

arisen because of amending legislation, and also one or two repeals that should have been made consequential upon legislation which has been passed by this Parliament. The necessity to provide for these repeals was overlooked at the time.

The House is fortunate to have before it the report of the Statute Law Revision Committee. That committee has examined the Bill in detail, and honorable members will see from this report the exact nature and effect of the amendments. The concluding paragraph of the report of the Statute Law Revision Committee states—

The Committee is of opinion that all the proposed amendments are such as may properly be included in a statute law revision Bill, and accordingly commends the Bill to honorable members.

As some of the corrections are of considerable practical importance, the Government is anxious that the measure be passed as speedily as possible. I commend the Bill to the House.

On the motion of Mr. CAMPBELL TURNBULL (Brunswick West), the debate was adjourned until next day.

#### CLEAN AIR BILL.

The debate (adjourned from the previous day) on the motion of Mr. Porter (Honorary Minister) for the second reading of this Bill was resumed.

**Mr. WILKES** (Northcote).—I wish to support the Bill and to compliment the Government on the manner in which it has handled it. With your indulgence, Mr. Speaker, I should like to preface my remarks by saying that I am deeply conscious of the circumstances that led to my election to this House. I refer to the untimely death of my predecessor, the late John Cain, who was held in high esteem in this House and also throughout Victoria. His fidelity to the party of which he was a member and which he subsequently led was never questioned. His name is synonymous with legislation that has been passed by this House over the years and it will appear in a prominent place in the annals of political history long after most of us have been forgotten.

This Bill is designed to eliminate the increasing problem of atmospheric pollution which has caused concern to metropolitan municipalities for many years. Unfortunately, the existing regulations have been inadequate to deal with the problem. The term "pollution" is used to describe any foreign matter whether gaseous or otherwise, and whether harmful or simply unpleasant, that is emitted into the atmosphere. The amount of pollution we endure today is brought about chiefly by the rapid industrial development of our State. Industries have been established in and around Melbourne in areas set aside for them, as well as in country places. With this industrial advance has come the need for increased production of power by the use of heat and other methods. It is when this power is produced that the problem of atmospheric pollution begins. In most industries to-day certain stringent regulations are laid down with a view to ensuring the cleanliness of the air within buildings. It is prescribed that the air must be changed by means of normal ventilation on a number of occasions each hour. In some industries, because of the work that is carried on, the air becomes overloaded with foreign matter more frequently, and mechanical means of changing it must be installed. I refer to such apparatus as exhaust fans, and so on.

When foul air is taken out of a building by such means and mixed with the atmosphere outside, it causes pollution. It might be said that this is not a grave problem because of the magnitude of the atmosphere into which the foul air is deposited. However, let me point out that in an area of one square mile there are 36,000 tons of air below roof level and it takes only .03 ton of pollution to make that air unsuitable for humans to breathe. When one considers the amount of exhaust fumes emitted from motor vehicles at busy intersections, one can realize just how much concentration of foul air there is in the community. Any honorable member who lives on a main arterial road, as I do, can readily appreciate that fumes from motor vehicles

can cause serious inconvenience, particularly in the morning and evening peak periods, when they float into houses through windows and doors, much to the annoyance of residents. To illustrate the effect that this has on the health of the community, I should like to quote from a Sydney Sunday newspaper dated 20th October, 1957. The article, which deals with the effects on the health of the community of pollution of the air, states—

**BUS FUMES POLLUTE CITY.**

Doctors fear the increasing air pollution from exhaust fumes of Sydney buses and other diesel vehicles may become a major health hazard.

They urged positive action to abate the menace.

Observers this week watched Sydney public transport make its own smoke nuisance.

The increasing number of buses appeared to be the worst offenders—belching out pungent, black, oil-laden fumes from their big diesel motors.

They were at their worst during evening peak hours, when there seemed to be less wind to disperse the fumes, and when buses were at peak output of fumes, because of the amount of low-gear work they were doing.

Physicians said fumes could do only harm to the lungs of the Sydney people forced to inhale them.

That illustrates how serious pollution of the atmosphere can become.

