

## COMMENTS

### STUDENT SURVEY OF PROBLEMS OF POLLUTION CONTROL OVER THE YARRA RIVER IN THE CITY OF MELBOURNE, 1971

#### (a) *Introduction*

This project was carried out during the latter part of 1971 by a group of law students interested in the practical application of water pollution controls in Victoria. The Yarra River was chosen as the subject of the survey because of its significance as the major river on which the city of Melbourne is built, because it flows through a variety of suburbs ranging from residential to industrial, and because it was within easy reach to students for research purposes. It was found necessary to limit the survey project to that part of the river which flows from Dights Falls in Abbotsford to its mouth at Hobsons Bay.<sup>1</sup> This was because of pressures of time placed upon the students taking part who were also studying for examinations in November. However, it was frequently drawn to our attention that the river upstream from Dights Falls is far from free from pollution, and in fact the difficulties of control faced by downstream authorities are aggravated by pollution entering the river far upstream from both domestic and industrial sources. Similarly, the lower reaches of the Yarra River have absorbed pollution which has entered by way of various tributaries such as Gardiner's Creek, the Maribyrnong River and the Merri Creek, some of which have flowed through heavily industrialized suburbs and which present acute pollution problems in themselves. Nevertheless it was considered worthwhile to carry out a survey within those limitations, in order to present a description of the types of legislative provisions which control water pollution in the city and to examine their application through the various authorities vested with responsibility for their enforcement. Thus the project was carried out in two stages; an examination of the relevant legislation, and a series of interviews with representatives of responsible authorities.

#### (b) *Legislation*

Until the complete proclamation of the Environment Protection Act 1970, water pollution in Victoria is controlled partially through specific statutory offences carrying fairly nominal fines. Most Victorian enactments with any relationship to water contain a few provisions dealing with specific types of pollution which are incidental to their main purpose, and in this general sense can be said to be relevant to this survey. For instance the

<sup>1</sup> Hobsons Bay is the extreme northern reach of Port Phillip Bay. If a line was drawn roughly from Williamstown Pier to Point Ormond at St Kilda, the water enclosed would comprise Hobsons Bay.

Fisheries Act 1958, section 48, makes it an offence to discharge into water-courses any liquid or solid matter injurious to fish and carries a maximum penalty of \$100, and the Harbour Boards Act 1958, section 63(1) prohibits throwing rubbish or allowing offensive matter to flow into any port, with a penalty of \$40.<sup>2</sup> However the penalties attached to these offences are small and they are rarely prosecuted. Consequently, this type of legislative provision cannot be regarded as a serious anti-pollution measure. There is also legislation which is aimed solely at preventing specific types of pollution. The most significant example is the Navigable Waters (Oil Pollution) Act 1960. This Act *inter alia* makes it an offence to discharge oil into any waters within the jurisdiction, and carries a maximum penalty of \$2,000. It has been judicially interpreted as imposing a strict liability for oil pollution and represents a much more effective legislative control than existed prior to its enactment.<sup>3</sup>

Apart from a multitude of specific offences, general powers to take action to prevent or abate water pollution either by cleaning waterways or by enacting by-laws or regulations, are vested in a variety of authorities under a variety of Acts. For example, under the Melbourne and Metropolitan Board of Works Act 1958, the Board has power to make by-laws for the prevention of water pollution, and under the Health Act 1958, and the Local Government Act 1958, similar powers are vested in all local councils.<sup>4</sup> It is through the exercise of these powers that water pollution in Melbourne is primarily regulated. The most active bodies in this field in the survey area are the Melbourne and Metropolitan Board of Works, the Harbour Trust and the individual municipal councils.<sup>5</sup>

Note should also be taken of the Environment Protection Act 1970 which aims at a radical approach to the control of all sources of pollution. It establishes an authority responsible for the co-ordination of anti-pollution enforcement agencies and ultimately responsible for enforcement of the provisions of the Act itself. The main thrust of the Act is to require that all sources of any type of pollution of the environment be licensed

<sup>2</sup> See, also, for example, Melbourne and Metropolitan Board of Works Act 1958, ss 119 and 150, Health Act 1958, ss 53, 333 and 334 and Melbourne Harbour Trust Act 1958, s. 155.

