

THE CLEAN AIR ACT'S CREDIBLE EVIDENCE RULE: ACHIEVING GREATER EFFICIENCY IN ENVIRONMENTAL REGULATION

INTRODUCTION

The implementation of the Clean Air Act (CAA)¹ has brought substantial gains to the overall improvement of air quality in this country.² To increase the efficiency of the CAA, as well as to produce greater improvements in air quality, Congress passed the 1990 Clean Air Act Amendments (CAAA).³ A major goal of the CAAA is to enhance the enforcement powers of the regulatory agencies charged with reducing the nation's air pollution.⁴ The center piece of these new enforcement powers is the addition to the act of the Title V permitting requirements.⁵

The Title V permitting program states that "it shall be unlawful . . . to operate an affected source . . . [or] a major source . . . except in compliance with a permit . . ."⁶ Each source applying for a permit must submit with its permit application a compliance plan that outlines how the source will comply with the requirements of the Act.⁷ Furthermore, the CAAA revised section 114(a) of the CAA to require each applicant to provide a compliance certificate.⁸ The source must certify that it satisfies all applicable requirements, including any enhanced monitoring requirements, and it must

1. See Clean Air Act (CAA) §§ 101-618, 42 U.S.C. §§ 7401-7671q (1994).

2. Since its implementation in 1970, the CAA has made tremendous progress tackling certain major air pollution problems: toxic lead emissions have dropped 98%, sulphur dioxide (SO₂) emissions have dropped 30% (despite industrial growth), carbon monoxide emissions have dropped 24% (even as the amount of driving has doubled), cars burn their fuels substantially cleaner, toxic emissions have decreased by 1.6 billion pounds per year since 1990, and the production of chemicals that deplete the stratospheric ozone layer has decreased by 90% since 1990. See Daniel Riesel, *Forecasting Significant Air Act Implementation Issues: Permitting and Enforcement*, 14 PACE ENVTL. L. REV. 129, 133 (1996). Despite these gains, significant problems concerning air quality remain. For example, the American Lung Association has indicated that health based standards are too lenient to adequately protect the public health. See AMERICAN LUNG ASSOCIATION, AIR POLLUTION: PROTECTING YOURSELF (1995). Also, the Natural Resources Defense Council (NRDC) warns that heart and lung diseases associated with airborne particulate matter kill more people than car accidents. See *Particulates Cause More Premature Deaths Than Car Accidents*, NRDC Report States, 90 Daily Env't Rep. (BNA) D-9 (May 9, 1996).

3. See Clean Air Act Amendments (CAAA), Pub. L. No. 101-549, 104 Stat. 2399 (1990) (codified in various sections of 42 U.S.C.).

4. See George Van Cleve & Keith W. Holman, *Promise and Reality in the Enforcement of the Amended Clean Air Act Part I: EPA's "Any Credible Evidence" and "Compliance Assurance Monitoring" Rules*, [1997] 27 Envtl. L. Rep. (Envtl. L. Inst.) 10,097, 10,098 (1997).

5. See CAA §§ 501-506, 42 U.S.C. §§ 7661a-7661f.

6. *Id.* § 502(a), 42 U.S.C. § 7661a(a). A source is required to have a permit once an applicable permit program has been developed. *See id.*

7. *See id.* § 503(b)(1), 42 U.S.C. § 7661b(b)(1).

8. *See id.* § 114(a)(3), 42 U.S.C. § 7414(a)(3).

state which methods it will employ to determine compliance.⁹ Finally, a source must certify annually that it is complying with all applicable permit requirements.¹⁰

To implement these new requirements the Environmental Protection Agency (EPA) promulgated the Credible Evidence Rule (CER).¹¹ This rule allows an agency, a state, or a citizen to utilize "any credible evidence" available to demonstrate that a source has violated the CAA.¹² However, the CER need not serve solely as an enforcement device. The rule possesses enough flexibility to serve as a useful tool to develop new approaches to the regulation of air pollution. When used in conjunction with new, creative regulatory schemes, for example the alternative compliance model, the CER can help achieve more effective and more efficient environmental gains.

This Note analyzes the nature of the CER to determine whether the rule possesses the flexibility to go beyond the scope of enforcement actions under the CAA. Part I is a detailed analysis of the CER. Part I.A examines EPA's underlying legal authority to issue the rule. Next, Part I.B explores the effect of implementing the CER on the stringency of the CAA emissions standards. Finally, Part I.C determines whether the CER creates an unfair burden on the regulated community. In each of these sections the discussion focuses on industry's concerns and objections to the rule, as well as EPA's responses to those criticisms. This evaluation of the CER demonstrates that the rule possesses a great deal of flexibility to determine exactly how much of a pollutant a given source is releasing into the air.

Part II introduces how the rule may function in more than just an enforcement role. Specifically, this Part examines one particular type of environmental regulation strategy, the alternative compliance model, that can help realize the flexibility inherent in the CER. Part III concludes with an examination of how the CER can aid in the development of regulatory strategies that produce more effective air pollutant emission standards. This Note demonstrates that the CER can provide a useful benefit to the type of environmental management scheme the alternative compliance model employs.

9. See *id.* § 114(a)(3), 42 U.S.C. § 7414(a)(3); 40 C.F.R. § 70.5(c)(9)(i) (1998).

10. See CAA § 503(b)(2), 42 U.S.C. § 7661b(b)(2).

11. See Credible Evidence Revisions, 62 Fed. Reg. 8314 (1997).

12. *Id.*; see also Van Cleve & Holman, *supra* note 4, at 10,099.

I. THE CREDIBLE EVIDENCE RULE

Prior to the CAAA, the method for determining whether a source had violated the CAA requirements relied historically upon the results of reference tests tailored for that particular type of source.¹³ In *United States v. Kaiser Steel Corp.*, the United States District Court for the Central District of California held that the *only* method EPA could rely on to establish a violation of a particular air regulation was the reference test method.¹⁴ This ruling severely curtailed EPA's enforcement powers under the CAA by forcing the Agency to rely only on specific testing methods which may have become either outdated or are more costly to implement than comparable testing methods. Disagreeing with California's interpretation of the CAA's enforcement provisions, EPA proposed the "credible evidence" rule, which relies upon the section 113(a) requirement to comply with state implementation plans. Section 113(a) states:

Whenever, on the *basis of any information available* to [EPA], [EPA] finds that any person has violated or is in violation of any requirement or prohibition of an applicable implementation plan or permit . . . [EPA] may . . . issue an order requiring such person to comply with the requirements or prohibitions of such plan or permit, . . . issue an administrative penalty order . . . or . . . bring a civil action [to enforce the implementation plan or permit].¹⁵

Although the CAAA does not provide a specific provision for the use of credible evidence to establish the basis of an enforcement action, EPA believes that it possesses "clear statutory authority to use any available information—not just data from reference tests or other federally promulgated or approved compliance methods—to prove CAA violations."¹⁶

13. See Van Cleve & Holman, *supra* note 4, at 10,100-03. For example, a common type of reference test is an opacity test. See *id.* at 10,100.

