#### 106TH CONGRESS 1ST SESSION

# S. 172

To reduce acid deposition under the Clean Air Act, and for other purposes.

### IN THE SENATE OF THE UNITED STATES

January 19, 1999

Mr. Moynihan (for himself, Mr. Schumer, and Mr. Lieberman) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

## A BILL

To reduce acid deposition under the Clean Air Act, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION. 1. SHORT TITLE.
- 4 This Act may be cited as the "Acid Deposition and
- 5 Ozone Control Act".
- 6 SEC. 2. FINDINGS AND PURPOSES.
- 7 (a) FINDINGS.—Congress finds that—
- 8 (1) reductions of atmospheric nitrogen oxide
- 9 and sulfur dioxide from utility plants, in addition to
- the reductions required under the Clean Air Act (42)

- U.S.C. 7401 et seq.), are needed to reduce acid deposition and its serious adverse effects on public health, natural resources, building structures, sensitive ecosystems, and visibility;
  - (2) nitrogen oxide and sulfur dioxide contribute to the development of fine particulates, suspected of causing human mortality and morbidity to a significant extent;
  - (3) regional nitrogen oxide reductions of 50 percent in the Eastern United States, in addition to the reductions required under the Clean Air Act, may be necessary to protect sensitive watersheds from the effects of nitrogen deposition;
  - (4) without reductions in nitrogen oxide and sulfur dioxide, the number of acidic lakes in the Adirondacks in the State of New York is expected to increase by up to 40 percent by 2040; and
  - (5) nitrogen oxide is highly mobile and can lead to ozone formation hundreds of miles from the emitting source.
  - (b) Purposes.—The purposes of this Act are—
    - (1) to recognize the current scientific understanding that emissions of nitrogen oxide and sulfur dioxide, and the acid deposition resulting from emis-

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1	sions of nitrogen oxide and sulfur dioxide, present a
2	substantial human health and environmental risk;
3	(2) to require reductions in nitrogen oxide and
4	sulfur dioxide emissions;
5	(3) to support the efforts of the Ozone Trans-
6	port Assessment Group to reduce ozone pollution;
7	(4) to reduce utility emissions of nitrogen oxide
8	by 70 percent from 1990 levels; and
9	(5) to reduce utility emissions of sulfur dioxide
10	by 50 percent after the implementation of phase II
11	sulfur dioxide requirements under section 405 of the
12	Clean Air Act (42 U.S.C. 7651d).
13	SEC. 3. DEFINITIONS.
	SEC. 3. DEFINITIONS.  In this Act:
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13 14	In this Act:
13 14 15	In this Act:  (1) Administrator.—The term "Adminis-
13 14 15 16	In this Act:  (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environ-
13 14 15 16 17	In this Act:  (1) Administrator.—The term "Administrator" means the Administrator of the Environmental Protection Agency.
13 14 15 16 17	In this Act:  (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.  (2) AFFECTED FACILITY.—The term "affected"
13 14 15 16 17 18	In this Act:  (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.  (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion.
13 14 15 16 17 18 19 20	In this Act:  (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.  (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion units that serve at least 1 electricity generator with
13 14 15 16 17 18 19 20 21	In this Act:  (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the Environmental Protection Agency.  (2) AFFECTED FACILITY.—The term "affected facility" means a facility with 1 or more combustion units that serve at least 1 electricity generator with a capacity equal to or greater than 25 megawatts.

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of nitrogen oxide.

1	(4) MMBTU.—The term "mmBtu" means
2	1,000,000 British thermal units.
3	(5) Program.—The term "Program" means
4	the Nitrogen Oxide Allowance Program established
5	under section 4.
6	(6) State.—The term "State" means the 48
7	contiguous States and the District of Columbia.
8	SEC. 4. NITROGEN OXIDE ALLOWANCE PROGRAM.
9	(a) In General.—
10	(1) Establishment.—Not later than 18
11	months after the date of enactment of this Act, the
12	Administrator shall establish a program to be known
13	as the "Nitrogen Oxide Allowance Program".
14	(2) Scope.—The Program shall be conducted
15	in the 48 contiguous States and the District of Co-
16	lumbia.
17	(3) NO <sub>x</sub> allowances.—
18	(A) Allocation.—The Administrator
19	shall allocate under paragraph (4)—
20	(i) for each of calendar years 2002
21	through 2004, $5,400,000$ NO <sub>x</sub> allowances;
22	and
23	(ii) for calendar year 2005 and each
24	calendar year thereafter, 3,000,000 $NO_x$
25	allowances.

