^{105TH CONGRESS} 2D SESSION **S. 1915**

To amend the Clean Air Act to establish requirements concerning the operation of fossil fuel-fired electric utility steam generating units, commercial and industrial boiler units, solid waste incineration units, medical waste incinerators, hazardous waste combustors, chlor-alkali plants, and Portland cement plants to reduce emissions of mercury to the environment, and for other purposes.

IN THE SENATE OF THE UNITED STATES

April 2, 1998

Mr. LEAHY introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

- To amend the Clean Air Act to establish requirements concerning the operation of fossil fuel-fired electric utility steam generating units, commercial and industrial boiler units, solid waste incineration units, medical waste incinerators, hazardous waste combustors, chlor-alkali plants, and Portland cement plants to reduce emissions of mercury to the environment, 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,

1 SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

- 2 (a) SHORT TITLE.—This Act may be cited as the
- 3 "Omnibus Mercury Emissions Reduction Act of 1998".
- 4 (b) TABLE OF CONTENTS.—The table of contents of

5 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings and purposes.
- Sec. 3. Mercury emission standards for fossil fuel-fired electric utility steam generating units.
- Sec. 4. Mercury emission standards for coal- and oil-fired commercial and industrial boiler units.
- Sec. 5. Mercury emission standards for solid waste incineration units.
- Sec. 6. Mercury emission standards for chlor-alkali plants.
- Sec. 7. Mercury emission standards for Portland cement plants.
- Sec. 8. Report on implementation of mercury emission standards for medical waste incinerators.
- Sec. 9. Report on implementation of mercury emission standards for hazardous waste combustors.
- Sec. 10. Report on use of mercury and mercury compounds by Department of Defense.
- Sec. 11. International activities.
- Sec. 12. Mercury research.

6 SEC. 2. FINDINGS AND PURPOSES.

- 7 (a) FINDINGS.—Congress finds that—
- 8 (1) on the basis of available scientific and medi-9 cal evidence, exposure to mercury and mercury com-10 pounds (collectively referred to in this Act as "mer-11 cury") is of concern to human health and the envi-12 ronment;
- (2) pregnant women and their fetuses, women
 of childbearing age, children, and individuals who
 subsist primarily on fish, are most at risk for mercury-related health impacts such as neurotoxicity;

1	(3) although exposure to mercury occurs most
2	frequently through consumption of mercury-contami-
3	nated fish, such exposure can also occur through—
4	(A) ingestion of drinking water, and food
5	sources other than fish, that are contaminated
6	with methyl mercury;
7	(B) dermal uptake through soil and water;
8	and
9	(C) inhalation of contaminated air;
10	(4) on the basis of the report entitled "Mercury
11	Study Report to Congress" and submitted by the
12	Environmental Protection Agency under section
13	112(n)(1)(B) of the Clean Air Act (42 U.S.C.
14	7412(n)(1)(B)), the major sources of mercury emis-
15	sions in the United States are, in descending order
16	of volume of emissions—
17	(A) fossil fuel-fired electric utility steam
18	generating units;
19	(B) solid waste incineration units;
20	(C) coal- and oil-fired commercial and in-
21	dustrial boiler units;
22	(D) medical waste incinerators;
23	(E) hazardous waste combustors;
24	(F) chlor-alkali plants; and
25	(G) Portland cement plants;

1	(5)(A) the Environmental Protection Agency re-
2	port described in paragraph (4), in conjunction with
3	available scientific knowledge, supports a plausible
4	link between mercury emissions from anthropogenic
5	combustion and industrial sources and mercury con-
6	centrations in air, soil, water, and sediments;
7	(B) the Environmental Protection Agency has
8	concluded that the geographical areas that have the
9	highest annual rate of deposition of mercury in all
10	forms are—
11	(i) the southern Great Lakes and Ohio
12	River Valley;
13	(ii) the Northeast and southern New Eng-
14	land; and
15	(iii) scattered areas in the South, with the
16	most elevated deposition occurring in the Miami
17	and Tampa areas and 2 areas in northeast
18	Texas; and
19	(C) analysis conducted before the date of the
20	Environmental Protection Agency report dem-
21	onstrates that mercury is being deposited into the
22	waters of Canada;
23	(6)(A) the Environmental Protection Agency re-
24	port described in paragraph (4) supports a plausible
25	link between mercury emissions from anthropogenic

1	combustion and industrial sources and concentra-
2	tions of methyl mercury in freshwater fish;
3	(B) in 1997, 39 States issued health advisories
4	that warned the public about consuming mercury-
5	tainted fish, as compared to 27 States that issued
6	such advisories in 1993;
7	(C) the total number of mercury advisories in-
8	creased from 899 in 1993 to 1,675 in 1996, an in-
9	crease of 86 percent; and
10	(D) the United States and Canada have agreed
11	on a goal of virtual elimination of mercury from the
12	transboundary waters of the 2 countries;
13	(7) the presence of mercury in consumer prod-
14	ucts is of concern in light of the health consequences
15	associated with exposure to mercury;
16	(8) the presence of mercury in certain batteries
17	and fluorescent light bulbs is of special concern, par-
18	ticularly in light of the substantial quantities of used
19	batteries and fluorescent light bulbs that are dis-
20	carded annually in the solid waste stream and the
21	potential for environmental and health consequences
22	associated with land disposal, composting, or incin-
23	eration of the batteries and light bulbs; and
24	(9) a comprehensive study of the use of mer-
25	cury by the Department of Defense would signifi-

cantly further the goal of reducing mercury pollu tion.

(b) PURPOSES.—The purposes of this Act are—

3

4 (1) to greatly reduce the quantity of mercury 5 entering the environment by controlling air emis-6 sions of mercury from fossil fuel-fired electric utility 7 steam generating units, coal- and oil-fired commer-8 cial and industrial boiler units, solid waste inciner-9 ation units, medical waste incinerators, hazardous 10 waste combustors, chlor-alkali plants, and Portland 11 cement plants;

(2) to reduce the quantity of mercury entering
solid waste landfills, incinerators, and composting
facilities by promoting recycling or proper disposal
of used batteries, fluorescent light bulbs, and other
products containing mercury;

17 (3) to increase the understanding of the volume
18 and sources of mercury emissions throughout North
19 America;

20 (4) to promote efficient and cost-effective meth21 ods of controlling mercury emissions;

(5) to promote permanent, safe, and stable disposal of mercury recovered through coal cleaning,
flue gas control systems, and other methods of mercury pollution control;

1	(6) to reduce the use of mercury in cases in
2	which technologically and economically feasible alter-
3	natives are available;
4	(7) to educate the public concerning the collec-
5	tion, recycling, and proper disposal of mercury-con-
6	taining products;
7	(8) to increase public knowledge of the sources
8	of mercury exposure and the threat to public health,
9	particularly the threat to the health of pregnant
10	women and their fetuses, women of childbearing age,
11	children, and individuals who subsist primarily on
12	fish;
13	(9) to significantly decrease the threat to
14	human health and the environment posed by mer-
15	cury; and
16	(10) to ensure that the health of sensitive popu-
17	lations, whether in the United States, Canada, or
18	Mexico, is protected, with an adequate margin of
19	safety, against adverse health effects caused by mer-
20	cury.
21	SEC. 3. MERCURY EMISSION STANDARDS FOR FOSSIL
22	FUEL-FIRED ELECTRIC UTILITY STEAM GEN-
23	ERATING UNITS.
24	Section 112 of the Clean Air Act (42 U.S.C. 7412)
25	is amended—

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1 (1) by redesignating subsection (s) as sub-2 section (w); and 3 (2) by inserting after subsection (r) the follow-4 ing: 5 "(s) MERCURY EMISSION STANDARDS FOR ELECTRIC 6 UTILITY STEAM GENERATING UNITS.— 7 "(1) IN GENERAL.— "(A) REGULATIONS.—Not later than 180 8 9 days after the date of enactment of this sub-10 paragraph, the Administrator shall promulgate 11 regulations to establish standards for the emis-12 sion of mercury and mercury compounds (col-13 lectively referred to in this subsection as 'mer-14 cury') applicable to existing and new electric 15 utility steam generating units. "(B) PERMIT REQUIREMENT.—Not later 16 17 than 2 years after the date of enactment of this 18 subparagraph, each electric utility steam gener-19 ating unit shall have an enforceable permit 20 issued under title V that complies with this sub-21 section. 22 "(C) PROCEDURES AND SCHEDULES FOR 23 COMPLIANCE WITH STANDARDS.—Each electric 24 utility steam generating unit shall achieve com-25 pliance with the mercury emission standards es-

tablished under subparagraph (A) in accordance
with the procedures and schedules established
under subsection (i).
"(2) Standards and methods.—
"(A) MINIMUM REQUIRED EMISSION RE-
DUCTION.—Subject to subparagraph (C), the
emission standards established under paragraph
(1)(A) shall require that each electric utility
steam generating unit reduce its annual pound-
age of mercury emitted, as calculated under
subparagraph (B), below its mercury emission
baseline, as calculated under paragraph $(3)(D)$,
by not less than 95 percent.
"(B) CALCULATION OF ANNUAL POUND-
AGE OF MERCURY EMITTED.—
"(i) IN GENERAL.—For each electric
utility steam generating unit (referred to
in this subparagraph as a 'unit') and each
calendar year, the Administrator shall cal-
culate the poundage of mercury emitted
per unit for the calendar year, which shall
be equal to the product obtained by mul-
tiplying-

	10
1	"(I) the fuel consumption deter-
2	mined under clause (ii) for the unit
3	for the calendar year; by
4	"(II) the average mercury con-
5	tent determined under clause (iii) for
6	the unit for the calendar year.
7	"(ii) Fuel consumption.—The fuel
8	consumption for a unit shall be equal to
9	the annual average quantity of millions of
10	British thermal units (referred to in this
11	subparagraph as 'mmBtu's') consumed by
12	the unit during the calendar year, as sub-
13	mitted to the Secretary of Energy on De-
14	partment of Energy Form 767.
15	"(iii) AVERAGE MERCURY CON-
16	TENT.—
17	"(I) Specific data.—The aver-
18	age mercury content per mmBtu of
19	fuel consumed by a unit shall be de-
20	termined using the best available data
21	from the Department of the Interior
22	and the Department of Energy that
23	characterize the average mercury con-
24	tent of the fuel consumed by the unit
25	during the calendar year.

