

Nos. 07-588, 07-589 & 07-597 (Consolidated)

---

---

In The  
**Supreme Court of the United States**

—◆—  
ENTERGY CORP., *Petitioner,*

v.

ENVIRONMENTAL PROTECTION AGENCY, ET AL.,  
*Respondents.*

—◆—  
PSEG FOSSIL LLC AND PSEG NUCLEAR LLC,  
*Petitioners,*

v.

RIVERKEEPER, INC., ET AL., *Respondents.*

—◆—  
UTILITY WATER ACT GROUP, *Petitioner,*

v.

RIVERKEEPER, INC., ET AL., *Respondents.*

—◆—  
**On Writ Of Certiorari To The  
United States Court Of Appeals  
For The Second Circuit**

—◆—  
**BRIEF FOR THE STATES AS RESPONDENTS**

—◆—  
PATRICK C. LYNCH  
Attorney General of Rhode Island  
TRICIA O'HARE JEDELE, *Counsel of Record*  
Special Assistant Attorney General  
150 South Main Street  
Providence, RI 02903  
(401) 274-4400

(Additional Counsel Listed On Inside Cover)

RICHARD BLUMENTHAL  
Attorney General  
of Connecticut

KIMBERLY MASSICOTTE  
MATTHEW LEVINE  
Assistant Attorneys General  
P.O. Box 120  
55 Elm Street  
Hartford, CT 06141-0120  
(860) 808-5250

MARTHA COAKLEY  
Attorney General  
of Massachusetts  
ANDREW GOLDBERG  
Assistant Attorney General  
1 Ashburton Place,  
18th Floor  
Boston, MA 02108  
(617) 727-2200

ANDREW M. CUOMO  
Attorney General of New York

BARBARA D. UNDERWOOD  
Solicitor General

ANDY D. BING  
Deputy Solicitor General

DENISE A. HARTMAN  
Assistant Solicitor General

MAUREEN F. LEARY  
Assistant Attorney General  
The Capitol  
Albany, NY 12224  
(518) 473-6085

JOSEPH R. BIDEN III  
Attorney General  
of Delaware

KEVIN MALONEY  
Deputy Attorney General  
820 N. French Street,  
6th Floor  
Wilmington, DE 19801  
(302) 577-8327

ANNE MILGRAM  
Attorney General  
of New Jersey

ELLEN BARNEY BALINT  
Deputy Attorney General  
P.O. Box 093  
25 Market Street  
Trenton, NJ 08625-0093  
(609) 984-5065

**QUESTION PRESENTED**

Whether § 316(b) of the Clean Water Act, 33 U.S.C. § 1326(b), authorizes the Environmental Protection Agency to compare costs with benefits in determining the “best technology available for minimizing adverse environmental impact” at cooling water intake structures?

TABLE OF CONTENTS

	Page
STATEMENT OF THE CASE.....	1
SUMMARY OF THE ARGUMENT .....	15
ARGUMENT.....	17
SECTION 316(b) OF THE CLEAN WATER ACT DOES NOT ALLOW EPA TO RELY ON A COST- BENEFIT ANALYSIS AS THE BASIS FOR ESTABLISHING A NATIONAL RULE FOR INTAKE STRUCTURES OR FOR MAKING SITE-SPECIFIC PERMITTING DECISIONS ..	17
A. The Plain Language of § 316(b) Requires EPA to Promulgate a Rule That Minimizes Adverse Environmental Impact.....	18
B. Throughout the Clean Water Act, Congress Told EPA When and How It Could Consider Costs .....	31
C. The Legislative History Supports the Conclusion That Congress Rejected a Cost- Benefit Analysis in Section 316(b) .....	38
CONCLUSION .....	44
ADDENDUM	

## TABLE OF AUTHORITIES

Page

## CASES:

<i>American Textile Mfrs. Institute, Inc. v. Donovan</i> , 452 U.S. 490 (1981).....	<i>passim</i>
<i>Appalachian Power Co. v. Train</i> , 566 F.2d 451 (4th Cir. 1977) .....	7
<i>BP Exploration &amp; Oil, Inc. v. E.P.A.</i> , 66 F.3d 784 (1995).....	28
<i>Brown v. Gardner</i> , 513 U.S. 115 (1994).....	25
<i>Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.</i> , 467 U.S. 837 (1984) ...	18, 24, 31
<i>Chrysler Corp. v. Brown</i> , 441 U.S. 281 (1979).....	38
<i>Conoco Phillips Co. v. U.S. Environmental Protection Agency</i> , (Docket No. 06-60662) (2008).....	9
<i>Consolidated Edison Co. of New York, Inc. v. NYSDEC</i> , 726 F.Supp. 1404 (S.D.N.Y. 1989).....	8
<i>Consumer Product Safety Comm'n v. GTE Sylvania, Inc.</i> , 447 U.S. 102 (1980).....	39
<i>Cronin v. Browner</i> , 898 F.Supp. 1052 (S.D.N.Y. 1995) .....	8
<i>Dewsnup v. Timm</i> , 502 U.S. 410 (1992).....	22
<i>EPA v. Nat'l Crushed Stone Ass'n</i> , 449 U.S. 64 (1980).....	14, 35
<i>FDA v. Brown &amp; Williamson Tobacco Corp.</i> , 529 U.S. 120 (2000).....	25, 32
<i>INS v. St. Cyr</i> , 533 U.S. 289 (2001) .....	43

## TABLE OF AUTHORITIES – Continued

	Page
<i>Massachusetts v. EPA</i> , 127 S. Ct. 1438 (2007).....	24
<i>MCI Telecommunications Corp. v. Am. Tel. &amp; Tel. Co.</i> , 512 U.S. 218 (1994).....	29
<i>Nat’l Ass’n of Home Builders v. Defenders of Wildlife</i> , 127 S.Ct. 2518 (2007) .....	32
<i>Nat’l R.R. Passenger Corp. v. Boston &amp; Maine Corp.</i> , 503 U.S. 407 (1992).....	29
<i>Nat’l Wildlife Fed’n v. EPA</i> , 286 F.3d 554 (D.C. Cir. 2002).....	14
<i>Riverkeeper, Inc. v. EPA</i> , 358 F.3d 174 (2d Cir. 2004).....	4, 9
<i>Riverkeeper, Inc. v. EPA</i> , 475 F.3d 83 (2d Cir. 2007).....	2, 12, 13, 14, 15
<i>Whitman v. American Trucking Ass’ns</i> , 531 U.S. 457 (2001).....	22, 23, 25, 27, 36
<i>Williams v. Taylor</i> , 529 U.S. 420 (2000).....	18

## STATUTES:

33 U.S.C. § 1251 .....	1, 4
33 U.S.C. § 1311.....	<i>passim</i>
33 U.S.C. § 1311(b)(1)(A).....	6, 13, 34, 40
33 U.S.C. § 1311(b)(2)(A).....	6, 27, 28, 34, 40
33 U.S.C. § 1311(b)(2)(E).....	6, 36
33 U.S.C. § 1314 .....	5, 33, 34
33 U.S.C. § 1314(b).....	33, 35

## TABLE OF AUTHORITIES – Continued

	Page
33 U.S.C. § 1314(b)(1)(B).....	6, 34
33 U.S.C. § 1314(b)(2)(B).....	35
33 U.S.C. § 1314(b)(4)(B).....	6, 35, 36
33 U.S.C. § 1316 .....	<i>passim</i>
33 U.S.C. § 1316(a)(1).....	6, 35, 41
33 U.S.C. § 1316(b)(1)(B).....	35
33 U.S.C. § 1326(a).....	5, 33, 36, 37, 42
33 U.S.C. § 1326(b).....	<i>passim</i>
42 U.S.C. § 7409(b)(1).....	22, 23, 24, 27

## CODE OF FEDERAL REGULATIONS:

40 C.F.R. § 125.83 .....	20
40 C.F.R. § 125.94(a)(1)(i).....	11
40 C.F.R. § 125.94(a)(1)(ii).....	11
40 C.F.R. § 125.94(a)(2-4) .....	12
40 C.F.R. § 125.94(a)(5) .....	12
40 C.F.R. § 125.94(a)(5)(i).....	12
40 C.F.R. § 125.94(a)(5)(ii).....	12
40 C.F.R. § 125.99(a).....	12

## FEDERAL REGISTER:

38 Fed. Reg. 34,410 (December 13, 1973).....	7
41 Fed. Reg. 17,387 (April 26, 1976).....	7, 19

## TABLE OF AUTHORITIES – Continued

	Page
66 Fed. Reg. 65,256 (December 18, 2001).....	9
67 Fed. Reg. 17,122 (April 9, 2002).....	8
69 Fed. Reg. 41,576-623 (July 9, 2004).....	<i>passim</i>
71 Fed. Reg. 35,006 (June 16, 2006).....	9
72 Fed. Reg. 37,107 (July 9, 2007).....	15