1	(B) Use.—Each NO <sub>x</sub> allowance shall au-
2	thorize an affected facility to emit—
3	(i) 1 ton of nitrogen oxide during each
4	of the months of October, November, De-
5	cember, January, February, March, and
6	April of any year; or
7	(ii) ½ ton of nitrogen oxide during
8	each of the months of May, June, July,
9	August, and September of any year.
10	(4) Allocation.—
11	(A) DEFINITION OF TOTAL ELECTRIC
12	POWER.—In this paragraph, the term "total
13	electric power" means all electric power gen-
14	erated by utility and nonutility generators for
15	distribution, including electricity generated
16	from solar, wind, hydro power, nuclear power,
17	cogeneration facilities, and the combustion of
18	fossil fuel.
19	(B) Allocation of allowances.—The
20	Administrator shall allocate annual $NO_x$ allow-
21	ances to each of the States in proportion to the
22	State's share of the total electric power gen-
23	erated in all of the States.

1	(C) Publication.—The Administrator
2	shall publish in the Federal Register a list of
3	each State's $NO_x$ allowance allocation—
4	(i) by December 1, 2000, for calendar
5	years 2002 through 2004;
6	(ii) by December 1, 2002, for calendar
7	years 2005 through 2007; and
8	(iii) by December 1 of each calendar
9	year after 2002, for the calendar year that
10	begins 61 months thereafter.
11	(5) Intrastate distribution.—
12	(A) IN GENERAL.—A State may submit to
13	the Administrator a report detailing the dis-
14	tribution of $NO_x$ allowances of the State to af-
15	fected facilities in the State—
16	(i) not later than September 30,
17	2001, for calendar years 2002 through
18	2004;
19	(ii) not later than September 30,
20	2003, for calendar years 2005 through
21	2012; and
22	(iii) not later than September 30 of
23	each calendar year after 2013, for the cal-
24	endar year that begins 61 months there-
25	after.

- 1 (B) ACTION BY THE ADMINISTRATOR.—If
  2 a State submits a report under subparagraph
  3 (A) not later than September 30 of the calendar
  4 year specified in subparagraph (A), the Admin5 istrator shall distribute the NO<sub>x</sub> allowances to
  6 affected facilities in the State as detailed in the
  7 report.
  - (C) Late submission of report.—A report submitted by a State after September 30 of a specified year shall be of no effect.
  - (D) DISTRIBUTION IN ABSENCE OF A RE-PORT.—

(i) IN GENERAL.—Subject to subsection (e), if a State does not submit a report under subparagraph (A) not later than September 30 of the calendar year specified in subparagraph (A), the Administrator shall, not later than November 30 of that calendar year, distribute the NO<sub>x</sub> allowances for the calendar years specified in subparagraph (A) to each affected facility in the State in proportion to the affected facility's share of the total electric power generated in the State.

1	(ii) Determination of facility's
2	SHARE.—In determining an affected facili-
3	ty's share of total electric power generated
4	in a State, the Administrator shall con-
5	sider the net electric power generated by
6	the facility and the State to be—
7	(I) for calendar years 2002
8	through 2004, the average annual
9	amount of electric power generated,
10	by the facility and the State, respec-
11	tively, in calendar years 1997 through
12	1999;
13	(II) for calendar years 2005
14	through 2012, the average annual
15	amount of electric power generated,
16	by the facility and the State, respec-
17	tively, in calendar years 1999 through
18	2001; and
19	(III) for calendar year 2013 and
20	each calendar year thereafter, the
21	amount of electric power generated,
22	by the facility and the State, respec-
23	tively, in the calendar year 5 years
24	previous to the year for which the de-
25	termination is made

