

ILLINOIS POLLUTION CONTROL BOARD
August 15, 1972

CITY OF SPRINGFIELD,)
a Municipal Corporation)
)
) #72-143
v.)
)
ENVIRONMENTAL PROTECTION AGENCY)

MR. RICHARD E. HART, ASSISTANT CITY ATTORNEY, APPEARED ON BEHALF
OF PETITIONER, CITY OF SPRINGFIELD
MR. THOMAS J. IMMEL, ASSISTANT ATTORNEY GENERAL, APPEARED ON
BEHALF OF RESPONDENT, ENVIRONMENTAL PROTECTION AGENCY
OPINION AND ORDER OF THE BOARD (BY SAMUEL T. LAWTON, JR.)

Petition for variance was filed by the City of Springfield seeking what is, in effect, a one-year moratorium between July 21, 1972 and June 30, 1973, on the enforcement of the Open Burning Regulations (#R70-11; Part V, Open Burning, Chapter 2, Illinois Pollution Control Board Rules and Regulations - Air Pollution) in order to allow the open burning of domicile waste. The variance request presumably would be applicable not only to the City itself, but to all residents of Springfield affected by the Regulations. For reasons more fully set forth in this opinion, we deny the variance.

"Domicile waste" is defined in the Regulations (Rule 501(b)) as:

"Any refuse generated on single-family domiciliary property as a result of domiciliary activities. The term includes landscape waste but excludes garbage and trade waste."

"Landscape waste" is defined (Rule 501(d)) as:

"Any vegetable or plant refuse, except garbage. The term includes trees, tree trimmings, branches, stumps, brush, weeds, leaves, grass, shrubbery, yard trimmings and crop residues."

"Open burning" is defined (Rule 501(e)) as"

"The combustion of any matter in such a way that the products of the combustion are emitted to the open air without originating in or passing through equipment for which a permit could be issued under Section 9(b) of the Act." [Environmental Protection Act].

Rule 503 of the Regulations exempts the burning of domicile waste under circumstances not applicable to the City of Springfield, inasmuch as the City is a "restricted area" in which the open burning of domicile waste is expressly prohibited.

The petition for variance sets forth inter alia that the City desires the one-year moratorium to develop an informational and educational program to inform its citizens of the reasons for, and consequences of, the prohibition on the open burning of domicile waste and to permit adequate time to consider possible alternatives, particularly, incineration, the use of air curtain destructors and the mulching or compacting of leaves.

The petition alleges that the Environmental Protection Agency did not furnish adequate evidence in the regulatory hearings justifying the prohibitions complained of, that enforcement of the regulation would entail inordinate utilization of sanitary landfill space and would impose severe economic burdens on individuals with fixed incomes. Further, hauling companies, landfill operators and law enforcement agencies would be obliged to spend undue money, time and manpower in implementation and enforcement of the Regulations. The petition concludes by attacking the evidence on which the Regulation is based and suggests that the Regulation be enforced only in areas where "particularly bad or sub-standard ambient air quality significantly below Federal standards" exists, and asserts that enforcement of the regulations in Springfield will lead to antagonism between law enforcement agencies, public officials and the people "thereby encouraging disrespect for the law".

The recommendation filed by the Environmental Protection Agency recommends that the petition be denied. It notes that the City conducts no refuse hauling service but that ten companies are listed under the heading "Rubbish Removal" in the Springfield telephone directory. It observes that the City has had nine months to develop an informational and educational program and consider alternatives to the burning of domicile waste since the adoption of the open burning regulations. The Environmental Protection Agency hypothesizes that the population of Springfield (approximately 92,000) would generate 183.5 tons per day of domicile waste which, if burned, would produce emissions of particulates, sulphur oxides, carbon monoxide, hydrocarbons and nitrogen oxide in an amount of 21,285 pounds per day, which projections are not, however, limited to single-family dwellings. The recommendation concludes that the City has failed to assert the imposition of any arbitrary or unreasonable hardship upon itself or its citizens as a consequence of the Regulations.

