

STATEMENTS ON A MATTER OF OFFICIAL RESPONSIBILITY

5.1 Senator F.E. Cohen (Minister for Planning and the Environment) regarding deep ground water investigations:

I wish to update States Members on the figures I gave them on 23rd May in respect of the experimental drilling investigations to establish the existence or otherwise of a deep groundwater connection with mainland Europe. The estimate figure I gave of £50,000 has subsequently been revised to £61,073 following precise identification of the drilling sites and the receipt of actual quotations. This cost covers drilling experimental boreholes at 2 sites in the east of the Island at La Rocque and St. Catherine's, technical supervision of the construction, analysis of water samples for isotopes and age, and expert interpretation and report. I can confirm that a contribution of £20,000 by Jersey Water towards the experimental costs will be obtained. In addition, I feel I should also explain that in addition to this figure, a further sum of £9,531 has previously been expended in support of the activities of the Deep Groundwater Advisory Group from their inception in November 2005 and prior to the inception of this experiment. The 2 sites involved have been identified as the best opportunity to find incoming water from mainland Europe by the well drillers who were given a completely free choice of site. Technical supervision, sampling analysis and interpretation of results will be jointly undertaken by the British Geological Survey and Entec. Entec were the consultancy engaged by the Scrutiny Panel when they examined the Draft Water Resources Law last year. The boreholes will be constructed in such a way that there can be no ingress of water from surface, lying or shallow groundwater to ensure that the water being sampled is from the deepest point only. The water samples will be tested for isotopic composition and also aged. Aging is necessary to rule out the possibility that the borehole has struck fossil water that fell in a previous era and has been trapped underground for millennia. The science of isotope testing is the analysis of the water molecule consisting of H₂O. The sample isotopes of hydrogen and oxygen have identical chemical properties but have slightly different physical properties. During rainwater events, the heavier hydrogen and oxygen isotopes tend to fall out as rain at a higher rate than the lighter isotopes. Thus it is possible to make maps of the isotope composition of water and use this to determine the area where groundwater originally fell as rain. I am pleased to report that all members of the Deep Groundwater Advisory Group have signed up to this experiment as being the definitive resolution of this matter. I am very grateful to Deputy Duhamel and Deputy Ferguson for all their hard work on the group and the support they have given me to ensure that this important agreement has been concluded. By test-pumping the boreholes, we will be able to determine the maximum obtainable yield. This will add to our knowledge of the Island's overall water resource.