1	(E) Judicial review.—A distribution of
2	NO <sub>x</sub> allowances by the Administrator under
3	subparagraph (D) shall not be subject to judi-
4	cial review.
5	(b) $NO_x$ Allowance Transfer System.—
6	(1) In general.—Not later than 18 months
7	after the date of enactment of this Act, the Adminis-
8	trator shall promulgate a $\mathrm{NO}_{\mathbf{x}}$ allowance system reg-
9	ulation under which a $NO_x$ allowance allocated
10	under this Act may be transferred among affected
11	facilities and any other person.
12	(2) Establishment.—The regulation shall es-
13	tablish the $\mathrm{NO}_{\mathbf{x}}$ allowance system under this section,
14	including requirements for the allocation, transfer,
15	and use of $\mathrm{NO}_{\mathbf{x}}$ allowances under this Act.
16	(3) Use of $NO_x$ allowances.—The regulation
17	shall—
18	(A) prohibit the use (but not the transfer
19	in accordance with paragraph (5)) of any $\mathrm{NO}_x$
20	allowance before the calendar year for which
21	the $NO_x$ allowance is allocated; and
22	(B) provide that the unused $NO_x$ allow-
23	ances shall be carried forward and added to
24	$\mathrm{NO}_{\mathbf{x}}$ allowances allocated for subsequent years.

1	(4) CERTIFICATION OF TRANSFER.—A transfer
2	of a $NO_x$ allowance shall not be effective until a
3	written certification of the transfer, signed by a re-
4	sponsible official of the person making the transfer,
5	is received and recorded by the Administrator.
6	(c) $\mathrm{NO}_{\mathbf{x}}$ Allowance Tracking System.—Not later
7	than 18 months after the date of enactment of this Act,
8	the Administrator shall promulgate regulations for
9	issuing, recording, and tracking the use and transfer of
10	$\mathrm{NO}_{x}$ allowances that shall specify all necessary procedures
11	and requirements for an orderly and competitive function-
12	ing of the $\mathrm{NO}_{\mathbf{x}}$ allowance system.
13	(d) Permit Requirements.—A $\mathrm{NO}_{x}$ allowance allo-
14	cation or transfer shall, on recordation by the Adminis-
15	trator, be considered to be a part of each affected facility's
16	operating permit requirements, without a requirement for
17	any further permit review or revision.
18	(e) New Source Reserve.—
19	(1) IN GENERAL.—For a State for which the
20	Administrator distributes $NO_x$ allowances under
21	subsection (a)(5)(D), the Administrator shall place
22	10 percent of the total annual $\mathrm{NO}_{\mathbf{x}}$ allowances of the
23	State in a new source reserve to be distributed by
24	the Administrator—

1	(A) for calendar years 2002 through 2005,
2	to sources that commence operation after 1998;
3	(B) for calendar years 2006 through 2011,
4	to sources that commence operation after 2000;
5	and
6	(C) for calendar year 2012 and each cal-
7	endar year thereafter, to sources that com-
8	mence operation after the calendar year that is
9	5 years previous to the year for which the dis-
10	tribution is made.
11	(2) Share.—For a State for which the Admin-
12	istrator distributes $\mathrm{NO}_{\mathbf{x}}$ allowances under subsection
13	(a)(5)(D), the Administrator shall distribute to each
14	new source a number of $\mathrm{NO}_{\mathbf{x}}$ allowances sufficient to
15	allow emissions by the source at a rate equal to the
16	lesser of the new source performance standard or
17	the permitted level for the full nameplate capacity of
18	the source, adjusted pro rata for the number of
19	months of the year during which the source oper-
20	ates.
21	(3) Unused No <sub>x</sub> allowances.—
22	(A) In general.—During the period of
23	calendar years 2000 through 2005, the Admin-
24	is trator shall conduct auctions at which a $\mathrm{NO}_{\mathbf{x}}$

