3d 438 (D.C. Cir. 1993).....	20
<i>Environmental Defense v. EPA</i> , 369 F.3d 193 (2d Cir. 2004).....	8, 17-18
<i>Federal Power Comm’n v. Idaho Power Co.</i> , 344 U.S. 17 (1952).....	5
<i>Michigan v. EPA</i> , 268 F.3d 1075 (D.C. Cir. 2001).....	8
<i>Michigan Dept. of Env’tl. Quality v. Browner</i> , 230 F.3d 181 (6 th Cir. 2000).....	20
<i>National Tank Truck Carriers, Inc. v. EPA</i> , 907 F.2d 177 (D.C. Cir. 1990).....	28
<i>Qwest Corp. v. FCC</i> , 258 F.3d 1191 (10 th Cir. 2001).....	22
<i>Sierra Club v. Georgia Power Co.</i> , 443 F.3d 1346 (11 th Cir. 2006).....	11
<i>Sierra Club v. TVA</i> , 430 F.3d 1337 (11 th Cir. 2005).....	16
<i>Sierra Club v. TVA</i> , No. 3:02-cv-2279, slip op. (N.D. Ala. Aug. 27, 2007).....	16
<i>Train v. NRDC</i> , 421 U.S. 60 (1975).....	7
<i>Union Electric Co. v. EPA</i> , 427 U.S. 246 (1976).....	7

Statutes

Administrative Procedure Act, 5 U.S.C. §§ 551-559, 701-706 (2000).....	7-8
---	-----

Clean Air Act

§ 110(a)(2)(A), 42 U.S.C. § 110(a)(2)(A) (2000).....	17
§ 110(l), 42 U.S.C. § 7410(l) (2000).....	19, 20
§ 302(k), 42 U.S.C. § 7602(k) (2000).....	17
§ 302(y), 42 U.S.C. § 7602(y) (2000).....	8, 17
§ 307(b), 42 U.S.C. § 7607(b) (2000).....	8
§ 307(b)(1), 42 U.S.C. § 7607(b)(1) (2000).....	4
§ 307(b)(2), 42 U.S.C. § 7607(b)(2) (2000).....	14
§ 307(d), 42 U.S.C. § 7607(d) (2000).....	7

Session Laws

Clean Air Act Amendments of 1977, Pub. L. No. 95-95, 91 Stat. 685 (1977).....	18
--	----

Legislative History

H.R. Rep. No. 294, 95 th Cong., 1 st Sess. (1977).....	18
--	----

Federal Regulations

40 C.F.R. § 49.23(c)(7) (2007).....	15
40 C.F.R. § 49.23(d)(3) (2007).....	1, 3, 28
40 C.F.R. § 49.23(d)(4) (2007).....	28
40 C.F.R. § 49.23(e) (2007).....	28
40 C.F.R. § 49.23(h)(3) (2007).....	15
40 C.F.R. § 49.121 (2007).....	5
40 C.F.R. § 49.126 (2007).....	5
40 C.F.R. § 49.126(d) (2007).....	5
40 C.F.R. Part 50 (2007).....	5
40 C.F.R. Part 60, Subpart D (2006).....	11

40 C.F.R. § 60.42 (2006).....	11
-------------------------------	----

Federal Register

70 Fed. Reg. 61556 (2005).....	24, 25
70 Fed. Reg. 61557 (2005).....	25
70 Fed. Reg. 61556-57 (2005).....	25
71 Fed. Reg. 48696, 48714 (2006).....	21
72 Fed. Reg. 18428 (2007).....	26
72 Fed. Reg. 18430 (2007).....	26
72 Fed. Reg. 18431 (2007).....	19, 26
72 Fed. Reg. 18428, 18429 (2007).....	10-11
72 Fed. Reg. 25702 (2007).....	20
72 Fed. Reg. 25703 (2007).....	13
72 Fed. Reg. 25705 (2007).....	13, 15
72 Fed. Reg. 25708 (2007).....	15

State Regulations

New Mexico Admin. Code Part 20.2.14.....	11
New Mexico Admin. Code § 20.2.61.109.....	11

Prior Or Related Appeals

None.

SUMMARY OF ARGUMENT

In accordance with the Environmental Protection Agency's ("EPA's") request, the Court should vacate and remand the fugitive dust limit at 40 C.F.R. § 49.23(d)(3) (2007) on consent. Given the discretionary nature of EPA's action in promulgating the Federal Implementation Plan ("FIP") provisions at issue in this case, the Court should decline to impose a deadline for reconsideration of the fugitive dust limit.

The Court should also vacate and remand the opacity limit on Unit 4 and 5 stack emissions. The limit is purely arbitrary, even without considering the fact that the Plant cannot meet the limit as it is currently defined.

EPA has identified no rational basis for the Unit 4 and 5 particulate matter ("PM") limit, upon which the validity of the opacity limit entirely depends. EPA points to no air quality analysis or other data to show why the PM limit EPA selected is necessary to protect the National Ambient Air Quality Standards ("NAAQS"). Moreover, EPA's prior approval of the PM limit in the New Mexico State Implementation Plan ("SIP") as "technically valid" is meaningless here, because – as shown herein -- that action did not involve a finding that the limit was necessary to protect the NAAQS, either.

EPA's goal of ensuring proper operation of the baghouses that control PM emissions cannot justify the opacity limit, because the PM limit itself lacks a

reasoned justification. In any event, EPA never made a specific correlation between the opacity limit it chose and the PM limit it chose. The record is silent as to what specific opacity level translates into an exceedance of the PM limit.