<sup>3</sup> See *Goodes v. General Motors Holden Ltd* (Vic. Sup. Ct 1970—as yet unreported) noted in (1971) 45 *Australian Law Journal* 150.

<sup>4</sup> Melbourne and Metropolitan Board of Works Act 1958, ss 32, 110 and 111, Health Act 1958, ss 94-105, 77-82 and Local Government Act 1958, ss 642-56.

<sup>5</sup> Other authorities with these general powers are the State Rivers and Water Supply Commission (Water Act 1958, s. 11), any Waterworks Authority established under the Water Act 1958, s. 332, any Waterworks Authority within an urban district (Water Act 1958, ss 236, 244), any River Improvement Authority (River Improvement Act 1958, s. 3), Geelong Waterworks and Sewerage Trust (Geelong Waterworks and Sewerage Act 1958, ss 62, 175, 189), any Sewerage Authority (Sewerage Districts Act 1958, ss 124, 131, 154), the Department of Mines, (Mines Act 1958, s. 99), any Sludge Abatement Board or Trust (Mines Act 1958, ss 454, 456-9, 497), and the Commission of Health (Health Act 1958, ss 68, 79, 81, 92, 221).

by the Environment Protection Authority subject to such conditions as the Authority sees fit. Penalties for breach of the licensing provisions, and for emitting pollution are, hopefully, severe enough to be a significant deterrent to offenders. The maximum penalties are \$5,000, and \$2,000 *per diem* of a continuing offence. Although it has not yet been fully proclaimed<sup>6</sup> this Act should become an important factor affecting the vigilance of enforcement officers and the implementation of legislative controls on polluting activities. The Act does not repeal any existing legislation, although it is said to prevail over other provisions which are inconsistent,<sup>7</sup> and it provides the Authority with power to delegate all or part of its enforcement duties to any 'protection agency' or existing body with responsibilities under any other Act in the field of pollution control.<sup>8</sup> Thus, the Authority will be able to exercise a degree of standardization and co-ordination of all such agencies, and it is expected that increased research facilities, staff training programmes and finance will be reflected in more stringent enforcement of anti-pollution legislation on all levels.

(c) *Administration*

(i) THE BOARD OF WORKS

The bed and banks of the Yarra and all other public watercourses within the metropolis are vested in the Board of Works which has wide regulatory powers. The jurisdiction of the Board in this context generally extends within a twenty-five mile radius of the General Post Office, and it is in fact the water supply sewerage drainage and planning authority for the metropolitan area.<sup>9</sup> The Board exercises its authority over two main systems; the sewerage system with outlets at the various sewerage farms, and a system of storm water drains which find their way into the watercourses of the Yarra basin and thus ultimately into the Yarra itself.

As a closed system, the sewerage drains themselves present no threat to the quality of the Yarra. It was pointed out, however, that the newer outlying suburbs do not come within the jurisdiction of the Board, and drain domestic wastes into the river or its tributaries. In the view of the Chief Engineer of the Board, the main source of pollution of the Yarra as a whole was the extension of urban development without adequate sewerage services.

<sup>6</sup> This Act was partly proclaimed in March 1971, although only those sections dealing with the establishment of administrative bodies, and similar housekeeping sections became effective then: see Victoria, *Government Gazette*, No. 22, 11 March 1971, 6291; (ss 1-4, 5a, 5b, 6-11, 13(i)a-c, e-p, 14, 15, 16-9, 54, 57, 60, 61, 65(i) and 71 were proclaimed). The remainder of the Act including the licensing and offence provisions is expected to be proclaimed later in 1972 when finance and staffing arrangements have been made. See also Lanteri, 'Clean Air Legislation in Australia' (1971) 8 *M.U.L.R.* 254.

<sup>7</sup> Environment Protection Act 1970, s. 3(2).

<sup>8</sup> Ss 4(1) and 68. 'Protection agency' clearly includes all those bodies referred to in n. 4, *supra*.