Hearing was held on the petition in Springfield on June 5, 1972. Witnesses introduced by the City consisted principally of public

officials whose duties related to the collection and disposition of refuse and enforcement of the law, refuse haulers and landfill operators who were concerned with the physical problem of pick-up and disposal of domicile refuse and citizens who because of their financial condition felt that enforcement of the Regulations would subject them to undue economic hardship. A summary of the most significant testimony at the hearing follows:

James N. Henneberry, Environmental Coordinator for the Department of City Water, Light & Power testified (R.19) that the City Counsel had adopted a resolution authorizing the submission of the present variance petition. He reiterated the basic premises on which the variance petition was filed: The need for time to evaluate alternatives to open burning, including the testing of various types of equipment, and the practicality of composting, as well as the desire to develop an educational and informational program to "clear up the confusion that apparently exists on the part of the public" as the reasons why open burning is prohibited and what the regulations require. He stressed the lack of public understanding as to why leaf burning in particular should be prohibited when it had been previously tolerated. In his view, the enforcement of the regulation would use up the limited sanitary landfill resources and impose hardship on the persons with fixed income obliged to pay for refuse hauling. He testified (R. 27) on the availability of two landfills, one known as "Airport Landfill" and the other located east of the City of Springfield. Garbage pick-up rates are presently \$10.50 per quarter for twice weekly pick up with a two-bag per pick-up limit on landscape waste. Some increase is indicated (R.56). In his judgment, the two landfills in the City of Springfield had a life expectancy of ten years which presented a serious space problem (R.51).

Tom Fitzsimmons (R.61) Assistant Director of the Illinois Municipal League, testified that many member municipalities were experiencing the same problems as Springfield. Mrs. Gerald Lahey, President of the Springfield Civic Garden Club (R.64) spoke in support of the variance. She stated that the garden club is interested in the establishment of a municipal compost heap for the benefit of the entire community and that her club would work with the City in the possible development of this proposal. James A. Dunham, Commissioner of Accounts and Financing (R.68) testified to the complaints being received, principally from Springfield citizens with fixed incomes resulting from the prohibition of open burning of domicile waste and the resulting need to pay haulage charges. Joseph P. Knox, Commissioner of Public Health and Safety (R.79) reiterated the concern for the lack of available landfill space. Robert Brumett, Past President of the Senior Citizens' Council of Springfield (R.86) testified that there were 12,000 citizens in the City over 62 years of age and that the likely increase in refuse pick-up charges as a consequence of the open

burning regulation would impose a hardship on a substantial number of citizens. Robert Lawson, Director of Parks for the City of Springfield (R.89), testified to the increased cost resulting from truck hauling of landscape waste as a result of the prohibition on burning such wastes in the park area. He expressed interest in the possible development of a municipal compost heap. Sam H. Howard, operator of the Airport Landfill (R.97), testified that the site consisted of 120 acres of which 80 acres were not yet in use. He anticipated that the land available would enable landfill operations to continue for between 20 and 30 years. He testified that the prohibition on open burning of landscape waste with the resulting requirement for burying increased his cost of operation and entailed the use of additional equipment.

Harvey E. Gorbett, owner of Capital Disposal (R.107), a refuse hauling company, testified that there are sixteen licensed refuse haulers in the City of Springfield. He commented on the difficulty of locating additional landfill sites as a result of public resistance and restrictive zoning ordinances. The rate of charge for once a week curb pick-up is \$2.50 per month; and for twice weekly curb pick-up \$3.50 per month; the charge is \$3.50 per month for once a week pick-up and \$4.50 per month for twice a week pick-up for carry-out service (R.109). A six-bag per week limitation for landscape refuse is generally imposed (R. 111), although on one occasion, 91 bags were picked up at one location. Henry J. Henry, (R.115) and Howard P. Frazee (R.119), both private citizens, testified to difficulties experienced in collecting and disposing of landscape waste.

