110TH CONGRESS 1ST SESSION

H. R. 3989

To amend the Clean Air Act to reduce mercury, carbon dioxide, sulfur dioxide, and nitrogen oxide emissions, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 29, 2007

Mr. McHugh introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Natural Resources, Science and Technology, and Agriculture, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To amend the Clean Air Act to reduce mercury, carbon dioxide, sulfur dioxide, and nitrogen oxide emissions, 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 AND TABLE OF CONTENTS.
- 4 This Act may be cited as the "Healthy Air and Clean
- 5 Water Act".

TITLE I—MERCURY AND CARBON DIOXIDE EMISSION REDUCTIONS

- Sec. 101. Findings and purposes.
- Sec. 102. Mercury and carbon dioxide emissions reductions.
- Sec. 103. Protecting sensitive regional ecosystems.

Sec. 104. Authorization of appropriations.

Sec. 105. Modernization.

TITLE II—SULFUR DIOXIDE AND NITROGEN OXIDE EMISSIONS

Sec. 201. Reduction of emissions from powerplants.

1 TITLE I—MERCURY AND CAR-

2 BON DIOXIDE EMISSION RE-

3 **DUCTIONS**

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| 4 | SEC | 101 | FINDINGS | ΔND | PURPOSES |
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- (a) FINDINGS.—Congress finds that—
- 6 (1) fossil fuel-fired electric generating units 7 emit approximately ½ of the total mercury and car-8 bon dioxide emission in the United States;
- 9 (2) the Environmental Protection Agency has 10 yet to adequately address the emissions of either 11 mercury or carbon dioxide;
 - (3) owners of electric generating units seek regulatory certainty when complying with environmental standards; and
 - (4) many states have already taken action, either by themselves or in partnerships, to reduce their emissions of mercury and carbon dioxide.
- 18 (b) Purposes.—The purposes of this Act are—
- 19 (1) to protect the quality of our Nation's air 20 and water quality by substantially reducing the 21 emissions from fossil fuel-fired electric generating 22 units;

| 1 | (2) to reduce the impact of climate change by | | |
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| 2 | limiting emissions of carbon dioxide; | | |
| 3 | (3) to enhance human and wildlife health by | | |
| 4 | limiting emissions of mercury; and | | |
| 5 | (4) to develop and promote sources of clean en- | | |
| 6 | ergy that do not require the burning of fossil fuels. | | |
| 7 | SEC. 102. MERCURY AND CARBON DIOXIDE EMISSIONS RE- | | |
| 8 | DUCTIONS. | | |
| 9 | The Clean Air Act (42 U.S.C. 7401 et seq.) is amend- | | |
| 10 | ed by adding at the end the following: | | |
| 11 | "TITLE VII—MERCURY AND | | |
| 12 | CARBON DIOXIDE REDUCTIONS | | |
| | "Sec. 701. Definitions. "Sec. 702. Mercury reduction program. "Sec. 703. Carbon dioxide trading program. "Sec. 704. Prohibitions. "Sec. 705. Effect on other law. | | |
| 13 | "SEC. 701. DEFINITIONS. | | |
| 14 | "In this title: | | |
| 15 | "(1) Affected Unit.—The term 'affected | | |
| 16 | unit' means a coal-fired electric generating facility | | |
| 17 | (including a cogeneration facility) that— | | |
| 18 | "(A) has a nameplate capacity greater | | |
| 19 | than 25 megawatts; and | | |
| 20 | "(B) generates electricity for sale. | | |
| 21 | "(2) Cogeneration facility.—The term 'co- | | |
| 22 | generation facility' means a facility that— | | |
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| 1 | "(i) steam; and |
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| 2 | "(ii) electricity; and |
| 3 | "(B) supplies, on a net annual basis, to |
| 4 | any utility power distribution system for sale— |
| 5 | "(i) more than 1/3 of the potential |
| 6 | electric output capacity of the facility; and |
| 7 | "(ii) more than 25 megawatts of elec- |
| 8 | trical output of the facility. |
| 9 | "SEC. 702. MERCURY REDUCTION PROGRAM. |
| 10 | "(a) New Unit Requirement.—Any affected unit |
| 11 | that commences operation after December 31, 2008, shall |
| 12 | be considered a new unit for the purposes of this section |
| 13 | and shall not exceed the emission limit of 0.6 pounds mer- |
| 14 | cury per trillion Btu (0.6 lb Hg/TBtu) upon commence- |
| 15 | ment of operation. |
| 16 | "(b) Existing Unit Requirement.—Any affected |
| 17 | unit that commences operation on or before December 31, |
| 18 | 2008, shall not exceed the emission limit of 0.6 pounds |
| 19 | mercury per trillion Btu by January 1, 2011. |
| 20 | "(c) Monitoring System.—Not later than January |
| 21 | 1, 2009, the Administrator shall promulgate regulations |
| 22 | requiring operation, reporting and certification of contin- |
| 23 | uous emissions monitoring systems (CEMS) to accurately |
| 24 | measure the quantity of mercury that is emitted from each |
| 25 | affected unit. |