14. See *United States v. Kaiser Steel Corp.*, No. CV 82-2623-IH, 1984 WL 186690, at *4 (C.D. Cal. Feb. 8, 1984). The published materials of this case include only the court's order, but the order has been widely cited as the underlying basis for the belief that only a reference test method can be used to establish a failure to maintain compliance with the CAA standards. See Van Cleve & Holman, *supra* note 4, at 10,100 n.29.

15. CAA § 113(a)(1), 42 U.S.C. § 7413(a)(1) (1994) (emphasis added). This provision of the Act was unaffected by the 1990 Clean Air Act Amendments. See generally Pub. L. No. 101-549, 104 Stat. 2399 (1990) (codified in various sections of 42 U.S.C.). The CAAA did amend section 113(e)(1) to allow EPA to determine the amount of any penalty based in part on the "duration of the violation as established by *any credible evidence* (including evidence other than the applicable test method)." *Id.* (emphasis added); see also CAA § 113(e)(1), 42 U.S.C. § 7413(e)(1).

16. Credible Evidence Revisions, 62 Fed. Reg. 8314, 8314 (1997).

The final credible evidence rule,¹⁷ released by EPA on February 24, 1997, emphasizes that the ruling seeks to resolve any ambiguity concerning the use of non-reference test data to establish Title V compliance certifications.¹⁸ Responding to industry concerns, EPA states that the CER addresses an evidentiary issue.¹⁹ It is intended to provide federal, state, and citizen groups access to credible evidence to ensure a source's compliance with the CAA, as well as providing a source with the use of any credible evidence to contest allegations of noncompliance.²⁰ This dual use of the CER serves to highlight "EPA's 'common sense' approach to environmental protection, which encourages smarter, cheaper, and more flexible means of achieving environmental goals."²¹

An analysis of the main criticisms of the CER will determine whether this "common sense" approach to achieving the goal of a more efficient application of the CAA emissions standards is truly effective. The following discussion explores three major issues: 1) EPA's authority to issue the CER, 2) the effect of the CER on the stringency of air emissions standards, and 3) whether the rule imposes an unfair burden on the regulated community. To understand how the CER operates and what its effect will be on the regulation of air pollutant emissions, each of these issues must be addressed. With a clear understanding of how effective the CER actually is as a "common sense" approach to the enforcement of air pollution regulations, one can then examine the scope of the rule's application toward the creation of new environmental regulation strategies.

A. Authority to Issue the CER Final Rule

Opponents to the CER insist that EPA lacks the authority to implement the final rule establishing a new evidentiary standard.²² Under the CAA, a party may challenge a final EPA action by filing a petition for review in the

17. The Credible Evidence Revisions amend 40 C.F.R. §§ 51.212, 52.12, 52.33, 60.11, and 61.12. The pertinent language in each amended section is that nothing shall "preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed." 40 C.F.R. §§ 51.212(c), 52.12(c), 52.33(a), 60.11(g), 61.12(e) (1998), *as amended by* 62 Fed. Reg. 8314 (1997).

18. *See* Credible Evidence Revisions, 62 Fed. Reg. at 8314.

19. *See id.*

20. *See id.* at 8315.

21. *Id.*

22. *See* Riesel, *supra* note 2, at 153. Opponents believe that EPA should implement a source-category by source-category rulemaking process which would account for the impact of CER data. *See id.* at 153-54.

U.S. Court of Appeals for the District of Columbia.²³ Indeed, more than eighty interest groups have exercised this option to challenge the validity of the CER Final Rule.²⁴ An analysis of EPA's authority to issue the CER will aid in understanding how the Agency intends to enforce the requirements of the CAA.

EPA contends that it possesses the authority to issue the CER Final Rule. According to the Agency, this authority is vested in the CAA, the case law, and the legislative history of section 113(e) of the Act.²⁵ Furthermore, EPA asserts that it has provided all interested parties with sufficient notice, as well as the opportunity, to comment on the revised rule.²⁶ EPA believes that a thorough explanation of its authority to issue the final revised rule will remove any ambiguity in the application of the use of any credible evidence to prove, or disprove, the existence of a violation.²⁷

1. Statutory Authority for the CER Final Rule

EPA states that the language of the statute provides the authority to promulgate the CER.²⁸ To begin, the Agency relies on its existing authority under section 113(a), which provides for the use of any available information to form the basis of an enforcement action.²⁹ According to EPA, the plain language of the statute demonstrates the congressional intent that EPA should not be limited to relying solely on the reference test method results to establish proof of non-compliance.³⁰ Other provisions of the CAA support the use of CER data. The requirements of section 114(a)(3) call for enhanced monitoring and compliance certification regardless of whether compliance is continuous or intermittent.³¹ EPA states that this provision is further evidence of congressional intent to draw on data other than that provided by reference test methods.³² Also, the permitting, monitoring, and certification requirements of section 504 suggest the use of non-reference test data.³³

23. See CAA § 307(b)(1), 42 U.S.C. § 7607(b)(1).

24. See *Rejection of Rule May Not Prevent Use of Any Credible Evidence for Enforcement*, [1997] 28 Env't Rep. (BNA) 982, 982 (Sept. 26, 1997) (claiming new CER standard increases underlying stringency of current air pollution regulations).

25. See Credible Evidence Revisions, 62 Fed. Reg. at 8322.

26. See *id.*

27. See *id.*

28. See *id.* at 8320.

29. See *id.* at 8320; see also CAA § 113(a)(1), 42 U.S.C. § 7413(a)(1).

30. See Credible Evidence Revisions, 62 Fed. Reg. at 8320; see also CAA § 113(a)(1), 42 U.S.C. § 7413(a)(1) (stating that a violation may be established "on the basis of any information available").

31. See CAA § 114(a)(3), 42 U.S.C. § 7414(a)(3).

32. See Credible Evidence Revisions, 62 Fed. Reg. at 8321.

33. See *id.*; see also Enhanced Monitoring Program, Proposed Rule, 58 Fed. Reg. 54,648, 54,649

Specifically, section 504(b) allows EPA a degree of discretionary power by not requiring continuous emission monitoring “if alternative methods are available that provide sufficiently reliable and timely information for determining compliance.”³⁴ Finally, the CAA contains no language which expressly requires that only information derived from a reference test method may be used to establish a violation of the CAA emission standards.³⁵

2. Case Law Authority for the CER Final Rule

According to EPA, existing case law does not mandate the exclusive use of reference test methods.³⁶ The most significant decision concerning how EPA can establish a violation of an emission standard is *United States v. Kaiser Steel Corp.* This decision held that proof of a violation of emission standards by the operation of a blast furnace could only be established by data produced by an opacity reference test method, called Method-9.³⁷ However, EPA asserts that the *Kaiser Steel* ruling can be read to reflect only that court’s interpretation of then existing regulations, rather than its interpretation of the CAA itself.³⁸ Second, EPA contends that the CAAA specifically overruled the *Kaiser Steel* decision.³⁹ Third, under its section 113(a) authority, EPA states it is entitled to issue the CER Final Rule as a clarification of the regulatory interpretation of what constitutes “any information” as the basis for establishing a violation.⁴⁰

The regulated community relies on *Portland Cement Ass’n v. Ruckelshaus* for the proposition that violations of the CAA emission standards may only be demonstrated through the use of an exclusive reference test

(1993).