1	"(II) ESTIMATED DATA.—If spe-
2	cific mercury content data from the
3	Department of the Interior and the
4	Department of Energy are not avail-
5	able, the average mercury content
6	shall be estimated using the average
7	mercury content of fossil fuel from
8	mines or wells in the geographic re-
9	gion of each mine or well that supplies
10	the unit.
11	"(C) Emission trading within a gener-
12	ATING STATION.—
13	"(i) IN GENERAL.—For the purpose
14	of this subsection, taking into consider-
15	ation the cost of achieving the emission re-
16	duction, the Administrator may allow emis-
17	sion trading among the electric utility
18	steam generating units contained in a
19	power generating station at a single site if
20	the aggregate annual reduction from all
21	such units at the power generating station
22	is not less than 95 percent.
23	"(ii) UNDERLYING DATA.—In carry-
24	ing out clause (i), the Administrator shall

1	use mercury emission data calculated
2	under paragraph (3)(D).
3	"(D) Control methods.—For the pur-
4	pose of achieving compliance with the emission
5	standards established under paragraph (1)(A),
6	the Administrator shall authorize methods of
7	control of mercury emissions, including meas-
8	ures that—
9	"(i) reduce the volume of, or eliminate
10	emissions of, mercury through a process
11	change, substitution of material or fuel, or
12	other method;
13	"(ii) enclose systems or processes to
14	eliminate mercury emissions;
15	"(iii) collect, capture, or treat mer-
16	cury emissions when released from a proc-
17	ess, stack, storage, or fugitive emission
18	point;
19	"(iv) consist of design, equipment,
20	work practice, or operational standards
21	(including requirements for operator train-
22	ing or certification) in accordance with
23	subsection (h); or

1	"(v) consist of a combination of the
2	measures described in clauses (i) through
3	(iv).
4	"(3) PERMIT REQUIREMENTS AND CONDI-
5	TIONS.—
6	"(A) IN GENERAL.—Each permit issued in
7	accordance with paragraph (1)(B) shall in-
8	clude—
9	"(i) enforceable mercury emission
10	standards;
11	"(ii) a schedule of compliance;
12	"(iii) a requirement that the permittee
13	submit to the permitting authority, not less
14	often than every 90 days, the results of
15	any required monitoring; and
16	"(iv) such other conditions as the Ad-
17	ministrator determines are necessary to en-
18	sure compliance with this subsection and
19	each applicable implementation plan under
20	section 110.
21	"(B) MONITORING AND ANALYSIS.—
22	"(i) Procedures and methods.—
23	The regulations promulgated by the Ad-
24	ministrator under paragraph $(1)(A)$ shall
25	prescribe procedures and methods for—

1	"(I) monitoring and analysis for
2	mercury; and
3	"(II) determining compliance
4	with this subsection.
5	"(ii) INFORMATION.—Application of
6	the procedures and methods shall result in
7	reliable and timely information for deter-
8	mining compliance.
9	"(iii) Other requirements.—
10	"(I) IN GENERAL.—The require-
11	ments for monitoring and analysis
12	under this subparagraph shall in-
13	clude—
14	"(aa) such requirements
15	that result in a representative de-
16	termination of mercury in ash
17	and sludge; and
18	"(bb) such combination of
19	requirements for continuous or
20	other reliable and representative
21	emission monitoring methods
22	that results in a representative
23	determination of mercury in fuel
24	as received by each electric utility
25	steam generating unit;

1	as are requisite to provide accurate
2	and reliable data for determining
3	baseline and controlled emissions of
4	mercury from each electric utility
5	steam generating unit.
6	"(II) MINIMUM REQUIREMENT.—
7	If, under subclause (I)(bb), the Ad-
8	ministrator does not require an elec-
9	tric utility steam generating unit to
10	use direct emission monitoring meth-
11	ods, the requirements under subclause
12	(I)(bb) shall, at a minimum, result in
13	representative determinations of mer-
14	cury in fuel as received by the electric
15	utility steam generating unit at such
16	frequencies as are sufficient to deter-
17	mine whether compliance with this
18	subsection is continuous.
19	"(iv) Effect on other law.—
20	Nothing in this subsection affects any con-
21	tinuous emission monitoring requirement
22	of title IV or any other provision of this
23	Act.
24	"(C) INSPECTION, ENTRY, MONITORING,
25	CERTIFICATION, AND REPORTING.—

1	"(i) IN GENERAL.—Each permit
2	issued in accordance with paragraph
3	(1)(B) shall specify inspection, entry, mon-
4	itoring, compliance certification, and re-
5	porting requirements to ensure compliance
6	with the permit terms and conditions.
7	"(ii) Conformity with other reg-
8	ULATIONS.—The monitoring and reporting
9	requirements shall conform to each appli-
10	cable regulation under subparagraph (B).
11	"(iii) SIGNATURE.—Each report re-
12	quired under clause (i) and subparagraph
13	(B)(iii) shall be signed by a responsible of-
14	ficial of the electric utility steam generat-
15	ing unit, who shall certify the accuracy of
16	the report.
17	"(D) MERCURY EMISSION BASELINE.—
18	"(i) IN GENERAL.—For each electric
19	utility steam generating unit (referred to
20	in this subparagraph as a 'unit'), the Ad-
21	ministrator shall calculate the baseline an-
22	nual average poundage of mercury emitted
23	per unit, which shall be equal to the prod-
24	uct obtained by multiplying—

	11
1	"(I) the baseline fuel consump-
2	tion determined under clause (ii) for
3	the unit; by
4	"(II) the baseline average mer-
5	cury content determined under clause
6	(iii) for the unit.
7	"(ii) BASELINE FUEL CONSUMP-
8	TION.—
9	"(I) UNITS IN COMMERCIAL OP-
10	ERATION BEFORE JANUARY 1, 1995.—
11	For each unit that began commercial
12	operation before January 1, 1995, the
13	baseline fuel consumption shall be
14	equal to the annual average quantity
15	of millions of British thermal units
16	(referred to in this subparagraph as
17	'mmBtu's') consumed by the unit dur-
18	ing the period of calendar years 1995,
19	1996, and 1997, as submitted annu-
20	ally to the Secretary of Energy on De-
21	partment of Energy Form 767 (re-
22	ferred to in this clause as 'Form
23	767').
24	"(II) UNITS BEGINNING COM-
25	MERCIAL OPERATION BETWEEN JANU-

1	ARY 1, 1995, AND 180 DAYS AFTER EN-
2	ACTMENT.—Subject to subclause
3	(III), for each unit that begins com-
4	mercial operation between January 1,
5	1995, and the date that is 180 days
6	after the date of enactment of this
7	subparagraph, the baseline fuel con-
8	sumption shall be based on the annual
9	average of the fuel use data submitted
10	on Form 767 for each full year of
11	commercial operation that begins on
12	or after January 1, 1995.
13	"(III) UNITS IN COMMERCIAL
14	OPERATION LESS THAN 1 YEAR AS OF
15	180 DAYS AFTER ENACTMENT.—For
16	each unit that has not been in com-
17	mercial operation for at least 1 year
18	as of the date that is 180 days after
19	the date of enactment of this subpara-
20	graph, the Administrator may deter-
21	mine an interim baseline fuel con-
22	sumption by—
23	"(aa) extrapolating from
24	monthly fuel use data available
25	for the unit; or

1	"(bb) assigning a baseline
2	fuel consumption based on the
3	annual average of the fuel use
4	data submitted on Form 767 for
5	other units that are of similar de-
6	sign and capacity.
7	"(IV) UNITS BEGINNING COM-
8	MERCIAL OPERATION MORE THAN 180
9	DAYS AFTER ENACTMENT.—For each
10	unit that begins commercial operation
11	more than 180 days after the date of
12	enactment of this subparagraph, the
13	application for a permit issued in ac-
14	cordance with paragraph $(1)(B)$ for
15	the unit shall include an initial base-
16	line fuel consumption that is based on
17	the maximum design capacity for the
18	unit.
19	"(V) RECALCULATION AFTER EX-
20	TENDED PERIOD OF COMMERCIAL OP-
21	ERATION.—At such time as a unit de-
22	scribed in any of subclauses (II)
23	through (IV) has submitted fuel use
24	data for 3 consecutive years of com-

25 mercial operation on Form 767, the

1	Administrator shall recalculate the
2	baseline fuel consumption and make
3	modifications, as necessary, to the
4	mercury emission limitations con-
5	tained in the permit for the unit
6	issued in accordance with paragraph
7	(1)(B).
8	"(iii) BASELINE AVERAGE MERCURY
9	CONTENT.—
10	"(I) UNITS IN COMMERCIAL OP-
11	ERATION BEFORE JANUARY 1, 1995.—
12	In the case of a unit described in
13	clause (ii)(I), the baseline average
14	mercury content per mmBtu of fuel
15	consumed by a unit shall be deter-
16	mined using the best available data
17	from the Department of the Interior
18	and the Department of Energy that
19	characterize the average mercury con-
20	tent of the fuel consumed by the unit
21	during the 3-year period described in
22	clause (ii)(I).
23	"(II) UNITS BEGINNING COM-
24	MERCIAL OPERATION BETWEEN JANU-
25	ARY 1, 1995, AND 180 DAYS AFTER EN-