## LEGISLATIVE HISTORY:

1 <i>A Legislative History of the Water Pollution Control Act Amendments of 1972</i> 263 (93d Cong. 1st Sess.) (1973).....	38, 41
Senate Consideration of the Report of the Conference Committee, 92d Cong., 170 (October 4, 1972), reprinted in 1 <i>Legislative History of the Water Pollution Control Act Amendments of 1972</i> (Comm. Print 1973).....	40, 41
Senate Report 92-414 (1971), reprinted in U.S.C.C.A.N. 3668 (1972) .....	41
Conference Committee Report No. 92-1236 (accompanying S. 2770) (Sept. 28, 1972) .....	42
3 <i>Legislative History of the Clean Water Act of 1977 – A Continuation of the Legislative History of the Federal Water Pollution Control Act Amendments of 1972</i> (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), 427, Sen. No. 95-14 (1975) (Statement of Senator Muskie).....	39



## TABLE OF AUTHORITIES – Continued

Page

## OTHER AUTHORITY:

<i>American Heritage Dictionary of the English Language</i> (Houghton Mifflin, 4th ed. 2006) .....	19, 21, 27
<i>Webster’s Third New International Dictionary of the English Language</i> , (Merriam-Webster unabridged ed., 1981) .....	19, 20, 21, 31
<i>In re Brunswick Steam Electric Plant</i> , Decision of the General Counsel, No. 41 (1976) .....	20
“Development Document for Proposed Best Technology Available for Minimizing Adverse Environmental Impact of Cooling Water Intake Structures” (“Development Document”) available at <a href="http://nepis.epa.gov">http://nepis.epa.gov</a> .....	7
SAIC <i>Background Paper Number 3: Cooling Water Intake Technologies</i> , EPA, April 4, 1994 .....	11
Hon. Stephen G. Breyer, <i>Breaking the Vicious Circle: Toward Effective Risk Regulations</i> (1994).....	31

## STATEMENT OF THE CASE

Section 316(b) of the Clean Water Act<sup>1</sup> addresses the impact to fish and other aquatic life caused by the massive withdrawal of water at cooling water intake structures. Section 316(b) mandates that:

Any standard established pursuant to section 1311 of this title or section 1316 of this title and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect *the best technology available for minimizing adverse environmental impact*.

CWA § 316(b), 33 U.S.C. § 1326(b) (emphasis added).

This case is about whether in selecting the *best technology available for minimizing adverse environmental impact* under section 316(b), the United States Environmental Protection Agency (“EPA”) may reject the best technology based on the agency’s comparison of costs with the value of benefits. Specifically, the question is whether the language or purpose of the statute supports EPA’s reliance upon a cost-benefit analysis in establishing a national rule governing intake structures, or in setting site-specific permitting alternatives for intake structures.

---

<sup>1</sup> The Federal Water Pollution Control Act, as amended, is commonly referred to as the Clean Water Act (herein referred to as “CWA” or “the Act”). See 86 Stat. 816, 33 U.S.C. § 1251, *et seq.*

The State-Respondents<sup>2</sup> agree with the Second Circuit Court of Appeals' conclusion that, “[w]hile the statutory language suggests that the EPA may consider costs” in making this determination, “cost-benefit analysis is not similarly supported by the language or purpose of the [Act].” Pet. App. 24a (*Riverkeeper, Inc. v. EPA*, 475 F.3d 83, 99) (2d Cir. 2007) (“*Riverkeeper II*”).<sup>3</sup> Congress’ use of the word “available” allows for a limited consideration of cost, but when viewed in context, the technology standard in section 316(b) bars EPA from relying on a cost-benefit analysis when establishing the national rule or site-specific permitting alternatives for intake structures. In *Riverkeeper II*, the Second Circuit properly understood the concept of “availability” in terms of “feasibility,” and thus approved a type of feasibility analysis rather than a cost-benefit analysis as being consistent with section 316(b). See Pet. App. 27a (*Riverkeeper II*, *id.* at 100) (citing *American Textile Mfrs. Institute, Inc. v. Donovan*, 452 U.S. 490, 509-510 (1981) (“*American Textile*”) (“Congress itself has defined the relationship between technology costs and environmental benefits, and placed the emphasis on minimizing environmental impacts.”)).

---

<sup>2</sup> State-Respondents include: the States of Rhode Island, Connecticut, Delaware, New Jersey, and New York, and the Commonwealth of Massachusetts.

<sup>3</sup> Citations to “Pet. App.” refer to the Appendix to the Petition for Certiorari filed by Entergy Corp. in No. 07-588. “J.A.” refers to the Joint Appendix. “R.A.” refers to the addendum included in the State-Respondents’ brief.

Thus, when promulgating national performance standards to reflect the statutory mandate, EPA may consider cost in assessing the “availability” of a technology in terms of its economic and technological feasibility, or in evaluating comparably effective technologies. The language of the statute does not, however, authorize EPA to require less than the top-performing technology for minimizing impact based on its view that the cost of the top-performing technology outweighs the value of the benefits the technology would achieve.

### **The Environmental Impact Caused By Intake Structures**

Electric power generating plants and other facilities (“power plants”) withdraw hundreds of billions of gallons of water daily from the Nation’s waters through “intake structures” to cool nuclear reactors, or coal or gas-fired turbines, and other machinery and equipment. Pet. App. 169a-170a (69 Fed. Reg. 41,576, 41,586 (July 9, 2004)). After the water is drawn, and used by the power plant for cooling purposes, it is discharged back to the water bodies as thermally polluted effluent.

A power plant’s intake of cooling water and subsequent discharge of heated effluent causes two distinct types of injuries to aquatic life and the integrity of the Nation’s waters. The process of withdrawing water through the intake structure annually kills and injures trillions of fish, shellfish

and other aquatic organisms by trapping them against the screens located at the mouth of the intake structure (“impingement”), or by drawing them into the facility with the cooling water (“entrainment”).<sup>4</sup> Subsequently, heated effluent is discharged back into the water body, fundamentally altering the water body’s physical and chemical characteristics and thereby making it potentially uninhabitable for fish and other aquatic life.

### **The Clean Water Act**

Congress enacted the Act in 1972 “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” CWA, as amended, 86 Stat. 816, 33 U.S.C. § 1251, *et seq.* In section 316 of the Act, Congress addressed environmental harm caused by both intake structures and thermally polluted effluent. In subsection (b), Congress directed EPA, when it establishes effluent limitations for these facilities, to require power plants to use the *best technology available for minimizing adverse*

---

<sup>4</sup> A single power plant may impinge more than a million adult fish in a three-week period. *Riverkeeper, Inc. v. EPA*, 358 F.3d 174, 181 (2d Cir. 2004) (“*Riverkeeper I*”); and may impinge and entrain trillions of aquatic organisms in a year. Pet. App. 179a (69 Fed. Reg. 41,576, 41,588 (July 9, 2004)). The number killed or injured is largely corollary to the amount of water withdrawn and the velocity at which it is being withdrawn, *i.e.*, the more water withdrawn and the higher the velocity of the withdrawal, the greater the harm. See Pet. App. 230a, 241a, and 288a (69 Fed. Reg. at 41,599, 41,601, and 41,612).

*environmental impact* at their intake structures. CWA § 316(b), 33 U.S.C. § 1326(b). In contrast to this unequivocal directive regarding intake structures, in subsection (a) Congress authorized an exception to compliance with the national effluent limitations for thermal pollution where a power plant can demonstrate that a less stringent limitation would “assure the protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife on that water body.” See CWA § 316(a), 33 U.S.C. § 1326(a).

Because section 316(b) addresses intake structures, not effluent, it stands apart from the statutory provisions elsewhere in the Act that govern effluent limitations for point source discharges. In section 301, for instance, Congress established a statutory framework for EPA to set effluent limitations for existing facilities. 33 U.S.C. § 1311. Likewise, section 306 of the Act provides EPA with the statutory framework for setting effluent limitations for new sources. 33 U.S.C. § 1316. In these provisions, Congress established discrete technology-based standards for different types of pollutants and facilities.

With respect to each of the technology standards, Congress expressly told EPA when and how to consider costs depending on the technology standard being applied. CWA §§ 301, 304, 33 U.S.C. §§ 1311, 1314. Congress directed EPA to weigh costs in relation to water quality benefits in only two instances: when setting effluent limitations reflecting best practicable control technology (“BPT”) – a

standard applicable to existing facilities only until 1989 (*see* CWA § 301(b)(1)(A), 33 U.S.C. § 1311(b)(1)(A)) and CWA § 304(b)(1)(B), 33 U.S.C. § 1314(b)(1)(B) (directing EPA to consider “total cost of application of technology in relation to effluent reduction benefits to be achieved from such application”); and when setting effluent limitations reflecting the best conventional technology (“BCT”) – a standard enacted in the 1977 amendments to the CWA applicable only to conventional pollutants (*see* CWA § 301(b)(2)(E), 33 U.S.C. § 1311(b)(2)(E) and CWA § 304(b)(4)(B), 33 U.S.C. § 1314(b)(4)(B)) (directing EPA to consider “the reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent benefits derived.”). With respect to all other *point sources*, whether from existing or new facilities, Congress directed EPA to take into account the cost of achieving effluent reductions, but did not direct EPA to weigh technology costs against reduction benefits. *See* CWA § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A); CWA § 306(a)(1), 33 U.S.C. § 1316(a)(1).