34. CAA § 504(b), 42 U.S.C. § 7661c(b).

35. See Credible Evidence Revisions, 62 Fed. Reg. at 8320. See generally CAA §§ 101-618, 42 U.S.C. §§ 7401-7671q.

36. See Credible Evidence Revisions, 62 Fed. Reg. at 8320-21.

37. See *Kaiser Steel Corp.*, 1984 WL 186690, at *4. Method-9 requires a trained visible emissions observer (VEO) to observe a smoke plume with the sun at a particular angle to determine the opacity of the plume released by the source. See Credible Evidence Revisions, 62 Fed. Reg. at 8319. A more precise and accurate method relies on a continuous opacity monitor (COM) that employs a calibrated light source to determine the opacity of a smoke plume at all times. See *id.*

38. See Credible Evidence Revisions, 62 Fed. Reg. at 8320; see also *Kaiser Steel Corp.*, 1984 WL 186690.

39. See Credible Evidence Revisions, 62 Fed. Reg. at 8320. EPA states in the Credible Evidence Revisions: “[The *Kaiser Steel*] decision—which interpreted only EPA’s existing regulations, not the Act—was specifically overruled by Congress in the 1990 CAA Amendments. Today’s rulemaking is intended to clarify that EPA’s regulations do not constrain EPA to using reference tests to prove a violation of an emission standard.” *Id.*

40. *Id.*

method.⁴¹ In *Portland Cement*, the court required that a reference test method must produce results that are “objective” and reasonably accurate.⁴² Whether this determination mandates that only evidence from a reference test method may be used to establish a violation of emission standards is subject to debate. EPA contends that the *Portland Cement* court was ensuring that the reference test method procedure produce reliable results, *not* that the reference test employed in *Portland Cement* was the sole test available to the Agency.⁴³ Thus, EPA interprets the decision as merely cautioning that where a specific reference test was in place to determine the existence of a violation, such a test would constitute the best method for proving the alleged violation.⁴⁴ In addition, EPA cites *National Lime Ass'n v. EPA* as general support for rejecting the notion that only a reference test methodology can be used to establish CAA emission standards.⁴⁵

3. Analysis of the Legislative History of CAA § 113(e)

The congressional discussions regarding the availability of non-reference test data also supports EPA's decision to issue the CER Final Rule. The Senate Report discussing the amendment of CAA § 113(e) makes “clear that the [EPA] may rely upon any credible evidence of violations in pursuing alleged violations.”⁴⁶ The report evidences the Senate's intent to allow courts to consider any credible evidence which is admissible under the Federal Rules of Evidence.⁴⁷ The report states that courts should “not limit[] . . . consideration of evidence that is based solely on the applicable test method in the State implementation [plan] or regulation.”⁴⁸ Specifically, the decision in *Kaiser Steel* is overruled with respect to its exclusion of the use of non-reference test method data.⁴⁹ Examining this interpretation of congressional intent in relation to the section 113(a) provision allowing for the use of “any information available,” EPA asserts that it possesses the authority to amend

41. See *Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375 (D.C. Cir. 1973).

42. *Id.* at 401 n.103.

43. See Credible Evidence Revisions, 62 Fed. Reg. at 8321.

44. See *id.*

45. See *id.*; see also *National Lime Ass'n v. EPA*, 627 F.2d 416, 446 n.103 (D.C. Cir. 1980) (rejecting petitioner's argument that EPA must abide by its stated testing methodology for the development of new emissions standards).

46. S. REP. NO. 101-228, at 358 (1989), reprinted in 1990 U.S.C.C.A.N. 3385, 3741.

47. See *id.* at 366.

48. *Id.* The Senate Report offered examples of evidence which could serve as the basis for a finding of a violation of the CAA regulations (despite the fact that the applicable reference test method did not rely on any of these testing methods): continuous emission monitoring systems, expert testimony, and bypassing and control equipment malfunctions. See *id.*

49. See *id.*; see also *supra* notes 36-39 and accompanying text.

the regulations to clearly indicate that reliance on reference test data is not the sole means for establishing non-compliance with the CAA.⁵⁰ Thus, the CER serves an essentially evidentiary purpose,⁵¹ and as such, the rule provides for the ability to prove, or disprove, a breach of a compliance requirement subject only to the limitations imposed by general evidentiary rules.⁵²

At the time of this writing, EPA has had the final word concerning the validity of its authority to issue the CER with the release of the Credible Evidence Revisions in the Federal Register. Whether the U.S. Court of Appeals for the District of Columbia Circuit upholds industry's challenge to this authority remains to be seen.⁵³ The importance of this analysis is that it demonstrates EPA's firm foundation to develop a rule that allows for a more flexible evidentiary mechanism to enforce violations of CAA emission standards.

B. The Effect of the CER Final Rule on the Stringency of Emission Standards

A major concern with the implementation of the CER is whether the rule ultimately affects the stringency of existing emission standards. Until this time, industry has only had to contend with whether the data produced from the results of a known reference test method indicated non-compliance with an emission standard. Indeed, some permits rely on a specific reference test method to establish compliance.⁵⁴ The use of CER data allows for the possibility that a source could also be subject to an enforcement action as the result of data derived from a non-reference test method.

The regulated community's principal concern with the finalized CER is that the rule will significantly increase the stringency of existing emission

50. See Credible Evidence Revisions, 62 Fed. Reg. at 8322. EPA specifically responds to the floor statements by United States Senator Chafee, who said, "[s]ubsection 113(e) also clarifies and confirms that once EPA establishes evidence of a violation using a formal test method, EPA can use other credible evidence to prove additional violations, or that a violation has continued." 135 CONG. REC. S9650, S9665 (daily ed. Aug. 3, 1989) (statement of Sen. Chafee). EPA cites the Senate Report language as unambiguous in its support for the use of non-reference test data. See Credible Evidence Revisions, 62 Fed. Reg. at 8322. Any reliance on Senator Chafee's remarks, made at the beginning of the CAAA legislative process, cannot measure up to the "more authoritative reflection of congressional intent" represented by the Senate Report. *Id.* Therefore, the use of any credible evidence is not limited solely to demonstrating the duration of a violation or the presence of additional violations.

51. See Credible Evidence Revisions, 62 Fed. Reg. at 8314.

52. See *id.* at 8320.

53. See generally *Rejection of Rule May Not Prevent Use of Any Credible Evidence for Enforcement*, *supra* note 24, at 982.