1	ACTMENT.—In the case of a unit de-
2	scribed in clause (ii)(II), the baseline
3	average mercury content per mmBtu
4	of fuel consumed by a unit shall be
5	determined using the best available
6	data from the Department of the In-
7	
	terior and the Department of Energy
8	that characterize the average mercury
9	content of the fuel consumed by the
10	unit during each full year of commer-
11	cial operation that begins on or after
12	January 1, 1995.
13	"(III) UNITS IN COMMERCIAL
13 14	(III) UNITS IN COMMERCIAL OPERATION LESS THAN 1 YEAR AS OF
14	OPERATION LESS THAN 1 YEAR AS OF
14 15	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the
14 15 16	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause
14 15 16 17	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause (ii)(III), the baseline average mercury
14 15 16 17 18	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause (ii)(III), the baseline average mercury content per mmBtu of fuel consumed
14 15 16 17 18 19	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause (ii)(III), the baseline average mercury content per mmBtu of fuel consumed by a unit shall be determined using
14 15 16 17 18 19 20	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause (ii)(III), the baseline average mercury content per mmBtu of fuel consumed by a unit shall be determined using the best available data from the De-
14 15 16 17 18 19 20 21	OPERATION LESS THAN 1 YEAR AS OF 180 DAYS AFTER ENACTMENT.—In the case of a unit described in clause (ii)(III), the baseline average mercury content per mmBtu of fuel consumed by a unit shall be determined using the best available data from the De- partment of the Interior and the De-

1	"(aa) during the months
2	used for the extrapolation under
3	clause (ii)(III); or
4	"(bb) based on the average
5	mercury content of fuel con-
6	sumed by other units that are of
7	similar design and capacity.
8	"(IV) UNITS BEGINNING COM-
9	MERCIAL OPERATION MORE THAN 180
10	DAYS AFTER ENACTMENT.—In the
11	case of a unit described in clause
12	(ii)(IV), the baseline average mercury
13	content per mmBtu of fuel consumed
14	by a unit shall be determined using
15	the best available data from the De-
16	partment of the Interior and the De-
17	partment of Energy, or data submit-
18	ted by the unit under subparagraph
19	(B)(iii), that characterize the average
20	mercury content of the fuel consumed
21	by the unit based on the maximum
22	design capacity for the unit.
23	"(V) Estimated data.—If mer-
24	cury content data described in clauses
25	(I) through (IV) are not available, the

1	baseline average mercury content shall
2	be estimated using the average mer-
3	cury content of fossil fuel from mines
4	or wells in the geographic region of
5	each mine or well that supplies the
6	unit.
7	"(4) DISPOSAL OF MERCURY CAPTURED
8	THROUGH EMISSION CONTROLS.—
9	"(A) IN GENERAL.—
10	"(i) CAPTURED OR RECOVERED MER-
11	CURY.—The regulations promulgated by
12	the Administrator under paragraph $(1)(A)$
13	shall ensure that mercury that is captured
14	or recovered through the use of an emis-
15	sion control, coal cleaning, or another
16	method is disposed of in a manner that en-
17	sures that—
18	"(I) the hazards from mercury
19	are not transferred from 1 environ-
20	mental medium to another; and
21	"(II) there is no release of mer-
22	cury into the environment (as the
23	terms 'release' and 'environment' are
24	defined in section 101 of the Com-
25	prehensive Environmental Response,

1	Compensation, and Liability Act of
2	1980 (42 U.S.C. 9601)).
3	"(ii) Mercury-containing sludges
4	AND WASTES.—The regulations promul-
5	gated by the Administrator under para-
6	graph (1)(A) shall ensure that mercury-
7	containing sludges and wastes are handled
8	and disposed of in accordance with all ap-
9	plicable Federal and State laws (including
10	regulations).
11	"(B) RESEARCH PROGRAM.—To promote
12	permanent and cost-effective disposal of mer-
13	cury from electric utility steam generating
14	units, the Administrator shall establish a pro-
15	gram of long-term research to develop and dis-
16	seminate information on methods and tech-
17	niques such as separating, solidifying, recycling,
18	and encapsulating mercury-bearing waste so
19	that mercury does not volatilize, migrate to
20	ground water or surface water, or contaminate
21	the soil.
22	"(5) OTHER REQUIREMENTS.—An emission
23	standard or other requirement promulgated under

25 quirement of a more stringent emission limitation or

this subsection does not diminish or replace any re-

	25
1	other applicable requirement established under this
2	Act or a standard issued under State law.
3	"(6) Public reporting of data pertaining
4	TO EMISSIONS OF MERCURY.—
5	"(A) IN GENERAL.—The Administrator
6	shall annually make available to the public,
7	through 1 or more published reports and 1 or
8	more forms of electronic media, facility-specific
9	mercury emission data for each electric utility
10	steam generating unit.
11	"(B) Source of data.—The emission
12	data shall be taken from the monitoring and
13	analysis reports submitted under paragraph
14	(3)(C).".
15	SEC. 4. MERCURY EMISSION STANDARDS FOR COAL- AND
16	OIL-FIRED COMMERCIAL AND INDUSTRIAL
17	BOILER UNITS.
18	Section 112 of the Clean Air Act (as amended by sec-
19	tion 3) is amended by inserting after subsection (s) the
20	following:
21	"(t) Mercury Emission Standards for Coal-
22	AND OIL-FIRED COMMERCIAL AND INDUSTRIAL BOILER
23	UNITS.—
24	"(1) IN GENERAL.—

"(A) REGULATIONS.—Not later than 180 1 2 days after the date of enactment of this subparagraph, the Administrator shall promulgate 3 4 regulations to establish standards for the emis-5 sion of mercury and mercury compounds (col-6 lectively referred to in this subsection as 'mer-7 cury') applicable to existing and new coal- and 8 oil-fired commercial and industrial boiler units 9 that have a maximum design heat input capac-10 ity of 10 mmBtu per hour or greater. "(B) PERMIT REQUIREMENT.—Not later 11 12 than 2 years after the date of enactment of this 13 subparagraph, each coal- or oil-fired commercial 14 or industrial boiler unit shall have an enforce-15 able permit issued under title V that complies with this subsection. 16

"(C) PROCEDURES AND SCHEDULES FOR
COMPLIANCE WITH STANDARDS.—Each coal- or
oil-fired commercial or industrial boiler unit
shall achieve compliance with the mercury emission standards established under subparagraph
(A) in accordance with the procedures and
schedules established under subsection (i).

24 "(2) Standards and methods.—

2 DUCTION.—Subject to subparagraph (C	
	C), the
3 emission standards established under par	agraph
4 (1)(A) shall require that each coal- or o	oil-fired
5 commercial or industrial boiler unit red	uce its
6 annual poundage of mercury emitted,	as cal-
7 culated under subparagraph (B), below it	ts mer-
8 cury emission baseline, as calculated	under
9 paragraph (3)(D), by not less than 95 p	ercent.
10 "(B) CALCULATION OF ANNUAL F	POUND-
11 AGE OF MERCURY EMITTED.—	
12 "(i) IN GENERAL.—For each c	oal- or
13 oil-fired commercial or industrial	boiler
14 unit (referred to in this subparagrap	ph as a
15 'unit') and each calendar year, the .	Admin-
16 istrator shall calculate the pound	age of
17 mercury emitted per unit for the ca	alendar
18 year, which shall be equal to the p	oroduct
19 obtained by multiplying—	
20 "(I) the fuel consumption	deter-
21 mined under clause (ii) for the	ne unit
22 for the calendar year; by	
23 "(II) the average mercur	y con-
24 tent determined under clause (iii) for
25 the unit for the calendar year.	

1	"(ii) Fuel consumption.—The fuel
2	consumption for a unit shall be equal to
3	the annual average quantity of millions of
4	British thermal units (referred to in this
5	subparagraph as 'mmBtu's') consumed by
6	the unit during the calendar year, as sub-
7	mitted to the Secretary of Energy on De-
8	partment of Energy Forms EIA-3 and
9	EIA-846 (A,B,C).
10	"(iii) AVERAGE MERCURY CON-
11	TENT.—
12	"(I) Specific data.—The aver-
13	age mercury content per mmBtu of
14	fuel consumed by a unit shall be de-
15	termined using the best available data
16	from the Department of the Interior
17	and the Department of Energy (as
18	submitted to the Secretary of Energy
19	on Department of Energy Form EIA–
20	3A) that characterize the average
21	mercury content of the fuel consumed
22	by the unit during the calendar year.
23	"(II) ESTIMATED DATA.—If spe-
24	cific mercury content data from the
25	Department of the Interior and the