Thus, while Congress expressly told EPA to consider technology costs, and in two instances costs in relation to reduction benefits, when setting national effluent limitations, it did not expressly tell EPA to consider costs when establishing national performance standards for intake structures. Instead, section 316(b) imposes on EPA the unqualified mandate that intake structures at both new and existing facilities shall reflect the *best technology available for minimizing adverse environmental impact*.

## **EPA's Historical Interpretation of Section 316(b)**

A little more than a year after Congress passed section 316(b), EPA issued a draft rule “to insure that intake structures reflect the best technology available for minimizing adverse environmental impact.” *See Proposed Rule, Preamble*, 38 Fed. Reg. 34,410 (December 13, 1973). On April 26, 1976, EPA issued the final rule, which incorporated (but did not publish as part of the rule), a “Development Document for Proposed Best Technology Available for Minimizing Adverse Environmental Impact of Cooling Water Intake Structures” (“Development Document”). *See Final Rule at 41 Fed. Reg. 17,387, 17,390* (April 26, 1976),<sup>5</sup> and *see* Development Document at p. 175, available at <http://nepis.epa.gov>. The Development Document listed several different technologies that were, at the time, “available.”<sup>6</sup> Among the most effective of these technologies was “recirculating cooling water systems employing off stream means to transfer heat directly to the atmosphere to minimize

---

<sup>5</sup> As a result of a successful industry challenge to EPA's 1976 Rule, the Fourth Circuit Court of Appeals remanded the 1976 Rule because the Development Document had not been published with the 1976 Rule. *See Appalachian Power Co. v. Train*, 566 F.2d 451 (4th Cir. 1977).

<sup>6</sup> The technology available to address the adverse impact associated with intake structures are relatively limited, and have included essentially the same set of technologies for more than thirty years. The technologies include various screening methods, fish return or barrier systems, change of intake location, and reductions in intake flow.



or in some cases eliminate the use of cooling water” (known as “closed-cycle cooling”).

Closed-cycle cooling continues to be one of the top technological performers at intake structures in the industry, eliminating mortality from impingement and entrainment by up to 98 percent when compared with conventional once-through systems. Pet. App. 239a-240a (69 Fed. Reg. 41,601). EPA has construed section 316(b) to require closed-cycle cooling technology as the *best technology available for minimizing adverse impact* at more than a dozen existing power plants, both before it published the 1976 Rule and after it was remanded. *See, e.g., Palisades Nuclear Power Plant*, 67 Fed. Reg. 17,122, 17,155 (April 9, 2002); *Consolidated Edison Co. of New York, Inc. v. NYSDEC*, 726 F.Supp. 1404, 1406 (S.D.N.Y. 1989).

### **The Phase II Rule**

In 1993, environmental groups challenged EPA’s failure to re-issue regulations governing intake structures. Pursuant to an amended consent decree resolving the case, EPA agreed to issue the intake structure regulations in three phases: the first for new facilities (“Phase I Rule”); the second for existing facilities (“Phase II Rule”); and the third for smaller offshore and coastal facilities (“Phase III Rule”). *See Cronin v. Browner*, 898 F.Supp. 1052 (S.D.N.Y. 1995). In December 2001, EPA issued its final Phase I Rule

for new facilities.<sup>7</sup> In July 2004, EPA issued the final Phase II Rule for existing facilities, at issue here.<sup>8</sup> EPA issued its final Phase III Rule for smaller facilities in June 2006.<sup>9</sup>

The final Phase II Rule applies only to existing facilities “whose primary activity is to generate and transmit electric power and who have a design intake flow of 50 million gallons or greater, and that use at least 25 percent of the water withdrawn for cooling purposes.” Pet. App. 189a (69 Fed. Reg. at 41,590). The Phase II Rule establishes “performance standards” – percentage ranges for reducing impingement (80 to 95 percent) and entrainment (60 to 90 percent) – based on a “range of technologies that EPA has determined to be commercially available for the industry as a whole. . . .” Pet. App. 228a (69 Fed. Reg. at 41,599). In the Phase II Rule, EPA interpreted “section 316(b) as authorizing it to

---

<sup>7</sup> 66 Fed. Reg. 65,256 (Dec. 18, 2001). The Phase I Rule was challenged by environmental and industry groups, and portions of it were upheld and others remanded to EPA. *See Riverkeeper I, supra*, 358 F.3d 174 (2d Cir. 2004).

<sup>8</sup> Pet. App. 122a. 69 Fed. Reg. 41,576 (July 9, 2004).

<sup>9</sup> 71 Fed. Reg. 35,006 (June 16, 2006). In its Phase III Rule, EPA decided not to issue regulations governing small existing facilities. The Phase III Rule contains intake requirements for new offshore and coastal oil and gas extraction facilities that had been deferred from the Phase I Rule. The Phase III Rule was challenged in the Fifth Circuit Court of Appeals, *Conoco Phillips Co. v. EPA* (Docket No. 06-60662), and on June 8, 2008, that matter was stayed pending this Court’s resolution of the challenge to the Phase II Rule.

consider not only technologies but also their effects on and benefits to the water from which the cooling water is withdrawn.” Pet. App. 157a (69 Fed. Reg. at 41,583); Pet. App. 249a-250a (69 Fed. Reg. at 41,603).

EPA also compared the efficacy of competing technologies. Specifically, EPA compared the effectiveness of various technologies in reducing impingement and entrainment, and concluded that other design and construction technologies, can approach closed-cycle cooling at less costs. Pet. App. 260a-261a (69 Fed. Reg. at 41,606). EPA recognized that closed-cycle cooling is the most effective technology, *see* Pet. App. 239a-240a (69 Fed. Reg. at 41,601), but rejected closed-cycle cooling because of its high costs. *See* Pet App. 255a (69 Fed. Reg. at 41,605).

EPA therefore set the low ends of the ranges in the performance standards at 80 percent reduction for impingement and 60 percent reduction for entrainment – far less than the 98 percent reductions that it recognized could be attained by closed-cycle cooling. Pet. App. 239a (69 Fed. Reg. at 41,601). EPA based the lower impingement and entrainment reduction percentages on the performance of less costly screening technologies. Pet. App. 244a (69 Fed. Reg. at 41,602). All of the evidence in the record indicated that screening technologies are far less effective at reducing the impacts associated with

impingement and entrainment at major power plants.<sup>10</sup>

The Phase II Rule establishes various compliance alternatives for achieving the performance standards. Recognizing that closed-cycle cooling has been installed at more than a dozen existing facilities, the first alternative allows a facility to demonstrate compliance with the impingement performance standard by showing that it has reduced its flow commensurate with closed-cycle cooling. Pet. App. 556a (40 C.F.R. § 125.94(a)(1)(i)). As a second compliance alternative, the Rule deems a facility in compliance with the impingement performance standard if it shows that it has reduced its intake velocity to 0.5 feet per second or less. Pet. App. 556a (40 C.F.R. § 125.94(a)(1)(ii)). Under another compliance alternative, a facility may demonstrate compliance with both impingement and entrainment performance standards through a combination of design and construction technologies, commonly

---

<sup>10</sup> See Science Applications International Corporation (“SAIC”), Background Paper Number 3, wherein SAIC, on behalf of EPA, concluded:

The main finding with regard to intake screen systems is that they are limited in their abilities to minimize adverse aquatic impact . . . *and many of our major power plants have been in serious trouble because of cooling water conditions [with] which our U.S. screening system cannot cope.*

SAIC *Background Paper Number 3: Cooling Water Intake Technologies*, EPA, April 4, 1994, at 3-5 (emphasis in original).

referred to by EPA as a “suite of technologies” that it considered *best technology available for minimizing adverse environmental impact*, including wedgewire screens, barrier systems, fish return systems, Pet. App. 592a (40 C.F.R. § 125.99(a)), and operational measures and/or restoration measures.<sup>11</sup> Pet. App. 556a-557a (40 C.F.R. § 125.94(a)(2-4)).