allowance remaining in the new source reserve

1	that has not been distributed under paragraph
2	(2) shall be offered for sale.
3	(B) OPEN AUCTIONS.—An auction under
4	subparagraph (A) shall be open to any person
5	(C) CONDUCT OF AUCTION.—
6	(i) Method of Bidding.—A person
7	wishing to bid for a NO <sub>x</sub> allowance at an
8	auction under subparagraph (A) shall sub-
9	mit (by a date set by the Administrator) to
10	the Administrator (on a sealed bid sched-
11	ule provided by the Administrator) an offer
12	to purchase a specified number of $NO_x$ al-
13	lowances at a specified price.
14	(ii) Sale based on bid price.—A
15	$\mathrm{NO}_{\mathrm{x}}$ allowance auctioned under subpara-
16	graph (A) shall be sold on the basis of bid
17	price, starting with the highest priced bid
18	and continuing until all $NO_x$ allowances
19	for sale at the auction have been sold.
20	(iii) No minimum price.—A mini-
21	mum price shall not be set for the pur-
22	chase of a $NO_x$ allowance auctioned under
23	subparagraph (A).
24	(iv) REGULATIONS.—The Adminis-
25	trator, in consultation with the Secretary

1	of the Treasury, shall promulgate a regula-
2	tion to carry out this paragraph.
3	(D) USE OF NO <sub>x</sub> ALLOWANCES.—A NO <sub>x</sub>
4	allowance purchased at an auction under sub-
5	paragraph (A) may be used for any purpose
6	and at any time after the auction that is per-
7	mitted for use of a NO <sub>x</sub> allowance under this
8	Act.
9	(E) PROCEEDS OF AUCTION.—The pro-
10	ceeds from an auction under this paragraph
11	shall be distributed to the owner of an affected
12	source in proportion to the number of allow-
13	ances that the owner would have received but
14	for this subsection.
15	(f) Nature of $NO_x$ Allowances.—
16	(1) Not a property right.—A $NO_x$ allow-
17	ance shall not be considered to be a property right.
18	(2) Limitation of No <sub>x</sub> allowances.—Not-
19	withstanding any other provision of law, the Admin-
20	is trator may terminate or limit a $\mathrm{NO}_{\mathbf{x}}$ allowance.
21	(g) Prohibitions.—
22	(1) In General.—After January 1, 2000, it
23	shall be unlawful—
24	(A) for the owner or operator of an af-
25	fected facility to operate the affected facility in

1	such a manner that the affected facility emits
2	nitrogen oxides in excess of the amount per-
3	mitted by the quantity of $NO_x$ allowances held
4	by the designated representative of the affected
5	facility; or
6	(B) for any person to hold, use, or transfer
7	a NO <sub>x</sub> allowance allocated under this Act, ex-
8	cept as provided under this Act.
9	(2) Other Emission Limitations.—Section
10	407 of the Clean Air Act (42 U.S.C. 7651f) is re-
11	pealed.
12	(3) Time of use.—A $NO_x$ allowance may not
13	be used before the calendar year for which the $\mathrm{NO}_{\mathbf{x}}$
14	allowance is allocated.
15	(4) Permitting, monitoring, and enforce-
16	MENT.—Nothing in this section affects—
17	(A) the permitting, monitoring, and en-
18	forcement obligations of the Administrator
19	under the Clean Air Act (42 U.S.C. 7401 et
20	seq.); or
21	(B) the requirements and liabilities of an
22	affected facility under that Act.
23	(h) Savings Provisions.—Nothing in this section—
24	(1) affects the application of, or compliance
25	with the Clean Air Act (42 U.S.C. 7401 et seg.) for