Worse, EPA has imposed a requirement that the opacity limit be met 100 percent of the time, even though the record establishes (and EPA does not dispute) that the Plant cannot meet the limit 100 percent of the time. EPA refuses to build an allowance into the limit for inevitable excess emissions that are beyond APS' control, even though EPA has established no specific air quality basis for the limit to begin with, and even though EPA implicitly found that equipment malfunctions at the Plant have no likelihood of causing an exceedance of the NAAQS.

Contrary to EPA's suggestion, the Clean Air Act ("CAA" or "Act") provides EPA with the discretion to accommodate excess emissions resulting from equipment malfunctions. EPA's refusal to exercise its discretion here was unreasonable. EPA ignored the essence of APS' proposed alternative, even though EPA has approved similar alternatives elsewhere. Also, EPA's position on malfunctions is inconsistent with EPA's position on unit startup and shutdown.

Even worse, the rule presumes that excess emissions are the fault of APS and requires APS to prove otherwise to avoid liability for civil penalties.¹ It does

¹ The rule sets forth no defense to a finding of violation or to injunctive relief.

so even though the record provides no factual basis for creating such a presumption. EPA offers no defense at all to this aspect of APS' petition.

For all these reasons, EPA's adoption of the opacity limit on Unit 4 and 5 stack emissions was arbitrary and capricious. The Court should vacate and remand that limit.

ARGUMENT

I. THE COURT SHOULD VACATE AND REMAND THE FUGITIVE DUST LIMIT ON CONSENT, AND SHOULD NOT IMPOSE A DEADLINE FOR FURTHER ACTION.

By motion and in its merits brief, EPA has conceded that the fugitive dust limit at 40 C.F.R. § 49.23(d)(3) (2007) lacks an adequate basis in the record, and has asked the Court to remand and vacate that regulation. EPA Remand Mot. at 3; EPA Br. at 53. APS supports EPA's request, and Sierra Club, *et al.* ("Conservation Groups") do not oppose it. *See* Conservation Groups Resp. To EPA's Remand Mot. at 1; Conservation Groups Interv. Br. at 4. Accordingly, the Court should vacate and remand the fugitive dust limit on consent.

Conservation Groups ask the Court to order EPA (following reversal and remand) to reconsider a fugitive dust limit within a time certain. Conservation Groups Interv. Br. at 4, 6. For the following reasons, the Court should decline to impose such a restriction on the Agency's discretion.

A. Conservation Groups' Real Dispute Is With The CAA And The NAAQS.

Conservation Groups claim that air quality is poor in the region of the Plant. *Id.* at 1-3. But air quality in the region is better than all the NAAQS that EPA has adopted under the CAA. Response To Comments at 11 [JA 40].

Thus, Conservation Groups' real dispute is with the stringency of the CAA and the current NAAQS, and not with the FIP or APS' challenge to the FIP *per se*. This is not the correct time or forum to challenge the NAAQS. 42 U.S.C. § 7607(b)(1) (2000) (imposing sixty-day limitations period on challenges to the NAAQS and designating the D.C. Circuit as the sole venue for such challenges).

B. Because EPA's Adoption Of The Fugitive Dust Limit Was Discretionary, The Court Lacks Jurisdiction To Impose A Deadline For Further Action.

APS argued in its Intervenor Brief that the Court lacks jurisdiction to order EPA to promulgate a new FIP. APS Interv. Br. at 7-13. In particular, because EPA's adoption of the FIP provisions was entirely at EPA's discretion, the Court's remedial authority is limited to reversing and remanding the FIP (or provisions thereof). *Id.* at 8-9. It would then be up to EPA whether or not to take up the matter anew. *Id.*

The same reasoning applies to Conservation Groups' request that the Court impose a deadline for further action on the fugitive dust limit. Because EPA's adoption of the limit was discretionary, whether or not to revisit the issue on

remand remains within EPA's discretion. *See Federal Power Comm'n v. Idaho Power Co.*, 344 U.S. 17, 20 (1952) (“[T]he function of the reviewing court ends when an error of law is laid bare.”).

Conservation Groups imply that EPA has a rule requiring a fugitive dust limit for power plants on Indian reservations. Conservation Groups Interv. Br. at 4-5. This is highly misleading.

The rule Conservation Groups cite (40 C.F.R. § 49.126 (2007)) applies only to Indian reservations in EPA's Region 10 (which does not include New Mexico). 40 C.F.R. § 49.121 (2007). Moreover, the rule does not impose a twenty percent limit or any other numerical limit. *Cf.* Conservation Groups Interv. Br. at 5 (arguing that a twenty percent limit is typical). Instead, the rule requires that sources take “all reasonable precautions.” 40 C.F.R. § 49.126(d) (2007).

The Court should decline to restrict EPA's discretion on remand.

II. THE UNIT 4 AND 5 OPACITY LIMIT LACKS A RATIONAL BASIS.

A. EPA Identifies No Rational Explanation For The PM Limit, Upon Which The Validity Of The Opacity Limit Depends.

There is no NAAQS for opacity. 40 C.F.R. Part 50 (2007); EPA Br. at 4. Thus, the opacity limit on Unit 4 and Unit 5 stack emissions is only indirectly related to protection of any NAAQS. According to EPA, it imposed the opacity limit to ensure that the units “are in continuous compliance with the PM limit.”

EPA Br. at 26. Thus, the validity of the opacity limit depends entirely upon the validity of the PM limit.