54. See, e.g., *Kaiser Steel Corp.*, 1984 WL 186690 (requiring the use of the opacity reference test Method-9); see also *supra* notes 36-39 and accompanying text.

standards.⁵⁵ Industry views compliance with the CAA as consisting of two essential elements: 1) satisfying the requirements of emission standards by relying on the results of a reference test method; and 2) maintaining the proper operation of control equipment as required by the "general duty" clause of the applicable State Implementation Plan (SIP).⁵⁶ Industry argues that where an EPA emission standard calls for periodic reference testing, a source need only show that it is correctly operating and maintaining its control equipment once that source has demonstrated that it has met the requirements of the emission standard.⁵⁷ Thus, industry concludes that the use of CER data, such as continuous emission monitors (CEMs), is irrelevant for establishing a violation for enforcement purposes.⁵⁸

This argument relies on the notion that the fundamental tool to establish compliance for a specific emission standard is the data from a reference test.⁵⁹ As a result, industry argues that EPA must rely on the use of reference tests, and may not change or discard the tests without also amending the emission standards.⁶⁰ Such a modification cannot occur without engaging in an amendment process for each individual emission standard.⁶¹

Finally, industry contends that the regulation of air pollution recognizes that the emission standards contemplate infrequent testing.⁶² The underlying belief is that specific reference tests should be administered only on a yearly basis.⁶³ According to industry, a source is required to be in compliance with the emission standards only ninety-nine percent of the time.⁶⁴ This compliance percentage reflects the realistic presumption that a regulated source cannot comply with the emission standard one hundred percent of the time.⁶⁵ Therefore, the reference test is designed to serve as an averaging mechanism.⁶⁶ Industry is concerned that the use of CER data would

55. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8323. Industry believes that the rule will increase the stringency of the emission standards by effectively requiring all sources to be in continuous compliance with the emission standards. *See id.*

56. *See Van Cleve & Holman, supra* note 4, at 10,105.

57. *See id.*

58. *See id.*

59. *See id.*

60. *See id.*

61. *See id.* Not surprisingly, a process that calls for the amendment of individual emission standards would greatly increase the amount of time and resources EPA would have to commit to the implementation of the CER. *See id.* The result would certainly be a large amount of litigation, as well as the likely "grandfathering" of numerous sources from continuous compliance requirements or CER enforcement until they had each received new permits. *See id.*

62. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8324.

63. *See id.*

64. *See id.*

65. *See Riesel, supra* note 2, at 156.

66. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8324.

encourage an increase in compliance testing frequency.⁶⁷ The fear is that a source may be found in violation of an emission standard at a time when the original reference test method permitted the source to be in non-compliance as an aspect of this averaging mechanism.⁶⁸ The use of CER data would destroy the concept of “averaging compliance” by allowing violations to be based on the normal fluctuations found in the standard operation of a source’s facility.⁶⁹ Thus, an increase in compliance testing frequency would require a source to operate at a level below their current emission standard in order to remain in compliance, thereby increasing the stringency of the emission standard.⁷⁰

Naturally, the advocates of the CER argue that the final rule has no effect on the stringency of emission standards. Instead, they argue that emission standard compliance focuses on whether or not an appropriate reference test method would reveal the presence of a violation.⁷¹ Additionally, the scope of a source’s compliance obligation is based solely on that source’s emission standards.⁷² Thus, achieving the CAA’s fundamental goal to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare,”⁷³ requires that all sources must achieve routine compliance with the applicable emission standards.⁷⁴

The CAA requirement that all sources observe continual compliance with the limitations set in each permit is evidenced by the Act’s definition of the terms “emission limitation” and “emission standard” as:

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*, 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 chapter..[sic]⁷⁵

To give weight to the importance of the “emission standard,” the amount of any penalty issued by EPA “shall take into consideration (in addition to such other factors as justice may require) . . . the duration of the violation as established by *any credible evidence (including evidence other than the*

67. *See id.*

68. *See id.*

69. *See Riesel, supra* note 2, at 156.

70. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8324.

71. *See id.* at 8323.

72. *See id.*

73. CAA § 101(b)(1), 42 U.S.C. § 7401(b)(1).

74. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8324.

75. CAA § 302(k), 42 U.S.C. § 7602(k) (emphasis added).

*applicable test method).*⁷⁶ Furthermore, the CAA provides that a penalty may be assessed for each day the source is in violation of the emission standard.⁷⁷ Finally, there is a presumption that once a source is found to be in violation of its emission limits, that source remains in violation "until the violator establishes that *continuous compliance* has been achieved."⁷⁸

EPA states that the criticism levied by industry concerning the likelihood that the CER will increase the stringency of emission standards is misplaced.⁷⁹ Instead, EPA contends that industry's concerns about its ability to meet the continuous compliance requirements of the emission standards addresses the adequacy of those underlying standards, not the potential impact of the new rule.⁸⁰ The Agency cites its review of past CAA enforcement actions which reveals no cases where either the Agency or a citizen sought to enforce a standard that was impossible to achieve.⁸¹ Nor could EPA cite to a single instance where a defendant was able to establish that compliance with an emission standard was impossible at the time of the alleged violation.⁸² Indeed, EPA's analysis of CEM data from EPA Region V, concerning the emission of sulphur dioxide (SO₂), indicated that most sources were able to comply with the emission standards nearly all of the time.⁸³ EPA can also provide a certain degree of flexibility in the source's compliance obligation by providing allowances in the permit for exceeding the emissions limitations in certain situations such as start-up, shut-down, or other upset conditions.⁸⁴

An emission standard which relies upon a single yearly test to determine compliance flies in the face of both the statute and, industry's demonstrated experience in complying with emission standards.⁸⁵ The plain language of the statute emphasizes the importance of continuous compliance.⁸⁶ Furthermore,

76. *Id.* § 113(e)(1), 42 U.S.C. § 7413(e)(1) (emphasis added).

77. *See id.* § 113(e)(2), 42 U.S.C. § 7413(e)(2).

78. *Id.* (emphasis added).

79. *See generally* Credible Evidence Revisions, 62 Fed. Reg. at 8324. In particular, EPA states that industry's adherence to the "average compliance" concept would undermine the public health and safety goals of the CAA. *See id.* According to EPA, an argument that the CER will increase the stringency of the emission standards is inconsistent with the CAA's goal to achieve clean air. *See id.*

80. *See id.* at 8325.

81. *See id.*

82. *See id.*

83. *See id.* at 8325-26. Indeed, a recent report released by EPA indicates that all of the 445 sources for SO₂ and NO_x in the Acid Rain Program achieved 100% compliance with the required emission standards in 1996. *See U.S. EPA, ACID RAIN PROGRAM, 1996 COMPLIANCE REPORT: SUMMARY* (visited Nov. 15, 1997) <<http://www.epa.gov/ardpublic/acidrain/cmrpt96/cr96summ.html>>.

84. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8325.

85. *See generally id.* at 8325-26. EPA states that it has not received any specific information which demonstrates that a well-operated and maintained facility employing pollution control technologies cannot comply with emission standards on a continuous basis. *See id.* at 8325.

86. *See id.* at 8324.

