ONE HUNDRED AND SIXTH LEGISLATURE

Legislative Document No. 1595

H. P. 1146 House of Representatives, March 14, 1973

Referred to the Committee on Natural Resources. Sent up for concurrence and ordered printed.

E. LOUISE LINCOLN, Clerk

Presented by Mr. Whitzell of Gardiner.

STATE OF MAINE

IN THE YEAR OF OUR LORD NINETEEN HUNDRED SEVENTY-THREE

AN ACT Adopting Emission Regulations of the Department of Environmental Protection.

Be it enacted by the People of the State of Maine, as follows:

Sec. 1. R. S., T. 38, § 582, sub-§ 5-A, additional. Section 582 of Title 38 of the Revised Statutes, as enacted by section 1 of chapter 474 of the public laws of 1969, and as amended, is further amended by adding a new subsection 5-A, to read as follows:

5-A. Best practical treatment. "Best practical treatment" means that method which controls or reduces emissions of air contaminants to the lowest possible level considering:

A. The then existing state of technology;

B. The effectiveness of available alternatives for reducing emissions from the source being considered;

C. The economic feasibility for the type of establishment involved.

Sec. 2. R. S., T. 38, § 582, sub-§ 6-A, additional. Section 582 of Title 38 of the Revised Statutes, as enacted by section 1 of chapter 474 of the public laws of 1969, and as amended, is further amended by adding a new subsection 6-A, to read as follows:

6-A. Commissioner. "Commissioner" means the Commissioner of Environmental Protection.

Sec. 3. R. S., T. 38, § 582, sub-§ 7-A - 7-E, additional. Section 582 of Title 38 of the Revised Statutes, as enacted by section 1 of chapter 474 of the

public laws of 1969, and as amended, is further amended by adding 5 new subsections, 7-A to 7-E, to read as follows:

7-A. Emission source. "Emission source" means any and all sources of emissions of air contaminants, whether privately or publicly owned or operated.

7-B. Fuel-burning equipment. "Fuel-burning equipment" means any furnace, boiler, apparatus, stack and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

7-C. Fugitive dust. "Fugitive dust" means solid air-borne particulate matter emitted from any source other than a flue or stack.

7-D. General process source. "General process source" means any emission source, except fuel-burning equipment, incinerators, mobile sources, open burning sources and sources of fugitive dust.

7-E. Incinerators. "Incinerators" means any device, apparatus, equipment or structure used for destroying, reducing or salvaging by fire any material or substance, and shall be classified as follows:

A. Class I. Portable, packaged, completely assembled, direct fed incinerators 5 to 15 cubic feet primary chamber volume or a burning rate of 25 to 100 pounds per hour of type 1 or type 2 waste or a burning rate of 25 to 75 pounds per hour of type 3 waste;

B. Class I-A. Portable, packaged or job assembled, direct feed incinerators with 5 to 14 cubic feet primary chamber volume or a burning rate of 25 to 100 pounds per hour of type 1 or type 2 waste or a burning rate of 25 to 75 pounds per hour of type 3 waste;

C. Class II. Flue-fed, single chamber incinerators with more than 2 square feet burning area, for type 2 waste. This type of incinerator is served by one vertical flue functioning both as a chute for charging waste and to carry the products of combustion to atmosphere;

D. Class II-A. Chute-fed multiple chamber incinerators, with more than 2 square feet burning area, suitable for type 1 or type 2 waste. This type of incinerator is served by a vertical chute for charging wastes from two or more floors above the incinerator and a separate flue for carrying the products of combustion to the atmosphere;

E. Class III. Direct-fed incinerators with a burning rate of 100 pounds per hour and over, suitable for type 3 waste;

F. Class IV. Direct-fed incinerators with a burning rate of 75 pounds per hour or over, suitable for type 3 waste;

G. Class V. Municipal incinerators suitable for type O, type 1, type 2 or type 3 wastes, or a combination of all 4 wastes, with a rated capacity expressed in tons per 24 hours;

H. Class VI. Crematory and pathological incinerators, suitable for type 4 waste;

I. Class VII. Incinerators designed for specific by-product wastes, type 5 or type 6.

7-F. Modification. "Modification" means any physical change to or change in the method of operation of any emission source which increases the amount of any air pollutant, to which a standard applies, emitted by such facility or which results in the emission of any air pollutant, to which a standard applies, not previously emitted, except that:

A. Routine maintenance, repair and replacement shall not be considered physical changes and

B. The following shall not be considered a change in the method of operation:

(1) An increase in production rate, if such increase does not exceeed the operating design capacity of the emission source of any component thereof;

(2) An increase in hours of operation;

(3) Use of an alternative fuel or raw material if, prior to the date any standard under this chapter becomes applicable to such emission source, such source is designed to accommodate such alternative use.

