

## Chapter 1

# Expert Opinions in Environmental Litigation: A *Daubert* Update

David G. Ries  
Joseph R. Brendel  
Jerri A. Ryan  
*Thorp Reed & Armstrong, LLP*  
Pittsburgh, Pennsylvania

### Synopsis

§ 1.01.	<b>Introduction</b> .....	4
§ 1.02.	<b>The <i>Daubert</i> Trilogy</b> .....	5
	[1] — The <i>Frye</i> Standard.....	5
	[2] — The <i>Daubert</i> Opinion .....	6
	[3] — Subsequent Supreme Court Decisions: <i>General Electric</i> and <i>Kumho Tire</i> .....	9
§ 1.03.	<b>Amendment to Federal Rule of Evidence 702</b> .....	11
§ 1.04.	<b>Bases for Expert Opinions</b> .....	14
§ 1.05.	<b>Application of <i>Daubert</i> in Federal Environmental Cases</b> .....	15
	[1] — Expert Testimony Excluded .....	16
	[a] — <i>MSC, LLC v. Transmontaigne Inc.</i> .....	16
	[b] — <i>United States v. Cinergy Corp.</i> .....	17
	[c] — <i>Innis Arden Golf Club v.     Pitney Bowes, Inc.</i> .....	18
	[d] — <i>Finestone v. Florida Power &amp; Light     Company</i> .....	20
	[2] — Expert Testimony Admitted .....	21
	[a] — <i>Walnut Creek Manor, LLC v. Mayhew     Center, LLC</i> .....	21
	[b] — <i>City of Gary v. Shafer</i> .....	23
	[c] — <i>Abrams v. Ciba Specialty     Chemicals Corp.</i> .....	25
	[d] — <i>Cannata v. Forest Preserve District     of DuPage County</i> .....	27
	[3] — Expert Testimony Admitted in Part and Excluded in Part .....	28
	[a] — <i>City of St. Petersburg v. Total     Containment, Inc.</i> .....	28
	[b] — <i>B.H v. Gold Fields Mining Corporation</i> .....	30
	[c] — <i>Chitayat v. Vanderbilt Associates</i> .....	32

§ 1.06. **Application of *Frye* and *Daubert* in the State Courts**..... 34  
 [1] — “*Daubert*” States .....35  
     [a] — Kentucky Courts .....35  
     [b] — Ohio Courts .....35  
     [c] — West Virginia Courts .....36  
 [2] — “*Frye*” States .....37  
     [a] — Pennsylvania Courts .....37  
     [b] — Illinois Courts .....38  
     [c] — New York Courts .....39  
 [3] — Other Standard .....39  
     [a] — Virginia Courts .....39  
 § 1.07. **The Effect of *Daubert*** ..... 40  
 § 1.08. ***Daubert* in Administrative Proceedings**..... 43  
     [1] — The Data Quality Act ..... 44  
     [2] — Cases .....45  
     [3] — Challenges to EPA’s Endangerment Finding ..... 46  
 § 1.09. ***Daubert* in Climate Change Cases**..... 46  
 § 1.10. **Additional Information Sources** ..... 47  
 § 1.11. **Conclusion**..... 48

**§ 1.01. Introduction.<sup>1</sup>**

Environmental litigation almost always involves expert opinions on scientific and technical issues, often with multiple experts, in different disciplines, for each party. Establishing admissibility of the opinions of a party’s experts and challenging opposing experts is often critical to the outcome of the case.

In 1993, the United States Supreme Court issued its landmark decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,<sup>2</sup> which made significant changes in the standards for admissibility of expert opinions in federal courts. The Supreme Court established (1) a gatekeeping requirement under which courts must screen expert opinions for reliability and exclude

---

<sup>1</sup> The authors acknowledge and thank Kerri L. Coriston and Brock E. McCandless of Thorp Reed & Armstrong, LLP for their contribution to these materials. Parts of these materials are adapted from David G. Ries and Matthew A. Jarrell, “Expert Opinions in Environmental Cases After *Daubert* and Amended Federal Rule 702,” 22 *Energy & Min. L. Inst.* ch. 13 (2002).

<sup>2</sup> *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 113 S. Ct. 2786 (1993).

“junk science” and (2) a new, more flexible test to be used in this process. An amendment to Federal Rule of Evidence 702, effective in December 2000, codified *Daubert’s* general approach. These standards have now become better defined through two later Supreme Court decisions and their application by courts over the 17 years since *Daubert*, including a number of environmental cases.

### § 1.02. The *Daubert* Trilogy.

#### [1] — The *Frye* Standard.

For years, the admissibility of expert opinions in federal courts was governed by *Frye v. United States*.<sup>3</sup> *Frye* required that the scientific principle “must be sufficiently established to have gained general acceptance in the particular field to which it belongs.”<sup>4</sup>

In 1975, over 50 years after the *Frye* decision, the Federal Rules of Evidence were adopted. Rule 702 governs the admissibility of expert opinions. The rule, in its original form, provided:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

The issue for the Supreme Court in *Daubert* was whether the *Frye* standard continued to apply under Rule 702.<sup>5</sup>

---

<sup>3</sup> *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

<sup>4</sup> *Frye* involved a systolic blood pressure deception test, a predecessor to the polygraph. The court excluded the test because it had not yet gained general acceptance among physiological and psychological authorities.

<sup>5</sup> *Daubert* involved claims that an antinausea drug taken by mothers during pregnancy caused birth defects. The evidence at issue included animal-cell studies, live-animal studies, chemical-structure analysis, and recalculation of previous epidemiological studies. The district court, relying on *Frye*, excluded the expert opinions and granted summary judgment. The Ninth Circuit affirmed. *Daubert*, 509 U.S. at 583-584, 113 S. Ct. at 2792.