As APS explained in its Opening Brief (at 31), EPA never provided a rational justification for selecting the PM limit. Rather, EPA merely “federalized” the limit in the New Mexico SIP that EPA had found inapplicable to the Plant as a matter of law. *Id.*; EPA Br. at 13-14.

Because there is no rational justification for the PM limit, there is no rational justification for the opacity limit. It makes no sense to impose a limit that is purportedly designed to ensure compliance with some other limit that is itself purely arbitrary.

Evidently recognizing this gaping void in the record, EPA argues that there was no need to justify the PM limit here, because EPA had previously approved the PM limit and other limits in the New Mexico SIP as “technically valid.” EPA Br. at 24 & n. 7. This argument is thoroughly hollow, and the Court should not allow itself to be taken in by it.

First, it is unclear what the term “technically valid” means. The term is vague and standardless. It is not a term that appears in the CAA or its implementing regulations.

EPA implies that what it means by “technically valid” is that the limit is necessary to ensure attainment and maintenance of the NAAQS. *Id.* at 24 n.7. But

EPA's approval of SIP provisions does not entail a finding that those provisions are necessary to protect the NAAQS. Rather EPA's approval only entails a finding that those provisions are *sufficient* to protect the NAAQS and otherwise comply with the minimum requirements of the CAA.

The Supreme Court made clear long ago that EPA has no discretion to disapprove any SIP that provides for attainment and maintenance of the NAAQS, even if the SIP goes far *beyond* that requirement in its stringency:

States may submit implementation plans more stringent than federal law requires and . . . the Administrator must approve such plans if they meet the minimum requirements of § 110(a)(2)

Union Electric Co. v. EPA, 427 U.S. 246, 265 (1976). EPA cannot even reject a SIP provision that is technically or economically infeasible. *Id.*

States have complete liberty under the CAA to select whatever combination of controls they choose, potentially favoring or burdening one facility or industry over another. *See Train v. NRDC*, 421 U.S. 60, 79-80 (1975). "The Act gives the Agency no authority to question the wisdom of a state's choices of emission limitations if they are part of a plan which satisfies the standards of § 110(a)(2)" *Id.* at 79.

Thus, EPA's previous approval of the PM limit in the New Mexico SIP cannot provide a justification for EPA's adoption of the PM limit in a FIP. Unlike states, EPA is bound under section 307(d) of the CAA (or the Administrative

Procedure Act) to develop and articulate a rational basis for its choices. APS Opening Br. at 23-24. And the most EPA may require in a FIP are provisions that are necessary to protect the NAAQS.

The CAA does not provide EPA with “a roving commission to achieve pure air or any other laudable goal,” *Michigan v. EPA*, 268 F.3d 1075, 1084 (D.C. Cir. 2001). Rather, EPA must limit its actions to conform to any applicable “specific statutory directive,” *id.* Under the definition of “Federal Implementation Plan,” EPA is merely to provide for attainment of the NAAQS. 42 U.S.C. § 7602(y) (2000). *See Environmental Defense v. EPA*, 369 F.3d 193, 208 (2d Cir. 2004) (SIP provisions of section 110 require emission limitations and other measures “only as may be necessary or appropriate”). For all the record here discloses, the New Mexico PM limit which EPA “federalized” in the FIP may well be far more stringent than necessary to protect the NAAQS.

Contrary to EPA’s suggestion, EPA Br. at 24, it makes no difference that APS did not challenge EPA’s earlier approval of the New Mexico PM limit. First, APS would have had little to challenge, given that EPA lacks discretion to disapprove a SIP provision as long as it meets the Act’s minimum requirements. Second, nothing in section 307(b) of the Act, 42 U.S.C. § 7607(b) (2000) -- which provides the Court jurisdiction over APS’ present challenge -- required APS to file such a challenge as a prerequisite to seeking relief here.

EPA is also incorrect when it states that APS does not challenge the PM limit here. *See* EPA Br. at 24 & n.7. APS does not ask the Court to *vacate* the PM limit, but *does* claim that the PM limit is arbitrary and cannot be used as a basis to justify the opacity limit. APS Opening Br. at 31 & n.8.

Indeed, all of the limits that EPA cut and pasted from the New Mexico SIP are arbitrary, but as APS noted in its opposition to EPA's motion to remand the record, APS decided not to seek their reversal here. APS Resp. To EPA's Mot. To Remand The Record at 5 n.1. The opacity limit, however, cannot even trace its lineage to the New Mexico SIP. *See* APS Opening Br. at 9.

Nor does it matter that APS has voluntarily complied with the New Mexico PM limit over the years. Voluntary compliance with an inapplicable rule cannot foreclose a challenge to an action making the rule federally enforceable.

Nor does APS' ability to comply with the PM limit affect the analysis. APS' ability to comply does not justify a limit that may be far more stringent than necessary to protect the NAAQS. More importantly, compliance with the New Mexico PM limit is demonstrated by the periodic performance of a stack test. Whether the Plant could meet the PM limit 100 percent of the time (as EPA effectively demands with its continuous opacity limit) is unknown, but highly unlikely, given inevitable equipment upsets and malfunctions.

Because EPA has identified no rational basis in the record for the PM limit, the opacity limit (the validity of which depends entirely upon the validity of the PM limit) cannot be sustained. Thus, the Court should vacate and remand the opacity limit, without even needing to reach the issue (discussed in point III, below) of EPA's refusal to deal reasonably with the Plant's inability to comply with that limit.