2able, the average mercury content3shall be estimated using the average4mercury content of coal mined or oil5produced in the geographic region of6each mine or well that supplies the7unit.8"(C) EMISSION TRADING WITHIN A FACIL-9ITY.—10"(i) IN GENERAL.—For the purpose11of this subsection, taking into consider-12ation the cost of achieving the emission re-13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-25pose of achieving compliance with the emission	1	Department of Energy are not avail-
4mercury content of coal mined or oil produced in the geographic region of each mine or well that supplies the unit.7unit.8"(C) EMISSION TRADING WITHIN A FACIL-9ITY.—10"(i) IN GENERAL.—For the purpose of this subsection, taking into consider- ation the cost of achieving the emission re- duction, the Administrator may allow emis- sion trading among the coal- and oil-fired commercial and industrial boiler units con- tained in a facility at a single site if the aggregate annual reduction from all such units at the facility is not less than 95 per- to eent.20"(ii) UNDERLYING DATA.—In carry- ing out clause (i), the Administrator shall use mercury emission data calculated under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	2	able, the average mercury content
5produced in the geographic region of6each mine or well that supplies the7unit.8"(C) EMISSION TRADING WITHIN A FACIL-9ITY.—10"(i) IN GENERAL.—For the purpose11of this subsection, taking into consider-12ation the cost of achieving the emission re-13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	3	shall be estimated using the average
 6 each mine or well that supplies the 7 unit. 8 "(C) EMISSION TRADING WITHIN A FACIL- 9 ITY.— 10 "(i) IN GENERAL.—For the purpose 11 of this subsection, taking into consider- 12 ation the cost of achieving the emission re- 13 duction, the Administrator may allow emis- 14 sion trading among the coal- and oil-fired 15 commercial and industrial boiler units con- 16 tained in a facility at a single site if the 17 aggregate annual reduction from all such 18 units at the facility is not less than 95 per- 19 cent. 20 "(ii) UNDERLYING DATA.—In carry- 21 ing out clause (i), the Administrator shall 22 use mercury emission data calculated 23 under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	4	mercury content of coal mined or oil
7unit.8"(C) EMISSION TRADING WITHIN A FACL-9ITY.—10"(i) IN GENERAL.—For the purpose11of this subsection, taking into consider-12ation the cost of achieving the emission re-13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	5	produced in the geographic region of
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 9 ITY.— 10 "(i) IN GENERAL.—For the purpose of this subsection, taking into consider- ation the cost of achieving the emission re- duction, the Administrator may allow emis- sion trading among the coal- and oil-fired commercial and industrial boiler units con- tained in a facility at a single site if the aggregate annual reduction from all such units at the facility is not less than 95 per- cent. 20 "(ii) UNDERLYING DATA.—In carry- ing out clause (i), the Administrator shall use mercury emission data calculated under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	7	unit.
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11of this subsection, taking into consider-12ation the cost of achieving the emission re-13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	9	ITY.—
12ation the cost of achieving the emission re-13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	10	"(i) IN GENERAL.—For the purpose
13duction, the Administrator may allow emis-14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	11	of this subsection, taking into consider-
14sion trading among the coal- and oil-fired15commercial and industrial boiler units con-16tained in a facility at a single site if the17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	12	ation the cost of achieving the emission re-
 15 commercial and industrial boiler units contained in a facility at a single site if the aggregate annual reduction from all such units at the facility is not less than 95 percent. 20 "(ii) UNDERLYING DATA.—In carry-ing out clause (i), the Administrator shall use mercury emission data calculated under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	13	duction, the Administrator may allow emis-
16tained in a facility at a single site if the aggregate annual reduction from all such units at the facility is not less than 95 per- (ent.19cent.20"(ii) UNDERLYING DATA.—In carry- ing out clause (i), the Administrator shall use mercury emission data calculated under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	14	sion trading among the coal- and oil-fired
17aggregate annual reduction from all such18units at the facility is not less than 95 per-19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	15	commercial and industrial boiler units con-
 18 units at the facility is not less than 95 per- 19 cent. 20 "(ii) UNDERLYING DATA.—In carry- 21 ing out clause (i), the Administrator shall 22 use mercury emission data calculated 23 under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	16	tained in a facility at a single site if the
19cent.20"(ii) UNDERLYING DATA.—In carry-21ing out clause (i), the Administrator shall22use mercury emission data calculated23under paragraph (3)(D).24"(D) CONTROL METHODS.—For the pur-	17	aggregate annual reduction from all such
 20 "(ii) UNDERLYING DATA.—In carry- 21 ing out clause (i), the Administrator shall 22 use mercury emission data calculated 23 under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	18	units at the facility is not less than 95 per-
 21 ing out clause (i), the Administrator shall 22 use mercury emission data calculated 23 under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	19	cent.
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 23 under paragraph (3)(D). 24 "(D) CONTROL METHODS.—For the pur- 	21	ing out clause (i), the Administrator shall
24 "(D) CONTROL METHODS.—For the pur-	22	use mercury emission data calculated
	23	under paragraph (3)(D).
25 pose of achieving compliance with the emission	24	"(D) CONTROL METHODS.—For the pur-
	25	pose of achieving compliance with the emission

1	standards established under paragraph $(1)(A)$,
2	the Administrator shall authorize methods of
3	control of mercury emissions, including meas-
4	ures that—
5	"(i) reduce the volume of, or eliminate
6	emissions of, mercury through a process
7	change, substitution of material or fuel, or
8	other method;
9	"(ii) enclose systems or processes to
10	eliminate mercury emissions;
11	"(iii) collect, capture, or treat mer-
12	cury emissions when released from a proc-
13	ess, stack, storage, or fugitive emission
14	point;
15	"(iv) consist of design, equipment,
16	work practice, or operational standards
17	(including requirements for operator train-
18	ing or certification) in accordance with
19	subsection (h); or
20	"(v) consist of a combination of the
21	measures described in clauses (i) through
22	(iv).
23	"(3) Permit requirements and condi-
24	TIONS.—

1	"(A) IN GENERAL.—Each permit issued in
2	accordance with paragraph $(1)(B)$ shall in-
3	clude—
4	"(i) enforceable mercury emission
5	standards;
6	"(ii) a schedule of compliance;
7	"(iii) a requirement that the permittee
8	submit to the permitting authority, not less
9	often than every 90 days, the results of
10	any required monitoring; and
11	"(iv) such other conditions as the Ad-
12	ministrator determines are necessary to en-
13	sure compliance with this subsection and
14	each applicable implementation plan under
15	section 110.
16	"(B) Monitoring and analysis.—
17	"(i) Procedures and methods.—
18	The regulations promulgated by the Ad-
19	ministrator under paragraph $(1)(A)$ shall
20	prescribe procedures and methods for—
21	"(I) monitoring and analysis for
22	mercury; and
23	"(II) determining compliance
24	with this subsection.

- INFORMATION.—Application of 1 "(ii) 2 the procedures and methods shall result in reliable and timely information for deter-3 4 mining compliance. "(iii) Other requirements.— 5 "(I) IN GENERAL.—The require-6 7 ments for monitoring and analysis 8 under this subparagraph shall in-9 clude— "(aa) 10 such requirements 11 that result in a representative determination of mercury in ash 12 13 and sludge; and "(bb) such combination of 14 15 requirements for continuous or other reliable and representative 16 17 methods emission monitoring 18 that results in a representative 19 determination of mercury in fuel 20 as received by each coal- or oil-21 fired commercial or industrial 22 boiler unit; 23 as are requisite to provide accurate 24 and reliable data for determining
- 25 baseline and controlled emissions of

1	mercury from each coal- or oil-fired
2	commercial or industrial boiler unit.
3	"(II) MINIMUM REQUIREMENT.—
4	If, under subclause (I)(bb), the Ad-
5	ministrator does not require a coal- or
6	oil-fired commercial or industrial boil-
7	er unit to use direct emission monitor-
8	ing methods, the requirements under
9	subclause (I)(bb) shall, at a minimum,
10	result in representative determinations
11	of mercury in fuel as received by the
12	boiler unit at such frequencies as are
13	sufficient to determine whether com-
14	pliance with this subsection is contin-
15	uous.
16	"(iv) Effect on other law.—
17	Nothing in this subsection affects any con-
18	tinuous emission monitoring requirement
19	of title IV or any other provision of this
20	Act.
21	"(C) INSPECTION, ENTRY, MONITORING,
22	CERTIFICATION, AND REPORTING.—
23	"(i) IN GENERAL.—Each permit
24	issued in accordance with paragraph
25	(1)(B) shall specify inspection, entry, mon-

- 1 itoring, compliance certification, and re-2 porting requirements to ensure compliance with the permit terms and conditions. 3 4 "(ii) Conformity with other reg-ULATIONS.—The monitoring and reporting 5 6 requirements shall conform to each appli-7 cable regulation under subparagraph (B). 8 "(iii) SIGNATURE.—Each report re-9 quired under clause (i) and subparagraph (B)(iii) shall be signed by a responsible of-10 11 ficial of the coal- or oil-fired commercial or 12 industrial boiler unit, who shall certify the 13 accuracy of the report. 14 "(D) MERCURY EMISSION BASELINE.— "(i) IN GENERAL.—For each coal- or 15 16 oil-fired commercial or industrial boiler 17 unit (referred to in this subparagraph as a 18 'unit'), the Administrator shall calculate 19 the baseline annual average poundage of 20 mercury emitted per unit, which shall be 21 equal to the product obtained by multiply-22 ing— 23 "(I) the baseline fuel consump-24 tion determined under clause (ii) for 25 the unit; by
 - •S 1915 IS

- 35 "(II) the baseline average mer-1 2 cury content determined under clause 3 (iii) for the unit. "(ii) 4 BASELINE FUEL CONSUMP-5 TION.— 6 "(I) UNITS IN COMMERCIAL OP-7 ERATION BEFORE JANUARY 1, 1995.-8 For each unit that began commercial 9 operation before January 1, 1995, the 10 baseline fuel consumption shall be 11 equal to the annual average quantity 12 of millions of British thermal units 13 (referred to in this subparagraph as 14 'mmBtu's') consumed by the unit dur-15 ing the period of calendar years 1995, 16 1996, and 1997, as submitted annu-17 ally to the Secretary of Energy on De-18 partment of Energy Forms EIA-3 19 and EIA-846 (A,B,C) (referred to in 20 this clause as the 'Forms'). 21 "(II) UNITS BEGINNING COM-22 MERCIAL OPERATION BETWEEN JANU-23 ARY 1, 1995, AND 180 DAYS AFTER EN-
 - (III), for each unit that begins com-

ACTMENT.—Subject

to

subclause

24

1	mercial operation between January 1,
2	1995, and the date that is 180 days
3	after the date of enactment of this
4	subparagraph, the baseline fuel con-
5	sumption shall be based on the annual
6	average of the fuel use data submitted
7	on the Forms for each full year of
8	commercial operation that begins on
9	or after January 1, 1995.
10	"(III) UNITS IN COMMERCIAL
11	OPERATION LESS THAN 1 YEAR AS OF
12	180 DAYS AFTER ENACTMENT.—For
13	each unit that has not been in com-
14	mercial operation for at least 1 year
15	as of the date that is 180 days after
16	the date of enactment of this subpara-
17	graph, the Administrator may deter-
18	mine an interim baseline fuel con-
19	sumption by—
20	"(aa) extrapolating from
21	monthly fuel use data available
22	for the unit; or
23	"(bb) assigning a baseline
24	fuel consumption based on the
25	annual average of the fuel use
1

2

3

data submitted on the Forms for
other units that are of similar de-
sign and capacity.