The Phase II Rule also allows two kinds of site-specific “compliance alternatives” that do not actually require compliance with the Rule’s percentage reduction standards for impingement and entrainment. Pet. App. 557a (40 C.F.R. § 125.94(a)(5)). First, if the facility demonstrates that compliance costs would be significantly greater than the compliance costs considered by EPA in the Rule, the facility may come “as close as practicable” to the performance standard (“cost-cost variance”). Pet. App. 557a (40 C.F.R. § 125.94(a)(5)(i)). Second, if the facility demonstrates that compliance costs would be “significantly greater than the benefits of complying” with the performance standards (“the cost-benefit variance”), the facility may come “as close as practicable” to the performance standard. Pet. App. 559a (40 C.F.R. § 125.94(a)(5)(ii)). EPA considered

---

<sup>11</sup> The Second Circuit struck down the Phase II Rule’s provisions that allowed a power plant to comply with section 316(b) through the use of restoration measures in lieu of technology. Pet. App. 43a-49a (*Riverkeeper II, supra*, 475 F.3d at 108-110). This Court limited the question presented to the cost-benefit issue.

only the costs associated with installing submerged cylindrical wedgewire screen technology to treat the total cooling water intake flow; these “compliance alternatives,” therefore, could preclude permitting agencies from requiring the most effective intake technology, closed-cycle cooling, at any power plant in the country. Pet. App. 244a (69 Fed. Reg. at 41,602).

## **Riverkeeper II**

On January 25, 2007, the Second Circuit Court of Appeals concluded that section 316(b) does not authorize EPA to promulgate a rule in which the *best technology available for minimizing adverse environmental impact* is determined by comparing the cost of a technology with the value of the environmental benefit it will achieve, or to “consider the relationship of a technology’s cost to the level of reduction of adverse environmental impact it produces.” Pet. App. 25a. (*Riverkeeper II, supra*, 475 F.3d at 99). The court prefaced its holding that EPA can consider cost in “a limited fashion and not as a primary consideration,” *id.*, by highlighting the difference between a cost-benefit analysis, like the one prescribed by Congress for effluent standards in section 301(b)(1)(A), and “cost-effectiveness.” Quoting from Office of Management and Budget (“OMB”) Circular A-94, *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs*, Appendix A (1992), the court explained the difference between the two methods as follows:

“[B]enefit-cost analysis” [is] “[a] systematic quantitative method of assessing the desirability of government projects or policies when it is important to take a long view of future effects and a broad view of possible side-effects” and “cost effectiveness” [is] “[a] systematic quantitative method for comparing the costs of alternative means of achieving the same stream of benefits or a given objective.”

Pet. App. 23a. (*Riverkeeper II*, 475 F.3d at 98, n.10). In other words, a cost-effectiveness analysis seeks the least costly method of achieving a specified result, while a cost-benefit analysis compares costs with the value of benefits, and chooses the result where the greatest value of net benefits is not outweighed by the costs of achieving those benefits.

The Second Circuit concluded that section 316(b) allows EPA, when it sets national standards for intake structures, and when it establishes criteria for site-specific permitting to consider costs only in terms of feasibility and “cost-effectiveness.” The court reached this conclusion based on the statute’s text, the context provided by the CWA, historical perspective expressed in documents like those produced by OMB, and the reasoning and authority found in various court opinions, including *EPA v. Nat’l Crushed Stone Ass’n*, 449 U.S. 64, 71 (1980); *Nat’l Wildlife Fed’n v. EPA*, 286 F.3d 554, 570 (D.C. Cir. 2002); and *American Textile*, *supra*, 452 U.S. at 509.

The Second Circuit remanded the Phase II Rule to EPA for reconsideration, stating that it was “unclear whether the Agency improperly weighed the benefits and the costs of requiring closed-cycle cooling,” because EPA had explained that “its rejection of closed-cycle cooling as [best technology available for minimizing adverse environmental impact] was based on ‘total social costs’ and ‘lack of cost-effectiveness.’” Pet. App. 32a (*Riverkeeper*, 475 F.3d at 102) (citing 69 Fed. Reg. at 41,606). In July 2007, EPA suspended the Phase II Rule pending further rulemaking. See 72 Fed. Reg. 37,107 (July 9, 2007).



### **SUMMARY OF THE ARGUMENT**

Congress’ intent in section 316(b) is unambiguous. EPA must select the top-performing technology available for the purpose of minimizing adverse environmental impact.

The plain language of section 316(b) requires EPA to promulgate a national rule that minimizes the killing and injuring of fish and other aquatic life. By using this language, Congress itself defined the relationship between technology costs and the value of environmental benefits. With calculated intention, Congress directed EPA to minimize adverse environmental impact, and EPA may not substitute its own different policy choice. Congress did not authorize EPA to compare the costs of the best technology available with the value of the benefits



that the technology would achieve when establishing a national rule for minimizing impact, or in setting criteria applicable at the permitting level. Because Congress did not expressly tell EPA to consider cost, cost cannot be a primary consideration, and most especially cannot be compared with benefits. Cost, therefore, is only allowed as a secondary factor to be considered by EPA when evaluating the best technology's "availability." A finding of "availability" will necessarily require EPA to determine the feasibility of the top-performing technology, but a feasibility analysis is not a cost-benefit analysis.

Reading section 316(b) in context confirms this straightforward meaning. Throughout the CWA, Congress told EPA when and how it could consider costs. Congress drafted different technology standards for different categories of pollutants and facilities. In some cases, Congress required EPA to consider costs in relation to benefits. In other instances, Congress authorized only a consideration of cost without comparison to benefits. What little legislative history exists supports this plain meaning.

Allowing EPA to rely on its own cost-benefit evaluation, where Congress already decided the question, would not, as Petitioners suggest, be within its "gap-filling" discretion. Congress did not acquiesce or delegate any power to EPA to employ a cost-benefit analysis in section 316(b). Instead, Congress expressed its clear intent to minimize the adverse environmental impact, *even if* minimizing impact

means that the selected technology will impose high costs on the industry or at a particular facility.

Petitioners argue that because selected definitions of key statutory terms can appear ambiguous in contexts other than section 316(b), the Court should presume ambiguity and defer to EPA's interpretation as reasonable. But the absence of an express reference to cost-benefit analysis in section 316(b) does not create ambiguity where the language in the provision clearly expresses Congress' intent.



## ARGUMENT

### **SECTION 316(b) OF THE CLEAN WATER ACT DOES NOT ALLOW EPA TO RELY ON A COST-BENEFIT ANALYSIS AS THE BASIS FOR ESTABLISHING A NATIONAL RULE FOR INTAKE STRUCTURES OR FOR MAKING SITE-SPECIFIC PERMITTING DECISIONS.**

The text of section 316(b) is unambiguous. The language plainly expresses Congress' intent that EPA must select the *best technology available for minimizing adverse environmental impact* associated with intake structures. The statutory phrase unambiguously precludes EPA from comparing costs with the value of the benefits in selecting cooling water intake technology that satisfies the statutory mandate. Rather than weigh costs against benefits, Congress clearly directed EPA to require technology that surpasses all others for achieving the goal of

minimizing the adverse impact associated with using the intake structures to the extent that technology is available. EPA may not substitute its policy views for those of Congress.

The United States and Industry Petitioners seek to add a cost-benefit comparison as a factor in the section 316(b) statutory equation. Adding this comparison would circumvent Congress' intent, to restore the Nation's degraded waters by implementing standards based on what the limits of technology can achieve and would resurrect a policy approach to water quality regulation long since abandoned by Congress.

EPA's interpretation therefore fails under step one of the *Chevron* analysis. See *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-843 (1984) ("If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.").

**A. The Plain Language of § 316(b) Requires EPA to Promulgate a Rule That Minimizes Adverse Environmental Impact.**

The starting point for construing the statutory standard – *best technology available for minimizing adverse environmental impact* – is the language itself. *Williams v. Taylor*, 529 U.S. 420, 431 (2000) ("We start, as always, with the language of the statute.").

The first word in the standard, “best,” means “excelling, or surpassing all others of its kind in inherent quality or according to some standard.” *Webster’s Third New International Dictionary of the English Language* 208 (Merriam-Webster unabridged ed., 1981) (“*Webster’s Third*”). In section 316(b), “best” is used as a superlative to describe the technology that must be selected to achieve the articulated congressional objective; it must surpass all other technologies *for minimizing* adverse environmental impacts. The word “for” is often used to indicate “the purpose or object of” a thing, action, or activity. *Id.* at 886; *see also American Heritage Dictionary of the English Language* 686 (Houghton Mifflin Co., 4th ed., 2006) (“*American Heritage Dictionary*”) (“indicates the object, aim, or purpose of an action or activity”). The placement of the word “for” in section 316(b) is the fulcrum of the statutory standard welding the first clause, “best technology available,” with the goal of the section, “minimizing adverse environmental impact.” Read in conjunction with the prepositional and objective-defining language – *for minimizing impacts* – the word “best” means the top-performing technology for achieving that objective.

