

composed of the Chief Engineer of the Public Works Department, the Chief Health Officer, the Government Analyst, and the Government Veterinarian; and I recommend accordingly. It might be advisable to ensure that factories from which waste products must be discharged into streams or rivers are only erected on sites approved by the Department or the Board.

2. *Hon. Mr. Buddo.*] Will you explain in what way section 66 of the Public Health Act could be utilized for a settlement of the difficulty?—The sections are Nos. 63 to 67. Section 67 provides for the prevention of the pollution of streams that are to be part of a public water-supply. Sections 65, 66, and 67, I submit with all respect, would meet the case. This is section 65: "In any case where, on the report of the District Health Officer, the Governor thinks it expedient in the interests of the public health so to do, by notice in the *Gazette*, place any specified watercourse, stream, or lake, or any specified portion thereof, under the sole control of any one specified local authority, notwithstanding that it may not be within the district of such local authority or on land belonging to such local authority, and every such notice shall, until revoked by the Governor, have full effect." Then section 66 reads: "Subject to the provisions of the last preceding section, the local authority shall, for all the purposes of this Act, be deemed to have control of all water-courses, streams, and lakes within its district." Section 67: "The local authority having the control of any watercourse, stream, or lake may from time to time, as it thinks fit, and shall, whenever the District Health Officer so recommends, make by-laws to enforce the cleansing and prevent the polluting or defiling of such watercourse, stream, or lake." Under those sections it would have been possible to put the stream in question under the control of, say, the Manawatu County Council, and the District Health Officer could have made recommendations with regard to the purification of the Manawatu and Oroua Rivers, insisting on refuse being kept out, and so forth.

3. *Mr. Forbes.*] Do you consider that those sections cover the ground that is taken up by this Bill?—I do not say they cover the whole ground, but I think they provide all that is required.

4. Is there any particular point in this Bill that is not covered in those sections?—What you want to do, I take it, is to maintain the purity of the rivers as far as possible, but you do not want to interfere more than is unavoidable with the trades and industries of the country. Those sections, I maintain, provide for that.

5. You said there was not much objection to the dairy factories discharging their waste into streams: do you mean their waste after it has been dealt with by filtration, or something like that?—Yes, after it has been filtered.

6. You do not mean the waste direct from the factories?—No. When dairy factories or cheese-factories are situated near running water, a very simple inexpensive means of filtration will render the effluent fit for admission to the stream.

7. It is necessary to have some filtration before the stuff is allowed to go into the stream?—Oh, yes.

8. *Mr. J. Bolland.*] With regard to the pollution of water, do you consider it is all a question of degree?—It is all a question of degree. It depends entirely on the velocity and volume and nature of the river. Take, for example, that very River Oroua. I know it very well. On Good Friday of 1895 I crossed that river, and the water was only up to my horse's hocks. On Easter Monday of 1895 I was nearly drowned in that river, and the whole of Feilding was under water; the water in the main street of Feilding was up to my horse's hocks. At that time the river would have taken all the refuse of the Manawatu; it very nearly took Feilding.

9. It would take a good deal of pollution to affect the Manawatu, would it not?—It would take a great deal.

10. In the judgment given in the Oroua case the Judge stated, I think, that if a man had an industry on a stream, and that stream was purer above his factory or mill than it was below, no matter what degree of pollution there was, it was contrary to English law, and an injunction must be granted on that ground. If that be the present law, how do you propose to deal under the Public Health Act with any stream that is less pure below a factory than above it?—As I said just now, I do not know anything about law, but I hope I know something about common-sense, and it seems to me that we must treat every case pretty well on its merits. It would be absurd to insist on the same standard for effluent to be admitted to the Manawatu as to a small slow-running stream. We must standardize our effluents. For example, we insist upon the drainage into our rivers from public septic tanks and so forth being of a certain standard, but in times of flood we allow the authorities controlling septic tanks to open them in order to dispose of their sludge.

11. *The Chairman.*] In evidence before the Committee complaint was made of town sewage entering the Oroua River higher up than where these flax-mills are discharging their waste?—Yes.

12. That came up in connection with the reported cases of typhoid fever; and we had evidence from medical men that the typhoid germ could pass, and did pass, through septic tanks without losing its vitality?—Yes, that is so; the possibility exists.

13. What would you say to evidence that was put before the Committee of cattle absolutely refusing to drink water in which there was a lot of the pulp from the flax-mills—water which, flowing sluggishly along, contained a lot of fermented matter?—I should certainly think that was true. Animals are very selective—horses especially—about where they drink. They are not likely to drink water that is subjected to active fermentation. They have not acquired the taste.

14. It was further stated that the difference in the condition of cattle was very marked as between the time when they were obliged to drink this water, there being no other, and when they were shifted where they got clean water?—I do not know much about cattle, but I can quite imagine that they would be liable to illness or discomfort if they had to drink water undergoing fermentation.

15. This is a section of the English Act as it stands: "Every person who puts or causes to be put or to fall, or knowingly permits to be put or to fall, or to be carried into, any stream,