B. The Record Reflects No Specific Correlation Between The Twenty Percent Opacity Limit And The PM Limit.

EPA devotes considerable effort in its brief to explaining that it set the opacity limit to ensure proper operation of the PM control equipment (*i.e.*, the baghouses), and that when the baghouses are functioning properly the units can achieve the twenty percent opacity limit.² EPA Br. at 26-31. But this cannot serve to justify the opacity limit, unless the PM limit itself has a rational basis. Neither the opacity limit nor the functioning of the baghouses has any importance independent of the PM limit.

Moreover, EPA has never shown a specific correlation between the twenty percent level of opacity and the specific PM limit it imposed. Elsewhere, EPA has admitted that "a reliable and direct correlation between opacity and PM emissions cannot be established without significant site-specific . . . testing," 72 Fed. Reg.

² Note that as discussed further, below, a facility may "properly operate" its control equipment at all times, and yet the equipment can still be subject to periods of upset or malfunction.

18428, 18429 (2007). *See* APS Opening Br. at 29-30. There is simply no way to know from the record what specific opacity level translates into an exceedance of the PM limit.

EPA notes that many states impose a twenty percent opacity limit. EPA Br. at 10. But some states impose a forty percent limit. *See Sierra Club v. Georgia Power Co.*, 443 F.3d 1346, 1350 (11th Cir. 2006) (referring to forty percent opacity limit in the Georgia SIP). The federal New Source Performance Standard (“NSPS”) at 40 C.F.R. Part 60, Subpart D (which does not apply to the Plant) generally imposes a twenty percent limit, but in certain cases imposes a thirty-two percent or thirty-five percent limit. 40 C.F.R. § 60.42 (2006). And the New Mexico regulations do not impose an opacity limit on emissions from coal-fired power plants at all. *See* New Mexico Admin. Code Part 20.2.14 and § 20.2.61.109.

EPA suggests that it was up to APS to justify an alternate limit. EPA Br. at 31 n.12. But the law does not place this burden on APS. Instead,

EPA “retains a duty to examine key assumptions as part of its affirmative ‘burden of promulgating and explaining a nonarbitrary, noncapricious rule’” and therefore . . . “EPA must justify that assumption even if no one objects to it during the comment period.”

Appalachian Power Co. v. EPA, 135 F.3d 791, 818 (D.C. Cir. 1998) (citations omitted). Because EPA has not carried its “burden of promulgating and explaining a nonarbitrary, noncapricious rule,” the Court should vacate the rule.

**III. EPA CANNOT JUSTIFY ITS DEMAND THAT APS
COMPLY WITH A LIMIT THAT IS UNACHIEVABLE
AS CURRENTLY DEFINED.**

EPA advances a number of reasons for its position that APS be liable to comply with a limit that is unachievable as currently defined. Before replying to those reasons individually, and to help the Court understand just how untenable EPA's position is, APS offers the following review of the problem.

A. Review Of The Problem.

First, EPA has never assessed the effect of various levels of emissions from the Plant on air quality in the region. However, it is known that the region is by far in attainment of all of the NAAQS. Response To Comments at 11 [JA 40].

Hence, it is not known whether *any* level of control of PM emissions from Units 4 and 5 is necessary to protect the NAAQS, let alone *which* level of control is necessary. Nonetheless, EPA has imposed a PM limit.

Although EPA has not correlated specific opacity levels with the PM limit, EPA has imposed an opacity limit, as discussed above. EPA bases the opacity limit on what the existing control equipment can achieve when it is functioning normally, but knows that periodically that equipment will not function normally and at many of those times, the limit will *not* be achieved -- through no fault of

APS.³ So, from the start, EPA knows that the limit it has set and with which it requires compliance at all times is not in fact achievable at all times. Thus, EPA has set the Plant up for failure.

In setting the limit, EPA does not intend to impose substantial new compliance costs upon the Plant. *See* 72 Fed. Reg. 25703 (2007) (“[FIP compliance] costs are expected to be minimal”). So, EPA does not intend the limit to be “technology-forcing” – indeed, EPA has provided no air quality-related basis to engage in technology-forcing, even if it wanted to.⁴

But now, in defending its requirement that the Plant meet the limit – even at times when it cannot -- EPA says that “[e]xceedances due to malfunction could be an indication that additional, upgraded or different control technology is necessary

³ By definition, a “malfunction” is an “unavoidable failure of . . . equipment.” 72 Fed. Reg. 25705 (2007) [JA 26]. The record establishes that malfunctions and resulting excess emissions periodically occur. Letter from M. Wood to L. Guinan (Aug. 1, 1996) at Attachment, pp. 3-5 [JA 116-18]. EPA does not question this; it only denies that excess emissions will occur during normal operations when the baghouses are functioning normally and the stacks are not saturated. EPA Br. at 28-30, 41-42.

⁴ From the beginning of the FIP negotiations, it was understood that APS would not be expected to make significant capital expenditures. *See* APS 1999 Comments at 6 [JA 176]. APS was not thereby given a free pass. APS and the other Plant participants had already invested over 500 million dollars in pollution control equipment. Letter from E. Fox (APS) to D. Howekamp (EPA) (Aug. 7, 1996) at Enclosure, p. 1 [JA 122]. Then, APS lent its support to EPA’s arbitrarily cutting and pasting from the New Mexico SIP – and even went along with an arbitrary opacity limit that did not originate in that SIP (as long as EPA kept its part of the agreement). APS Opening Br. at 2, 11, 15.

in order to meet the underlying limitation.” EPA Br. at 48. So, the circle is complete.