William T. Hall, Springfield Chief of Police (R.121) testified that he was obliged to use additional personnel to put out leaf and trash fires since the adoption of the Regulation which imposed undue burdens on his personnel who should be engaged in more significant activities. In his judgement, the law was being disobeyed because people do not understand it and that undue court time would be consumed in enforcing the open burning regulations. In his view, enforcement of open burning regulations was not a police function. He stressed the need for public education as to the reasons why the open burning regulations were adopted and stated that at the present time, the open burning regulations were not being enforced by his Department (R.126) apparently because of the uncertainty of public response and the lack of understanding of the Regulations. In his judgement, the circumstances described led to disrespect of the law generally. Joseph P. Knox, Commissioner of Public Health and Safety (R.138) reiterated the citizen confusion in the open burning prohibition, particularly with regard to leaf burning. He testified that there was a square mile within the City limits that is classified as a Central Fire District, in which no burning would be permitted even if the variation sought was granted, which area contains approximately 2,300 single-family units, that any burning which would be allowed in the City would be done pursuant to ordinance between sun-up and sundown and that burning would be prohibited during periods of

high wind or drought. Frank Madonia, Commissioner of Cities and Public Improvements (R.170) testified that leaves created problems for his Department when they got into municipal sewers, requiring the use of high-powered vacuum equipment. He commented on a successful program sponsored by the City whereby leaves were picked up and taken to designated locations and then hauled to landfills at no expense to the landowners. The Garbage Haulers' Association had agreed to pick up leaves at no extra expense to customers if the leaves were properly bagged and placed at curb-side, providing the amount so deposited was not excessive. He stated that he was working with State agencies toward resolving the problems and would explore the possibility of using air curtain destructors and composting. He stated that his personal experiences with the Environmental Protection Agency had been good and that the City was very sincere in seeking to work out a solution to the disposal problem.

Agency witnesses included several individuals who testified to their personal respiratory problems resulting from smoke inhalation caused by leaf burning and the following witnesses: Joseph Hudak, Director of Special Programs for the Illinois Tuberculosis and Respiratory Diseases Association (R.204) testified to the relation between air pollution and respiratory ailments, describing the impact on the lungs resulting from the inhalation of irritants with particular reference to tuberculosis and emphysema. It was his position that emissions from open burning would serve as contributing factors to worsening the ambient air quality which, in turn, would increase the likelihood of respiratory and lung ailments and diseases.

Charles Clark, member of the Surveillance Section of the Division of Land Pollution Control, Environmental Protection Agency (R.225) described the characteristics and operation of a sanitary landfill including trenching, spreading, compacting and covering. He testified that there were two active landfill sites in the Springfield area. 35 acres of the Airport Landfill site had not been used, other than for extraction of cover material. He estimated that the available unused land would enable 20 years of landfill operation and that 35 acres already in use would have an additional five to ten years of useful life, giving a total of between 25 and 30 years of potential use for landfill operations. The B&H Landfill occupies approximately 60 acres which, in Mr. Clark's estimation, would have a useful life of no less than six years remaining. He testified to procedures being employed throughout the United States and Europe in development of compost piles. On a municipal basis, these have not appeared overwhelmingly successful, principally because of the economics involved and the environmental problems created, namely, odors, insect larvae, rats and pollutional run-off into streams. In his judgement, a municipal compost heap was not a recommended alternative to disposal of waste by landfill operations or legally controlled burning (R.243).

Wilbert N. Palmquist (R.251) Groundwater Geologist for the Environmental Protection Agency (R.251) testified to the polluttional potential to underground water from sanitary landfills which was dependant on its geologic attributes, particularly the presence of aquifers. Based upon his study of the Springfield area, he expressed the belief that there was a substantial number of potential sites in Sangamon County and the Springfield area suitable for landfill operation in addition to those presently in use. Robert Goldberg, employee of the Division of Air Pollution Control of the Environmental Protection Agency, testified that he prepared the portion of the Environmental Protection Agency's recommendation computing possible pollution potential from the open burning of domicile waste. The figures were based on per capita waste generation resulting in an estimate of four pounds per day of domicile waste and the correlation of these to emission factors contained in standard texts, particularly, McGraw & Duprey "Compilation of Air Pollution Emission Factors", 1971 Edition. A population figure of 91,753 produces a total generation of 183.5 tons per day of domicile waste and results in the estimated emissions set forth in the Environmental Protection Agency recommendation (supra).