4 "(IV) UNITS BEGINNING COM-5 MERCIAL OPERATION MORE THAN 180 6 DAYS AFTER ENACTMENT.—For each 7 unit that begins commercial operation 8 more than 180 days after the date of 9 enactment of this subparagraph, the 10 application for a permit issued in ac-11 cordance with paragraph (1)(B) for 12 the unit shall include an initial base-13 line fuel consumption that is based on 14 the maximum design capacity for the 15 unit.

"(V) RECALCULATION AFTER EX-16 17 TENDED PERIOD OF COMMERCIAL OP-18 ERATION.—At such time as a unit de-19 scribed in any of subclauses (II) 20 through (IV) has submitted fuel use 21 data for 3 consecutive years of com-22 mercial operation on the Forms, the 23 Administrator shall recalculate the 24 baseline fuel consumption and make 25 modifications, as necessary, to the

1	mercury emission limitations con-
2	tained in the permit for the unit
3	issued in accordance with paragraph
4	(1)(B).
5	"(iii) BASELINE AVERAGE MERCURY
6	CONTENT.—
7	"(I) UNITS IN COMMERCIAL OP-
8	ERATION BEFORE JANUARY 1, 1995.—
9	In the case of a unit described in
10	clause (ii)(I), the baseline average
11	mercury content per mmBtu of fuel
12	consumed by a unit shall be deter-
13	mined using the best available data
14	from the Department of the Interior
15	and the Department of Energy (as
16	submitted to the Secretary of Energy
17	on Department of Energy Form EIA–
18	3A) that characterize the average
19	mercury content of the fuel consumed
20	by the unit during the 3-year period
21	described in clause (ii)(I).
22	"(II) UNITS BEGINNING COM-
23	MERCIAL OPERATION BETWEEN JANU-
24	ARY 1, 1995, AND 180 DAYS AFTER EN-
25	ACTMENT.—In the case of a unit de-

1	scribed in clause (ii)(II), the baseline
2	average mercury content per mmBtu
3	of fuel consumed by a unit shall be
4	determined using the best available
5	data from the Department of the In-
6	terior and the Department of Energy
7	(as submitted to the Secretary of En-
8	ergy on Department of Energy Form
9	EIA-3A) that characterize the aver-
10	age mercury content of the fuel con-
11	sumed by the unit during each full
12	year of commercial operation that be-
13	gins on or after January 1, 1995.
14	"(III) UNITS IN COMMERCIAL
15	OPERATION LESS THAN 1 YEAR AS OF
16	180 DAYS AFTER ENACTMENT.—In the
17	case of a unit described in clause
18	(ii)(III), the baseline average mercury
19	content per mmBtu of fuel consumed
20	by a unit shall be determined using
21	the best available data from the De-
22	partment of the Interior and the De-
23	partment of Energy (as submitted to
24	the Secretary of Energy on Depart-
25	ment of Energy Form EIA-3A) that

	10
1	characterize the average mercury con-
2	tent of the fuel consumed by the
3	unit—
4	"(aa) during the months
5	used for the extrapolation under
6	clause (ii)(III); or
7	"(bb) based on the average
8	mercury content of fuel con-
9	sumed by other units that are of
10	similar design and capacity.
11	"(IV) UNITS BEGINNING COM-
12	MERCIAL OPERATION MORE THAN 180
13	DAYS AFTER ENACTMENT.—In the
14	case of a unit described in clause
15	(ii)(IV), the baseline average mercury
16	content per mmBtu of fuel consumed
17	by a unit shall be determined using
18	the best available data from the De-
19	partment of the Interior and the De-
20	partment of Energy (as submitted to
21	the Secretary of Energy on Depart-
22	ment of Energy Form EIA-3A), or
23	data submitted by the unit under sub-
24	paragraph (B)(iii), that characterize
25	the average mercury content of the

1	fuel consumed by the unit based on
2	the maximum design capacity for the
3	unit.
4	"(V) ESTIMATED DATA.—If mer-
5	cury content data described in clauses
6	(I) through (IV) are not available, the
7	baseline average mercury content shall
8	be estimated using the average mer-
9	cury content of coal mined or oil pro-
10	duced in the geographic region of each
11	mine or well that supplies the unit.
12	"(4) DISPOSAL OF MERCURY CAPTURED
13	THROUGH EMISSION CONTROLS.—
14	"(A) IN GENERAL.—
15	"(i) CAPTURED OR RECOVERED MER-
16	CURY.—The regulations promulgated by
17	the Administrator under paragraph $(1)(A)$
18	shall ensure that mercury that is captured
19	or recovered through the use of an emis-
20	sion control, coal cleaning, or another
21	method is disposed of in a manner that en-
22	sures that—
23	"(I) the hazards from mercury
24	are not transferred from 1 environ-
25	mental medium to another; and

	1-
1	"(II) there is no release of mer-
2	cury into the environment (as the
3	terms 'release' and 'environment' are
4	defined in section 101 of the Com-
5	prehensive Environmental Response,
6	Compensation, and Liability Act of
7	1980 (42 U.S.C. 9601)).
8	"(ii) Mercury-containing sludges
9	AND WASTES.—The regulations promul-
10	gated by the Administrator under para-
11	graph $(1)(A)$ shall ensure that mercury-
12	containing sludges and wastes are handled
13	and disposed of in accordance with all ap-
14	plicable Federal and State laws (including
15	regulations).
16	"(B) RESEARCH PROGRAM.—To promote
17	permanent and cost-effective disposal of mer-
18	cury from coal- and oil-fired commercial and in-
19	dustrial boiler units, the Administrator shall es-
20	tablish a program of long-term research to de-
21	velop and disseminate information on methods
22	and techniques such as separating, solidifying,
23	recycling, and encapsulating mercury-bearing
24	waste so that mercury does not volatilize, mi-

1	grate to ground water or surface water, or con-
2	taminate the soil.
3	"(5) Other requirements.—An emission
4	standard or other requirement promulgated under
5	this subsection does not diminish or replace any re-
6	quirement of a more stringent emission limitation or
7	other applicable requirement established under this
8	Act or a standard issued under State law.
9	"(6) Public reporting of data pertaining
10	TO EMISSIONS OF MERCURY.—
11	"(A) IN GENERAL.—The Administrator
12	shall annually make available to the public,
13	through 1 or more published reports and 1 or
14	more forms of electronic media, facility-specific
15	mercury emission data for each coal- or oil-fired
16	commercial or industrial boiler unit.
17	"(B) Source of data.—The emission
18	data shall be taken from the monitoring and
19	analysis reports submitted under paragraph
20	(3)(C).".
21	SEC. 5. MERCURY EMISSION STANDARDS FOR SOLID
22	WASTE INCINERATION UNITS.
23	Section 129(e) of the Clean Air Act (42 U.S.C.
24	7429(e)) is amended—

1	(1) by striking "Beginning (1) 36" and insert-
2	ing the following:
3	"(1) IN GENERAL.—Beginning (A) 36";
4	(2) in the first sentence, by redesignating para-
5	graph (2) as subparagraph (B); and
6	(3) by adding at the end the following:
7	"(2) Separation of mercury-containing
8	ITEMS.—
9	"(A) Publication of List.—
10	"(i) IN GENERAL.—Not later than
11	180 days after the date of enactment of
12	this subparagraph, the Administrator shall
13	publish a list of mercury-containing items
14	that shall be separated and removed from
15	the waste streams that feed solid waste in-
16	cineration units.
17	"(ii) Required items.—The list
18	shall include mercury-containing items
19	such as fluorescent light bulbs, batteries,
20	pharmaceuticals, laboratory chemicals and
21	reagents, electrical devices such as thermo-
22	stats, relays, and switches, and medical
23	and scientific instruments.
24	"(iii) LABELING REQUIREMENT.—

1	
1	"(I) IN GENERAL.—Except as
2	provided in subclause (II), to facilitate
3	the process of separating and remov-
4	ing items listed under clause (i), each
5	manufacturer of a listed item shall en-
6	sure that each item is clearly labeled
7	to indicate that the product contains
8	mercury.
9	"(II) BUTTON CELL BAT-
10	TERIES.—In the case of button cell
11	batteries for which, due to size con-
12	straints, labeling described in sub-
13	clause (I) is not practicable, the pack-
14	aging shall indicate that the product
15	contains mercury.
16	"(B) Monitoring and analysis.—
17	"(i) PROCEDURES AND METHODS
18	Not later than 180 days after the date of
19	enactment of this subparagraph, the Ad-
20	ministrator shall promulgate regulations
21	prescribing procedures and methods for—
22	"(I) monitoring and analysis for
23	mercury emissions from solid waste
24	combustion flue gases; and

1	"(II) determining compliance
2	with this paragraph.
3	"(ii) INFORMATION.—Application of
4	the procedures and methods shall result in
5	reliable and timely information for deter-
6	mining compliance.
7	"(C) Plan.—
8	"(i) REQUIREMENT.—Not later than
9	1 year after the date of enactment of this
10	subparagraph, each solid waste inciner-
11	ation unit that operates pursuant to a per-
12	mit described in paragraph (1) shall sub-
13	mit for review and approval by the Admin-
14	istrator (or, in the case of a solid waste in-
15	cineration unit located in a State acting
16	under a permit program approved under
17	title V, the State) a plan for—
18	"(I) separating and removing
19	mercury-containing items listed by the
20	Administrator under subparagraph
21	(A) from the waste streams that feed
22	the solid waste incineration unit;
23	"(II) subject to subtitle C of the
24	Solid Waste Disposal Act (42 U.S.C.
25	6921 et seq.), transferring the sepa-