1	an affected facility, including the provisions related
2	to applicable national ambient air quality standards
3	and State implementation plans;
4	(2) requires a change in, affects, or limits any
5	State law regulating electric utility rates or charges,
6	including prudency review under State law;
7	(3) affects the application of the Federal Power
8	Act (16 U.S.C. 791a et seq.) or the authority of the
9	Federal Energy Regulatory Commission under that
10	Act; or
11	(4) interferes with or impairs any program for
12	competitive bidding for power supply in a State in
13	which the Program is established.
14	SEC. 5. INDUSTRIAL SOURCE MONITORING.
15	Section 412(a) of the Clean Air Act (42 U.S.C.
16	7651k(a)) is amended in the first sentence by inserting
17	", or of any industrial facility with a capacity of 100 or
18	more mmBtu's per hour," after "The owner and operator
19	of any source subject to this title".
20	SEC. 6. EXCESS EMISSIONS PENALTY.
21	(a) In General.—
22	(1) Liability.—The owner or operator of an
23	affected facility that emits nitrogen oxides in any
24	calendar year in excess of the NO allowances the

owner or operator holds for use for the facility for

- that year shall be liable for the payment of an excessemissions penalty.
  - (2) Calculation.—The excess emissions penalty shall be calculated by multiplying \$6,000 by the quantity that is equal to—
    - (A) the quantity of NO<sub>x</sub> allowances that would authorize the nitrogen oxides emitted by the facility for the calendar year; minus
    - (B) the quantity of  $NO_x$  allowances that the owner or operator holds for use for the facility for that year.
  - (3) Overlapping penalties.—A penalty under this section shall not diminish the liability of the owner or operator of an affected facility for any fine, penalty, or assessment against the owner or operator for the same violation under any other provision of law.

#### (b) Excess Emissions Offset.—

(1) In general.—The owner or operator of an affected facility that emits nitrogen oxide during a calendar year in excess of the NO<sub>x</sub> allowances held for the facility for the calendar year shall offset in the following calendar year a quantity of NO<sub>x</sub> allowances equal to the number of NO<sub>x</sub> allowances that would authorize the excess nitrogen oxides emitted.

- 1 (2) PROPOSED PLAN.—Not later than 60 days 2 after the end of the year in which excess emissions 3 occur, the owner or operator of an affected facility 4 shall submit to the Administrator and the State in 5 which the affected facility is located a proposed plan 6 to achieve the offset required under paragraph (1).
- 7 (3) CONDITION OF PERMIT.—On approval of 8 the proposed plan by the Administrator, as submit-9 ted, or as modified or conditioned by the Adminis-10 trator, the plan shall be considered a condition of 11 the operating permit for the affected facility without 12 further review or revision of the permit.
- 13 (c) Penalty Adjustment.—The Administrator 14 shall annually adjust the amount of the penalty specified 15 in subsection (a) to reflect changes in the Consumer Price 16 Index for all urban consumers published by the Bureau 17 of Labor Statistics.
- 18 SEC. 7. SULFUR DIOXIDE ALLOWANCE PROGRAM REVI-19 SIONS.
- Section 402 of the Clean Air Act (42 U.S.C. 7651a)
- 21 is amended by striking paragraph (3) and inserting the
- 22 following:
- 23 "(3) Allowance.—The term 'allowance'
- 24 means an authorization, allocated to an affected unit

1	by the Administrator under this title, to emit, during
2	or after a specified calendar year—
3	"(A) in the case of allowances allocated for
4	calendar years 1997 through 2004, 1 ton of
5	sulfur dioxide; and
6	"(B) in the case of allowances allocated for
7	calendar year 2005 and each calendar year
8	thereafter, ½ ton of sulfur dioxide.".
9	SEC. 8. REGIONAL ECOSYSTEMS.
10	(a) Report.—
11	(1) IN GENERAL.—Not later than December 31,
12	2002, the Administrator shall submit to Congress a
13	report identifying objectives for scientifically credible
14	environmental indicators, as determined by the Ad-
15	ministrator, that are sufficient to protect sensitive
16	ecosystems of the Adirondack Mountains, mid-Appa-
17	lachian Mountains, Rocky Mountains, and Southern
18	Blue Ridge Mountains and water bodies of the Great
19	Lakes, Lake Champlain, Long Island Sound, and
20	the Chesapeake Bay.
21	(2) ACID NEUTRALIZING CAPACITY.—The re-
22	port under paragraph (1) shall—
23	(A) include acid neutralizing capacity as
24	an indicator: and