Cross examination brought out that the figures are subject to substantial correction since the domicile waste provision is applicable only to single-family residences, which do not include the entire population of Springfield. (R.287). Furthermore, the witness testified that his computations required the use of weighted averages because the standard emission factors were not premised on domicile waste as defined in the Regulations, but on municipal refuse which includes garbage. For the purpose of this opinion and order, we find the estimates of interest but in no way controlling or necessary for a determination of the matter at hand.

The City of Springfield's request for variance of the open burning provisions as applied to domicile waste is based on four separate but interrelated premises. The first deals with what petitioner regards as a need for public education, both as to the basic reasons for the adoption of the regulation in terms of public need and an interpretation of what the law provides. It proposes a one-year moratorium on the enforcement of the law in order to educate the populace on the substance of the foregoing considerations. Secondly, the City advances the somewhat novel concept that because the law is difficult to understand and disliked by many citizens, it is not being enforced, and accordingly, it should not remain on the books because an unenforced law creates disrespect for law enforcement and for those mandated with the duty of enforcing it. Thirdly, the City contends that adequate landfill capacity is not available or that if it is presently available, if utilized for disposal of domicile waste it will soon be dissipated. In any event, if the Regulations are enforced, they would impose economic hardship on the citizens of the community, particularly elderly persons on fixed income, as well as the municipality itself, those responsible for refuse disposal and the landfill operators.

We find the record fails to sustain the contentions made and deny the petition accordingly. We do not see the need for the one-year moratorium on the Regulation in order to educate the citizens of Springfield on the reasons for its passage or the meaning of its provisions. Notwithstanding the expressed views of several City witnesses, this proceeding is not the proper vehicle for re-litigation of the entire regulatory proceeding. Nor do we feel the reluctance on the part of the police force to enforce the law serves as a valid basis for its repeal. Allegations of unreasonable hardship, if proven, might serve as a basis for a variance allowance. However, the testimony of petitioner, as well as that of the Environmental Protection Agency, overcomes this contention. Adequate landfill operation is available to accommodate the disposition of domicile waste for a substantial number of years. Professional hauling services are available at what appear to be reasonable cost. Springfield has failed to demonstrate any peculiar characteristics of its situation that can be viewed as creating unreasonable or arbitrary hardship on it, making it unique within the State of Illinois. Furthermore, Springfield has made no showing that it has adopted a program for ultimate compliance with the Regulation, a condition which we generally require for a variance allowance. See Harold L. Swords, d/b/a Harold L. Swords & Co. v. Environmental Protection Agency, #70-6; York Center Community Cooperative v. Environmental Protection Agency, #72-7. The request for additional time in which to study alternatives is singularly unpersuasive. Nine months have passed since the adoption of the open burning regulation. Nothing appears in the record suggesting any intensive study of alternatives by the City of Springfield during this period. While we encourage investigation and experimentation with such alternatives as incineration, use of air curtain destructors and composting and urge continued cooperation between the City and the Environmental Protection Agency to further these objectives, no reason suggests itself why a one-year moratorium on the enforcement of the law is necessary to enable such a program to be pursued. What petitioner is seeking by this proceeding is a repeal of the Regulations. The variance procedure is not the proper vehicle for consideration of such a proposal. Hearings have been scheduled in the near future for modification of the open burning regulations in which the City of Springfield is invited to participate. Although the specific proposal which is the subject of the hearing would not grant Springfield the relief sought by the present petition, Springfield and other municipalities may suggest alternative proposals by way of amendment which will be given further consideration by the Board and enable modification of the Regulation, should the record substantiate such change. While no regulation adopted by this Board is immutable and all Regulations are subject to continuing re-analysis and examination, a one-year moratorium on the enforcement is not the proper method to achieve this result.

The City of Chicago enacted an ordinance prohibiting leaf burning before the present open burning regulation was adopted. We are unaware of any substantial problem that Chicago has experienced as a result of its own ordinance. Small communities have pursued the same route on their own initiative without any disastrous consequences ensuing.