EPA is empowered by the CAA to conduct testing of a source's compliance with emission standards at its discretion.⁸⁷ Thus, the impact of more frequent testing, regardless of whether it is the result of a reference test method or other credible test, will have no affect on the stringency of an emission standard.⁸⁸ The emission standards must be met on a continuous basis.⁸⁹ If an industry believes that the emission limitations imposed on a source in its permit are excessive, EPA recommends that the affected source file a petition requesting that the standard be amended.⁹⁰

C. Will the Use of Credible Evidence Unfairly Burden the Regulated Community?

The availability of any credible evidence to establish a CAA violation raises the specter of unfair practices by enforcement persons or places an undue burden on industry to conduct every conceivable test method to ensure compliance. At the root of industry's concern is the belief that a source will not know what type of test or evidence it must rely on to demonstrate compliance.⁹¹ This confusion may lead to a breach of due process rights, the generation of enforcement actions based on numerous minor violations, or uncertain certification process requirements for Title V permits.⁹²

To protect a source's constitutional due process rights, industry argues that EPA must explicitly define all types of information that may be used as credible evidence.⁹³ The failure to provide such information would infringe upon a source's right to "fair warning" of a potential enforcement action.⁹⁴ However, EPA correctly states that the CER is essentially a rule on the admissibility of evidence.⁹⁵ The use of credible evidence is not new to

87. See CAA § 114(a)(1)(D), 42 U.S.C. § 7414(a)(1)(D).

88. See Credible Evidence Revisions, 62 Fed. Reg. at 8326. To illustrate this point, EPA employs an analogy of the use of radar guns in the detection and apprehension of persons violating posted speed limits. *See id.* EPA explains that the increased use of radar guns does not alter the legal stringency of the posted speed limits. *See id.* Therefore, in a similar fashion, the availability of alternative, credible testing methods cannot affect the underlying stringency of a source's emission limitations.

89. *See id.*

90. *See id.*

91. *See id.* at 8318.

92. *See id.* at 8317-19.

93. *See id.* at 8317.

94. *See id.*; *see also* General Elec. Co. v. United States EPA, 53 F.3d 1324, 1329 (D.C. Cir. 1995) (stating that "by reviewing the regulations . . . issued by the agency, a regulated party acting in good faith would be able to identify, with 'ascertainable certainty,' the standards with which the agency expects parties to conform, then the agency has fairly notified a petitioner of the agency's interpretation") (citation omitted).

95. See Credible Evidence Revisions, 62 Fed. Reg. at 8317.

American jurisprudence.⁹⁶ Litigants, including government agencies, have relied on a wide variety of evidence to prove or refute claims.⁹⁷ Furthermore, as prescribed by Federal Rule of Evidence 104,⁹⁸ the decision regarding whether evidence is relevant, and therefore admissible, is made by an independent authority, for example the judge. EPA emphasizes that the CER serves as a threshold test to establish whether evidence is relevant to an enforcement action.⁹⁹ Thus, EPA concludes that the rule does not violate a source's constitutional due process rights as part of an action to establish whether a source has complied with the CAA regulations.¹⁰⁰

The regulated community also raises a concern that the CER will encourage unfair practices by providing EPA with the ability to generate enforcement actions on the basis of numerous minor violations of the Title V permit program.¹⁰¹ Industry worries that a deluge of "frivolous" suits may result.¹⁰² EPA responds that it is not the Agency's intention to pursue actions

96. *See id.*

97. *See id.* EPA also remarks that the use of widely varying types of evidence in governmental and citizen suit enforcement actions has been demonstrated in actions brought under other environmental statutes. *See id.* Furthermore, EPA believes that industry's concern that they will not know what credible evidence may be used against them lacks merit. *See id.* at 8318. EPA expects that sources subject to the Title V permits will have knowledge of what data may be used as the basis of an enforcement action from the data generated by the methods to be established in the proposed compliance assurance monitoring (CAM) rule (due to be released in a separate ruling). *See id.* at 8314, 8318. Those sources not subject to CAM should be able to make reasonable determinations concerning which information will be relevant to a potential enforcement action. *See id.* at 8318.

98. Federal Rule of Evidence 104(a)-(b) states:

(a) **Questions of Admissibility Generally.** Preliminary questions concerning the . . . admissibility of evidence shall be determined by the court, subject to the provisions of subdivision (b). In making its determination it is not bound by the rules of evidence except those with respect to privileges.

(b) **Relevancy Conditioned on Fact.** When the relevancy of evidence depends upon the fulfillment of a condition of fact, the court shall admit it upon, or subject to, the introduction of evidence sufficient to support a finding of the fulfillment of the condition.

FED. R. EVID. 104(a)-(b).

EPA notes that the application of the Federal Rules of Evidence to environmental enforcement actions, including those brought under the CAA, has not resulted in any infringement of a source's constitutional rights, including the right of "fair warning." *See Credible Evidence Revisions*, 62 Fed. Reg. at 8317.

99. *See Credible Evidence Revisions*, 62 Fed. Reg. at 8317. EPA states "that the determination that evidence or information is credible is merely a threshold determination that the evidence or information in question is technically relevant, and therefore, legally admissible in an enforcement action." *Id.* at 8317-18. Given the provision in section 113(a) that allows for an enforcement action to be brought on the basis of "any information," EPA concludes that Congress intended this threshold to be relatively low. *See id.* at 8318.

100. *See id.* at 8317.

101. *See id.* at 8318.

102. *See id.*

involving minor violations.¹⁰³ Rather, the enforcement resources of EPA are directed at violations that: 1) may endanger the public health or the environment, 2) persist for a significant duration or are of a significant magnitude, 3) indicate a pattern of noncompliance, 4) reflect a refusal to provide requested information concerning compliance, 5) may be the product of criminal conduct, or 6) provide the source with an economic windfall.¹⁰⁴ EPA prefers to rely on other enforcement tools such as notices of violation or administrative penalty orders to address minor, unexcused violations.¹⁰⁵

Additionally, there is no indication that the CER will result in an increase in citizen suits.¹⁰⁶ EPA reviewed citizen suit enforcement actions under the Clean Water Act and found that generally there was no effort by citizen groups to bring actions for sporadic or inconsequential violations.¹⁰⁷ Indeed, EPA points out that under the CAA, citizen groups have been free to use credible evidence to pursue an enforcement action.¹⁰⁸ Furthermore, the incorporation of the CER into state SIPs has not resulted in an increase of citizen suits.¹⁰⁹

The last major concern industry raises is that the CER will cause a source to apply every applicable test method in order to satisfy the compliance certification requirement of the Title V permit program.¹¹⁰ The regulated community fears that the use of any credible test data will generate uncertainty and render void (due to vagueness) the certification requirement to state the methods a source will employ to demonstrate compliance.¹¹¹ EPA emphasizes that sources may continue to rely solely on the appropriately conducted continuous reference test method to satisfy the certification requirement.¹¹² A source must address in its certification any information that indicates that the source may be out of compliance with the applicable emission standards,

103. *See id.*

104. *See id.*

105. *See id.* EPA indicates that its actions will remain within the realm of prosecutorial discretion regarding whether or not to bring an enforcement action. *See id.* Since deterrence is the Agency's overriding goal, EPA states that judicial action for minor CAA violations exists as a low enforcement priority. *See id.*

106. *See id.*

107. *See id.*

108. *See id.*

109. *See id.* at 8319. Five states have specifically incorporated in their SIPs the use of any credible evidence in enforcement actions: Kansas, Iowa, Nebraska, North Dakota, and Georgia. *See id.*

