

The Commonwealth of Massachusetts

SPECIAL REPORT OF THE DEPARTMENT OF
PUBLIC UTILITIES RELATIVE TO AN IN-
VESTIGATION INTO CONDITIONS IN SOUTH
BOSTON BETWEEN CITY POINT AND N
STREET PARK, CAUSED BY SOFT COAL
DUST.

DEPARTMENT OF PUBLIC UTILITIES, December 31, 1935.

To the Honorable Senate.

The Senate, on July 2, 1935, ordered —

That the department of public utilities is hereby directed to investigate into conditions in the vicinity of that part of South Boston between City Point and N Street Park, so-called, caused by soft coal dust from such coal, attributable to the manner in which such coal is stored and handled on various premises in that vicinity. The department is requested to take such steps as may be proper to improve such conditions without placing an unfair burden upon the owners or users of said coal, and to report the result of its investigation and its recommendations, if any, to the Senate on or before the first Wednesday of January.

As a result of the order of the Senate, the Division of Smoke Inspection of this Department made an investigation, and a public hearing was held by the Commissioners on September 26, 1935. The Commission thereafter viewed the premises. It appears, both by the disclosures of the investigation and the testimony of witnesses at the public hearing, that the principal cause of annoyance to South Boston residents is the precipitation of cinders

and fly-ash from the smokestacks of industrial plants on First Street, South Boston, rather than coal dust scattered and conveyed directly by the wind from piles of coal stored on the premises of these plants.

The problem arising from the storage and handling of coal, being the specific subject for inquiry directed by the Senate order, will be taken up first.

The plants in question, all situated on First Street, between L and P streets, are those of the Edison Electric Illuminating Company of Boston, Boston Elevated Railway Company, White Fuel Company and Walworth Manufacturing Company. The Elevated Railway Company, Walworth Company and the White Fuel Company store coal in uncovered piles on their own premises, and C. H. Sprague & Sons Company, which sells coal to the Edison Company, has storage piles on the premises of that company. The coal is of the bituminous variety known as "nut and slack," which is so fine as easily to be blown away by the wind and scattered, in the form of dust, upon adjacent property.

Exhibits and testimony presented at the public hearing indicated that coal dust from these piles is carried and deposited for distances up to 500 feet beyond First Street on the landward side. Considerable testimony was given, supported by the investigation of the Division of Smoke Inspection, to indicate that the presence of this dust in the neighborhood constitutes a menace to health and property.

Representatives of C. H. Sprague & Sons Company and the Boston Elevated Railway Company testified that they made use of devices for wetting down their coal piles with water at frequent intervals, and contended that, as a result of this precaution, there was no dust from these piles. The other company principally involved, the White Fuel Company, has not adopted any effective method of protecting travelers in East First Street and property owners in the vicinity. Neither the White Fuel Company nor the Walworth Manufacturing Company, which maintains a smaller uncovered coal pile close to the water's

edge at the rear of its premises, was represented at the public hearing.

Suggestions were advanced at the hearing for the construction of high baffles, or fences, to partly enclose the coal piles, and for completely enclosing the piles by specially constructed housings, but these cannot be considered, in the judgment of the Department, the first, because of excessive cost and questionable effectiveness, and the second, because of the danger of explosion or fire by spontaneous combustion. It was stated at the hearing that the coal piles are between 40 and 45 feet high, but the dimension of height gives no adequate conception of the size of the piles. The most convincing evidence of the extent of the nuisance and the problem of its abatement was obtained from the view taken by the Commissioners of the Department, who found the coal at the various plants piled in huge mounds covering space equivalent to that of about twenty average city blocks. The Boston Elevated Railway Company's coal pile alone is 760 feet long and 300 feet wide.

The wetting-down process of the Elevated and C. H. Sprague & Sons Company is accomplished by means of a 3-inch pipe, fitted with sprinklers, running lengthwise on a movable trestle bridge used in connection with the conveyer systems at both plants. It is possible, by means of these sprinklers, to cover the coal piles in their entirety, but it appears that they are used so infrequently as to minimize the value of the device. At the time of the view by the Commissioners, which was late in December, both the Sprague and Elevated Company piles were bone dry, and, under the action of the wind, were causing clouds of fine coal dust to be circulated in the vicinity, the same as at the premises of the White Fuel Company, where no such system is installed.