I now wish to deal with a more common and important type of pollution, which this Bill is intended to deal with specifically. I refer to the emission of smoke, whether dark or otherwise, from the chimney stacks of industrial establishments. Heat and power are produced by the burning of black coal, brown coal, coke, oil and, in isolated instances, wood. When these fuels are incorrectly fired, or when the furnace or boiler is inadequate or unsuitable, greater pollution of the atmosphere results. It is worth while mentioning that in Britain one ton of coal is burnt every minute and 800,000 tons of atmospheric pollution is produced each year. Atmospheric pollution is a grave problem in England, as it could become in this country also. Smoke is the term used to describe the visible produce of imperfect combustion. It contains many chemicals and other matter that is discharged with it.

*Mr. Wilkes.*

Coal smoke contains a high proportion of carbon, and appears almost black when viewed in bulk. It also contains tarry hydro-carbons, which add to its sticking powers, and it has a tendency to cling to the outside of chimney stacks or to anything else with which it comes into contact. The particles are very small and cannot be seen under a normal microscope. They can be measured only by the use of an electron microscope. When measured, they are found to be approximately three one-millionths of an inch in diameter. Consequently, they appear to be much like a gas in substance and they behave in that manner. When polluted air enters a building through windows, doors or ventilators, these smoke particles are carried with it and are deposited on walls, ceilings and furnishings to form dirty surfaces. Not all of these particles settle immediately; some remain suspended in the air from anything up to 48 hours. They are often deposited on knife-edged surfaces like blades of grass or leaves of trees, much to the detriment of the foliage.

Another emission from smoke-laden air is ash, the unburnable material that is set free when fuel is combusted. Sparks from a fire are actually red-hot particles of ash. In a fire or furnace where fuel such as coal or coke is burnt, much of the ash falls into the grate, but a large proportion escapes with the flue gases into the atmosphere, where it becomes a serious source of annoyance to people living in the vicinity.

The third main form of pollution is by sulphur dioxide, which is formed by the burning of coal and certain fuel oils. In large quantities, it is capable of doing considerable harm. It is a gas with a high penetration and, when mixed with a moist atmosphere it changes to sulphuric acid. In that form, it affects anything that it comes into contact with, such as corrugated iron roofing.

I have covered briefly the main causes of pollution, and their effect on the health of the community is not difficult to assess because of what has happened in the past both here and in other countries. In the Meuse valley, near

Liege in Belgium, 63 people lost their lives through atmospheric pollution of the area, and several hundred others were severely affected by bronchial complaints and respiratory troubles. By and large, it was considered to be a natural disaster at the time. More recently in Pittsburgh, nineteen people lost their lives when a fog, which lasted for five days, prevented the pollution in the atmosphere from clearing away. Pollution of this type affects chiefly the aged, the young, and the sick, and it is a notable fact that in England the incidence of diseases of the respiratory tract is 20 per cent. higher in industrial areas than elsewhere. Furthermore, whilst it is now the considered opinion of many authorities that smoking contributes largely to lung cancer, it is notable also that this dreaded disease has a high incidence in areas in which there is atmospheric pollution.

The electors of Northcote are anxiously awaiting the passing of this Bill and the proclamation of the resulting Act. They have suffered loss through damage to property, including the washing on the clothes lines, and their health has been endangered because of atmospheric pollution in the area. The local municipal council has been inundated with various complaints about this nuisance, and it has received many deputations requesting that the council take action in an endeavour to cope with this very serious problem. Unfortunately, the local council has been unable to do a great deal towards that end, but under this legislation it will have every opportunity to tackle the problem.

In order to emphasize my point, I should like to refer to the situation confronting some of my constituents who live in proximity to an industrial dry-cleaning plant. These people have been subjected to serious disabilities—in some instances the health of individuals has suffered—as a result of the operations of this industry. They claim to have suffered continually from sore throats, new paint work on their homes has been adversely affected, and the linen on the clothes-line has been ruined by the elements in the polluted atmosphere. I have personally examined

some of this linen during the past eight months and I consider the complaints are justified. The industry to which I refer operates a water-tube boiler, which originally was fuelled with brown coal. Although at no stage have the proprietors admitted liability, they have been co-operative and they changed to the use of black coal; and later the boiler was converted to permit of the burning of oil. Unfortunately, however, the nuisance continued. The residents were irate because, although their washing was continually being damaged, no remedy to the problem could be found. During a visit to the establishment about a fortnight ago, I was pleased to note that the firm had continued to co-operate with a view to reducing the nuisance and there had been installed, at a cost of £11,000, the most modern type of steam-producing unit available. The new unit functions without the necessity for a chimney stack of the type commonly used in conjunction with the older type of equipment. Under the new method only a flue, level with the roof of the building, is necessary. Whilst I know that the principal intention of the firm is to increase the efficiency of its plant, I have no doubt that its actions must have been motivated by the complaints that are being continually made. Fortunately, the majority of industrialists would be prepared to co-operate in this matter with a view to overcoming the problem.