<sup>9</sup> Melbourne and Metropolitan Board of Works Act 1958, s. 67 and 3rd Schedule.

Control of the storm water drainage system in practice is roughly divided between the Board and local councils. The Board is responsible for the 'main drains'<sup>10</sup> and relies to some extent on the local councils for initiative and co-operation over the lesser or tributary drains. The Board does not have a separate pollution control department, but does have a large research laboratory which is used *inter alia* for water quality checking by a group of approximately 24 inspectors checking for illegal connections to Melbourne and Metropolitan Board of Works drains and for waste dumped into drains, and a pollution investigation engineer attached to the storm water drainage department.

Major sources of pollution in the Board's view are industrial waste entering the Yarra directly or through council drains, and grease from service stations which has been allowed to flow into the drainage systems.

The Board only accepts industrial waste into the sewerage system if it complies with certain standards to protect purification plants. Waste which does not comply with those standards must be disposed of through the storm water drains unless it can be placed at one of the solid waste tips, which are increasingly loathe to accept industrial waste. In the view of the Chief Engineer, all industrial waste should be pre-treated to comply with Board standards and be discharged only into the sewerage systems. The costs involved would presumably be borne by the industry as a production cost.

An amendment to the Uniform Building Regulations requiring installation of adequate grease traps in all service stations would remedy pollution of the drainage and sewerage systems from those sources.

The policy of the Board with respect to prosecutions for offences against legislation or regulations is flexible. Blatant disregard of regulations will be prosecuted while accidental discharge usually will not. Co-operation with local councils in prosecuting offenders is reported to be generally good, and the Board is willing to provide help for councils which call for it in tracing sources of pollution and obtaining evidence. Although it must be remembered that the duties of the Board are widespread and that it would be unrealistic to suppose that its implementation of all of them were perfect, this body at present is the most important administrator of the existing legislation within the metropolitan area, and bears most of the practical responsibility for its implementation.

#### (ii) METROPOLITAN HARBOUR TRUST

The Harbour Trust has jurisdiction over those waters comprising Hobsons Bay and the tidal reaches of the Yarra below Spencer Street Bridge.<sup>11</sup> The rest of Port Phillip Bay is under the control of the Ports and Harbours Authority.

<sup>10</sup> Melbourne and Metropolitan Board of Works Act 1958, Part X.

<sup>11</sup> Melbourne Harbour Trust Act 1958, 2nd Schedule.

The Port Emergency Service of the Harbour Trust is responsible for maintaining the cleanliness of the waters within the Trust's control; its officers police vessels discharging dangerous cargoes and it also provides a constant watch to detect and minimize damage caused by pollution. Where pollution is traced to sources outside the jurisdiction of the Trust, the matter is referred to the appropriate responsible authority.

The Port of Melbourne handles 75 *per cent* of the total oil traffic of the Commonwealth, and the pollution control measures exercised by the Port Emergency Service are geared to deal primarily with oil spills and leakages. Although it is estimated that perhaps only 10 *per cent* of offenders are traced and prosecuted, the Trust has almost 100 *per cent* success in the courts. Prosecutions for oil pollution are carried out under the Navigable Waters (Oil Pollution) Act 1960 rather than under the offence sections of the Harbour Trust Act 1958 or the Health Act 1958 because of the more realistic size of penalties imposed by that legislation, and also because it makes provisions for recovery of expenses incurred in cleaning spills and minimizing damage from the offender.<sup>12</sup> Even so, the expenses incurred in cleaning up spills, tracing offenders, and going to court still outweigh damages recovered in successful actions. For instance, in 1970, approximately \$30,000 were spent in these activities, while the 13 successful prosecutions recovered only \$7,500 in fines and costs. It was also pointed out that an oil spill from one of the larger tankers on any significant scale would probably be beyond the capacity of the Port Emergency Service to deal with adequately.

Another major source of pollution of the Bay and the tidal reaches is the discharge of sewerage from passenger liners at berth. The Port of Melbourne does not have the facilities for treating this sewerage and the Service can take no practical action to cope with it. Similarly, pollution discharged outside the jurisdiction of the Harbour Trust cannot be controlled effectively by the Trust.

