

Avondale.—Proposals for a drainage scheme have been discussed, but little can be done till the Drainage Board's sewer is completed through Arch Hill.

Onehunga.—Some uneasiness was caused as regards the discharge of sewage into the harbour by the occurrence of typhoid among those taking oysters from the beds on the Mangere foreshore. There was some reason to think that earlier in the year the system of discharging the tank only at the middle of ebb tide was not always observed, and this in certain states of the wind may have affected the Mangere beaches. However, any such deficiencies were remedied, and when in November I made a thorough inspection of the foreshores in the neighbourhood of the outfall no trace of pollution could be seen. The large body of sea-water passing out with the ebb tide is evidently sufficient to secure the oxidation of the sewage.

Water-supply.

The spread of population in the suburbs has caused a heavy increase in the demands on the water-supplies, and this year the exceptionally dry season has shown that the limit of safety has been reached. Further auxiliary supplies must be sought for those districts now dependent on the local springs at Onehunga, and those which draw their supply from Lake Takapuna.

A severe outbreak of gastro-enteritis in the Onehunga-Ellerslie district was obviously due to some infection in the water-supply, and a series of analyses of the water confirmed this suspicion. The source of contamination was probably the result of disturbance of the ground in the neighbourhood of the springs in an attempt to seek a more plentiful water-supply. Fortunately the contamination was only temporary, and the water rapidly returned to its normal state of purity. These springs generally show a high degree of purity, but a comparison of the analyses extending back some twelve years shows a steady increase in the proportion of nitrates. This is doubtless due to remote contamination from the ever-increasing population of the catchment-area, and indicates that apart from its insufficiency this source of supply cannot be relied upon for an indefinite period. A number of townships along the Main Trunk line from Ellerslie southwards to Papakura must now be regarded as suburban areas, and are increasing in population steadily. All these places will soon require water-supplies, and as there are available good catchment-areas in the Maungatawhiri and Hunia Ranges, it would seem reasonable to establish a Water-supply Board dealing with all these places and the south-eastern parts of Eden County by means of one comprehensive scheme. Some move in this direction is contemplated by the Onehunga Borough Council and the Manukau Water Board. The Mount Roskill Board have a small scheme in hand whereby they can supplement the supply at present drawn from the Manukau Trust. The source is from a deep well in the volcanic area from which the water is pumped to a reservoir. This will augment the former supply sufficiently for immediate needs. In the Epsom Road District there is a small but populous area wholly without water-supply, and, owing to the dry weather, the householders here suffered severely. The Epsom Board derive their supply from the Manukau Trust, but owing to some extraordinary oversight this area is excluded from the operations of that Trust, and the Road Board are unable to evolve any solution for what appears to be a simple enough situation to those not versed in the Gilbertian difficulties which arise from the absurd system of local government by small and wholly inefficient bodies. This case forms one of the many anomalies which will be removed by the inclusion of these suburban Boards in a Greater Auckland.

On the northern side of the harbour the four suburban boroughs had to exercise strict economy in the matter of water-supply, as the level of Lake Takapuna fell to a point dangerously near that at which the pressure of the sea will overcome that in the lake. These bodies are rather unfortunately situated in the matter of water-supply, since there is no satisfactory auxiliary source within reasonable distance, and an expensive scheme must soon be faced. The Devonport Borough Council are trying to make use of one of the natural reservoirs of water often found beneath the volcanic hills round Auckland. This may afford a temporary relief, but cannot be regarded as a permanent solution of the difficulty, as the supply must be very limited, and, though pure at present, is much exposed to possibilities of contamination. A comprehensive scheme shared between the boroughs—or, better still, handled by a large body resulting from the union of these boroughs—is much required.

Disposal of Refuse.

The disposal of household refuse in the more populous suburbs is an ever-increasing source of difficulty. At Mount Eden, for example, an old crater is used as a dump, and, though precautions are taken, it is a very unsatisfactory method of dealing with the waste from ten thousand persons. Newmarket was making use of one of the harbour reclamations, and thereby created a very serious nuisance. At Devonport a gully is being reclaimed with refuse, with the result that the neighbouring houses are infested with rats, and often in warm, moist weather are seriously inconvenienced by foul odours. In many of the suburbs no effort is made to deal with refuse. One of the benefits which will follow the inclusion of the suburbs in a greater city will be that modern methods of dealing with refuse can be introduced.

Sanitary Conditions of Country Districts.

In the country towns generally there has been distinct progress in sanitary matters during the year, and many of these places are models so far as their needs and means go of sanitary virtue. Te Aroha and Cambridge, as usual, coming first in this respect.

Many townships are handicapped from the first by having developed from a group of hastily constructed shanties needlessly crowded together. One of the principal sanitary needs of New Zealand is legislation which will prevent this overcrowding of buildings in rural districts. Later, when a town emerges from the primary chaos the local authority recognizes the need for some restriction in this direction, and building by-laws are passed limiting the subdivision of areas. But these towns are