The word “minimize” means “to reduce to the smallest possible number, degree, or extent.” *Webster’s Third*, at 1438. This is the definition EPA gave the word “minimize” when it promulgated the initial rule in 1976. *See* J.A. 41 (41 Fed. Reg. 17,387) (April 26, 1976) (In the preamble discussing “minimizing adverse environmental impact,” EPA

explained that, “[o]nce such adverse effects have been identified (or in the case of new structures, predicted) then *the effort must be to select the most effective means of minimizing (i.e., ‘reducing to the smallest possible amount or degree’) those adverse effects.*” (emphasis added).<sup>12</sup> More recently in its promulgation of the Phase I Rule governing intake structures at new power plants, EPA again adopted the 1976 definition. See 40 C.F.R. § 125.83 (defining “minimize” to mean “to reduce to the smallest amount, extent, or degree reasonably possible”). The noun following the verb “minimize” is “impact.” “Impact” is defined as “the act of impinging or striking,” or “a concentrated force producing change,” *Webster’s Third*, at 1131, demonstrating Congress’ understanding of the nature of the environmental injuries associated with intake structures.

Under section 316(b), the *best technology for minimizing adverse environmental impact* must also

---

<sup>12</sup> Later in 1976, in *In re Brunswick Steam Electric Plant*, a Decision of the General Counsel, EPA again consistently discussed the meaning of the word “minimize,” stating that:

The structures must reflect the best technology available for minimizing (*i.e.* “*reducing to the smallest possible amount or degree*”) adverse environmental impact – significant or otherwise. . . . In other words, the goal of best technology available under § 316(b) is to minimize all adverse impacts – not to reduce the impact to a pre-determined level.

J.A. 60 (*In re Brunswick Steam Electric Plant*, EPA, Decision of General Counsel No. 41) (emphasis added).

be “available.” The most quotidian meaning of the word “available” is “capable of use for the accomplishment of a purpose.” *Webster’s Third*, at 150; *see also American Heritage Dictionary*, at 123 (defining “available” as “present and ready for use; at hand; accessible”). A technology is “available” to the power plant industry, therefore, if it is accessible, or capable of being used by power plants at the time it is chosen.<sup>13</sup> Synonyms for “available,” like “practicable” (*i.e.*, “capable of being put into practice” or “capable of being used,” *Webster’s Third*, at 1780; or “capable of being effected, done, or put into practice; feasible,” *American Heritage Dictionary*, at 1377), and “feasible” (*i.e.*, “capable of being done, executed, or effected,” *Webster’s Third*, at 831 or “possible,” *American Heritage Dictionary*, at 646), support the concept that “availability” can be understood in terms of “feasibility,” but not in terms of cost versus benefit. These definitions comport fully with the secondary consideration of cost, in terms of “cost-effectiveness” and “feasibility” that the Second Circuit found to be reasonable under section 316(b), and with this Court’s view of the distinction between feasibility analysis and cost-benefit analysis. *See American Textile*,

---

<sup>13</sup> The Phase II Rule recognizes that closed-cycle cooling is capable of being used by existing power plants. Pet. App. 240a (69 Fed. Reg. at 41,601 (“EPA is nonetheless aware that some existing facilities have installed this highly effective technology and has thus provided a streamlined alternative for such facilities.”)).

*supra*, 452 U.S. at 509 (distinguishing feasibility analysis from cost-benefit analysis).

When read together as an “indivisible term of art,”<sup>14</sup> the standard set by section 316(b) plainly directs that, when establishing a national rule, EPA must require the most effective technology at hand for reducing to the smallest possible level the adverse impact associated with intake structures. Congress’ use of the purpose-defining language – “for minimizing adverse environmental impact” – reflects its unequivocal emphasis on minimizing impact. Thus, whether the value of impact minimization outweighs the cost associated with using the best technology for that purpose is a question that Congress has already answered.

This Court reached a similar conclusion in *Whitman v. American Trucking Ass’ns, Inc.*, 531 U.S. 457, 467-468 (2001) (“*American Trucking*”). There the Court considered whether the language of section 109(b)(1) of the Clean Air Act (“CAA”), 42 U.S.C. § 7409(b)(1), allowed EPA to consider costs in setting ambient air quality standards. Section 109(b)(1) instructs EPA to set air quality standards “the attainment and maintenance of which[,] . . . allowing an adequate margin of safety, are requisite to protect

---

<sup>14</sup> See *Dewsnup v. Timm*, 502 U.S. 410, 423 (1992) (Scalia, J., dissenting, Souter, J., joining) (rejecting the majority’s position that “the words ‘allowed secured claim’ in section 506(d) of the Bankruptcy Code need not be read as an ‘indivisible term of art’”).

the public health.” 42 U.S.C. § 7409(b)(1). The Court concluded that the text of section 109(b), “interpreted in its statutory and historical context and with appreciation for its importance to the CAA as a whole, unambiguously bars cost consideration from the [national ambient air quality standards]-setting process.” *American Trucking*, 531 U.S. at 471.

Likewise, in *American Textile*, the Court construed the phrase “to the extent feasible” to preclude the agency’s reliance on cost-benefit analysis in setting the cotton dust standard under the Occupational Safety and Health Act (“OSHA”). *American Textile*, 452 U.S. at 512-513. The Court recognized that “feasibility analysis” and “cost-benefit analysis” are distinct concepts, and explained that cost-benefit analysis imposes an additional and overriding requirement that would countermand the feasibility requirement. *Id.* at 513. Discussing the practical implications of allowing a cost-benefit analysis to substitute for a feasibility analysis, the Court reached the conclusion that “[s]tandards would inevitably be set at the level indicated by cost-benefit analysis, and not at the level specified by [the Act].” *Id.* See also *id.* at 519 (“Congress meant ‘feasible’ rather than ‘cost-benefit’”) (emphasis added). The same result would obtain here if EPA were to rely on cost-benefit analysis; “[a]doption of petitioners’ interpretation would effectively write [the requirement for minimization of impact] out of [section 316(b)].” *Id.* at 513.



In section 316(b), Congress similarly instructed EPA to set a national standard that would reduce the killing of trillions of fish and other aquatic life to the lowest level possible. The statutory language defines the basic relationship between costs and benefits by mandating the achievement of a particular goal and limiting the achievement only in terms of “availability.” Indeed, the Industry Petitioners acknowledge that the courts evaluate the permissibility of a cost-benefit analysis differently where Congress has articulated a specific goal that must be achieved. See *Entergy Br.* at 27 (“The few circuit courts that have read *American Textile* to prohibit cost-benefit analysis in the OSHA context have emphasized the specific and inflexible worker safety goal set by the statute”; and “[t]his Court held that the language in [section] 109(b)(1) plainly requires EPA to set the minimum standards “requisite” to achieve that goal, and that costs were irrelevant.”). Here, Congress has in fact articulated the specific goal to be achieved. EPA may not override Congress’ choice based on the agency’s own policy preference. *Massachusetts v. EPA*, 127 S. Ct. 1438, 1462-1463 (2007) (the exercise of EPA’s discretion must fall within defined statutory limits, and “[t]o the extent that this constrains agency discretion to pursue other priorities . . . this is the congressional design.”); *Chevron, supra*, 467 U.S. at 865-866 (an agency may base its judgments on its own policy choices only where “Congress itself either inadvertently did not resolve [the issue], or intentionally left [it] to be resolved by the agency. . .”).

The United States and Industry Petitioners create a perception of ambiguity by parsing the words in section 316(b). Petitioners then juxtapose a parsed word with an unrelated scenario designed to produce an absurd result, and suggest that acceptance of the fringe definition or concession of deference from the Court are the only means of avoiding the absurdity. But legal ambiguity is not created by perception alone, and absurd results can be avoided without presuming congressional delegation or requiring court-afforded deference to an agency's policy preference for setting intake structure standards according to its own view that a cost-benefit analysis is allowed.<sup>15</sup>

Petitioners' approach to statutory interpretation, arguing that each term listed in section 316(b) can have a number of possible meanings when viewed in isolation from the statutory standard overall, has consistently been rejected by this Court. *See Brown v. Gardner*, 513 U.S. 115, 118 (1994) ("Ambiguity is a creature not of definitional possibilities but of statutory context."); *American Trucking, supra*, 531 U.S. at 466; *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120, 132-133 (2000) ("*Brown &*

---

<sup>15</sup> Industry Petitioners mischaracterize and question the policy goals set by Congress in section 316(b). *See Entergy Br.* at 49 ("a campaign to eliminate impingement and entrainment of fish to the maximum extent possible without regard to cost, is self-evidently unsound policy"); *see also Entergy Br.* at 57 (not allowing consideration of cost versus benefit "places fish and other aquatic organisms on a pedestal never erected by Congress").

*Williamson*) (“While a word can have more than one meaning in the abstract, that same word can be given concrete meaning by the context in which it appears.”). Petitioners’ reliance on possible and little-used definitions of a single word cannot trump the meaning of that word when it is viewed in its statutory context.