- 1 (B) identify as an objective under para2 graph (1) the objective of increasing the propor3 tion of water bodies in sensitive receptor areas
  4 with an acid neutralizing capacity greater than
  5 zero from the proportion identified in surveys
  6 begun in 1984.
  - (3) UPDATED REPORT.—Not later than December 31, 2008, the Administrator shall submit to Congress a report updating the report under paragraph (1) and assessing the status and trends of various environmental indicators for the regional ecosystems referred to in paragraph (1).
    - (4) Reports under the National acid pre-CIPITATION ASSESSMENT PROGRAM.—The reports under this subsection shall be subject to the requirements applicable to a report under section 103(j)(3)(E) of the Clean Air Act (42 U.S.C. 7403(j)(3)(E)).

#### (b) Regulations.—

(1) Determination.—Not later than December 31, 2008, the Administrator shall determine whether emissions reductions under section 4 are sufficient to ensure achievement of the objectives stated in subsection (a)(1).

1 (2) Promulgation.—If the Administrator de-2 termines under paragraph (1) that emissions reductions under section 4 are not sufficient to ensure 3 achievement of the objectives identified in subsection 5 (a)(1), the Administrator shall promulgate, not later 6 than 2 years after making the finding, such regula-7 tions, including modification of nitrogen oxide and sulfur dioxide allowance allocations or any such 8 9 measure, as the Administrator determines are nec-10 essary to protect the sensitive ecosystems described 11 in subsection (a)(1).

#### 12 SEC. 9. GENERAL COMPLIANCE WITH OTHER PROVISIONS.

- Except as expressly provided in this Act, compliance with this Act shall not exempt or exclude the owner or operator of an affected facility from compliance with any
- 16 other law.

#### 17 SEC. 10. MERCURY EMISSION STUDY AND CONTROL.

- 18 (a) Study and Report.—The Administrator 19 shall—
- 20 (1) study the practicality of monitoring mercury 21 emissions from all combustion units that have a ca-22 pacity equal to or greater than 250 mmBtu's per
- hour; and

(2) not later than 2 years after the date of en-
actment of this Act, submit to Congress a report on
the results of the study.
(b) REGULATIONS CONCERNING MONITORING.—Not
later than 1 year after the date of submission of the report
under subsection (a), the Administrator shall promulgate
a regulation requiring the reporting of mercury emissions
from units that have a capacity equal to or greater than
250 mmBtu's per hour.
(c) Emission Controls.—
(1) In general.—Not later than 1 year after
the commencement of monitoring activities under
subsection (b), the Administrator shall promulgate a
regulation controlling electric utility and industrial
source emissions of mercury.
(2) Factors.—The regulation shall take into
account technological feasibility, cost, and the pro-
jected reduction in levels of mercury emissions that
will result from implementation of this Act.
SEC. 11. DEPOSITION RESEARCH BY THE ENVIRONMENTAL
PROTECTION AGENCY.
(a) In General.—The Administrator shall establish
a competitive grant program to fund research related to
the effects of nitrogen deposition on sensitive watersheds

25 and coastal estuaries in the Eastern United States.

1	(b) Chemistry of Lakes and Streams.—
2	(1) Initial Report.—Not later than Septem-
3	ber 30, 2001, the Administrator shall submit to the
4	Committee on Environment and Public Works of the
5	Senate and the Committee on Resources of the
6	House of Representatives a report on the health and
7	chemistry of lakes and streams of the Adirondacks
8	that were subjects of the report transmitted under
9	section 404 of Public Law 101–549 (commonly
10	known as the "Clean Air Act Amendments of
11	1990'') (104 Stat. 2632).
12	(2) Following Report.—Not later than 2
13	years after the date of the report under paragraph
14	(1), the Administrator shall submit a report updat-
15	ing the information contained in the initial report.
16	(c) Authorization of Appropriations.—There
17	are authorized to be appropriated—
18	(1) to carry out subsection (a), \$1,000,000 for
19	each of fiscal years 2000 through 2005; and
20	(2) to carry out subsection (b), \$1,000,000 for
21	each of fiscal years 2000, 2001, 2007, and 2008.