8-A. Opacity. "Opacity" means the degree of light obscuring capability of visible air contaminant expressed as a percentage. Complete opacity shall be expressed 100%.

8-B. Open burning. "Open burning" means the burning of any type of combustible material in the open ambient air without being completely enclosed and where the products of combustion are emitted directly into the ambient air without passing through a stack, chimney or duct or other device or structure.

9-A. Process weight rate. "Process weight rate" means the average total weight of all materials, not including any gaseous or liquid fuels or combustion air, introduced into any manufacturing, industrial or combustion process that may result in the emission of particulate matter to the ambient air, computed on an hourly basis, and shall be expressed in terms of weight per unit of time.

Sec. 6. R. S., T. 38, § 582, sub-§§ 11 and 12, additional. Section 582 of Title 38 of the Revised Statutes, as enacted by section 1 of chapter 474 of the public laws of 1969, and as amended, is further amended by adding 2 new subsections 11 and 12 to read as follows:

11. Ringelmann Chart. "Ringelmann Chart" shall mean the chart published and described in the U. S. Bureau of Mines Information Circular 8333, on which are illustrated graduated shades of gray for use in estimating the light obscuring density or opacity of any emissions or any other such device which may be approved by the board.

12. Waste. "Waste" means refuse, garbage, rubbish, trash or unwanted or discarded materials of any kind and source which shall be classified as follows:

A. Type O. Trash, a mixture of highly combustible waste such as paper, cardboard cartons, woodboxes and combustible floor sweepings from commercial and industrial activities. The mixtures contain up to 10% by weight of plastic bags, coated paper, laminated paper, treated corrugated cardboard, oily rags and plastic or rubber scraps. This type of waste contains about 10% moisture and 5% incombustible solids and has a heating value of approximately 8500 B.T.U. per pound as fired.

B. Type 1. Rubbish, a mixture of combustible waste such as paper, cardboard cartons, wood scrap, foliage and combustible floor sweepings from domestic, commercial and industrial activities. The mixture contains up to 20% by weight of restaurant or cafeteria waste, but contains little or no treated papers, plastic or rubber wastes. This type of waste contains about 25% moisture and 10% incombustible solids and has a heating value of approximately 6500 B.T.U. per pound as fired.

C. Type 2. Refuse, consisting of an approximately even mixture of rubbish and garbage by weight. This type of waste is common to apartment and residential occupancy, consisting of up to 50% moisture, 7% incombustible solids and a heating value of approximately 4300 B.T.U. per pound as fired.

D. Type 3. Garbage, consisting of animal and vegetable wastes from restaurants, cafeterias, hotels, hospitals, markets and like installations. This type of waste contains up to 70% moisture and up to 5% incombustible solids and has a heating value of approximately 2500 B.T.U. per pound as fired.

E. Type 4. Human and animal remains, consisting of carcasses, organs and solid organic wastes from hospitals, laboratories, abattoirs, animal pounds and similar sources, consisting of up to 85% moisture, 5% incombustible solids and having a heating value of approximately 1000 B.T.U. per pound as fired.

F. Type 5. By-product waste, gaseous, liquid or semi-liquid, such as tar, paints, solvents, sludge, fumes, etc., from industrial operations. B.T.U. values must be determined by the individual materials to be destroyed.

G. Type 6. Solid by-product waste, such as rubber, plastics, wood waste, etc., from industrial operations. B.T.U. values must be determined by individual materials to be destroyed.

Sec. 7. R. S., T. 38, § 593, amended. The first paragraph of section 593 of Title 38 of the Revised Stautes, as enacted by section 1 of chapter 474 of the public laws of 1969, and as amended by section 12 of chapter 618 of the public laws of 1971, is further amended to read as follows:

If the board after investigation finds that a condition of air pollution exists, or in view of meteorological and and atmospheric conditions is likely to occur or increase in severity, which condition is creating or is likely to create a substantial and immediate danger to public health or safety, as defined in regulations adopted by the board, it may order the person or persons causing or contributing to such condition to immediately reduce or discontinue the emission of the air contaminants causing the same. Service of a copy of the board's findings and order issued under this section shall be made by

the sheriff or some deputy within the county where the person against whom the order runs maintains the source of air contaminants affected by such order. **In the event such persons are so numerous that such method of service is a practical impossibility or the board is unable to identify the persons causing or contributing to such conditions, the board shall make its order known through prominent publication in news media serving the affected area.**

Sec. 8. R. S., T. 38, §§ 598-605, additional. Title 38 of the Revised Statutes is amended by adding 8 new sections, 598 to 605, to read as follows:

§ 598. Visible emissions

1. Scope. This section shall be effective in all ambient air quality regions in the State of Maine as follows:

A. Immediately for all emission sources, the construction or operation of which begins after January 31, 1972;

B. October 1, 1973 for all existing sources.

2. Prohibition. No person shall emit or cause to be emitted any visible air contaminants from any emission source that exceeds a number 2 on the Ringelmann Chart or an opacity of 40% except for periods of not exceeding 5 minutes in any one hour or 15 minutes in any continuous 3-hour period.