The coal dust nuisance on the premises of the White Fuel Company actually is more serious than at the other plants, however, not alone by reason of failure to install devices for the protection of the public, but also because of the fact that the company's large fleet of motor trucks

is constantly passing into and out of the coal yard. Much dust is occasioned by the loading of these trucks as well as by the movement of the vehicles through First Street without any protective covering over their loads. In addition, the White Fuel Company maintains a separate coal pile at the entrance to the premises, almost directly on the street.

The Walworth Company's pile is small in size; is situated at a considerable distance from the street, and is shielded by the factory building which acts as an intermediate barrier. It is questionable whether the Walworth Company contributes substantially to the cause of annoyance.

The Commissioners of the Department are of the opinion that the wetting-down process, if adopted by all of the plants concerned and consistently employed by them, is the most practical way available for reducing existing discomfort and damage to a minimum "without placing an unfair burden" upon the owners and users of the coal.

In dealing with the situation there is no necessity for additional legislation by the General Court. The health department of the city of Boston, acting under the authority granted to local boards of health in chapter 111 of the General Laws, Tercentenary Edition, is permitted to establish "reasonable" health regulations, and on August 22, 1901, did establish a regulation to prevent the spreading of dust, which provides:

No substance in any way liable to be distributed or blown about by the wind or air currents shall be . . . handled or exposed in any street or public place, nor elsewhere, in such a manner that particles or portions of such substances are scattered, blown or otherwise passed into or upon any such street or public place or upon any inhabited building.

In consideration of this authority there appears likewise to be no need for the establishment of any further ordinance or by-law by the city, nor should any resident be obliged to appeal to the courts by civil action to

restrain the annoyance. The Boston city health department has assumed jurisdiction through the powers conferred upon it by the law, and may proceed at any time to compel its abatement.

FLY-ASH AND CINDERS.

While the nature of the Department's inquiry, as directed by the Senate order, was principally an investigation of conditions arising from the storage and handling of soft coal, it was disclosed that conditions resulting from the precipitation of fly-ash and cinders from the smokestacks of the plants situated in First Street, between City Point and N Street Park, so called, are far more serious in their effect upon the residents and property of the district, and constitute the principal nuisance complained of.

The coal dust, while obnoxious to an equal degree, affects only the area within a radius of 500 feet of each offending plant, while the cinders and ash emitted by smokestacks cause discomfort and damage over the entire City Point district. The widespread prevalence of this nuisance was supported by testimony, and exhibits at the public hearing held by the Department, and the results of analyses of deposits of cinders and fly-ash shown on such exhibits, were testified to by the Director of the Division of Smoke Inspection. An exhibit of coal dust or cinders gathered from the premises of a resident also was presented. The consumption of coal by these various plants approximates 500 tons daily.

The exhibits of fly-ash and cinders indicated the presence of these substances approximately one mile from the industrial plants in First Street. The resultant annoyance to the people of the district cannot be minimized. It has existed for a number of years and constitutes an interference with their reasonable comfort and enjoyment, and causes actual damage to wearing apparel, household furnishings and real estate.

This Department is, however, without power to regu-

late the precipitation of such ash and cinders, except under the provisions of chapter 651 of the Acts of 1910, which created the Division of Smoke Inspection, with authority to regulate the emission of dense smoke. Cinders and fly-ash can be and are being emitted, however, from smokestacks without violating the law against the emission of dense smoke.

In recent years the annoyance has been aggravated by the use of pulverized coal and underfeed stokers used in firing the boilers of the plants in First Street, South Boston. By the pulverized coal method the coal is first ground to powder and then blown, mixed with air, into the fire pit. The resulting combustion, which is practically instantaneous, leaves almost no residuary ash, and the unburned portion, chiefly fly-ash, goes up the chimney.

Where underfeed stokers are used in connection with forced or induced draft, the action of the power-operated blowers or exhausters by which the natural draft is increased causes minute cinders, as well as fly-ash, to rise from the bed of the fire, and, passing up the chimney or stack, to be scattered over considerable distances.

The resultant rain of sooty particles upon the district is so great that such activities as baseball games and skating at N Street Park have been curtailed and prevented on this account. A letter from the Boston Park Commissioner, written in answer to a request for flooding the playground for skating purposes in December of 1934, and introduced as evidence at the public hearing, stated that, although the request would be granted, skating would not be possible because of the precipitation of soft coal ash from the Edison Company's plant. The existence of this condition was not controverted by the representative of the company.