EPA has set a limit it knows cannot be achieved, and does not intend the plant to invest in new or better technology. And later, when the plant cannot meet the limit at all times (as EPA anticipated from the start), EPA (or a citizens group) holds APS in violation of the CAA and demands that the Plant make substantial new investments in technology in order to come into compliance. *See* EPA Br. at 48, 51-52; APS Opening Br. at 34-36. And by then -- without relief from this Court -- it is too late for APS to protest. *See* 42 U.S.C. § 7607(b)(2) (2000) (precluding judicial review in enforcement proceedings).

And all of this happens without EPA’s establishing in the record (1) whether *any* level of PM emissions from Units 4 and 5 will threaten the NAAQS, (2) what the correlation is between the twenty percent opacity limit and the level of PM emissions, or (3) whether there is *any* technology that can meet the emission limit 100 percent of the time. It is difficult to conceive of a more arbitrary agency action.

B. Encouraging “Proper Operation” Of Equipment Is To Be Distinguished From Outlawing Unavoidable Equipment Malfunctions.

EPA says that it imposed the opacity limit in order to “ensure[] that the baghouse technology is properly operated.” EPA Br. at 29. *See id.* at 26 (referring

to proper operation and maintenance). Assuming, *arguendo* (and without any basis in the record), that such proper operation of the baghouses is in fact necessary to protect the PM NAAQS, then it would seem appropriate to force the Plant to properly operate and maintain that equipment by establishing an appropriate opacity limit.

But encouraging a facility to properly operate and maintain its equipment is to be distinguished from outlawing equipment malfunctions. The former may represent sound regulatory policy, but the latter is more akin to squeezing blood from a stone.

The FIP defines “malfunction” as follows:

[A]ny sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

72 Fed. Reg. 25705 (2007) [JA 26] (codified at 40 C.F.R. § 49.23(c)(7)). Under this definition, then, failures caused by sloppy operation or poor maintenance do not qualify as malfunctions. Malfunctions are only those failures that are “unavoidable.”

The FIP provides that excess emissions caused by malfunctions constitute a violation. 72 Fed. Reg. 25708 (2007) [JA 29] (codified at 40 C.F.R. § 49.23(h)(3)). Thus, APS is to be held in violation of the FIP for equipment failures

beyond its control. This does not encourage proper operation and maintenance. It merely outlaws that which is unavoidable, and therefore irrationally requires the impossible.

The parties in *Sierra Club v. TVA*, No. 3:02-cv-2279, slip op. (N.D. Ala. Aug. 27, 2007) (included in the addendum to EPA's brief) apparently recognized that equipment malfunctions can occur even though the operator is "properly operating" its control equipment. According to the court's listing of undisputed facts, causes of opacity exceedances in that case included malfunctions in the control equipment (there, electrostatic precipitators or "ESPs") as well as problems with various other equipment. *Sierra Club v. TVA*, slip op. at 13. Nonetheless, "During the claimed violation period, the . . . Plant was properly operating its pollution control equipment." *Id.* at 14.

The court held TVA liable only because the Eleventh Circuit had earlier ruled that Alabama's 2.0 percent "*de minimis* rule" had not been properly incorporated into the Alabama SIP, *Sierra Club v. TVA*, 430 F.3d 1337, 1340 (11th Cir. 2005). *Sierra Club v. TVA*, slip op. at 20-22. But neither the Eleventh Circuit nor the District Court in that case held that the CAA *precluded* the inclusion of a 2.0 percent "*de minimis* rule" in the Alabama SIP. As shown below, the CAA in fact allows the states and EPA the discretion to avoid outlawing equipment malfunctions.

C. EPA Has The Discretion Not To Outlaw Equipment Malfunctions.

EPA suggests that its hands are tied – that the CAA must be read to require EPA to outlaw equipment malfunctions that cause emissions in excess of any otherwise applicable standard. EPA Br. at 46-48. This is simply not so.

EPA cites section 302(k), which defines “emission limitation” as:

[A] requirement . . . which limits . . . emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this Act.

42 U.S.C. § 7602(k) (2000). *See* EPA Br. at 47-48. EPA argues that excluding periods of equipment malfunction from the applicability of the opacity limit “would be inconsistent with the CAA’s requirement for such continuous [emission] reductions.” *Id.* at 48.

But EPA can impose a requirement in a FIP that does not necessarily meet the definition of “emission limitation.” The definition of “Federal Implementation Plan” includes -- in addition to emission limitations -- “other control measures, means or techniques (including economic incentives, such as marketable permits or auctions of emissions allowances),” 42 U.S.C. § 7602(y) (2000). Similarly, section 110 allows states to choose among a variety of means of achieving attainment. 42 U.S.C. § 110(a)(2)(A) (2000). *See Environmental Defense v. EPA*, 369 F.3d 193,

208 (2d Cir. 2004) (noting the “wide array of types of submissions” that states can make in their SIPs).

Moreover, even the definition of “emission limitation” need not be read in as absolute a sense as EPA would read it. Congress added the definition in the Clean Air Act Amendments of 1977. Pub. L. No. 95-95, § 301(a), 91 Stat. 685, 769-70 (1977). It did so in reaction to the use of so-called “intermittent controls,” which often amounted to nothing more than reducing a utility unit’s load on those occasions where winds were not adequate to disperse the air pollutants being emitted. H.R. Rep. No. 294, 95th Cong., 1st Sess. at 81-94 (1977), *reprinted in* 1977 U.S. Code Cong. & Admin. News 1159-72.