3. Exemptions. This section shall not apply to emissions of water vapor, incinerators, air contaminants emitted for the purpose of research training or recreation and so certified by the board and permitted open burning. Existing general process sources which are otherwise granted a longer period of time to comply with section 602 shall be exempt from this section until such time as such standard becomes applicable.

§ 599. Open burning

1. Prohibitions

A. Open burning of tires or rubber products or by-products is prohibited after July 1, 1972;

B. Except as provided in subsection 2, open burning of waste of any kind is prohibited after July 1, 1974, except that municipalities qualifying for an extension under a solid waste management plan approved by the board shall cease using open burning as a means of solid waste disposal by July 1, 1975.

2. Exemptions. Open burning may be permitted for the following purposes provided a permit is obtained pursuant to subsection 3:

A. Open burning for the control or prevention of any disease, virus or similar hazard to public health;

B. Open burning for agricultural purposes such as land clearing, blueberry control or burning for similar prescribed cultural purposes;

C. Open burning for the disposal of any material generated by the demolition of any building or the clearing of any land for the erection, modification or construction of any highway, railroad, power or communication line or pipeline, or commercial or industrial or recreational building or development;

D. Open burning for training, research and recreational purposes provided that fires for recreational purposes on a person's own property do not require a permit.

3. Open burning permits. Open burning permits may be granted by the forest ranger or town forest fire warden having jurisdiction over the location where the fire is to be set. Should complicated circumstances warrant, the ranger or warden may refer the person requesting such a permit to the commissioner for approval of paragraph A, B and C. Such permits will be issued if it is determined:

A. There is no local, private or municipal waste collection for such materials nor any reasonably located municipal or private solid waste disposal facility to which such material may be transported;

B. There is no other suitable method for disposal of such materials that will not create or aggravate a hazard to public health or safety or public or private property nor violate any provision of state or local law or regulation;

C. The existing wind speed and atmospheric stagnating conditions will not create any nuisance conditions;

D. Such burning will not take place within 50 feet of a public way;

E. Such burning will take place under such conditions as will prevent the uncontrolled spread of the fire;

F. The burning will comply with all applicable regulations of the State of Maine Forestry Department and any applicable local fire regulations.

4. Reports. The progress reports listed in this subsection shall be submitted to the board on or before the date indicated by all persons using open burning as a method of solid waste disposal:

A. January 10, 1973: Preliminary report of plans and investigations made as to the selection of a suitable site for sanitary landfill and other feasible alternatives, including estimated costs and regional arrangements investigated;

B. June 30, 1973: Final plans as to the selection of suitable site or other alternative and the capital and operating cost thereof, including administrative procedures required to implement these plans;

C. January 1, 1974: Indicate status of site acquisition and equipment procurement and any other necessary agreements.

§ 600. Fuel-burning equipment particulate emission standard

1. Scope. This section shall be applicable to all fuel-burning equipment that is fired at a rate of 3 million B.T.U. per hour or greater, regardless of fuel type, and shall be effective in all ambient air quality control regions in the State of Maine as follows:

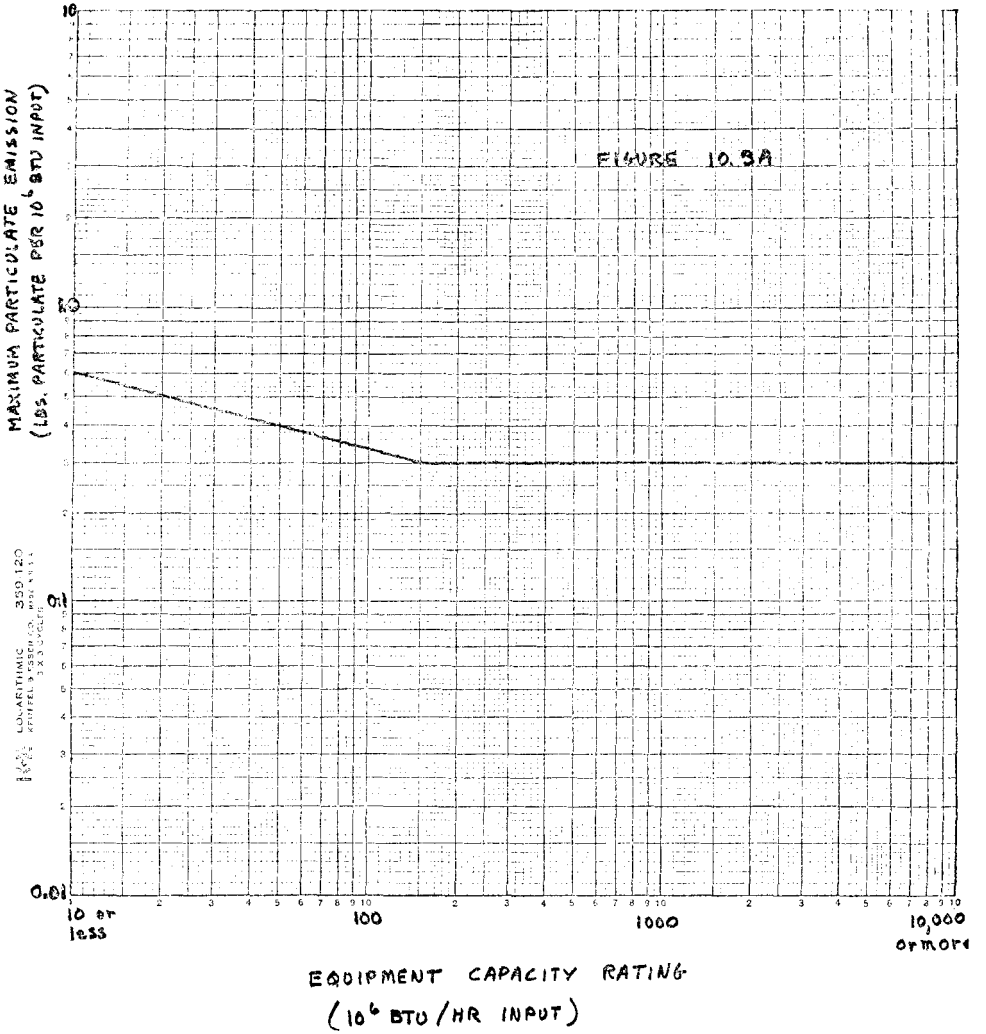
A. Immediately for all fuel-burning equipment, the construction or operation of which begins after January 31, 1972;

B. June 1, 1975 for all existing sources.

2. Emission standard. Any person operating fuel-burning equipment within the scope of this section shall limit the particulate emissions from such fuel-burning equipment in accordance with Figure A during any continuous 2-hour period.

3. Test methods and procedures. Test methods 1 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971, or such other methods as are deemed equivalent by the board shall be those used to determine compliance with this section.

FIGURE A



§ 601. Incinerator particulate emission standard

1. Scope. This section shall be applicable to all incinerators and shall be effective in all regions in the State of Maine as follows:

A. Immediately for all incinerators, the construction or operation of which begins after January 31, 1972;

B. June 1, 1975 for all existing incinerators.

2. Emission standard. No person shall emit or cause to be emitted any particulate air contaminants from:

A. Any incinerator, darker than a number 1 on the Ringelmann Chart, excluding the emission of water vapor;

B. Any class III, IV, V, VI and VII incinerator having a designed charging rate of 50 tons per day or less, that exceed 0.2 grain per standard cubic foot of dry flue gas during any continuous 2-hour period, corrected to 12% carbon dioxide without the contribution of carbon dioxide from the auxiliary fuel;

C. Any class incinerator having a designed charging rate greater than 50 tons per day, that exceed 0.08 grain per standard cubic foot of dry flue gas during any continuous 2-hour period, corrected to 12% carbon dioxide without the contribution of carbon dioxide from the auxiliary fuel.

3. Test methods and procedures. Test methods 1, 3 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971 or such other methods as are deemed equivalent by the board shall be those used to determine compliance with this section.

§ 602. General process source particulate emissions

1. Scope. This emission standard shall be effective in all regions in the State of Maine as follows:

A. Immediately for any process source the construction or operation of which begins after January 31, 1972;

B. June 1, 1975 for any existing general process source.

2. Kraft pulping processes. Any person operating any kraft pulping process shall limit the emission of particulate air contaminants from such emission source as follows:

Four pounds of particulate emissions per air dried ton of kraft pulp from the recovery boiler; I pound of particulate air contaminants per air dried ton of kraft pulp from the lime kiln; 0.5 pound of particulate air contaminants per air dried ton of kraft pulp from the smelt tank during any continuous 2-hour period.