Despite its limitations, the Harbour Trust does provide an important service in the control of pollution. It is active in its enforcement programme within the scope of its powers and facilities, and is ready to cooperate with those municipal councils bordering the river within its control. It must be remembered however, when making comparisons with other responsible authorities, that it operates within an area which is of immediate state and national importance, and thus gains the benefits of a fairly high degree of government support which might be lacking in the case of other bodies less in the public eye.

<sup>12</sup> Navigable Waters (Oil Pollution) Act 1960, s. 8(2). See also n. 2, *supra*.

## (iii) LOCAL MUNICIPAL COUNCILS

Municipal councils have a significant role to play in the prevention and abatement of water pollution in the city of Melbourne through their controls over lesser drains and direct discharges into waterways, and their powers under both the Local Government Act 1958 and the Health Act 1958.<sup>13</sup> The responses received from the various council officers interviewed revealed a variety of attitudes to this role which ranged from the complacent and unconcerned to the vitally aware.<sup>14</sup> Perhaps these differences are not in themselves so surprising in view of the widely different characters of the suburbs through which the Yarra runs within the survey area. These range from heavily industrialized areas such as Footscray, Williamstown and Port Melbourne, through the commercial city of Melbourne to middle-class residential suburbs such as Prahran, Kew and Hawthorn. Nevertheless it could not be said that all 'residential' suburban councils were complacent nor that all 'industrial' councils were actively aware of pollution prevention as an important part of their duties. It is interesting to note that the majority of councils approached were rather suspicious of the intentions of the students carrying out the survey, and were anxious to avoid any breath of bad publicity reaching the mass media. Despite these initial reservations however, all councils approached did co-operate with the interviewers.

Questions pursued four main points:

- (a) whether or not the officers interviewed considered that a pollution problem existed in their municipality;
- (b) which were the most significant sources of pollution within their municipality;
- (c) what was the council's policy on enforcement of anti-pollution measures, and
- (d) the amount of co-operation existing between the council and other authorities responsible for pollution control.

With respect to the first line of questioning, most of the 'heavy industry' councils agreed that water pollution was a problem, although in some cases this agreement was qualified by favourable comparisons with

<sup>13</sup> See n. 4, *supra*.

<sup>14</sup> Officers from the following municipal councils were interviewed. Melbourne, Footscray, Williamstown, Northcote, Collingwood, Prahran, Malvern, Richmond, Port Melbourne, Kew, and Hawthorn. These municipalities have borders along the Yarra River within the survey area with the exception of Malvern. That municipality touches the Yarra at only one point, but a large proportion of its boundary stretches along the Gardiners Creek, one of the major tributaries to the river within the survey area. Of the municipalities investigated a rough characterization of type could be made for discussion purposes; Melbourne—mainly commercial; Williamstown, Port Melbourne, Footscray, Collingwood and Richmond—mixed heavy and light industry and residential; Hawthorn, Kew, Prahran, Northcote and Malvern—mainly residential.

other municipalities, by reference to marked improvements in the situation over a period of time, or by blaming such problems on neighbouring municipalities. The 'residential' councils when pressed, also revealed varying degrees of concern over water pollution, although at least initially, the tendency was in some cases to deny the existence of any problem at all. However, with regard to the answers given to the second line of questions covering sources of pollution, it was noted that no council failed to think of at least one type of pollution which answered the description of a 'significant source'. In view of these answers, it would seem that the response to a direct question on existence of a problem was influenced in some cases by a desire to avoid creating a bad impression of the suburb as a cesspool of pollution.

Industrialized suburbs complained primarily of industrial waste flowing either directly into watercourses, or into the drainage system, but also noted as a significant source oily waste from service stations flowing into the drains. This latter source was almost unanimously cited by the residential councils as the only or most significant pollution source in those areas.