Congress was dissatisfied with the use of such intermittent controls, and wanted to encourage the use of technologies that actually reduce emissions on an on-going basis, such as scrubbers and baghouses. *Id.* at 89-91, *reprinted in* 1977 U.S. Code Cong. & Admin. News 1167-69. Thus, while Congress wanted to encourage the use of technologies such as scrubbers and baghouses (rather than dispersion or dilution techniques), that is a far cry from prohibiting the states or EPA from excepting occasional periods of equipment malfunction from emission limits, when sources such as the Plant in fact employ technologies (*e.g.*, scrubbers and baghouses) that reduce emissions on an on-going basis. *See* APS Opening Br. at 3-4 (describing the Plant’s control technologies).

Moreover, if absolute continuity of compliance were the *sine qua non* of an emission limit in a FIP, then EPA could set the limit high enough to ensure that the limit *can* be met continuously. But here, EPA set the opacity limit at twenty percent, knowing that because of inevitable upsets and malfunctions, the limit cannot be met on an absolutely continuous basis.⁵ And again, EPA did so without any air quality analysis to show that the limit is necessary to achieve attainment of the NAAQS.

Next, EPA argues that its hands are tied by section 110(*l*) of the Act. *See* EPA Br. at 46-47. Section 110(*l*) provides that EPA

[S]hall not approve a revision of a plan if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress . . . or any other applicable requirement of this Act.

42 U.S.C. § 7410(*l*) (2000). By its terms, that provision applies to a *revision* to a plan. In other words, it applies where a plan already includes emissions limitations, presumably adopted to meet the NAAQS, and the state now wants to allow new exceptions (such as an exception for periods of malfunction). In fact,

⁵ EPA incorporated an unexplained allowance of one six-minute period per hour of up to twenty-seven percent opacity, but this provides little relief from the twenty percent limit, particularly since opacity can approach 100 percent. *See* Letter from M. Wood (APS) to L. Guinan (EPA) (Aug. 1, 1996) at Attachment, p. 4 [JA 117]. *See also* 72 Fed. Reg. 18431 (2007) (proposing to allow periods of up to 100 percent opacity in the Alabama SIP).

that was the very scenario in *Michigan Dept. of Env'tl. Quality v. Browner*, 230 F.3d 181 (6th Cir. 2000), which EPA cites in support of its position.

But the scenario here is quite different. EPA is promulgating emission limitations or other requirements applicable to the Plant for the first time.⁶ Thus, EPA is at liberty to build an accommodation for malfunctions into the emission limitation itself. Indeed, as already shown, it was arbitrary for EPA to fail to do so.

Even if section 110(l) were applicable, EPA has provided no reasonable basis to conclude that a malfunction allowance here would likely “interfere” with attainment or maintenance of the NAAQS. As discussed above, EPA has not conducted any analysis to establish whether *any* level of PM emissions from the Plant will interfere with attainment of the NAAQS. *Cf. Edison Electric Inst. v. EPA*, 2 F.3d 438, 446-47 (D.C. Cir. 1993) (rejecting “speculative factual assertions” as a basis for an agency conclusion).

Of course, anything is possible. As APS argued in its comments, any level of emissions from any source theoretically *could* interfere with attainment, or to use a phrase from EPA’s 1983 policy memorandum, any level of emissions from any source *could* “aggravate air quality.” APS 2006 Comments at 11 [JA 298].

⁶ Recall that it is EPA’s position that the New Mexico SIP cannot have applied to the Plant, based on the Plant’s location on the Navajo reservation. EPA Br. at 13. But even putting that aside, the New Mexico SIP itself contained an exemption for periods of malfunction. *See* 72 Fed. Reg. 25702 (2007) [JA 23] (“EPA acknowledges the New Mexico SIP contained an exemption for these emissions.”). So there can be no issue of “backsliding” here.

But that does not lead EPA to outlaw all emissions or even to regulate all sources of emissions. *See id.* *Cf. Dithiocarbamate Task Force v. EPA*, 98 F.3d 1394, 1400-01 (D.C. Cir. 1996) (rejecting “accidents will happen” as a basis for an agency conclusion). Rather, in setting emission limitations and in deciding which sources to regulate (and which not to regulate), EPA must make reasonable judgments based on engineering calculations or air quality data about what degree of control is necessary to protect the NAAQS.

For example, EPA decided here that a FIP regulating only the Plant was all that was “necessary or appropriate” to protect air quality on the Navajo reservation at this time. *See* EPA Br. at 60 (noting the Tribal Authority Rule (“TAR”) gave EPA “broad discretion to promulgate only those measures it deemed necessary or appropriate to protect air quality at any particular time”). This seems reasonable, given the superior state of air quality in the region. Yet, the lack of regulation of many other sources on the reservation surely could “aggravate air quality.”

As APS noted in its Opening Brief (at 26-27), in its proposed “new source review” or “NSR” rule for Indian country, EPA found that subjecting all existing minor sources to regulation “would result in significant emissions reductions,” but concluded that “subjecting all minor sources to the program is not necessary to achieve the NAAQS,” 71 Fed. Reg. 48696, 48714 (2006). Yet foregoing those “significant emissions reductions” surely “could aggravate air quality.”

If EPA wants to prohibit all excess emissions caused by malfunctions, it needs a stronger basis than the mere possibility that those emissions “could aggravate air quality.” Otherwise there is no limiting standard against which to measure the reasonableness of EPA’s prohibition. *See Qwest Corp. v. FCC*, 258 F.3d 1191, 1202 (10th Cir. 2001).