In Northcote, as in other northern municipalities, there are a number of brickworks. Wherever such works or pottery kilns are in operation, trouble is always caused through pollution of the air and the emission of smoke and grit from the chimneys. This is brought about largely by the methods used in baking the bricks. The wet clay is placed in the kiln which is then sealed off. The fire, which is started in the kiln, circulates around the stacks and it is kept burning by a very complex flue and draught system. Carbon from the fire is deposited on the wet clay, and, as the clay dries out, or as the bricks become baked, it flakes off and is drawn into the flue system and out through the chimney along with other grit and ash that is drawn up with the fire.

These are spread over a wide area, much to the misfortune of the local residents. The problem can be alleviated by the inclusion of grit arresters or electronic precipitators, which can be fitted to the chimney stacks to lessen the menace.

Whilst the ramifications of the Bill are rather wide, it does not include any provision to safeguard against another important type of pollution which could have a serious effect on the community if it is not controlled. I refer to the pollution from atomic-generating plants. On this question a number of reports have been published recently in the Melbourne newspapers. In the *Sun News-Pictorial* of 23rd October there appeared an article entitled, "A-Power Cheaper After 1975." A similar article appeared in the *Age* of the same date, although in another press report, which rather conflicted with that to which I have just referred, cheaper atomic power was forecast in ten years' time. If atomic power can be produced more cheaply than electric power, it will be an inducement for large industrial firms to install atomic-generating equipment. When that position arises, the problem of radio-active emissions will have to be considered by Parliament.

In the *Age* of 23rd October it was reported that the uranium furnace at an atomic power plant had overheated, causing grave concern because of the emission of widespread radio-activity and damage to stock. The surrounding area which, fortunately, was not a residential locality, was sealed off. In time, it will be necessary to amend the legislation to cover pollution of this type. However, I support the Bill in its present form, believing that it will provide for the people of this State something to which they are justly entitled—clean air.

**Sir HERBERT HYLAND** (Gippsland South).—Members of the Country party would like to congratulate the honorable member for Northcote on his excellent maiden speech, which contained a number of points worthy of consideration by this House. The Bill, which is designed to make provision for abating the pollution of the air defines

"air impurities" as soot, ash, grit, dust, cinders, fumes, gases, acids, unburnt fuel, and any other particles or substances that may be emitted from a fireplace or as a result of any industrial process. Furthermore, in clause 2 there are contained definitions of "fireplace" and "industrial plant." However, there are a few questions regarding this measure that the members of my party would like to have answered. We support this class of legislation; we believe in clean air legislation, but one point that arises is whether the Government will be bound by the Bill when it is passed. Will semi-governmental bodies such as the State Electricity Commission be required to observe its provisions? Will the Railway Department be bound? If such bodies as the State Electricity Commission and the Railway Department, also the activities of municipalities, are to come within the scope of the legislation the Government will have some fun in administering it. Recently the Premier, with members representing Gippsland districts, inspected the open sewer that runs from Rosedale towards the ocean.

I do not know whether the effluent from this outfall sewer should be classed as fumes or gases. Probably it is a question of whether they come from a fireplace or are the outcome of an industrial process. Perhaps they can be placed in the latter category because they emanate partly from the works of the Gas and Fuel Corporation at Morwell and partly from those of Australian Paper Manufacturers Limited at Maryvale. Will emissions such as those from the open drain come within the range of this legislation so that those responsible for the control of that project can be forced to remedy the position? People in the surrounding districts will certainly be pleased if the Government can say to the Latrobe Valley Water and Sewerage Board, "You must enclose that drain by means of a pipe-line so that the effluent will be conveyed to the ocean." The Church of England Bishop of Gippsland, the Mayor of Sale and presidents of several shires, together with landowners and other residents of that area,