For example, the United States defines the word “best” as “a relative term capable of different meanings.” It argues the “‘best’ way of pursuing a goal is not always the one that most single-mindedly achieves that goal at all costs.” *EPA Br.* at 16. To illustrate this, it suggests that the *best* route home might not be the quickest route. This example, however, ignores the fact that in section 316(b), “best” is relative to a specific Congressional objective – best *for* minimizing impact. If the stated objective, therefore, is to select the best route available *for* arriving home as quickly as possible, then the quickest route, if it is accessible, is indeed the best route. If, on the other hand, the stated objective is to select the best route available *for* arriving home in the safest manner possible, then the best route home might be the longer route with lower speed limits and less traffic regardless of the additional cost in gas or potential for additional wear and tear on the vehicle. The superlative “best,” therefore, cannot be disconnected from the stated objective. In this case, the “best” technology is given its proper context by

the phrase that follows it in the statute: *for minimizing adverse environmental impact*.<sup>16</sup>

Next, the United States argues that the preposition “for” is “sometimes used to indicate appropriateness or suitability,” *EPA Br.* at 16 (quoting *American Heritage Dictionary* 686 (4th ed., 2006)). Petitioner relies, however, on the eighth listed definition in that source, as opposed to the first listed definition, *i.e.*, “to indicate the object, aim, or purpose of an action or activity.” *Cf. American Trucking*, 531 U.S. at 466 (the Court rejected the second listed definition as “making no sense” in the context of section 109(b)(1) of the Clean Air Act). The United States also suggests that, had Congress used the word “at,” the legislative intent to demand that the selected technology actually be the best technology would have been clear. By way of example, the Petitioner suggests that, “the best person *at* his trade might not be the best person *for* a particular job,” *EPA Br.* at 16, but fails to acknowledge that the specifications of the particular job are relevant. For

---

<sup>16</sup> Congress’ use of this specific purpose-defining modifier in section 316(b) contrasts with statutory standards that Congress used elsewhere in the Act. For example, Congress directed EPA to establish effluent limitations for toxic pollutants that reflect “best available technology economically achievable.” CWA § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A). The words “economically achievable” modify the phrase “best available technology,” giving that phrase a different meaning, one that expressly includes cost considerations. In stark contrast, the modifying language in section 316(b) focuses on minimizing environmental impact, not on costs.

example, if a particular job calls only for a person with superior skills *for* repairing shoes, then the best cobbler *at* his trade would also be the best person *for* the job. If, however, the job calls for a cobbler who also has good “people skills,” then a cobbler with poor “people skills” may not be the best person *for* the job even if he is the best *at* his trade. By detaching the preposition from the legislative objective, however, Petitioner again provides an example that is inapplicable in the context of section 316(b), because Congress did specify the objective.<sup>17</sup> The use of “at” or “for” in this context, therefore, is a distinction without a difference.

In addressing the term “available,” the United States suggests that just because a luxury item is available does not mean that the cost is justified or that it would be purchased. That would be true if the person were not *required* to obtain the item. Section 316(b), by contrast, *requires* the minimization

---

<sup>17</sup> Relying also on *BP Exploration & Oil, Inc. v. EPA*, 66 F.3d 784 (6th Cir. 1995), to further its example, the United States quotes the Sixth Circuit explaining that “the requirement that EPA choose the ‘best’ technology does not mean that the chosen technology must be the best pollutant removal.” *BP Exploration*, 66 F.3d at 796. The standard at issue in *BP Oil* was the best available technology standard under section 301(b)(2)(A). As discussed above, this standard for non-conventional effluent requires that the best available technology also be economically achievable. In this context, the Sixth Circuit’s dicta, conveys only the obvious – the best technology does not necessarily have to be the best at pollutant removal if the best at pollutant removal is not also economically achievable.

of adverse environmental impact on an aquatic ecosystem. Congress directed that the selected technology be the best for accomplishing that objective. Relying on an example that disputes the “availability” of a luxury item on the basis of its affordability misses the mark. Moreover, the question presented in this case is not whether costs may be considered at some secondary level in determining “availability.” The question is whether EPA may elevate cost considerations to the forefront of its technology evaluation by relying on a cost-benefit analysis.

The United States also proposes a definition of “minimize” that does not withstand scrutiny. Departing from the definition that EPA itself has used over the past three decades, the United States cites a single source to justify its argument that “in common usage, the terms “minimal” and “minimize” often refer to a lesser degree of reduction.” *EPA Br.* at 17.<sup>18</sup> But as discussed above, EPA applied the most natural definition of “minimize” – “to reduce to the smallest extent” – when it first promulgated intake structure rules in 1976, and more recently when it promulgated the Phase I Rule governing intake structures at new facilities.

---

<sup>18</sup> *MCI Telecommunications Corp. v. Am. Tel. & Tel.*, 512 U.S. 218, 226 (1994) (When the Court spoke of alternative dictionary definitions in *Nat’l R.R. Passenger Corp. v. Boston & Maine Corp.*, 503 U.S. 407, 418-419 (1992), “it did not refer to what we have here: one dictionary whose suggested meaning contradicts virtually all others.”).

Moreover, the “risk assessment” example that the United States gives is inapposite. The United States relies on the following example:

[I]f a person said that he was trying to minimize the risk of being hit by a car while crossing a street, he presumably would not mean that he was staying inside his house at all times. Instead the person would presumably mean that he was trying to *reduce that risk* consistent with other practical considerations, including economic ones such as the need to travel to work.

*EPA Br.* at 17-18 (emphasis added).

That analogy is flawed because its very premise is that the person is engaged in a risk assessment. The *best technology available for minimizing adverse environmental impact* determination required by section 316(b) does not, however, mandate a risk assessment; it mandates minimizing the known adverse impact. If, for example, a pedestrian had to cross Interstate 95 to travel to work, the pedestrian, undoubtedly, would do more than simply look both ways before crossing to minimize the greater likelihood that she could be injured or killed given the nature of the road she was trying to cross. The pedestrian would likely use every precautionary measure available to her to reduce to the smallest possible degree the likelihood that she could be struck by a car.

In other words, when trying to assess whether protecting society from an uncertain risk is worth the cost of regulating, a cost-benefit analysis may be a central consideration, but where the impact is certain and the cost of minimizing it necessary, cost is not necessarily a factor for consideration at all. When a person says, “minimize impact X,” the only natural meaning of that statement is to “reduce” impact X “to the smallest possible number, degree, or extent.” *Webster’s Third*, at 1438. For this reason, EPA’s example and its reliance on Hon. Justice Breyer’s book, *Breaking the Vicious Circle: Toward Effective Risk Regulation*, are misplaced. See *EPA Br.* at 14 and 18.

Thus, Congress’ decision in section 316(b), not to refer to costs, or costs in relation to benefits, was not an oversight, nor can it be construed as ambiguous silence. It was deliberate subordination of cost considerations to an emphasis on minimizing environmental impact.

#### **B. Throughout the Clean Water Act, Congress Told EPA When and How It Could Consider Costs.**

In making a threshold determination under *Chevron*, the Court should not “confine itself to examining a particular provision in isolation,” but should follow the “fundamental canon of statutory construction that the words of a statute must be read in their context and with a view to their place in the



overall statutory scheme.” *Nat’l Ass’n of Home Builders v. Defenders of Wildlife*, 127 S.Ct. 2518, 2534 (2007) (quoting *Brown & Williamson*, *supra*, 529 U.S. at 132-133). Congress’ direction as to when and how EPA could consider costs in sections 301 and 306 of the Act confirms that EPA cannot balance costs with benefits when selecting the best technology under section 316(b).

As a preliminary matter, the express reference in section 316(b) to sections 301 and 306 of the Act is not a cross reference inviting EPA to apply the same technology standards for discharges set forth in those sections. Section 316(b) provides that “[a]ny standard established pursuant to [33 U.S.C.] section 1311 [section 301] of this title, or [33 U.S.C.] section 1316 [section 306] and applicable to a point source” shall require cooling water intake structures to reflect *best technology available for minimizing adverse environmental impact*. By the United States’ own admission, “the only direct consequence of the cross-reference is a procedural one: when any standard under section 301 or 306 is made applicable to a point source with an intake structure,” the standard must also reflect the *best technology available for minimizing adverse environmental impact*. *EPA Br.* at 19. The reference in section 316(b) to sections 301 and 306, therefore, means only that when EPA promulgates or revises effluent limitations for existing facilities under section 301, or for new facilities under section 306, it must also include national requirements for cooling water intake

structures. Moreover, section 316(b) does not reference section 304, where the enumerated factors for the technology standards for existing facilities are found. *See* R.A. (chart comparing the factors Congress directed EPA to consider when selecting the *best technology available for minimizing adverse environmental impact* under section 316(b), with the factors EPA must consider when setting effluent limitations standards for other pollutant discharges under sections 301 and 306 of the CWA, or when justifying a variance from thermal discharge limitations under section 316(a)).