| I | "(d) Excess Emissions.— |
|----|--|
| 2 | "(1) IN GENERAL.—The owner or operator of |
| 3 | an affected unit that emits mercury in excess of the |
| 4 | emission limitation described in subsections (b) and |
| 5 | (c) shall pay an excess emissions penalty determined |
| 6 | under paragraph (2). |
| 7 | "(2) Determination of excess emissions |
| 8 | PENALTY.—The excess emissions penalty shall be an |
| 9 | amount equal to \$10,000 for each ounce of mercury |
| 10 | emitted in excess of the emission limitations for mer- |
| 11 | cury described in subsections (b) and (c). |
| 12 | "(e) Prevention of Mercury Re-Release.—Not |
| 13 | later than January 1, 2009, the Administrator shall pro- |
| 14 | mulgate regulations to ensure that any mercury captured |
| 15 | or recovered by emission controls installed at an affected |
| 16 | unit is not re-released into the environment. |
| 17 | "SEC. 703. CARBON DIOXIDE TRADING PROGRAM. |
| 18 | "(a) Definitions.—In this section: |
| 19 | "(1) Allowance.—The term 'allowance' mean |
| 20 | a carbon dioxide allowance equivalent to emitting |
| 21 | one ton of carbon dioxide during the year that it was |
| 22 | issued or any subsequent year. |
| 23 | "(2) Renewable energy.—The term 'renew- |
| 24 | able energy' means electricity generated from— |
| 25 | "(A) wind: |

| 1 | "(B) organic waste (excluding incinerated |
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| 2 | municipal solid waste); |
| 3 | "(C) biomass (including anaerobic diges- |
| 4 | tion from farm systems and landfill gas recov- |
| 5 | ery); |
| 6 | "(D) fuel cells; or |
| 7 | "(E) a hydroelectric, geothermal, solar |
| 8 | thermal, photovoltaic, or other nonfossil fuel, |
| 9 | nonnuclear source. |
| 10 | "(b) Carbon Dioxide Emission Levels for 2015, |
| 11 | 2020, 2030, 2040, and 2050. |
| 12 | "(1) By January 1, 2015, carbon dioxide emis- |
| 13 | sion levels for affected units shall not exceed the |
| 14 | level of carbon dioxide emissions for affected units in |
| 15 | 2005. |
| 16 | "(2) By January 1, 2020, carbon dioxide emis- |
| 17 | sion levels for affected units shall not exceed 75 per- |
| 18 | cent of the level of carbon dioxide emissions for af- |
| 19 | fected units in 2005. |
| 20 | "(3) By January 1, 2030, carbon dioxide emis- |
| 21 | sion levels for affected units shall not exceed 50 per- |
| 22 | cent of the level of carbon dioxide emissions for af- |
| 23 | fected units in 2005. |
| 24 | "(4) By January 1, 2040, carbon dioxide emis- |
| 25 | sion levels for affected units shall not exceed 35 per- |

| 1 | cent of the level of carbon dioxide emissions for af- |
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| 2 | fected units in 2005. |
| 3 | "(5) By January 1, 2050, carbon dioxide emis- |
| 4 | sion levels for affected units shall not exceed 20 per- |
| 5 | cent of the level of carbon dioxide emissions for af- |
| 6 | fected units in 2005. |
| 7 | "(e) Regulations.— |
| 8 | "(1) In general.—Not later than January 1, |
| 9 | 2010, the Administrator shall promulgate regula- |
| 10 | tions to establish an allowance trading program for |
| 11 | affected units in the United States. |
| 12 | "(2) Required elements.—Regulations pro- |
| 13 | mulgated under paragraph (1) shall establish re- |
| 14 | quirements for the carbon dioxide allowance trading |
| 15 | program under this section, including requirements |
| 16 | concerning— |
| 17 | "(A) the issuance, auction, and use of car- |
| 18 | bon dioxide allowances. Such allowances shall |
| 19 | be— |
| 20 | "(i) 100 percent auctioned; and |
| 21 | "(ii) the proceeds of such auction |
| 22 | shall be deposited into a special fund joint- |
| 23 | ly administered by the Department of En- |
| 24 | ergy and Environmental Protection Agency |

