# **3.8** Deputy R.G. Le Hérissier of the Minister for Planning and Environment regarding nitrate levels in the water supply:

What has been the trend in the last 5 years in respect of nitrate levels in the water supply and, in the case of an adverse trend, what mitigation measures, if any, are in place in order to reduce levels?

## Deputy R.C. Duhamel of St. Saviour (The Minister for Planning and Environment):

The level of nitrates in the Island's surface and ground water that form the supply of our drinking water are reducing and have steadily declined during the past 5 years. However, spikes of nitrate or nitrates in surface water in winter and spring continue to be problematic and at certain times of the year water in the public supply, and in many private bore holes and wells, can exceed the E.U. (European Union) and World Health Organisation limits for nitrates of 50 milligrams per litre. The level of nitrates in drinking water is regulated by my department under the Water (Jersey) Law 1972. Under the law, Jersey Water can request dispensations that permit such spikes of nitrates. These requests are considered in consultation with the Medical Officer of Health to ensure that no detrimental impact to health results in granting these. During the past 5 years, Jersey Water have complied with all the agreed dispensations. The declining nitrate levels in the raw water are mostly likely due to improvements in farming practices such as more appropriate and accurate fertiliser applications and, indeed, the nitrate level has fallen despite the area of potato farming increasing over the last 5 years. However, there is no room for complacency and my department is committed to reducing levels of nitrates in the Island's water supply. The work concentrates on the sustainable and lower cost solution of tackling nitrate at source rather than higher cost options of treatment of our drinking water.

## 3.8.1 Deputy R.G. Le Hérissier:

I wonder if the Minister could outline what the actual percentage drop has been over the last 5 years and also could he elaborate on the fact that the standards in many cases are not meeting E.U. standards according to his statement?

### **Deputy R.C. Duhamel:**

The average figures have gone from just under 60 milligrams per litre to just over 50 milligrams per litre. Sorry, what was the other question?

# **Deputy R.G. Le Hérissier:**

Is he happy that E.U. standards have in many cases not been followed according to his statement?

### **Deputy R.C. Duhamel:**

I did not say that E.U. standards have not been followed. The Environmental Health Department and our department do, as I mentioned, allow Jersey Water to allow for 33 per cent of the 76 annual samples to be taken to have nitrate levels that are higher than 50 milligrams per litre but not exceeding 70.

# 3.8.2 Deputy J.H. Young:

Could the Minister tell us how those levels of allowed nitrate in our drinking water compare with standards elsewhere, particularly Europe and the mainland?

## **Deputy R.C. Duhamel:**

I think generally they are quite high in relation to other areas, but the level of the figures is to be expected because of the nature of the farming in a small confined space.

# 3.8.3 Deputy J.H. Young:

Can he clarify when he says that they are bigger, could he tell us how much they exceed those levels elsewhere?

# **Deputy R.C. Duhamel:**

U.K. figures, and it really depends on which part of the U.K. you are talking about, regularly come in for maybe a quarter of those figures at well under the 50 milligrams per litre mark, at levels round about perhaps a half of that. In areas where there are high levels of farming and, indeed, application of fertilisers, the levels have reduced in line with the practices that have been undertaken both here and similarly in the U.K. areas.

## 3.8.4 Deputy M. Tadier:

Will the Minister explain what the sample sizes were that were used to determine the average and whether the average is the mean and what percentage of those samples fell above the 50 milligram limit?

## **Deputy R.C. Duhamel:**

I do not have those figures to hand at my fingertips but what figure I do have I can repeat. That was the department allows a third or thereabouts of the 76 samples to be taken by Jersey Water to exceed the nitrate levels as spikes for part of the year. Part of the science of regulating the levels at which the pollution, if you like, can take place are down to things like the frequency of the rain water, the extent that fields have had fertilisers placed upon them and, indeed, whether or not the waters that have come from the clouds have allowed those nitrates which are water soluble to wash out of the ground. Even if we were to reduce the levels of nitrates that are on the fields or applied at the moment through current farming practices to levels where they were negligent, it would still take a number of years - of the order of 10, I am being told, at least - in order to allow the inherent nitrate levels within the ground to climb to a level that ensured that we were way below the World Health Organisation limits for these particular chemicals.

### 3.8.5 Deputy M. Tadier:

Would the Minister be willing to publish the statistics which he does not have currently to hand and circulate them to Members?

### **Deputy R.C. Duhamel:**

Certainly, yes, and perhaps it is a bit remiss of me for not having those at my fingertips. I apologise to Members and certainly I am happy to get them published and forward it to Members.

### 3.8.6 Deputy R.G. Le Hérissier:

Can the Minister confirm that he is talking about a difference of 16 millimetres, being the norm that we should reach, versus often 50 millimetres? In other words, what is being found? Is he happy with that difference?

### **Deputy R.C. Duhamel:**

I did not say 16. I said it had declined from 60 down to just above 50, not 16. Sixteen, of course, is smaller than 50 and if 50 is set at the problem level then 16 would, indeed, be good practice.