1	rated waste to a recycling facility or a
2	treatment, storage, or disposal facility
3	permitted under that subtitle;
4	"(III) monitoring and reporting
5	on compliance with the plan; and
6	"(IV) achieving full compliance
7	with the plan not later than 18
8	months after the date of approval of
9	the plan in accordance with clause
10	(ii).
11	"(ii) Plan Approval.—
12	"(I) DEADLINE.—The Adminis-
13	trator (or the State) shall determine
14	whether to approve or disapprove a
15	plan submitted under clause (i) not
16	later than 180 days after receipt of
17	the plan.
18	"(II) PREFERENCE.—In deter-
19	mining whether to approve a plan, the
20	Administrator (or the State) shall give
21	preference to recycling or stabilization
22	of mercury-containing items over dis-
23	posal of the items.
24	"(iii) Amended plan.—

1	"(I) SUBMISSION.—If the Admin-
2	istrator (or the State) disapproves a
3	plan submitted under clause (i), the
4	solid waste incineration unit may sub-
5	mit an amended plan within 90 days
6	after the date of disapproval.
7	"(II) APPROVAL.—The Adminis-
8	trator (or the State) shall approve or
9	disapprove the amended plan within
10	30 days after receipt of the plan.
11	"(iv) Plan by administrator (or
12	STATE).—
13	"(I) IN GENERAL.—If an amend-
14	ed plan is not submitted to the Ad-
15	ministrator (or the State) within 90
16	days after the date of disapproval, or
17	if an amended plan has been submit-
	if an amended plan has been submit- ted and subsequently disapproved, the
17	
17 18	ted and subsequently disapproved, the
17 18 19	ted and subsequently disapproved, the Administrator (or the State) shall
17 18 19 20	ted and subsequently disapproved, the Administrator (or the State) shall issue a determination that it is nec-
17 18 19 20 21	ted and subsequently disapproved, the Administrator (or the State) shall issue a determination that it is nec- essary for the Administrator (or the
 17 18 19 20 21 22 	ted and subsequently disapproved, the Administrator (or the State) shall issue a determination that it is nec- essary for the Administrator (or the State) to assume the duties of the

1	"(II) PLAN.—Not later than 180
2	days after issuing the determination,
3	the Administrator (or the State) shall
4	develop, publish in the Federal Reg-
5	ister, implement, and enforce a plan
6	for the solid waste incineration unit
7	that meets the criteria specified in
8	clause (i) and ensures that full com-
9	pliance with the plan is achieved not
10	later than 18 months after the date of
11	publication of the plan.
12	"(v) Enforceability.—Upon ap-
13	proval by the Administrator (or the State)
14	of a plan submitted under clause (i), or
15	upon publication of a plan developed by
16	the Administrator (or the State) under
17	clause (iv), the plan shall be considered to
18	be an enforceable modification to any exist-
19	ing or new permit described in paragraph
20	(1) for the solid waste incineration unit.
21	"(D) Permit requirements.—
22	"(i) IN GENERAL.—Each permit de-
23	scribed in paragraph (1) shall specify in-
24	spection, entry, monitoring, compliance
25	certification, and reporting requirements to

1	ensure compliance with the permit terms
2	and conditions, including a requirement
3	that the permittee submit to the permit-
4	ting authority, not less often than every 90
5	days, the results of any required monitor-
6	ing.
7	"(ii) SIGNATURE.—Each report re-
8	quired under clause (i) shall be signed by
9	a responsible official of the solid waste in-
10	cineration unit or by a municipal official,
11	who shall certify the accuracy of the re-
12	port.
13	"(E) Other requirements.—An emis-
14	sion standard or other requirement promulgated
15	under this subsection does not diminish or re-
16	place any requirement of a more stringent emis-
17	sion limitation or other applicable requirement
18	established under this Act or a standard issued
19	under State law.
20	"(F) PUBLIC REPORTING OF DATA PER-
21	TAINING TO EMISSIONS OF MERCURY.—
22	"(i) IN GENERAL.—The Administrator
23	shall annually make available to the public,
24	through 1 or more published reports and 1
25	or more forms of electronic media, facility-

1	specific mercury emission data for each
2	solid waste incineration unit.
3	"(ii) Source of data.—The emis-
4	sion data shall be taken from the monitor-
5	ing and analysis reports submitted under
6	subparagraph (D).".
7	SEC. 6. MERCURY EMISSION STANDARDS FOR CHLOR-AL-
8	KALI PLANTS.
9	Section 112 of the Clean Air Act (as amended by sec-
10	tion 4) is amended by inserting after subsection (t) the
11	following:
12	"(u) Mercury Emission Standards for Chlor-
13	Alkali Plants.—
14	"(1) IN GENERAL.—
15	"(A) REGULATIONS.—Not later than 180
16	days after the date of enactment of this sub-
17	paragraph, the Administrator shall promulgate
18	regulations to establish standards for the direct
19	and fugitive emission of mercury and mercury
20	compounds (collectively referred to in this sub-
21	section as 'mercury') applicable to existing and
22	new chlor-alkali plants that use the mercury cell
23	production process (referred to in this sub-
24	section as 'mercury cell chlor-alkali plants').

1 "(B) PERMIT REQUIREMENT.—Not later 2 than 2 years after the date of enactment of this 3 subparagraph, each mercury cell chlor-alkali 4 plant shall have an enforceable permit issued 5 under title V that complies with this subsection. 6 "(C) PROCEDURES AND SCHEDULES FOR 7 COMPLIANCE WITH STANDARDS.—Each mer-8 cury cell chlor-alkali plant shall achieve compli-9 ance with the mercury emission standards es-10 tablished under subparagraph (A) in accordance 11 with the procedures and schedules established 12 under subsection (i).

13 "(2) STANDARDS AND METHODS.—

14 "(A) MINIMUM REQUIRED EMISSION RE-15 DUCTION.—The emission standards established 16 under paragraph (1)(A) shall require that each 17 mercury cell chlor-alkali plant reduce its annual 18 poundage of direct and fugitive mercury emit-19 ted below its mercury emission baseline, as de-20 termined by the Administrator, by not less than 21 95 percent.

22 "(B) CONTROL METHODS.—For the pur23 pose of achieving compliance with the emission
24 standards established under paragraph (1)(A),
25 the Administrator shall authorize methods of

1	control of mercury emissions, including meas-
2	ures that—
3	"(i) reduce the volume of, or eliminate
4	emissions of, mercury through a process
5	change, substitution of material, or other
6	method;
7	"(ii) enclose systems or processes to
8	eliminate mercury emissions;
9	"(iii) collect, capture, or treat mer-
10	cury emissions when released from a proc-
11	ess, stack, storage, or fugitive emission
12	point, or through evaporation of a spill;
13	"(iv) consist of design, equipment,
14	manufacturing process, work practice, or
15	operational standards (including require-
16	ments for operator training or certification
17	or spill prevention) in accordance with sub-
18	section (h); or
19	"(v) consist of a combination of the
20	measures described in clauses (i) through
21	(iv).
22	"(3) PERMIT REQUIREMENTS AND CONDI-
23	TIONS.—

1	"(A) IN GENERAL.—Each permit issued in
2	accordance with paragraph (1)(B) shall in-
3	clude—
4	"(i) enforceable mercury emission
5	standards;
6	"(ii) a schedule of compliance;
7	"(iii) a requirement that the permittee
8	submit to the permitting authority, not less
9	often than every 90 days, the results of
10	any required monitoring; and
11	"(iv) such other conditions as the Ad-
12	ministrator determines are necessary to en-
13	sure compliance with this subsection and
14	each applicable implementation plan under
15	section 110.
16	"(B) MONITORING AND ANALYSIS.—
17	"(i) Procedures and methods
18	The regulations promulgated by the Ad-
19	ministrator under paragraph $(1)(A)$ shall
20	prescribe procedures and methods for—
21	"(I) monitoring and analysis for
22	mercury; and
23	"(II) determining compliance
24	with this subsection.

INFORMATION.—Application of 1 "(ii) 2 the procedures and methods shall result in 3 reliable and timely information for deter-4 mining compliance. "(iii) Effect on other law.— 5 6 Nothing in this subsection affects any con-7 tinuous emission monitoring requirement 8 of title IV or any other provision of this 9 Act. "(C) INSPECTION, ENTRY, MONITORING, 10 11 CERTIFICATION, AND REPORTING.-12 "(i) GENERAL.—Each IN permit 13 issued in accordance with paragraph 14 (1)(B) shall specify inspection, entry, mon-15 itoring, compliance certification, and reporting requirements to ensure compliance 16 17 with the permit terms and conditions. 18 "(ii) Conformity with other reg-19 ULATIONS.—The monitoring and reporting 20 requirements shall conform to each appli-21 cable regulation under subparagraph (B). 22 "(iii) SIGNATURE.—Each report re-23 quired under clause (i) shall be signed by a responsible official of the mercury cell 24

1	chlor-alkali plant, who shall certify the ac-
2	curacy of the report.
3	"(4) DISPOSAL OF MERCURY CAPTURED
4	THROUGH EMISSION CONTROLS.—
5	"(A) IN GENERAL.—
6	"(i) Captured or recovered mer-
7	CURY.—The regulations promulgated by
8	the Administrator under paragraph (1)(A)
9	shall ensure that mercury that is captured
10	or recovered through the use of an emis-
11	sion control or another method is disposed
12	of in a manner that ensures that—
13	"(I) the hazards from mercury
14	are not transferred from 1 environ-
15	mental medium to another; and
16	"(II) there is no release of mer-
17	cury into the environment (as the
18	terms 'release' and 'environment' are
19	defined in section 101 of the Com-
20	prehensive Environmental Response,
21	Compensation, and Liability Act of
22	1980 (42 U.S.C. 9601)).
23	"(ii) MERCURY-CONTAINING
24	WASTES.—The regulations promulgated by
25	the Administrator under paragraph $(1)(A)$

shall ensure that mercury-containing
 wastes are handled and disposed of in ac cordance with all applicable Federal and
 State laws (including regulations).