In our original opinion of March 31, 1971, adopting the Open Burning Regulations, we noted the reasons for adoption of the provisions under consideration:

"3. Leaves and Other Landscape Refuse: "Backyard Incineration"

There has been considerable confusion over the status of leaf-burning under the new statute. Today's regulation makes it clear that leaves and other landscape refuse may be burned on the premises, but only outside the large metropolitan areas surrounding cities of 50,000 or more population. In these areas there are enough other sources of air pollution, and population density is great enough, that the air can ill afford uncontrolled burning of leaves. The City of Chicago has recently banned leaf burning, and it reports a significant reduction in complaints as a result (R.131, 132). We have been urged by numerous witnesses to ban leaf burning.

Dr. George Arnold, on behalf of the Madison County Sanitation and Pollution Committee, argued that leaf burning creates a hazard of fire and of traffic accidents, contributes to the violation of particulate air quality standards, reduces visibility, endangers health, and destroys valuable organic matter (R.64-67). Several witnesses discussed from personal experience the adverse health effects of leaf burning, especially on persons with respiratory problems (R.214-32). An allergy specialist testified as to the serious health effects of burning leaves, especially those contaminated with pesticides, upon people with allergies or respiratory diseases (R.184-91). There was also much evidence as to alternative methods of leaf disposal, including municipal incineration and sanitary landfill (R.135) as well as mulching, and composting to make use of the organic material (R.67-68, 100-02, 228-30). Cost studies have concluded that the cost of leaf collection in large cities is moderate (\$2.58 per family per year in Detroit in 1967, (R.68) and that the cost of such collection is offset more than three to one by the benefits of reducing pollution, even without considering either health effects or the possible benefits of mulching (Ex. 11).

Thus, we have concluded that there is no excuse for leaf burning in the larger metropolitan areas. At the other end of the spectrum, however, we are persuaded that the costs of alternate disposal methods are likely to be significantly higher because of low population density and that, in contrast to the overwhelming nuisance created even in rural areas by salvage or garbage burning, the

burning of relatively small quantities of leaves, weeds and other landscape refuse or paper and the like, at irregular intervals on the premises on which it is generated, will cause relatively little harm (R.105-06, 168-76). We limit this exception to noncommercial and farm refuse and specifically forbid the burning of garbage. We think industrial and commercial concerns, other than farms, which are relatively remote, ought to bear the cost of providing for more acceptable means of disposal.

It is therefore desirable in this case, as authorized by Section 27 of the Act, to make different provisions for different parts of the State in terms of population density. It is obviously impossible to draw a scientific line to separate with logical precision those cases in which it is and is not acceptable to burn landscape refuse; one is reminded of the necessity for choosing a somewhat arbitrary voting age. We believe the distinction between Standard Metropolitan Statistical Areas and the two heavily populated Air Quality Control Regions, on the one hand, and less populated areas, on the other, is an appropriate one that will be easy to administer and to understand. To attempt to delineate relatively unpopulated parts of the SMSA's, we believe, would be administratively difficult, create uncertainty, and invite litigation.

A word of caution is in order as to the disposition of leaves. We have some reservations about the spreading practice of placing leaves in plastic bags for collection. Plastic bags are relatively non-degradable and may interfere with normal decomposition of the leaves in a sanitary landfill. Moreover, the gaseous products of incineration of plastic bags may not be desirable additions to the air (R.135,139). We are not today outlawing the use of plastic for this purpose, since the issue is not before us, but we wish to warn people to take care that in avoiding one environmental problem they do not create another."

We noted there that disposal of leaves by bagging and burying may not be the ultimate solution, but it is a far better solution than the uncontrolled open burning of leaves. We encourage the City to pursue its studies and seek alternatives in which the State agencies will hopefully assist and participate. However, the requisite elements of hardship are lacking on the present record to justify the variance sought, and the petition of the City of Springfield is accordingly denied.

This opinion constitutes the findings of fact and conclusions of law of the Board.

IT IS THE ORDER of the Pollution Control Board that the petition for variance from the provisions of the Open Burning Regulations filed by the City of Springfield, be and the same is hereby denied.

I, Christan Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion was adopted on the 15th day of August, 1972, by a vote of 5 to 0.

Christan L. Moffett