| 1 | to fund research and development of re- |
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| 2 | newable energy projects. |
| 3 | "(B) the transfer of allowances; |
| 4 | "(C) the monitoring, tracking and report- |
| 5 | ing of carbon dioxide allowances; and |
| 6 | "(d) Compliance and Enforcement.— |
| 7 | "(1) In general.—For calendar year 2015 |
| 8 | and each calendar year thereafter, the owner of each |
| 9 | affected unit shall surrender to the Administrator a |
| 10 | quantity of allowances that is equal to the total tons |
| 11 | of carbon dioxide emitted by the affected unit during |
| 12 | the calendar year. |
| 13 | "(2) Penalty.—The owner of an affected unit |
| 14 | that emits carbon dioxide in excess of the allowances |
| 15 | that the owner holds for use for the affected unit for |
| 16 | the calendar year shall pay an excess emissions pen- |
| 17 | alty equal to the product obtained by multiplying— |
| 18 | "(A) the number of tons of carbon dioxide |
| 19 | emitted inexcess of the total quantity of allow- |
| 20 | ances held; and |
| 21 | "(B) \$150, adjusted for changes in the |
| 22 | Consumer Price Index for All-Urban Consumers |
| 23 | published by the Department of Labor. |
| 24 | "(e) Allowance Not a Property Right.—An al- |
| 25 | lowance— |

| 1 | "(1) is not a property right; and |
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| 2 | "(2) may be terminated or limited by the Ad- |
| 3 | ministrator. |
| 4 | "(f) No Judicial Review.—An auction or issuance |
| 5 | of an allowance by the Administrator shall not be subject |
| 6 | to judicial review. |
| 7 | "SEC. 704. PROHIBITIONS. |
| 8 | "It shall be unlawful— |
| 9 | "(1) for the owner or operator of any electricity |
| 10 | generating facility— |
| 11 | "(A) to operate the electricity generating |
| 12 | facility in noncompliance with the requirements |
| 13 | of this title (including any regulations imple- |
| 14 | menting this title); |
| 15 | "(B) to fail to submit by the required date |
| 16 | any emission allowances, or pay any penalty, for |
| 17 | which the owner or operator is liable; |
| 18 | "(C) to fail to provide and comply with any |
| 19 | plan to offset excess emissions; or |
| 20 | "(D) to emit mercury in excess of the |
| 21 | emission limitations established under section |
| 22 | 702; or |
| 23 | "(2) for any person to hold, use, or transfer |
| 24 | any emission allowance allocated under this title ex- |

| 1 | cept in accordance with regulations promulgated by |
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| 2 | the Administrator. |
| 3 | "SEC. 705. EFFECT ON OTHER LAW. |
| 4 | "Nothing in this title— |
| 5 | "(1) affects the ability of a State to take State |
| 6 | actions to further limit climate change (except that |
| 7 | section 209 shall apply to standards for vehicles); |
| 8 | and |
| 9 | "(2) except as expressly provided in this title— |
| 10 | "(A) modifies or otherwise affects any re- |
| 11 | quirement of this Act in effect on the day be- |
| 12 | fore the date of enactment of this title; or |
| 13 | "(B) relieves any person of the responsi- |
| 14 | bility to comply with this Act.". |
| 15 | SEC. 103. PROTECTING SENSITIVE REGIONAL ECOSYSTEMS. |
| 16 | (a) Report.— |
| 17 | (1) In General.—Not later than December 31, |
| 18 | 2010, the Administrator shall submit to Congress a |
| 19 | report identifying objectives for scientifically credible |
| 20 | environmental indicators, as determined by the Ad- |
| 21 | ministrator, that are sufficient to protect and restore |
| 22 | sensitive ecosystems of the Adirondack Mountains, |
| 23 | mid-Appalachian Mountains, Catskill Mountains, |
| 24 | Rocky Mountains, and Southern Blue Ridge Moun- |
| 25 | tains and water bodies of the Great Lakes, Lake |

- 1 Champlain, Long Island Sound, the Chesapeake Bay 2 and other sensitive ecosystems, as determined by the 3 Administrator.
- 4 (2) UPDATED REPORT.—Not later than Decem5 ber 31, 2019, the Administrator shall submit to
 6 Congress a report updating the report under para7 graph (1) and assessing the status and trends of
 8 various environmental objectives and indicators for
 9 the sensitive regional ecosystems referred to in para10 graph (1).
 - (3) 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)).