A review of the technology standards for discharges does, however, assist in understanding the role of costs in the determination of *best technology available for minimizing adverse impact*. Congress decided to provide different standards for different types of pollutants and facilities, and expressed its view of when and how EPA should consider technology costs when applying those statutory standards. It used different technology phrases throughout section 301 and then in section 306, with specific modifying language – “practicable technology,” “conventional technology,” and “technology economically achievable” – and intended to give each standard different meaning in its application. In some cases, Congress required EPA to consider cost in relation to environmental benefit. In other instances, Congress told EPA to consider cost as a factor, but not in relation to environmental benefit. CWA § 304(b), 33 U.S.C. § 1314(b). But in none of the

other technology standards in sections 301, 304, and 306 did Congress – as it did in section 316(b) – altogether omit any reference to cost. *See* R.A. This striking contrast between section 316(b) and the Act’s technology standards for discharges provides powerful confirmation that Congress did not intend EPA to undertake a cost-benefit analysis when selecting the *best technology available for minimizing adverse environmental impact*.

Under section 301, EPA was initially required to establish effluent limitations for existing industrial facilities that required best practicable control technology (“BPT”), which standards the facilities were required to meet before 1989. CWA § 301(b)(1)(A), 33 U.S.C. § 1311(b)(1)(A). In setting BPT, Congress required EPA to consider the “total cost of application of technology in relation to effluent reduction benefits to be achieved from such application,” and the age of the equipment and facilities involved, the process employed, engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impacts, energy requirements, and other factors EPA deems appropriate. CWA § 304(b)(1)(B), 33 U.S.C. § 1314(b)(1)(B). Since 1989, existing facilities have been required to comply with more stringent effluent limitations for most toxic pollutants, including thermal pollution, that reflect the best available technology economically achievable (“BAT”). CWA § 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A). In transitioning from BPT to BAT, Congress directed

that “in assessing BAT total cost is no longer to be considered in comparison to effluent reduction benefits” of eliminating the discharge of pollutants. *EPA v. Nat’l Crushed Stone Ass’n*, 449 U.S. 64, 71 (1980) (discussing CWA § 304(b)(2)(B), 33 U.S.C. § 1314(b)(2)(B)).

For new facilities, required to meet the more stringent standard “best available demonstrated technology” (“BADT”), EPA was directed again, as with BAT, to only consider the cost of achieving the reduction.<sup>19</sup> CWA § 306(a)(1), 33 U.S.C. § 1316(a)(1); CWA § 304(b)(4)(B), 33 U.S.C. § 1314(b)(4)(B). In fact, the reference in section 316(b) to section 306 (the section applicable to new rather than existing facilities) confirms Congress’ intent to eliminate EPA’s authority to make cost-benefit comparisons when it sets new source performance standards. Consistent with its technology-forcing approach, Congress did not direct EPA to consider the value of the benefits to the receiving water body at all when promulgating BADT regulations. *Id.*; *See* R.A.

For conventional pollutants, under a provision added to the Act in 1977, existing facilities must comply with effluent limitations that reflect “best conventional pollutant control technology” (“BCT”).

---

<sup>19</sup> The CWA requires EPA to revise its regulations periodically, with respect to both new and existing facilities, to reflect advances in technology. *See, e.g.*, CWA § 304(b), 33 U.S.C. § 1314(b); CWA § 306(b)(1)(B), 33 U.S.C. § 1316(b)(1)(B).

CWA § 301(b)(2)(E), 33 U.S.C. § 1311(b)(2)(E). In setting BCT, like BPT, Congress directed EPA to consider costs in relation to benefits. CWA § 304(b)(4)(B), 33 U.S.C. § 1314(b)(4)(B). *See* R.A. Petitioners argue that because Congress has authorized EPA to continue to compare costs with benefits when it establishes BCT effluent limitations for conventional pollutants, such as BOD, fecal coliform, total suspended solids, pH, oil and grease, Congress has also evinced an unambiguous intent to allow EPA to compare costs with benefits under section 316(b). *EPA Br.* at 24-25. But Congress' express enumeration of a cost-benefit comparison factor for BCT five years after it enacted section 316(b) only confirms that Congress made deliberate choices about when EPA was to consider costs in relation to benefits, and when it could not.

In section 316(b), Congress imposed on EPA the single, unique mandate of requiring both new and existing facilities to apply *best technology available for minimizing adverse environmental impact* associated with intake structures. This Court has refused to find implicit authorization of certain factors where Congress has been explicit elsewhere in the same statute. *See, e.g., American Trucking*, 531 U.S., *supra*, at 467. Congress did not authorize EPA to set national standards based on cost-benefit analysis.

Congress' intent to preclude cost-benefit analysis in regulating intake structures is further shown by examining section 316(a). In that provision, Congress

also does not allow for consideration of cost, even when operators of a point source apply for a variance from the otherwise-applicable effluent limitation. Instead, a variance is authorized only when the standards “are more stringent than necessary to assure the projection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife” in and on a particular water body. CWA § 316(a), 33 U.S.C. § 1326(a). As in section 316(b), the impact on fish and wildlife is the paramount concern.

Even the United States acknowledges that Congress made deliberate choices about when EPA may use cost-benefit comparisons and when it may not. *EPA Br.* at 19 (“Congress *specified* the factors that EPA must consider in promulgating each of the various “best” standards found in sections 301 and 306. In doing so, it *expressly required* consideration of costs for all of those standards, and *specifically required* consideration of the relationship between costs and benefits for two of them.”) (emphasis added); *see also EPA Br.* at 21 (“The bottom line is that each of the cross-referenced provisions requires consideration of costs, and two of them (BPT and BCT) *specifically require* comparison of costs and benefits.”) (emphasis added). In marked contrast, section 316(b) expressly requires that EPA choose a technology that minimizes environmental impact, and does not authorize EPA to consider cost in relation to benefits.

### **C. The Legislative History Supports the Conclusion that Congress Rejected a Cost-Benefit Analysis in Section 316(b).**

The legislative history of section 316(b) is sparse and undeserving of any significant weight. What little there is, however, supports the conclusion that the meaning of section 316(b) is plain on its face. In the House Consideration of the Report of the Conference Committee (Oct. 4, 1972) on the final version of the 1972 CWA Amendments, Representative Clausen explained the meaning of section 316(b) by using the language of section 316(b) itself, stating that “[s]ection 316(b) requires the location, design, construction and capacity of cooling water intake structures of steam-electric generating plants to reflect the best technology available for minimizing any adverse environmental impact.” Congressional Research Service, *“A Legislative History of the Water Pollution Control Act Amendments of 1972, Vol. 1,”* 93d Cong., 1st Sess., p. 264 (“Legislative History”).

Petitioners, however, place a great deal of weight on Representative Clausen’s one sentence remark in which he suggested that the word “available” means “commercially available at an economically practicable cost.” This lone statement acts as the springboard for Petitioners’ sometimes alternative argument that a cost-benefit analysis is unambiguously allowed by the “plain meaning” of section 316(b). This remark is undeserving of such weight. *See Chrysler Corp. v. Brown*, 441 U.S. 281, 311 (1979) (“[T]he remarks of a single legislator, even

the sponsor, are not controlling in analyzing legislative history.”); *Consumer Product Safety Comm’n v. GTE Sylvania, Inc.*, 447 U.S. 102, 118 (1980). But even this single statement underscores the point that “availability” does not involve the weighing of cost with benefits, even in Representative Clausen’s mind, since he did not define the word that way; rather, he defined the word “available” in terms of “practicability.” See *States’ Br.*, *supra* at 18 (definition of “practicable”).

The legislative history of sections 301, 304, and 306 also supports the literal reading of section 316(b) because it establishes that Congress did not intend to allow EPA to conduct a cost-benefit analysis in setting any of the “best technology” standards where “availability” was also a component. Specifically, the legislative reports accompanying the 1972 amendments to the CWA confirm that Congress intended a cost-benefit consideration to be made only during the transitional period before 1989 when establishing the effluent limitations under the BPT standard.<sup>20</sup> For example, in the 1972 Senate Consideration of the Report of the Conference

---

<sup>20</sup> The BCT standard, the only other provision directing EPA to consider the relationship between costs and benefits, was not added to the CWA until 1977. See *3 Legislative History of the Clean Water Act of 1977 – A Continuation of the Legislative History of the Federal Water Pollution Control Act Amendments of 1972*, at 427 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress), Sen. No. 95-14 (1975) (Statement of Senator Muskie).