While EPA is certainly correct that it need not wait for a violation of the NAAQS to occur before imposing controls on a source, EPA Br. at 50 & n. 19, EPA must at least have a reasonable basis for concluding that the NAAQS is threatened. Given that malfunctions at the Plant have periodically occurred over many years with nothing approaching a violation of the NAAQS, what evidence there is runs counter to the conclusion that malfunctions must be outlawed.⁷

In fact, EPA implicitly found in this case that malfunctions at the Plant have little, if any potential to cause an exceedance of the NAAQS. The 1999 EPA policy memorandum upon which EPA relies heavily in its brief (at 11, 45, 51, 53) states that “Where a single source or small group of sources has the potential to cause an exceedance of the NAAQS . . . , EPA believes an affirmative defense

⁷ Notice that in making its point here, EPA again engages in circular reasoning: “EPA should not first have to wait until an exceedance of the NAAQS has occurred before it may require a source that has exceeded its own emission limits to undertake corrective action.” EPA Br. at 50. This statement presupposes that the source’s “own emission limits” have been shown to be necessary to protect the NAAQS in the first instance. In the present case, they have not, as discussed above.

approach will not be adequate to protect public health and the environment.”

Memorandum From S. Herman to EPA Regional Administrators (Sept. 20, 1999) at 2-3 [JA 161-62]. Here, EPA employed an “affirmative defense approach,” and thus implicitly found that the Plant does *not* have “the potential to cause an exceedance of the NAAQS.”

D. EPA Ignored APS’ Suggested Alternative, Even Though EPA Has Approved Similar Alternatives Elsewhere.

EPA is correct that APS has sought a reasonable accommodation of the malfunction problem for the many years that the FIP has been under development. *See* EPA Br. at 40. And, although EPA originally offered language that would exempt excess emissions during periods of malfunction, APS Opening Br. at 11-12, it later became evident that EPA would resist promulgating such language.

By the time EPA published the 2006 proposed FIP, APS noticed that in other contexts, EPA appeared to be willing to deal reasonably with the issue of excess opacity emissions. APS had also come to recognize that the definition of malfunction would not always be easy to apply. *See* APS Opening Br. at 18 n.5 (noting whether a event is “normal or usual” can be subject to disagreement). *Cf.* Letter from M. Wood (APS) to L. Guinan (EPA) (Aug. 1, 1996) at Attachment, pp. 3-5 [JA 116-18] (noting that some events of high opacity are not fully explainable).

Accordingly, APS proposed in its 2006 comments that EPA build into the opacity limit an allowance for exceedances a certain percentage of the time. APS

2006 Comments at 5 [JA 292]. APS noted that EPA had approved such an approach in the North Carolina SIP. *Id.* (citing 70 Fed. Reg. 61556 (2005)).

EPA rejected APS' proposal out of hand – or more accurately, EPA ignored APS' proposal. EPA now frames the issue in terms of the specific percentage that APS proposed (0.2 percent), but not only did EPA not address the specific percentage APS had proposed -- it also declined even to address the basic concept of the approach.

EPA's assertion that there is no evidence to support APS' request for relief is incorrect. APS provided specific data on events of excess emissions in 1996. Letter from M. Wood (APS) to L. Guinan (EPA) (Aug. 1, 1996) at Attachment, pp. 3-5 [JA 116-18]. *See also* Letter from M. Wood (APS) to S. Pogorzelski (EPA) (April 14, 1998) at 5-8 [JA 127-30]. Moreover, in the administrative context, even comments making a plausible assertion (such as APS' 2006 comments) are “evidence.” If EPA had adopted APS' proposal or something like it, EPA could have defended its action by relying on APS' comments. And if EPA was dissatisfied with the lack of more specific data provided in APS' 2006 comments, EPA could have said so in its response to comments – but it did not do so.⁸

⁸ Contrary to EPA's brief, APS did not state in its 2006 comments that the Plant could not meet the opacity limit “during normal operations for 0.2 percent of the time,” EPA Br. at 35. APS said that “opacity exceedances do in fact occur even under conditions of best operating practices and proper equipment operation,” and that “Because of this, and *particularly because of the onerous nature of the*

In any event, the more important problem is that EPA simply declined to deal with the essence of APS' proposal. The North Carolina SIP provisions that EPA approved in 2005 (and that APS cited in its 2006 comments) allow up to twenty-four consecutive minutes per calendar day over the SIP's forty percent opacity limit – and up to ninety percent opacity. 70 Fed. Reg. 61557 (2005). Two twenty-four minute periods could straddle two calendar days, for a total of forty-eight minutes of up to ninety percent opacity. *Id.* Opacity exceptions are limited to 0.8 percent of the total operating hours in a calendar quarter. *Id.* at 61556.

In the same action, EPA deferred approval (or disapproval) of an express exemption for periods of malfunction. *Id.* at 61556-57. However, the allowed periods of exemption, detailed above, do not appear to exclude periods where the excess emissions are caused by malfunction. So there appears to be a way to accommodate the malfunction issue that meets EPA's approval, even if it is less direct than an express, narrative exemption. APS proposed a similar means here, but EPA ignored APS' proposal.

proposed affirmative defense for malfunctions,” APS was proposing the allowance for exceedances 0.2 percent of the time. APS 2006 Comments at 5 (emphasis added) [JA 292] EPA criticizes APS for building a margin of safety into its proposal. EPA Br. at 36-37. This is a red herring. EPA did the same thing (appropriately) in finalizing the sulfur dioxide reduction requirements in the FIP. *See* Response To Comments at 22-23 [JA 51-52] (“[W]e set the emission limit at 88 percent removal to ensure some margin for consistent compliance.”).