17 (b) Regulations.—

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- (1) Determination.—Not later than December 31, 2019, the Administrator shall determine whether emissions reductions under title VII of the Clean Air Act are sufficient to ensure achievement of the objectives stated in subsection (a)(1).
- (2) Promulgation.—If the Administrator determines under paragraph (1) that emissions reductions under title VII of the Clean Air Act are not

| 1 | sufficient to ensure achievement of the objectives |
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| 2 | identified in subsection (a)(1), the Administrator |
| 3 | shall promulgate, not later than 2 years after mak- |
| 4 | ing the finding, such regulations, including modifica- |
| 5 | tion of nitrogen oxide and sulfur dioxide allowance |
| 6 | allocations or any such measure, as the Adminis- |
| 7 | trator determines are necessary to protect the sen- |
| 8 | sitive ecosystems described in subsection $(a)(1)$. |
| 9 | SEC. 104. AUTHORIZATION OF APPROPRIATIONS. |
| 10 | In addition to amounts made available under any |
| 11 | other law, there are authorized to be appropriated for each |
| 12 | of fiscal years 2008 through 2018— |
| 13 | (1) for operational support of the National At- |
| 14 | mospheric Deposition Program National Trends |
| 15 | Network— |
| 16 | (A) \$2,000,000 to the United States Geo- |
| 17 | logical Survey; |
| 18 | (B) \$600,000 to the Environmental Pro- |
| 19 | tection Agency; |
| 20 | (C) \$600,000 to the National Park Serv- |
| 21 | ice; and |
| 22 | (D) \$400,000 to the Forest Service; |
| 23 | (2) for operational support of the National At- |
| 24 | mospheric Deposition Program Mercury Deposition |
| 25 | Network— |

| 1 | (A) \$400,000 to the Environmental Pro- |
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| 2 | tection Agency; |
| 3 | (B) \$400,000 to the United States Geo- |
| 4 | logical Survey; |
| 5 | (C) \$100,000 to the National Oceanic and |
| 6 | Atmospheric Administration; and |
| 7 | (D) \$100,000 to the National Park Serv- |
| 8 | ice; |
| 9 | (3) for the National Atmospheric Deposition |
| 10 | Program Atmospheric Integrated Research Moni- |
| 11 | toring Network \$1,500,000 to the National Oceanic |
| 12 | and Atmospheric Administration; |
| 13 | (4) for the Clean Air Status and Trends Net- |
| 14 | work \$5,000,000 to the Environmental Protection |
| 15 | Agency; and |
| 16 | (5) for the Temporally Integrated Monitoring of |
| 17 | Ecosystems and Long-Term Monitoring Program |
| 18 | \$2,500,000 to the Environmental Protection Agency. |
| 19 | SEC. 105. MODERNIZATION. |
| 20 | (a) Authorization of Appropriations.—In addi- |
| 21 | tion to amounts made available under any other law, there |
| 22 | are authorized to be appropriated— |
| 23 | (1) for equipment and site modernization of the |
| 24 | National Atmospheric Deposition Program National |

| 1 | Trends Network \$6,000,000 to the Environmental |
|----|--|
| 2 | Protection Agency; |
| 3 | (2) for equipment and site modernization and |
| 4 | network expansion of the National Atmospheric |
| 5 | Deposition Program Mercury Deposition Network |
| 6 | \$2,000,000 to the Environmental Protection Agency |
| 7 | (3) for equipment and site modernization and |
| 8 | network expansion of the National Atmospheric |
| 9 | Deposition Program Atmospheric Integrated Re- |
| 10 | search Monitoring Network \$1,000,000 to the Na- |
| 11 | tional Oceanic and Atmospheric Administration; and |
| 12 | (4) for equipment and site modernization and |
| 13 | network expansion of the Clean Air Status and |
| 14 | Trends Network \$4,600,000 to the Environmental |
| 15 | Protection Agency. |
| 16 | (b) AVAILABILITY OF AMOUNTS.—Each of the |
| 17 | amounts appropriated under subsection (b) shall remain |
| 18 | available until expended. |
| 19 | TITLE II—SULFUR DIOXIDE AND |
| 20 | NITROGEN OXIDE EMISSIONS |
| 21 | SEC. 201. REDUCTION OF EMISSIONS FROM POWERPLANTS |
| 22 | Part A of title I of the Clean Air Act (42 U.S.C. 7401 |
| 23 | et seq.) is amended by adding at the end the following |