Committee, the Chairman and the principal sponsor of the Senate Bill, Senator Edmund Muskie, discussed the difference between BPT to comply with section 301(b)(1)(A) and BAT to comply with section 301(b)(2)(A) of the Act:

In making the determination of [BAT] for a category or class, the Administrator is expected to apply the same principles involved in making the determination of [BPT], *except as to cost-benefit analysis*. Also, rather than establishing the range of levels in reference to the average of the best performers in an industrial category, the range should, at a minimum, be established with reference to the *best performer in any industrial category*. The distinction between [BPT] and [BAT] is intended to reflect the need to press toward increasingly higher levels of control. . . .

Senate Consideration of the Report of the Conference Committee, 92d Congress, October 4, 1972, p. 170 (emphasis added), *reprinted in Legislative History of the Water Pollution Control Act Amendments of 1972* (Senate Public Works Comm.), Sen. No. 93-1 (1973).

Senator Muskie further elaborated on the limited way Congress intended the Administrator to consider cost in determining BAT:

As to the cost of [BAT] – While cost should be a factor in the Administrator’s judgment, *no balancing test will be required*. The Administrator will be bound by a test of

reasonableness. In this case, the reasonableness of what is ‘economically achievable’ should reflect an evaluation of what needs to be done to move toward the elimination of the discharge of pollutants and what is achievable through the application of available technology – *without regard to cost*.

*Id.* (emphasis added).<sup>21</sup>

That Congress made deliberate choices about when to require cost-benefit considerations is further evidenced by the legislative history associated with section 316 generally. The Conference Committee Report for the CWA of 1972 explains that, while the House bill had proposed a version of section 316 that would have called for the altogether separate

---

<sup>21</sup> The standard established in section 306(a)(1) is the most stringent effluent limitation standard in the CWA and does not allow for a comparison of costs and benefits. *See* Senate Consideration of the Report of the Conference Committee, 92d Congress, October 4, 1972 at 170, *reprinted in* 1 Legislative History of the Water Pollution Control Act Amendments of 1972 (Senate Public Works Comm.), Sen. No. 93-1 (1973). *See also* S. Rep. 92-414 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3724 (“The implicit consideration of economic factors in determining whether technology is ‘available’ should not affect the usefulness of this section. The overriding purpose of this section would be to prevent new water pollution problems, and toward that end, maximum feasible control of new sources, at the time of their construction, is considered by the Committee to be the most effective and, in the long run, the least expensive approach to pollution control.”).

regulation of thermal discharges, including a case-by-case variance based on a test involving a comparison of costs against benefits, the final bill, as modified by the Conference Committee, substituted the provision that was finally enacted as section 316(a). Section 316(a) provided that heat would be treated like any other pollutant, except for the creation of the limited variance specified in section 316(a). Notably, cost-benefit analysis was not included in any of the section 316 provisions. *See* Conference Committee Report No. 92-1236 (accompanying S. 2770) (Sept. 28, 1972) pp. 175 and 320 (CWA amendments 1972).

Reliance on a cost-benefit analysis, therefore, is inconsistent with Congress' intent, as confirmed by the legislative history, to eliminate the impact on the Nation's waters by requiring EPA to implement technology-forcing standards. Thus, in setting the national standard for cooling water intake structures, EPA must require that the technology achieve the desired end, and must not modify the desired end as a result of its consideration of the costs in relation to benefits to achieve that end.

The Petitioners, Entergy Corp. and PSEG Fossil ("Entergy"), mischaracterize the Second Circuit's construction of section 316(b), as pronouncing a "radical," "unsound," and "nonsensical" "clear statement rule." *Entergy Br.* at 21 and 24. Entergy inaccurately asserts "the Second Circuit concluded that cost-benefit analysis is prohibited unless explicitly authorized, *based solely on* this Court's statement in *American Textile* that 'when Congress

has intended that an agency engage in cost-benefit analysis, it has clearly indicated such intent on the face of the statute.’” *Entergy Br.* at 24 (quoting *American Textile*, 452 U.S. at 510) (emphasis added). The Second Circuit’s reading of section 316(b), however, was completely justified. Far from being “radical” or establishing a “clear statement rule,” the Second Circuit’s conclusion was reached using the basic tools of statutory construction. The court held only that Congress had set an unambiguous objective in section 316(b), one that is incompatible with the agency’s cost-benefit approach when setting a national standard for Phase II facilities or addressing permits at a site-specific level. The Second Circuit’s conclusion was not based solely on this Court’s statement in *American Textile*, but was based on a thorough review of the text of section 316(b) itself, an examination of section 316(b) in relation to and in contrast to the other technology standards in the Act, legislative history, and the policy goals of the Act.

The Court therefore should reject Entergy’s invitation to “adopt a presumption or clear statement rule that is the *opposite* of the one employed by the Second Circuit.” *Entergy Br.* at 29 (emphasis in original). See *INS v. St. Cyr*, 533 U.S. 289, 320, n.45 (2001) (The cases and rules cited by Petitioner are distinguishable because “[w]e only defer, however, to agency interpretations of statutes that, applying the normal ‘tools of statutory construction’ are ambiguous.”). In essence all of the Petitioners are asking the Court to presume ambiguity. Such a

presumption would allow agencies to second-guess Congress' intent even though the statutory language plainly indicates that Congress has already determined the relationship between the costs and benefits. Here, this Court should find that Congress deliberately precluded EPA from establishing standards for intake structures based on a cost-benefit analysis, and instead directed the minimization of environmental impact with the factor of cost as a subordinate consideration.

---

◆

### CONCLUSION

The judgment of the United States Court of Appeals for the Second Circuit should be affirmed.

Respectfully submitted,

PATRICK C. LYNCH  
Attorney General of Rhode Island  
TRICIA O'HARE JEDELE,  
*Counsel of Record*  
Special Assistant Attorney General  
150 South Main Street  
Providence, RI 02903  
(401) 274-4400

(Additional Counsel Listed  
On Inside Front Cover)

September 29, 2008

## **ADDENDUM**

CWA Statutory Provision For EPA to Establish National Technology-Based Standards	Factors EPA May Consider in Setting National Standard
<p><b>Section 316(b), 33 U.S.C. § 1326(b)</b> — Industry-wide intake structure standards for both new and existing facilities requiring application of <i>best technology available for minimizing adverse environmental impacts</i>.</p>	<p>Best technology available for minimizing adverse environmental impact.</p>
<p><b>Section 301(b)(1)(A), 33 U.S.C. §1311(b)(1)(A)</b> — Pre-1989 Industry-wide technology standard for effluent discharges requiring application of <i>best practicable control technology</i> (“BPT”) for existing power plants.</p> <p><b>Section 304(b)(1)(B), 33 U.S.C. § 1314(b)(1)(B)</b> (listing factors).</p>	<p>“[T]otal cost of application of technology in relation to effluent reduction benefits to be achieved from such application,” and “the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.” (emphasis added).</p>
<p><b>Section 301(b)(2)(A), 33 U.S.C. § 1311(b)(2)(A)</b>— Post-1989 Industry-wide technology standard for non-conventional effluent discharges, including heat, requiring application of <i>best available technology economically achievable</i> (“BAT”) for existing power plants.</p> <p><b>Section 304(b)(2)(B), 33 U.S.C. § 1314(b)(2)(B)</b> (listing factors).</p>	<p>“[T]he age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, <i>the cost of achieving such effluent reduction</i>, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.” (emphasis added).</p>
<p><b>Section 301(b)(2)(E), 33 U.S.C. § 1311(b)(2)(E)</b> — Industry-wide technology standard applicable to discharges from existing facilities of conventional pollutants such as fecal coliform, total suspended solids, pH, oil and grease requiring <i>best</i></p>	<p>“[T]he reasonableness of the relationship between the costs of attaining a reduction in effluents and the effluent reduction benefits derived, and the comparison of the cost and level of reduction of such pollutants from the discharge from</p>

CWA Statutory Provision For EPA to Establish National Technology-Based Standards	Factors EPA May Consider in Setting National Standard
<p><i>conventional pollutant control technology</i> (“BCT”).</p> <p><b>Section 304(b)(4)(B), 33 U.S.C. § 1314(b)(4)(B) (listing factors).</b></p>	<p><i>publicly owned treatment works to the cost and level of reduction of such pollutants</i> from a class or category of industrial sources,” and “the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.” (emphasis added).</p>
<p><b>Section 306(a)(1) and (b)(1)(B), 33 U.S.C. § 1316(a)(1) and (b)(1)(B)</b> — Industry-wide technology standard for effluent discharges from new sources of all pollutants requiring <i>best available demonstrated control technology</i> (“BADT”).</p>	<p>“[F]or the control of the discharge of pollutants which reflects the <i>greatest degree of effluent reduction which the Administrator determines to be achievable</i> through application of the <i>best available demonstrated control technology</i>, processes, operating methods, or other alternatives, including where practicable, permitting no discharge of pollutants.”</p> <p>“[T]he Administrator shall take into consideration <i>the cost of achieving such effluent reduction</i>, and any non-water quality, environmental impact and energy requirements.” (emphasis added).</p>