"(B) RESEARCH PROGRAM.—To promote 5 6 permanent and cost-effective disposal of mer-7 cury from mercury cell chlor-alkali plants, the 8 Administrator shall establish a program of long-9 term research to develop and disseminate infor-10 mation on methods and techniques such as sep-11 arating, solidifying, recycling, and encapsulating 12 mercury-bearing waste so that mercury does 13 not volatilize, migrate to ground water or sur-14 face water, or contaminate the soil.

15 "(5) OTHER REQUIREMENTS.—An emission
16 standard or other requirement promulgated under
17 this subsection does not diminish or replace any re18 quirement of a more stringent emission limitation or
19 other applicable requirement established under this
20 Act or a standard issued under State law.

21 "(6) PUBLIC REPORTING OF DATA PERTAINING
22 TO EMISSIONS OF MERCURY.—

23 "(A) IN GENERAL.—The Administrator
24 shall annually make available to the public,
25 through 1 or more published reports and 1 or

	00
1	more forms of electronic media, facility-specific
2	mercury emission data for each mercury cell
3	chlor-alkali plant.
4	"(B) Source of data.—The emission
5	data shall be taken from the monitoring and
6	analysis reports submitted under paragraph
7	(3)(C).".
8	SEC. 7. MERCURY EMISSION STANDARDS FOR PORTLAND
9	CEMENT PLANTS.
10	Section 112 of the Clean Air Act (as amended by sec-
11	tion 6) is amended by inserting after subsection (u) the
12	following:
13	"(v) Mercury Emission Standards for Port-
14	land Cement Plants.—
15	"(1) IN GENERAL.—
16	"(A) REGULATIONS.—Not later than 180
17	days after the date of enactment of this sub-
18	paragraph, the Administrator shall promulgate
19	regulations—
20	"(i) to establish standards for the
21	control of direct dust emission of mercury
22	and mercury compounds (collectively re-
23	ferred to in this subsection as 'mercury')
24	from crushers, mills, dryers, kilns (exclud-
25	ing emission from such burning of hazard-

1	ous waste-containing fuel in a cement kiln
2	as is regulated under section 3004(q) of
3	the Solid Waste Disposal Act (42 U.S.C.
4	6924(q)), and clinker coolers at existing
5	and new Portland cement plants; and
6	"(ii) to establish standards for the
7	control of fugitive dust emission of mer-
8	cury from storage, transport, charging,
9	and discharging operations at existing and
10	new Portland cement plants.
11	"(B) PERMIT REQUIREMENT.—Not later
12	than 2 years after the date of enactment of this
13	subparagraph, each Portland cement plant shall
14	have an enforceable permit issued under title V
15	that complies with this subsection.
16	"(C) PROCEDURES AND SCHEDULES FOR
17	COMPLIANCE WITH STANDARDS.—Each Port-
18	land cement plant shall achieve compliance with
19	the mercury emission standards established
20	under subparagraph (A) in accordance with the
21	procedures and schedules established under
22	subsection (i).
23	"(2) Standards and methods.—
24	"(A) MINIMUM REQUIRED EMISSION RE-
25	DUCTION.—The emission standards established

1	under paragraph (1)(A) shall require that each
2	Portland cement plant reduce its annual pound-
3	age of direct and fugitive mercury emitted
4	below its mercury emission baseline, as deter-
5	mined by the Administrator, by not less than
6	95 percent.
7	"(B) Control methods.—For the pur-
8	pose of achieving compliance with the emission
9	standards established under paragraph (1)(A),
10	the Administrator shall authorize methods of
11	control of mercury emissions, including meas-
12	ures that—
13	"(i) reduce the volume of, or eliminate
14	emissions of, mercury through a process
15	change, substitution of material, or other
16	method;
17	"(ii) enclose systems, processes, or
18	storage to eliminate mercury emissions;
19	"(iii) collect, capture, or treat mer-
20	cury emissions when released from a proc-
21	ess, stack, storage, or fugitive emission
22	point;
23	"(iv) consist of design, equipment,
24	manufacturing process, work practice, or
25	operational standards (including require-

1	ments for operator training or certifi-
2	cation) in accordance with subsection (h);
3	or
4	"(v) consist of a combination of the
5	measures described in clauses (i) through
6	(iv).
7	"(3) Permit requirements and condi-
8	TIONS.—
9	"(A) IN GENERAL.—Each permit issued in
10	accordance with paragraph $(1)(B)$ shall in-
11	clude—
12	"(i) enforceable mercury emission
13	standards;
14	"(ii) a schedule of compliance;
15	"(iii) a requirement that the permittee
16	submit to the permitting authority, not less
17	often than every 90 days, the results of
18	any required monitoring; and
19	"(iv) such other conditions as the Ad-
20	ministrator determines are necessary to en-
21	sure compliance with this subsection and
22	each applicable implementation plan under
23	section 110.
24	"(B) MONITORING AND ANALYSIS.—

1	"(i) Procedures and methods
2	The regulations promulgated by the Ad-
3	ministrator under paragraph (1)(A) shall
4	prescribe procedures and methods for—
5	"(I) monitoring and analysis for
6	mercury; and
	• /
7	"(II) determining compliance
8	with this subsection.
9	"(ii) INFORMATION.—Application of
10	the procedures and methods shall result in
11	reliable and timely information for deter-
12	mining compliance.
13	"(iii) Effect on other law.—
14	Nothing in this subsection affects any con-
15	tinuous emission monitoring requirement
16	of title IV or any other provision of this
17	Act.
18	"(C) INSPECTION, ENTRY, MONITORING,
19	CERTIFICATION, AND REPORTING.—
20	"(i) IN GENERAL.—Each permit
21	issued in accordance with paragraph
22	(1)(B) shall specify inspection, entry, mon-
23	itoring, compliance certification, and re-
24	porting requirements to ensure compliance
25	with the permit terms and conditions.

1	"(ii) Conformity with other reg-
2	ULATIONS.—The monitoring and reporting
3	requirements shall conform to each appli-
4	cable regulation under subparagraph (B).
5	"(iii) SIGNATURE.—Each report re-
6	quired under clause (i) shall be signed by
7	a responsible official of the Portland ce-
8	ment plant, who shall certify the accuracy
9	of the report.
10	"(4) DISPOSAL OF MERCURY CAPTURED
11	THROUGH EMISSION CONTROLS.—
12	"(A) IN GENERAL.—
13	"(i) CAPTURED OR RECOVERED MER-
14	CURY.—The regulations promulgated by
15	the Administrator under paragraph (1)(A)
16	shall ensure that mercury that is captured
17	or recovered through the use of an emis-
18	sion control or another method is disposed
19	of in a manner that ensures that—
20	"(I) the hazards from mercury
21	are not transferred from 1 environ-
22	mental medium to another; and
23	"(II) there is no release of mer-
24	cury into the environment (as the
25	terms 'release' and 'environment' are

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defined in section 101 of the Com-
prehensive Environmental Response,
Compensation, and Liability Act of
1980 (42 U.S.C. 9601)).
"(ii) Mercury-containing
WASTES.—The regulations promulgated by
the Administrator under paragraph $(1)(A)$
shall ensure that mercury-containing
wastes are handled and disposed of in ac-
cordance with all applicable Federal and
State laws (including regulations).
"(B) RESEARCH PROGRAM.—To promote
permanent and cost-effective disposal of mer-
cury from Portland cement plants, the Adminis-
trator shall establish a program of long-term re-
search to develop and disseminate information
on methods and techniques such as separating,
solidifying, recycling, and encapsulating mer-
cury-bearing waste so that mercury does not
volatilize, migrate to ground water or surface
water, or contaminate the soil.
"(5) Other requirements.—An emission
standard or other requirement promulgated under
this subsection does not diminish or replace any re-
quirement of a more stringent emission limitation or

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1	other applicable requirement established under this
2	Act or a standard issued under State law.
3	"(6) Public reporting of data pertaining
4	TO EMISSIONS OF MERCURY.—
5	"(A) IN GENERAL.—The Administrator
6	shall annually make available to the public,
7	through 1 or more published reports and 1 or
8	more forms of electronic media, facility-specific
9	mercury emission data for each Portland ce-
10	ment plant.
11	"(B) Source of data.—The emission
12	data shall be taken from the monitoring and
13	analysis reports submitted under paragraph
14	(3)(C).".
15	SEC. 8. REPORT ON IMPLEMENTATION OF MERCURY EMIS-
16	SION STANDARDS FOR MEDICAL WASTE IN-
17	
17	CINERATORS.
17	CINERATORS. (a) IN GENERAL.—Not later than December 31,
18	(a) IN GENERAL.—Not later than December 31,
18 19	(a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection
18 19 20	(a) IN GENERAL.—Not later than December 31,2000, the Administrator of the Environmental ProtectionAgency shall submit to Congress a report on the extent
18 19 20 21	(a) IN GENERAL.—Not later than December 31,2000, the Administrator of the Environmental ProtectionAgency shall submit to Congress a report on the extentto which the annual poundage of mercury and mercury
 18 19 20 21 22 	(a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent to which the annual poundage of mercury and mercury compounds emitted by each medical waste incinerator in
 18 19 20 21 22 23 	(a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent to which the annual poundage of mercury and mercury compounds emitted by each medical waste incinerator in the United States has been reduced below the baseline for

1 (b) BASELINE.—

2	(1) Use of actual data.—As a baseline for
3	measuring emission reductions, the report shall use
4	the mercury and mercury compound emission data
5	that were submitted or developed during the process
6	of permitting of the medical waste incinerator under
7	the Clean Air Act (42 U.S.C. 7401 et seq.).
8	(2) LACK OF ACTUAL DATA.—If the data de-
9	scribed in paragraph (1) are not available, the Ad-
10	ministrator shall develop an estimate of baseline
11	mercury emissions based on other sources of data
12	and the best professional judgment of the Adminis-
10	trator
13	trator.
13 14	SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS-
14	SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS-
14 15	SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE
14 15 16	SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS.
14 15 16 17 18	 SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31,
14 15 16 17 18	 SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection
14 15 16 17 18 19	 SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent
14 15 16 17 18 19 20	 SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent to which the annual poundage of mercury and mercury
 14 15 16 17 18 19 20 21 	 SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent to which the annual poundage of mercury and mercury compounds emitted by each hazardous waste combustor
 14 15 16 17 18 19 20 21 22 	SEC. 9. REPORT ON IMPLEMENTATION OF MERCURY EMIS- SION STANDARDS FOR HAZARDOUS WASTE COMBUSTORS. (a) IN GENERAL.—Not later than December 31, 2000, the Administrator of the Environmental Protection Agency shall submit to Congress a report on the extent to which the annual poundage of mercury and mercury compounds emitted by each hazardous waste combustor in the United States has been reduced below the baseline

