

from should be led on to the sea-beach, or be allowed to soak through the sand into the ocean. It is contended that no nuisance would be created by this method. The cost of the pumping would, however, be an important item in the annual charges of working any effective scheme of drainage at this place. The prime cost of this scheme is estimated at about £22,000. This sum does not, however, include compensation for loss of riparian rights, land, way-leaves, or other claims or reticulation in the various districts, and the cost of pumping would amount to about £600 per annum, in addition to which there would be cost of maintenance and administration.

The principal difficulty in the adoption of this scheme is the fact that it would take most of the water out of the stream, and this would be fatal to the factories, and would give rise to enormous claims for compensation from the factory and all riparian owners, and Mr. Hay freely admits this (see his report, Exhibit II).

This scheme was proposed by the Taieri County Council, and, as a scheme, it was not shown to be at all impracticable; but the local bodies did not support it for reasons hereinafter set forth: that is to say, the Green Island Borough objected to the cost of pumping, and suggested that the expense of the proposed sewage-farm could be obviated by running the sewage on to the swamp, and then, as the sewage accumulates, covering it up with sand from the sandhills; but no evidence was given as to the cost or efficacy of such a procedure, or that it would be any better than the proposal to level an area of the sand from time to time, and run the sewage on to that area with the view of purifying the sewage and inducing vegetation to grow on the sand. The Borough of Green Island also considered that any interference with the sandhills would result in disaster, owing to the action of the wind thereon, and, as the sandhills are vested in them as a Domain, they objected to their being interfered with.

As regards these objections, it appears that the Domain contains 385 acres, and that more than 300 acres are barren sandhills with very little vegetation thereon, and that the sand from these sandhills is even now encroaching upon and destroying valuable land. The action of a sewage-farm is likely to end in the permanent establishment of vegetation, which is about the only thing which will satisfactorily arrest moving sand, and if vegetation can be made to grow on these sandhills it ought to be an advantage and not a detriment to the Domain and adjacent district.

(d.) *Septic-tank System.*

The Boroughs of Maori Hill, Mornington, and Roslyn had a drainage scheme of their own, which will, they contend, obviate any necessity for Hay's scheme, so far as they were concerned. Their scheme is the adoption of septic tanks. The portions of the Boroughs of Maori Hill and Mornington that are within the Kaikorai watershed have now obtained from the Dunedin City Waterworks a water-supply *sufficient for household purposes*, and the Borough of Roslyn either has or can obtain a similar supply. They propose to lay down sewage-drains in their various areas, which are to lead to a septic tank close to the Kaikorai Stream at a point near where the main branch of the stream joins the one from Maori Hill just above Ross and Glendining's mill, and they contend that if this septic tank is properly managed the effluent therefrom, which they propose to discharge into the stream, will be pure and innocuous, and this being so they contend that they are not interested in any general scheme of drainage for the whole valley, and that they are not liable to contribute towards the cost of any sewer or other work further down the valley, and that each district should be responsible for its own drainage and sewage.

This is all very fine, and in theory it looks splendid, but it makes no provision for the pollution of the stream by the wool-washing establishment or the Roslyn Woollen-mills within the Borough of Roslyn; neither does it take into account the pollution or otherwise of storm or surface water that may come into the stream from these districts, or from their septic tanks if not satisfactory. They propose to get over these difficulties by compelling the factory-owners to properly filter the water they use, or else to treat it chemically in such a manner