Policies on enforcement naturally varied considerably from council to council, although actual prosecution appears to be the rare exception rather than the rule. Even councils which could be characterized as actively aware of their responsibilities tended to rely on threats and promises falling short of court action. These officers pointed out rather wearily that the fines available were insignificant and ineffective as deterrents, and the costs involved in obtaining evidence and going to court far outweighed any benefits acquired through court actions. It was especially stressed that difficulties in satisfying the burden of proof were often insurmountable, and a few expensive failures in court were generally a much more effective deterrent to enforcing officers than the successful prosecutions were to offenders. Most councils of both types waited for complaints to be received before commencing action of any sort, but Footscray, Port Melbourne and Prahran, reported using a system of more or less regular checks on drainage outlets.

Co-operation with the Melbourne and Metropolitan Board of Works and Harbour Trust in surveys and analyses as well as in more direct enforcement was reported from all councils. None of them had their own facilities for carrying out tests on water quality which require more than visual observation, and most, especially those councils committed to pollution control complained of overworked staff and lack of finance.<sup>15</sup> The Health Department was criticized for lack of co-operation with enforcement problems. Almost unanimously, the Environment Protection Act 1970 was

<sup>15</sup> Each municipal council has two or three full time health inspectors, but it should be noted that these officers have duties other than pollution control to carry out; for instance, inspection of food premises and eating houses.

hailed as being a hopeful source of increased finance, staffing and equipment which would be available to councils for use in their enforcement duties, although some doubts were expressed concerning the precise methods of co-ordinating the various jurisdictions involved.

Some points of interest emerge fairly clearly from this series of interviews. Much responsibility for pollution control enforcement is left in the hands of municipal councils. The attitude of these bodies to their duties in this field varies considerably. The variations at present depend largely on the training, character and determination of the particular responsible officer in each council, rather than on the existence or otherwise of a water pollution problem. As every municipal council comes within the definition of a 'protection agency' to which enforcement duties may be delegated under the Environment Protection Act, the practice of such councils in enforcing anti-pollution provisions will come under closer scrutiny after the full proclamation of that Act. It is expected that chance variations in procedure would be minimized and that standards of enforcement should improve with the increased support of the Authority.

The difficulties facing even determined officers in prosecuting pollution offences indicate the need for reforms in the size of penalties and burden of proof, and in making available training programmes, equipment and finance to ensure regular checking procedures and vigilant enforcement; it may be that such reforms have already been achieved through the 1970 legislation.

### (c) *Conclusions*

Perhaps the major weakness of pollution control in practice is the diversity of authorities which share responsibility for enforcing the relevant legislation. Within the survey area, thirteen bodies were investigated which were indisputably vested with such duties. This diffusion of responsibility inevitably leads to inconsistencies in enforcement practice, duplication of effort or buck passing between the relevant bodies. It may be that an active and financially strong Environment Protection Authority will remedy this weakness through its co-ordination powers and its ultimate responsibility for enforcement. This depends on a realistic financial commitment on the part of the State Government and on the skills and personality of its chief administrators who are faced with the job of resolving the differences between existing bodies.

The other weaknesses revealed in the existing system were the low size of penalties and the difficulties council officers found in obtaining convictions in circumstances where there was no moral doubt that the public interest had been infringed. This was put down to lack of expertise on their part and limitations on financial support which placed them at a



disadvantage compared to the offenders. Again it may be that the provisions of the Environment Protection Act 1970 will solve these problems too, although the possibility of introducing a broader application of strict liability into the field of pollution control legislation might be considered as a method of relieving some of the difficulties which enforcers face at present.

It seems clear that the widely spread practice among councils of pursuing a policy of conciliation and co-operation with offending industries and commercial premises can be carried too far. Although such an approach cannot be abandoned entirely, especially in view of the increased publicity and public awareness of the problems of environmental conservation, it should be supplemented by a firm stand against offenders supported by court actions. The practical significance of bad publicity to both enforcing authorities and to offenders was strongly brought home to those conducting this survey, but it is still considered that a readiness to prosecute is essential to the adequate implementation of legislative provisions.<sup>16</sup>

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<sup>16</sup> Klassen, 'The Water Pollution Control Agency: Legal Basis, Administration, Regulations and Staffing', in World Health Organization, *Aspects of Water Pollution Control* (Public Health Paper No. 13, Geneva, 1962) 9, 12.

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