110. *See CAA § 504(c), 42 U.S.C. § 7661c(c).* Section 504 states “[e]ach permit issued under this subchapter shall set forth inspection, entry, monitoring, compliance certification, and reporting requirements to assure compliance with the permit terms and conditions Any report required to be submitted . . . under this subchapter shall be signed by a responsible corporate official, who shall certify its accuracy.” *Id.*

111. *See Credible Evidence Revisions, 62 Fed. Reg. at 8320.*

112. *See id.* at 8320.

despite the fact that the source's permit-identified data—the reference test method data—indicates compliance.¹¹³ Although the compliance certification requirement imposes no duty on a source to seek out all possible methods of testing for compliance, EPA does not want sources to ignore data that is clearly relevant to compliance.¹¹⁴

The essential purpose of CER data is to create a flexible, "common sense" approach to determine compliance with the CAA emission standards.¹¹⁵ The reference test method data will continue to remain the "benchmark against which to compare other emissions or parametric data, or engineering analyses, regarding source compliance."¹¹⁶ However, any evidence will be admissible to establish either compliance or noncompliance provided that it meets the threshold test for credibility.¹¹⁷ Thus, an enforcement action may be successfully pursued or resisted on the basis of any relevant, credible evidence, although a source may continue to establish compliance by an appropriate, properly conducted reference test method.¹¹⁸

II. THE ALTERNATIVE COMPLIANCE MODEL

The application of the Credible Evidence Rule (CER) can provide benefits that reach beyond the scope of Clean Air Act (CAA) enforcement actions. Specifically, the CER can serve as a useful device for introducing flexibility into the regulation of air pollution. The current system of environmental regulation appears to have reached a point of diminishing returns.¹¹⁹ The system is weighed down by a dizzying array of "prescriptive, duplicative, costly, and confusing requirements."¹²⁰ All sides have a strong

113. *See id.* EPA stresses that a "permit shield" provision will not protect the source from satisfying the underlying emission standards of its permit. *See id.* The protection provided by the "permit shield" does not relieve the source from its duty to demonstrate compliance even if the source's required monitoring method failed to detect the violation. *See id.*

EPA also indicates that the CER does not intend to specify what correlation there must be between CAM monitoring data and emissions violations or compliance certifications and that these issues will be addressed in the future proposed CAM rule. *See id.*

114. *See id.*

115. *See id.* at 8315.

116. *Id.* at 8320.

117. *See id.* at 8317.

118. *See id.* at 8320.

119. *See* Timothy J. Mohin, *The Alternative Compliance Model: A Bridge to the Future of Environmental Management*, [1997] 27 Envtl. L. Rep. (Envtl. L. Inst.) 10,345, 10,346 (1997).

120. *Id.* at 10,346. The system seems to be a victim of its own success. *See id.* The result has been the creation of a massive array of federal, state, and local requirements involving numerous environmental standards, monitoring requirements, recordkeeping requirements, etc., which have produced "a regulatory briar patch second only to the tax code." *Id.*

desire to produce a more flexible regulatory scheme.¹²¹ One method designed to address these concerns is the alternative compliance model. The CER exists as a bridge between the old regulatory scheme and the promised flexibility of the alternative compliance model.

To understand how the CER spans this gap, it is necessary to analyze the basic structure and goals of the alternative compliance model. This model provides a regulated entity with an opportunity to develop its own more efficient plan of managing its environmental performance.¹²² This approach is predicated on three major tenets: 1) the alternative compliance plan will achieve a net environmental gain—a superior environmental performance; 2) the regulated entity will be able to reduce costs, delays, and inefficiencies (as compared to the current regulatory scheme); and 3) the alternative compliance plan proposed by the source will involve “stakeholders” throughout its development and implementation.¹²³ Stakeholders are those persons who will benefit from the source’s increased environmental performance.¹²⁴ Their participation allows the regulated entity an opportunity to tailor its own environmental program to satisfy the required standards of the various environmental statutes, to alleviate the concerns of stakeholders, and to achieve a more flexible, efficient, and cost-effective industrial operation.

The alternative compliance model approach is the product of two significant changes in the environmental regulatory landscape. The first is the recognition that all of the major environmental problems have been addressed.¹²⁵ What remains are the smaller, less efficient gains which are not easily achieved by the command and control approach of the current regulatory scheme—the problem of diminishing returns.¹²⁶ The second major change is that the general awareness of environmental problems and the complexity of establishing effective regulation has increased dramatically among the general public.¹²⁷ The command and control approach does not lend itself to responding efficiently to this increased understanding of environmental issues.¹²⁸ In an effort to address these changes, the alternative compliance model focuses on two key issues: the level of environmental

121. *See id.*

122. *See id.* at 10,345.

123. *See id.* at 10,345-46.

124. *See id.* at 10,345. Stakeholders may be environmental organizations, citizen action groups, government agencies or other bodies, tribal governments, or any member of the general public. *See id.*

125. *See id.* at 10,346.

126. *See id.*

127. *See id.*

128. *See id.*

performance achieved by the model and the importance of the stakeholder process.¹²⁹

A. Achieving Superior Environmental Performance

The foundation for any environmental regulation governing the release of pollutants is our scientific understanding of the risks such pollutants present to human health and to the environment. Much of the difficulty associated with establishing whether a particular regulation will achieve an overall environmental net gain rests with the complexity of managing multiple environmental media.¹³⁰ A great deal of uncertainty is involved in choosing an approach which leads to an environmental gain in one medium at the possible expense of increasing pollution in another medium.¹³¹ The problem inherent in the medium-by-medium system, especially when multiple pollutants and multiple media are involved, is the current lack of scientific capability to determine whether one form of regulatory control yields a superior environmental performance as compared to another form of regulatory control.¹³²

This uncertainty has led to the establishment of a complex regulatory system. That system is controlled by a top-down approach requiring an environmental standard to be issued first by the Environmental Protection Agency (EPA), then directed to state, regional, and local authorities before finally reaching the regulated entity.¹³³ The fact that each regulatory scheme for each medium requires its own set of monitoring, recordkeeping, and recording procedures further complicates the process.¹³⁴ The result of this

129. *See id.* at 10,351.

130. *See id.* The current system of environmental regulation takes a medium-by-medium approach. *See, e.g.*, Clean Water Act §§101-607, 33 U.S.C. §§ 1251-1387 (1994); Clean Air Act §§101-618, 42 U.S.C. §§ 7401-7671q (1994); Safe Drinking Water Act §§1401-1465, 42 U.S.C. §§ 300f to j-26 (1994).

131. *See* Mohin, *supra* note 119, at 10,351. For example, an alternative compliance plan could employ air stripping technology (moving pollutants from water to the air) or it could employ wet scrubbers (moving pollutants from the air to water). *See id.* at 10,352 n.63.

132. *See id.* at 10,352. An excellent example of the problem of scientific uncertainty is the case of the pesticide dichloro diphenyl trichloroethane (DDT). Originally determined to be safe to the public health by scientific data, DDT was eventually banned because it was found to be hazardous to certain bird species and tended to bioaccumulate. *See id.*; *see generally* RACHEL CARSON, *SILENT SPRING* (1962) (drawing attention to the hazards of DDT).