3. Other processes. Any person opertaing any general process sources, except kraft pulping processes, shall limit the emission of particulate air contaminants from such source according to the following table:

TABLE I

Process Weight Rate (lbs./hr.)	Emission Rate (lbs./hr.)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of Table I for process weight rates up to 60,000 lb./hr. shall be computed by use of the following equation:

$$E=3.59P^{0.62} \qquad P \leq 30 \text{ tons/hr.}$$

and interpolation and extrapolation of Table I for rates in excess of 60,000 lbs./hr. shall be computed by use of the equation:

$$E=17.31P^{0.16} \qquad P > 30 \text{ tons/hr.}$$

Where E=emissions in pounds per hour and P=process weight rate in tons per hour.

All emissions from all general process sources operated by the same person in the same general location shall be combined in computing the process weight rate.

4. Test methods and procedures. Test methods 1 and 5 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulation 60.85 published in the Federal Register, volume 36, number 247, December 23, 1971 or such other methods as are deemed equivalent by the board shall be used to determine compliance with this regulation.

§ 603. Low sulfur fuel

1. Prohibitions. In the Metropolitan Portland Air Quality Control Region no person shall sell, distribute, buy or use any fuel with a sulfur content greater than 1.50% during the following periods:

A. November 1, 1973 to April 30, 1974;

B. Any time after November 1, 1974.

In the Central Maine, Downeast, Aroostook County and Northwest Maine Air Quality Control regions, no person shall sell, distribute, buy or use any fuel with a sulfur content greater than 2.5% any time after November 1, 1973.

2. Records. Any person importing or shipping residual oil or coal into the Metropolitan Portland Air Quality Control Region shall maintain a record of the sulfur content of such fuel for a period of 3 years.

3. Exemption. This section shall not apply to any emission source which through use of sulfur dioxide collecting devices or other equipment reduces the emission of sulfur dioxide to the equivalent of burning such fuel with a sulfur content of 1.50%.

§ 604. Sulfur dioxide emission standard for sulfite pulping processes

1. Scope. The emission standard shall apply to all emissions of sulfur dioxide from sulfite pulping processes except sulphur dioxide produced from the burning of coal or petroleum fuels. This emission standard shall become effective in all regions as follows:

A. Immediately for any sulfite pulping process, the construction or operation of which begins after January 31, 1972;

B. June 1, 1975 for all existing sources.

2. Emission standard. No person shall emit or cause to be emitted any sulfur dioxide emissions from any emission source within the scope of this emission standard in excess of 40 pounds per air dried ton of sulfite pulp produced.

3. Test methods and procedures. Test methods 1 and 6 as promulgated by the Administrator of the United States Environmental Protection Agency in Regulations 60.85 as published in the Federal Register, volume 36, number 247, December 23, 1971, or such other methods as are deemed equivalent by the board shall be used to determine compliance with this regulation.

§ 605. Malfunctions

Any person owning or operating any emission source that suffers a malfunction or breakdown in any component part which malfunction or breakdown causes a violation of sections 598 to 604 shall notify the board in writing within 48 hours.

STATEMENT OF FACT

The legislation is designed to enact regulations adopted by the Department of Environmental Protection on January 31, 1972 as it is empowered to do under Chapter 4 of Title 38. These regulations were adopted after extensive public hearings. They were made a part of the Maine Air Quality Implementation Plan submitted to the United States Environmental Protection Agency. In October of 1972 the regulations were approved by William Ruckelshaus, Administrator of the E.P.A.

The legislation is structured to incorporate definitions into the appropriate place in the Act. The bulk of the legislation is identical to the regulations adopted by the Department of Environmental Protection except that some

changes have been made in wording of provisions. No substantive changes have been made.

Section 3 of the bill is designed to insure that the Department of Environmental Protection may adequately cope with potential, as well as existing, air pollution emergencies. In order to satisfy the requirements of the Environmental Protection Agency and the Federal Clean Air Act, the Maine Department of Environmental Protection must have such authority. This section also authorizes the board, in extreme emergency condtions to use notification procedures designed to notify the public as quickly and completely as possible. Experience has shown that in serious emergencies the sources of air contaminants, for example all automobiles in a metropolitan area, are too numerous to notify by the sheriff. The board, therefore, requires flexible procedures designed to cope with emergencies.

This bill must be enacted to continue in effect, after the adjournment of the Legislature, the regulations adopted by the Board on January 31, 1972. Adoption of this Act will enable Maine to remain in compliance with the Clean Air Act.