25 (b) BASELINE.—

1 (1) USE OF ACTUAL DATA.—As a baseline for 2 measuring emission reductions, the report shall use 3 the mercury and mercury compound emission data 4 that were submitted or developed during the process 5 of permitting of the hazardous waste combustor 6 under the Clean Air Act (42 U.S.C. 7401 et seq.). 7 (2) LACK OF ACTUAL DATA.—If the data de-8 scribed in paragraph (1) are not available, the Ad-9 ministrator shall develop an estimate of baseline 10 mercury emissions based on other sources of data 11 and the best professional judgment of the Adminis-12 trator. 13 SEC. 10. REPORT ON USE OF MERCURY AND MERCURY 14 COMPOUNDS BY DEPARTMENT OF DEFENSE. 15 (a) IN GENERAL.—Not later than December 31, 1999, the Secretary of Defense shall submit to Congress 16 a report on the use of mercury and mercury compounds 17 18 by the Department of Defense. 19 (b) CONTENTS.—In the report, the Secretary of De-20 fense shall describe— 21 (1) measures that the Department of Defense is 22 carrying out to reduce the use and emissions of mer-

23 cury and mercury compounds by the Department;24 and

(2) measures that the Department of Defense is
 carrying out to stabilize or recycle discarded mer cury or discarded mercury-containing products.

4 SEC. 11. INTERNATIONAL ACTIVITIES.

5 (a) STUDY AND REPORT.—Not later than December
6 31, 1999, the Administrator of the Environmental Protec7 tion Agency, in cooperation with appropriate representa8 tives of Canada and Mexico, shall study and submit to
9 Congress a report on the sources and extent of mercury
10 emissions in North America.

(b) REVIEW.—Before submitting the report to Con-gress, the Administrator shall submit the report for—

13 (1) internal and external scientific peer review;14 and

(2) review by the Science Advisory Board established by section 8 of the Environmental Research,
Development, and Demonstration Authorization Act
of 1978 (42 U.S.C. 4365).

19 (c) REQUIRED ELEMENTS.—The report shall in-20 clude—

(1) a characterization and identification of the
sources of emissions of mercury in North America;
(2) a description of the patterns and pathways
taken by mercury pollution through the atmosphere
and surface water; and

1	(3) recommendations for pollution control meas-
2	ures, options, and strategies that, if implemented in-
3	dividually or jointly by the United States, Canada,
4	and Mexico, will eliminate or greatly reduce
5	transboundary atmospheric and surface water mer-
6	cury pollution in North America.
7	SEC. 12. MERCURY RESEARCH.
8	Section 103 of the Clean Air Act (42 U.S.C. 7403)
9	is amended by adding at the end the following:
10	"(1) MERCURY RESEARCH.—
11	"(1) Establishment of programs.—The Ad-
12	ministrator shall establish—
13	"(A) a program to characterize and quan-
14	tify the potential mercury-related health effects
15	on high-risk populations (such as pregnant
16	women and their fetuses, women of childbearing
17	age, children, and individuals who subsist pri-
18	marily on fish); and
19	"(B) a mercury public awareness and pre-
20	vention program targeted at populations most
21	at risk from exposure to mercury.
22	"(2) Study of implementation of meas-
23	URES TO CONTROL MERCURY EMISSIONS.—
24	"(A) ESTABLISHMENT OF ADVISORY COM-
25	MITTEE.—Not later than 3 years after the date

1	of enactment of this subsection, the Secretary
2	of Health and Human Services and the Admin-
3	istrator shall establish an advisory committee to
4	evaluate and prepare a report on the progress
5	made by the Federal Government, State and
6	local governments, industry, and other regu-
7	lated entities to implement and comply with the
8	mercury-related amendments to the Clean Air
9	Act (42 U.S.C. 7401 et seq.) made by the Om-
10	nibus Mercury Emissions Reduction Act of
11	1998.
12	"(B) Membership.—
13	"(i) IN GENERAL.—The advisory com-
14	mittee shall consist of at least 15 mem-
15	bers, of whom at least 1 member shall rep-
16	resent each of the following:
17	"(I) The Department of Health
18	and Human Services.
19	"(II) The Agency for Toxic Sub-
20	stances and Disease Registry.
21	"(III) The Food and Drug Ad-
22	ministration.
23	"(IV) The Environmental Protec-
24	tion Agency.

• •
"(V) The National Academy of
Sciences.
"(VI) Native American popu-
lations.
"(VII) State and local govern-
ments.
"(VIII) Industry.
"(IX) Environmental organiza-
tions.
"(X) Public health organizations.
"(ii) Appointment.—The Secretary
of Health and Human Services and the
Administrator shall each appoint not fewer
than 7 members of the advisory committee.
"(C) DUTIES.—The advisory committee
shall—
"(i) evaluate the adequacy and com-
pleteness of data collected and dissemi-
nated by the Environmental Protection
Agency and each State that reports on and
Agency and each State that reports on and
Agency and each State that reports on and measures mercury contamination in the en-
Agency and each State that reports on and measures mercury contamination in the en- vironment;

1	"(I) changes necessary to im-
2	prove the quality and ensure consist-
3	ency from State to State of Federal
4	and State data collection, reporting,
5	and characterization of baseline envi-
6	ronmental conditions; and
7	"(II) methods for improving pub-
8	lic education, particularly among high-
9	risk populations (such as pregnant
10	women and their fetuses, women of
11	childbearing age, children, and indi-
12	viduals who subsist primarily on fish),
13	concerning the pathways and effects
14	of mercury contamination and con-
15	sumption; and
16	"(iii) not later than 4 years after the
17	date of enactment of this subsection, com-
18	pile and make available to the public,
19	through 1 or more published reports and 1
20	or more forms of electronic media, the
21	findings, recommendations, and supporting
22	data, including State-specific data, of the
23	advisory committee under this subpara-
24	graph.
25	"(D) Compensation.—

"(i) IN GENERAL.—A member of the 1 2 advisory committee shall receive no compensation by reason of the service of the 3 4 member on the advisory committee. "(ii) TRAVEL EXPENSES.—A member 5 6 of the advisory committee shall be allowed travel expenses, including per diem in lieu 7 8 of subsistence, at rates authorized for em-9 ployees of agencies under subchapter I of chapter 57 of title 5, United States Code, 10 11 while away from the home or regular place of business of the member in the perform-12 13 ance of services for the advisory commit-14 tee. 15 "(E) DURATION OF ADVISORY COMMIT-16 TEE.—The advisory committee— 17 "(i) shall terminate not earlier than 18 the date on which the Secretary of Health 19 and Human Services and the Adminis-20 trator determine that the findings, rec-21 ommendations, and supporting data pre-

pared by the advisory committee have been

retary of Health and Human Services and

"(ii) may, at the discretion of the Sec-

made available to the public; and

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1	the Administrator, continue in existence
2	after that date to further carry out the du-
3	ties described in subparagraph (C).
4	((F) Applicability of federal advi-
5	SORY COMMITTEE ACT.—The Federal Advisory
6	Committee Act (5 U.S.C. App.) shall not apply
7	to the advisory committee established under
8	this paragraph.
9	"(G) FUNDING.—The Secretary of Health
10	and Human Services and the Administrator
11	shall each provide 50 percent of the funding
12	necessary to carry out this paragraph.
13	"(3) Report on mercury sedimentation
14	TRENDS.—Not later than 1 year after the date of
15	enactment of this subsection, the Administrator shall
16	submit to Congress a report that characterizes mer-
17	cury and mercury-compound sedimentation trends in
18	Lake Champlain, Chesapeake Bay, the Great Lakes,
19	the finger lakes region of upstate New York, Tampa
20	Bay, and other water bodies of concern (as deter-
21	mined by the Administrator).
22	"(4) EVALUATION OF FISH CONSUMPTION

23 ADVISORIES.—

1	"(A) IN GENERAL.—The Administrator
2	shall evaluate the adequacy, consistency, com-
3	pleteness, and public dissemination of—
4	"(i) data collected by the Environ-
5	mental Protection Agency and each State
6	concerning mercury contamination of fish;
7	and
8	"(ii) advisories to warn the public
9	about the consumption of mercury-con-
10	taminated fish (referred to in this para-
11	graph as 'fish consumption advisories').
12	"(B) Improvement of quality and
13	CONSISTENCY.—In conjunction with each State
14	or unilaterally, the Administrator shall imple-
15	ment any changes necessary to improve the
16	quality and ensure consistency from State to
17	State of Federal and State data collection, re-
18	porting, characterization of mercury contamina-
19	tion, and thresholds concerning mercury con-
20	tamination in fish above which fish consump-
21	tion advisories will be issued.
22	"(C) Reporting.—Not later than 2 years
23	after the date of enactment of this subsection
24	and every 2 years thereafter, the Administrator
25	shall prepare and make available to the public,

through 1 or more published reports and 1 or 1 more forms of electronic media, information 2 3 providing detail by State, watershed, water 4 body, and river reach of mercury levels in fish 5 and any fish consumption advisories that have 6 been issued during the preceding 2-year period. "(D) EFFECT ON STATE AUTHORITY.---7 Nothing in this paragraph affects any authority 8 9 of a State to advise residents of the mercury content of commercially sold foods and other 10

11 products.".

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