Both the Edison Electric Illuminating Company and the Boston Elevated Railway Company have installed devices for "trapping out" the cinders from the smoke and gases emitted by the stacks. It does not appear, however, that these are efficient enough to meet the needs

of the situation. Other plants, faced by the same difficulty, have installed types of apparatus which substantially restrain the emission of fly-ash and cinders.

We believe, under these circumstances, that it is neither unfair nor unreasonable to require all manufacturing or industrial establishments operating plants with forced or induced draft, in or near thickly populated residential districts, to provide such equipment as will prevent their operation from becoming a nuisance.

In 280 Mass., page 206, the Supreme Judicial Court said, in the case of *Shea v. the National Ice Cream Company Inc.*, which proceeding involved a neighborhood nuisance caused by the use of a spray-cooling system, that —

It is practicable for the defendant corporation to adopt some other method of cooling the water than by means of the spray pond device and thus to avoid to some extent interfering with the reasonable comfort or enjoyment of those living in the immediate vicinity of the factory.

The difficulty, however, is in the enactment of a general law applicable to all cases. Conditions differ widely, according to local conditions and density of population. The same condition which is so irksome to the people of South Boston might be no nuisance at all in a sparsely settled district or one given over exclusively to manufacturing purposes. As the court stated in 251 Mass., page 479, *Strachan v. the Beacon Oil Company*:

Mere discomfort caused by such conditions without injury to life or health cannot be ruled as a matter of law to constitute a nuisance. Each case must depend upon its own facts, and no rule can be formulated which will be applicable to all cases.

To any one familiar with conditions in City Point, South Boston, a thickly populated residential district, there can be no question of the right of residents and property owners to be relieved of the extreme annoyance, damage and possible injury to health resulting from the conditions existent.

We are of the opinion that a statute should be enacted prohibiting the emission of cinders and fly-ash causing damage to the community of the nature herein described. Due to the varying degree of damage and annoyance attributable to offenders in individual cases, the enforcement of such a statute and authority to initiate action should be placed in the hands of a responsible public official, such as the Attorney General of the Commonwealth. Accordingly we recommend a draft of legislation, accompanying this report, which, if enacted into law, will give to the Attorney General the power to proceed against those who cause damage by the emission of ashes, cinders and other solids from buildings and vessels through the use of forced or induced drafts.

Respectfully submitted,

HENRY C. ATTWILL,

Chairman,

LEONARD F. HARDY,

A. C. WEBBER,

LEO H. LEARY,

RICHARD D. GRANT,

Commissioners.

The Commonwealth of Massachusetts

In the Year One Thousand Nine Hundred and Thirty-Six.

An Act authorizing the Attorney General to prosecute Complaints for the Emission from Buildings and Vessels of Ashes, Cinders and Other Solids causing Damage.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 Whoever, being an owner, lessee, occupant or
2 manager of any building or vessel, in or upon which a
3 furnace or boiler with a forced or induced draft is
4 used, causes, suffers or allows cinders, ashes or other
5 solids to escape or to be discharged from any such
6 building or vessel to the detriment, annoyance or
7 damage of persons resident or owning property in the
8 vicinity and not being employed in such building or
9 vessel, shall upon complaint brought by or under the
10 direction of the attorney general, be punished by a fine
11 of not less than fifty dollars and not more than one
12 hundred dollars.

The Administration of the

The first part of the history of the administration of the country is the history of the government of the country. The second part is the history of the administration of the country. The third part is the history of the administration of the country. The fourth part is the history of the administration of the country. The fifth part is the history of the administration of the country. The sixth part is the history of the administration of the country. The seventh part is the history of the administration of the country. The eighth part is the history of the administration of the country. The ninth part is the history of the administration of the country. The tenth part is the history of the administration of the country.

The first part of the history of the administration of the country is the history of the government of the country. The second part is the history of the administration of the country. The third part is the history of the administration of the country. The fourth part is the history of the administration of the country. The fifth part is the history of the administration of the country. The sixth part is the history of the administration of the country. The seventh part is the history of the administration of the country. The eighth part is the history of the administration of the country. The ninth part is the history of the administration of the country. The tenth part is the history of the administration of the country.