133. *See* Mohin, *supra* note 119, at 10,353. Since a given emission requirement will initially be created at the federal level (with EPA), then incorporated at the state and local levels, before finally reaching the regulated entity, there is a concern that the process will not provide the "right environmental outcomes." *Id.* The central criticism is whether the system will yield emissions standards that adequately address the needs of facilities at the community level. *See id.*

134. *See id.*

combination of scientific uncertainty and a complex regulatory scheme is the creation of a chasm between the regulators and industry.

The alternative compliance model offers an opportunity to close this divide. Realizing that scientific uncertainty makes it extremely difficult to resolve the problems presented by multiple media regulation, the alternative compliance method relies on enhanced public review of the regulatory process.¹³⁵ The model calls for a collaborative effort by all of the interested parties to produce a regulatory plan that considers all of the variables unique to each situation, in order to provide the best opportunity to achieve a superior environmental performance by a given pollution source.¹³⁶ A regulation that is the result of a lengthy period of stakeholder negotiations, public scrutiny, environmental interest group criticism, and regulatory review by all the affected agencies will yield an environmental benefit that outweighs the costs.¹³⁷ At its root, the alternative compliance model draws on the knowledge, experience, and common sense of all of these groups to reduce the effects of scientific uncertainty and to produce a more efficient system of environmental regulation;¹³⁸ one that avoids the "briar patch" of the command and control scheme. Additionally, the model offers the advantage of addressing the impact of a pollution source on the environment as a whole.¹³⁹ The benefit produced by this process is an environmental regulation that meets the environmental concerns of the regulatory agencies and the various public and community interest groups, while adjusting to the operational and economic needs of the affected pollution source. Thus, the level of environmental performance that a source may achieve is not constrained by the complexity of the medium-by-medium system, rather it is open to whatever efficiencies or gains that a group of interested parties may devise.¹⁴⁰

135. *See id.*

136. *See id.* at 10,352-54.

137. *See id.* at 10,353.

138. *See id.* at 10,354.

139. *See id.* at 10,353.

140. *See id.* The degree to which superior environmental performance should be achieved by a source is subject to debate. Some proponents of the alternative compliance model believe that superior environmental performance must be a prerequisite to any approved alternative compliance model. *See id.* Critics of this concept express a preference to adopt any plan that produces greater efficiency regardless of whether there is any net environmental gain. *See id.* Still others believe that the regulated community should be required to "pay" some price, such as direct payments to stakeholders, for the right to implement new procedures that will increase overall efficiency and reduce costs. *See id.* This approach is commonly referred to as "Greenmail." *Id.*

B. The Importance of the Stakeholder Process

The involvement of stakeholders in the alternative compliance model scheme is an essential tool for dealing with the regulatory problems created by the scientific uncertainty found in environmental issues. Providing all interested parties with an opportunity to participate in important environmental decisions ensures that all interests will be heard.¹⁴¹ However, this does not necessarily *require* that all interests will be satisfied.¹⁴² Rather, the method reflects a "consensus building" approach to environmental decisionmaking.¹⁴³ All participants can expect access to information, an opportunity for dialogue, and some protection of individual and minority rights.¹⁴⁴ As a result of the negotiation process, a regulatory plan for a given source can be fashioned to strike a balance between environmental concerns and industry efficiency.

The strength of a decision made by the stakeholder process rests in the fact that it is a decision by consensus.¹⁴⁵ Yet, the fact that industry and the public sector are acting to help shape environmental policy does not mean that these groups are usurping regulatory power.¹⁴⁶ The stakeholders may exert some influence by making a rejection of the consensus plan politically unsavory. It is often a difficult political choice to reject a decision that has been endorsed by numerous groups within one's political district.¹⁴⁷ Rather than creating an unelected regulatory body, the stakeholder process serves as

141. See Lawrence E. Susskind, *Overview of Developments in Public Participation, in PUBLIC PARTICIPATION IN ENVIRONMENTAL DECISIONMAKING* 2, 4 (ABA Standing Comm. on Envtl. Law ed., 1994).

142. *See id.*

143. *Id.* at 2.

144. *See id.* These important considerations require that special attention be paid to ensure that all stakeholders are adequately represented, that consultation between groups is open, that there is an agreed upon method to bring about closure, and that some form of discussion style, whether formal or informal, is approved in advance of the actual negotiations. *See id.* Furthermore, a neutral party should act as a facilitator to manage the discussions and stimulate good faith negotiations. *See id.* at 4.

145. *See id.* at 3-4. There are four factors which weigh heavily in determining whether the consensus building decision reflects a good faith negotiation: 1) Fairness: whether the decision reflects the viewpoints of the group as a whole; 2) Efficiency: whether the negotiation process provides a maximum benefit to all the participants (without costing a large amount of time and money); 3) Stability: whether the stakeholders' actions are indicative of reliance on the decision; and 4) Wisdom: whether the information that was available to the stakeholders was used in an intelligent manner during the negotiation process (can only be evaluated in retrospect). *See id.* at 4.

146. *See Mohin, supra* note 119, at 10,354. The stakeholder process does not imbue the assembled parties with any regulatory power of their own. *See id.* If this were truly the case, one would expect such a body to possess the same resources as a government body, such as funding, research expertise, access to data, etc. *See id.* Furthermore, the group's decisions would have to be accountable to the public and subject to judicial review. *See id.*

147. *See Susskind, supra* note 141, at 3-4.

a supplement to the public involvement aspect of the development of environmental regulations.¹⁴⁸ The alternative compliance model provides all interested parties with the chance to express their views and to have their concerns addressed during the development of a source's environmental requirements and standards.¹⁴⁹ The essential distinction between the model and the current approach to the public review of environmental regulations is that the stakeholders will submit a recommendation that is the product of a negotiation process.¹⁵⁰ The stakeholders are not simply voicing their concerns, they are actively interacting and seeking a solution which is agreed upon by all the respective parties.¹⁵¹ Finally, the ultimate decision rendered by the stakeholders will be subject to the same notice and comment procedures that currently govern all environmental rules.¹⁵² The approval of any environmental regulation will continue to remain firmly in the hands of EPA and other regulatory agencies.¹⁵³

III. THE CER: A MEANINGFUL STEP BY THE CAA TOWARD AN ALTERNATIVE COMPLIANCE MODEL

The promulgation of the Credible Evidence Rule (CER) is largely for the purpose of enhancing the enforcement power of the regulatory agencies. In the introductory section of the CER Final Rule in the Federal Register, the Environmental Protection Agency (EPA) makes clear that the purpose of the rule is to "clarify that non-reference test data can be used in enforcement actions."¹⁵⁴ The final rule's specific purpose is to make clear that earlier decisions, such as *Kaiser Steel*, will no longer prevent the use of any credible evidence in the Title V permitting process.¹⁵⁵ Indeed, an enforcement action may now rely exclusively on any credible evidence, without the need for reference test data.¹⁵⁶ Yet, does the introduction of this rule only bring new muscle to the enforcement arm of the Clean Air Act (CAA)?