| 1 | "SEC. 132. REDUCTION OF EMISSIONS FROM POWER- |
|----|--|
| 2 | PLANTS. |
| 3 | "(a) Emission Reduction Objectives.—The emis- |
| 4 | sion reduction objectives of this section are to reduce, not |
| 5 | later than January 1, 2010: |
| 6 | "(1) aggregate sulfur dioxide emissions from |
| 7 | powerplants by 75 percent from the levels allowed |
| 8 | under full implementation of the Phase II sulfur di- |
| 9 | oxide requirements under title IV (relating to acid |
| 10 | deposition control); and |
| 11 | "(2) aggregate nitrogen oxide emissions from |
| 12 | powerplants by 75 percent from 1997 levels. |
| 13 | "(b) AGENCY ACTION.— |
| 14 | "(1) Regulations.— |
| 15 | "(A) In general.—Not later than 2 years |
| 16 | after the date of enactment of this section, the |
| 17 | Administrator shall promulgate regulations to |
| 18 | achieve the emission reduction objectives speci- |
| 19 | fied in subsection (a). |
| 20 | "(B) Elements.—The regulations pro- |
| 21 | mulgated under subparagraph (A)— |
| 22 | "(i) shall achieve the objectives in a |
| 23 | manner that the Administrator determines |
| 24 | will allocate required emission reductions |
| 25 | equitably, taking into account emission re- |
| 26 | ductions achieved before the date of enact- |

| 1 | ment of this section and other relevant fac- |
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| 2 | |
| | tors; |
| 3 | "(ii) may include market-oriented |
| 4 | mechanisms (such as emissions trading |
| 5 | based on generation performance stand- |
| 6 | ards, auctions, or other allocation meth- |
| 7 | ods); |
| 8 | "(iii) shall prevent localized adverse |
| 9 | effects on public health and the environ- |
| 10 | ment and ensure that significant emission |
| 11 | reductions are achieved in both the East- |
| 12 | ern and Western regions of the United |
| 13 | States; |
| 14 | "(iv) shall, include, consistent with |
| 15 | achieving the objectives set forth in sub- |
| 16 | section (a), incentives for renewable en- |
| 17 | ergy. |
| 18 | "(2) Interagency coordination to mini- |
| 19 | MIZE COSTS AND MAXIMIZE GAINS.—To minimize |
| 20 | the economic costs and maximize the economic gains |
| 21 | of achieving the emission reduction objectives speci- |
| 22 | fied in subsection (a), the Administrator shall co- |
| 23 | ordinate with other departments and agencies of |
| 24 | Federal and State government to increase energy ef- |
| 25 | ficiency, to increase the use of renewable energy, and |

| 1 | to implement cost saving advanced demand and sup- |
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| 2 | ply side policies, such as those described in the re- |
| 3 | port prepared by the Interlaboratory Working Group |
| 4 | of the Department of Energy entitled 'Scenarios for |
| 5 | a Clean Energy Future', dated November 2000. |
| 6 | "(c) Additional Reductions.—The regulations |
| 7 | promulgated under subsection (b) may require additional |
| 8 | reductions in emissions from powerplants if the Adminis- |
| 9 | trator determines that the emission levels necessary to |
| 10 | achieve the emission reduction objectives specified in sub- |
| 11 | section (a) are not reasonably anticipated to protect public |
| 12 | health or welfare. |
| 13 | "(d) Modernization of Outdated Power- |
| 14 | PLANTS.— |
| 15 | "(1) In general.—On the later of the date |
| 16 | that is 30 years after a powerplant commenced oper- |
| 17 | ation or the date that is 5 years after the date of |
| 18 | enactment of this section, it shall comply with— |
| 19 | "(A) the most recent new source perform- |
| 20 | ance standards promulgated under section 111; |
| 21 | and |
| 22 | "(B) the requirements under parts C and |
| 23 | D that are applicable to modified sources. |
| 24 | "(2) Additional requirements.—The re- |
| 25 | quirements of this subsection shall be in addition to |

- 1 the requirements of the regulations promulgated
- 2 under subsection (b).
- 3 "(e) Other Requirements of
- 4 this section shall be in addition to, and not in lieu of, any
- 5 other requirement of this Act.
- 6 "(f) Definition.—In this section, the term 'power-
- 7 plant' means an electric generation facility with a name-
- 8 plate capacity of 25 megawatts or more that uses a com-
- 9 bustion device to generate electricity for sale.".

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