Moreover, EPA's recent proposed approval of revisions to the Alabama SIP -- discussed in EPA's Brief at 31-34 -- provides an even better example. 72 Fed. Reg. 18428 (April 12, 2007). The Alabama SIP provisions would allow up to 100 percent opacity for up to two percent of the operating time on a quarterly basis, but for no more than ten percent of the time on a daily basis. *Id.* at 18431. Again, the allowed periods of excess emissions appear to accommodate periods of malfunction, along with process variability or other causes.⁹ Significantly, EPA noted in the preamble to its proposed approval, that Alabama had proposed the SIP revisions "in part because the Alabama SIP provides no *other* exemption from the standard for malfunction," *id.* at 18430 (emphasis added).

Thus, while EPA claims that in explaining its policy against express, narrative exemptions for malfunctions, EPA dealt adequately with APS' proposal -- EPA Br. at 40, 41-42 -- that is not so. In practice, the states and EPA appear to be finding reasonable ways to accommodate malfunctions as well as other inevitable causes of excess opacity. EPA's refusal here even to consider such solutions was arbitrary and capricious.

⁹ Indeed, even occasional operator error would appear to be accommodated. *Cf.* EPA Br. at 42 & n.17 (asserting any allowance for operator error is verboten).

E. EPA's Position On Malfunctions Is Inconsistent With Its Position On Unit Startup And Shutdown.

APS pointed out in its Opening Brief (at 41-42) that EPA's position on excess emissions caused by malfunctions was inconsistent with its position on excess emissions during unit startup and shutdown. The only potentially significant distinction between the two cases that EPA offers is that unlike periods of startup and shutdown, "Malfunctions . . . cannot be anticipated in time, size, or number of occurrences." EPA Br. at 51. This rationale does not appear in the record, and because of its *post hoc* nature should not be considered.

In any event, it is a false distinction. First, the FIP contains no specific limit on occurrences of startup or shutdown or on the level of opacity allowed. Second, under an approach along the lines that APS offered here (and EPA ignored), it would be possible to limit the "time, size, or number of occurrences" of excess emissions due to malfunctions allowed. *See* APS Opening Br. at 39-40.

Accordingly, EPA's treatment of excess emissions caused by equipment malfunction was arbitrary and capricious.

F. EPA Has No Defense For Its Decision To Shift The Burden Of Proof To APS.

In its Opening Brief (at 43), APS argued that even assuming EPA's position on malfunctions were reasonable, EPA had provided no justification for shifting the burden of proof to APS, as EPA has done in its "affirmative defense" approach.

APS argued that without a factual basis for presuming that excess emissions are the fault of APS, and requiring APS to prove otherwise, the rule was arbitrary and capricious. *Id.*

EPA offers no defense of this aspect of the rule. Accordingly, the rule should be reversed and remanded to the extent it shifts the burden of proof to APS. *See National Tank Truck Carriers, Inc. v. EPA*, 907 F.2d 177, 184-85 (D.C. Cir. 1990) (finding affirmative defense provisions arbitrary and capricious where the Agency “has not established an adequate rationale for their current structure”).

CONCLUSION

The Court should vacate and remand the fugitive dust limit at 40 C.F.R. § 49.23(d)(3) (2007), as EPA has requested. Additionally, the Court should vacate and remand the opacity limit on stack emissions from Units 4 and 5 (40 C.F.R. §§ 49.23(d)(4) and (e) (2007)), and grant such other relief as the Court deems just and proper.

Dated: January 7, 2008
Final: January 22, 2008

Respectfully submitted,

/s/Thomas Sayre Llewellyn

Thomas Sayre Llewellyn
LAW OFFICE OF
THOMAS SAYRE LLEWELLYN
5125 MacArthur Blvd., NW
Suite 32-A
Washington, DC 20016
(202) 237-7291
t.llewellyn@att.net

CERTIFICATE OF COMPLIANCE

As required by Fed. R. App. P. 32(a)(7)(C), and in reliance upon the word count feature of the word processing software used to prepare the brief (Microsoft Word 2002), I hereby certify that this brief contains 6960 words.

/s/Thomas Sayre Llewellyn

CERTIFICATE OF DIGITAL SUBMISSION

I hereby certify that all required privacy redactions have been made (*i.e.*, none) and that the foregoing Reply Brief Of Petitioner Arizona Public Service Company as submitted in Digital Form is an exact copy of the written document filed with the Clerk. I further certify that the digital submission has been scanned for viruses with the anti-virus feature of Verizon Internet Security Suite (Version No. 6.0.1.21395), with a virus definition file date of January 20, 2008 and according to the program, the digital submission is free of viruses.

/s/Thomas Sayre Llewellyn

CERTIFICATE OF SERVICE

I hereby certify that on January 22, 2008, one copy of the foregoing Reply Brief Of Petitioner Arizona Public Service Company was furnished by commercial carrier for delivery within three calendar days to each of the following:

Matthew G. Kenna, Esquire
Western Environmental Law Center
Rocky Mountain Office
679 E. 2nd Avenue
Suite 11B
Durango, CO 81301

David A. Carson, Esquire
United States Department of Justice
Environment and Natural Resources
Division
1961 Stout Street – 8th Floor
Denver, CO 80294

/s/Thomas Sayre Llewellyn