No, the CER also provides a flexible foundation for implementing alternative environmental regulation strategies like the alternative compliance model. The promise of a broader application of the rule is embedded in the rule's flexible approach to the use of scientific data for the enforcement of

148. See Mohin, *supra* note 119, at 10,354.

149. See *id.*

150. See Susskind, *supra* note 141, at 3-4.

151. See *id.* at 4.

152. See Mohin, *supra* note 119, at 10,355.

153. See *id.* at 10,354.

154. Credible Evidence Revisions, 62 Fed. Reg. 8314, 8314 (1997).

155. See *id.*

156. See *id.* at 8316.

CAA regulations. The CER encourages reliance on a wider range of test methods to produce credible (accurate) data. The availability of more and better data may help to alleviate some of the scientific uncertainty that is present in the assessment of the harmful effects of pollutants on human health and the environment (in this particular case the ambient air).¹⁵⁷ Placing this kind of flexible methodology in the context of the alternative compliance model, where dialogue, negotiation, and the free exchange of information are essential to the process, may produce an opportunity to achieve greater environmental gains with decreasing costs in industrial resources and productivity.

The method the alternative compliance model employs is not entirely alien to the statutory scheme of the CAA. The Act specifies that EPA shall develop regulations to inform all affected parties of the procedures and policies which it will employ to enforce the Act.¹⁵⁸ EPA is required "to assure fairness and uniformity in the criteria, procedures, and policies applied by the various regions in implementing and enforcing" the Act.¹⁵⁹ EPA's presentation of the credible evidence rule reflects this notion of fairness in criteria, procedures, and policies. The agency emphasizes that the rule promotes a "common sense" approach to environmental protection.¹⁶⁰ A goal of the ruling is to "encourage[] smarter, cheaper and more *flexible means* of achieving environmental goals without compromising the fundamental health and environmental protections provided by federal environmental laws."¹⁶¹ Furthermore, EPA states that the rule will place both sources and potential enforcers on equal evidentiary footing in an enforcement action.¹⁶² The import of this approach is that no one party can derive an advantage by demanding the rigid application of a single criteria, procedure, or policy. Lying at the heart of the CER is a search for a flexible approach to deal with the complexity of environmental regulation.

One means of achieving this goal is to broaden the pool of relevant and credible scientific data that may be used to measure the amount of pollutants emitted by a source.¹⁶³ The CER encourages innovation in emission testing

157. Indeed, the CAA states as its first purpose the goal of "promot[ing] the public health and welfare and the productive capacity of [the Nation's] population." CAA § 101(b)(1), 42 U.S.C. § 7401(b)(1) (1994).

158. *See id.* § 301(a), 42 U.S.C. § 7601(a)(2).

159. *Id.* § 301(a)(2)(A), 42 U.S.C. § 7601(a)(2)(A).

160. Credible Evidence Revisions, 62 Fed. Reg. at 8315.

161. *Id.* (emphasis added).

162. *See id.* Indeed, an important feature of the CER is that sources may also rely on any credible evidence to establish that they are in compliance with emission standards. *See id.*

163. *See id.* EPA remarks that much of the data it anticipates will be used as "credible evidence" is already utilized for other purposes. *See id.* Indeed, both the regulators and the regulated entities "routinely rely on many types of information, including engineering calculations, indirect estimates of

methodology by expanding the availability of information which may be relevant to compliance with the CAA emission standards. This expansion occurs as both sources and enforcement persons seek to find more effective and cheaper means of establishing exactly how much pollutant is released into the air. Since the rule turns away from the rigidity of relying solely on specific testing methods to establish emission levels toward a more flexible reliance on any method that produces credible data, the full weight of the scientific method, replete with its strong emphasis on critical analysis and rigorous peer review, may be brought to bear on the regulatory process of the CAA. The only legal requirement of the CER is that the data be credible evidence. Access to a greater pool of credible scientific data concerning the emissions of air pollutants may provide an increased understanding of the risks presented by air pollution to human health and the environment. The result is a sound evidentiary standard that serves as an excellent mechanism for addressing the scientific uncertainty that hinders the achievement of ever more efficient gains in air pollution management.

The pursuit of scientifically credible data generated by the application of the CER lends itself easily to the alternative compliance model's technique for establishing more efficient environmental regulations. The knowledge generated by the use of CER data may be used to stimulate dialogue between the stakeholders. All interested parties will possess a common evidentiary standard upon which to develop and express their unique concerns and ideas regarding the regulation of a source's air emissions. The exchange of information based on credible evidence may create a more balanced negotiating position for each of the parties because they will all be speaking a "common language." Armed with a flexible evidentiary standard which can be verified by scientific inquiry, each stakeholder can enter into the negotiation process of the alternative compliance model scheme with reasonable assurance of his or her ability to introduce and evaluate meaningful information. Use of the CER in the negotiation process of the alternative compliance model encourages the good faith development of a regulatory plan that holds the promise of achieving greater increases in air quality while improving efficiency on behalf of the source.

The alternative compliance model also offers the advantage of reconciling the need to address multi-media environmental issues with the complexity of a command and control regulatory scheme. Since the CER creates a broader base of scientific standards and testing methods, a stakeholder negotiation process can use the flexibility of the CER to

incorporate a source's potential effect on other environmental media. This may produce an emission standard for an air pollutant that is sensitive to a pollutant's overall effect on the environment. A source can benefit from such an approach because the emission standard can be tailored to that source's unique operation and production processes. For example, the emission standard for a facility's operation of a blast furnace may be less severe than the emission standard for a similar operation elsewhere, because that particular facility's production process allows for a greater regulatory gain in another medium. The use of a CER test method could ensure the accuracy of such a result. Indeed, a comprehensive regulatory scheme could be created for each individual source if a similar approach is used with the regulation of other environmental media. Combining the flexibility of both the CER and the alternative compliance model offers the regulated sources of air pollutants, or any regulated source of pollution, a tool that can achieve a more efficient, cost-effective means of increasing the quality of the nation's air, and the environment as a whole.

CONCLUSION

The current trend in the demand for enhanced environmental regulation has had the effect on industry of increasing commercial pressures to meet environmental standards to be competitive, increasing the awareness of environmental issues among investors, and decreasing credibility among the public sector.¹⁶⁴ At the same time, the regulatory agencies and the public are experiencing frustration due to the delay and bureaucracy of the current regulatory system.¹⁶⁵ The CER offers a solid ground upon which to build the foundation for improved air emission regulations. EPA can provide a mechanism that allows all interested parties to engage in meaningful dialogue concerning the negotiations made during an alternative compliance model stakeholder's meeting by incorporating this evidentiary standard into the CAA regulations. There is no reason why the credible evidence rule must serve merely as an enforcement device. A more positive approach recognizes the value of relying on any relevant and credible information in the development of innovative methods of environmental regulation.

David Langer

164. See Kurt Fischer & Johan Schot, *Introduction: The Greening of the Industrial Firm, in ENVIRONMENTAL STRATEGIES FOR INDUSTRY: INTERNATIONAL PERSPECTIVES ON RESEARCH NEEDS AND POLICY IMPLICATIONS 3, 3-5* (Kurt Fischer & Johan Schot eds., 1993).

165. See Mohin, *supra* note 119, at 10,346.

