QUESTIONS TO BE ASKED OF THE PRESIDENT OF THE ENVIRONMENT AND PUBLIC SERVICES COMMITTEE ON TUESDAY 10th JUNE 2003, BY THE DEPUTY OF ST. JOHN

Question 1

Will the President inform members whether potato leachate is still being removed from Beauport and whether, in the past, any of the leachate was disposed of through a discharge pipe near the Jersey New Waterworks Company Limited's desalination plant at Corbière, and if so, when?

Answer

Potato leachate is still being tankered out from Beauport for treatment at the Bellozanne Sewage Treatment Works. The exact amount is dependent on rainfall, but averages more than 1 million gallons per year.

In the past, some of the leachate was disposed of through a pipe belonging to the Jersey New Waterworks Company Ltd. at the desalination plant at La Rosiere, near Corbière. Exact dates are not available. However, my information is that no leachate has been discharged at La Rosiere since the implementation of the Water Pollution (Jersey) Law in 2000. All the leachate now goes for treatment at Bellozanne.

Question 2

Recently it has been reported that St. Brelade's Bay has failed to be awarded an EU mandatory pass by the Marine Conservation Society in its 2003 Good Beach Guide. Will the President inform members whether St. Brelade's Bay is monitored by the water resources section of the Public Services Department, and, if so, provide details of the number of tests undertaken annually and the results of these tests and what, if any, actions have been taken as a result?

Answer

To keep the answer strictly to the specific information requested, I thought it would be helpful if I attached a more complete and detailed Appendix for members' background information and future reference.

Yes, the Water Resources Section, Environment and Public Services Committee, monitors each year samples taken from St. Brelade's Bay.

The number of samples taken and analysed each summer is a total of 20, on a weekly basis, by two separate groups and laboratories. The samples are analysed for microbiological parameters called total colifoms, faecal coliforms and faecal streptococci, collectively called 'faecal indicator organisms'.

In 2002, during the external audit of all the results, a discrepancy was found between the data submitted by the Bellozanne Laboratory and the data from the Pathology Laboratory. The end result of this was that only the 10 results from Water Resources were submitted to the Marine Conservation Society, (MCS), for grading. This was done with the agreement of all concerned at a Water Resources Steering Group meeting, on the advice of the external auditor.

Because the results of the 10 samples submitted to MCS for 2002 included one for 11th September, which contained significantly elevated levels of coliforms above the *Imperative* standard, St. Brelade's only achieved a compliance rate of 90% for that year and failed to achieve the *Imperative* standard overall. This led to a down-grading of the beach in the 2003 Good Beach Guide. However, it should be noted that all the 11 other beaches submitted 'passed', with 10 achieving the MCS's highest recommendation.

Immediately following the 11th September analysis, the Water Resources Section carried out a pollution investigation at St. Brelade's Bay. No evidence was found that indicated anything else but that storm runoff had been responsible for the deterioration in water quality.

The 2003 bathing water sampling and analysis programme is now under way and the results to date from St. Brelade's show that the water quality is on a par with previous year's. Given a god summer, it is hoped that St. Brelade's will achieve the highest grading again in the 2004 Good Beach Guide.

In addition to the bathing water sampling programme, the Water Resources Section has implemented a monitoring programme for the non-sewage outfalls that discharge into St.Brelade's Bay (and other bays) in order to further quantify the impact of storm runoff on bathing water quality. The outcome will be reported to the Steering Group as soon as available.

APPENDIX TO QUESTION 2

Background The Marine Conservation Society (MCS) does not award passes or failures under the EU Bathing Water Directive. The Directive sets two standards, namely the *Guide* standard and the *Imperative* standard. These standards are then used by the Marine Conservation Society in the Good Beach Guide to grade beaches that are submitted to them. In order for MCS to recommend a beach for swimming, it must attain at least the *Guide* standard laid down in the Directive. This standard is currently the most stringent official standard in the world. The *Imperative* standard is 20 times less stringent and all beaches are required to achieve it to comply with the Directive.

St. Brelade's Bay has been monitored each year since 1992 for compliance with the EU Bathing Water Directive. The monitoring is carried out during the bathing season from mid-May to late September and the work is split equally between the Water Resources Section (Environment and Public Services Committee) and the Health Protection Department (Health and Social Services Committee). A total of 20 samples are taken during the bathing season on a weekly basis, 10 by each team. Both teams comply with a rigid protocol for sampling, which involves taking the samples in a minimum 1 metre depth of water 30 cm below the surface. Water Resources' samples are analysed by the Bellozanne Laboratory and Health Protection's samples are analysed by the Pathology Laboratory at the General Hospital. The samples are analysed for microbiological parameters called total coliforms, faecal coliforms and faecal streptococci, collectively called 'faecal indicator organisms'. They are present in large numbers in human sewage, but they are also present in the environment and are excreted in large numbers by all warm-blooded animals including birds.

At the end of each bathing season, the results are collated and sent for external audit to the Centre for Research into Environment and Health, University of Wales, who report on the compliance rates against the EU Bathing Water Directive.

In the years 1994-2001, St. Brelade's Bay achieved *Guide* standard 3 times (1994, 1999 and 2001). In the other years, it achieved *Imperative* standard and did not qualify in those years for the top grading from MCS. The reason for this is that the beach at St. Brelade is subject to land run-off from several non-sewage outfalls following rainfall events. These rainfall events carry faecal indicator organisms into the bathing water. These rainfall events occur on average 2-3 times each week during the bathing season. If the bathing water is samples after such an event, the beach can show elevated levels of faecal indicator organisms, which are not necessarily of human origin. This is what happens at St. Brelade's Bay and causes it to achieve the *Imperative* standard in most years. Jersey led the research in this area in the 1990s and this 'rainfall' effect has now been recognised throughout Europe.

In order to comply with the *Imperative* standard, the beach must achieve a 95% compliance rate with the standards in the EU Directive. This means that a beach can fail the *Imperative* standard once in each bathing season (assuming 20 samples are taken) and still pass the *Imperative* standard overall.

Summer of 2002 During the external audit of all the results, a discrepancy was found between the data submitted by the Bellozanne Laboratory and the data from the Pathology Laboratory. The end result of this, was that only the 10 results from Water Resources were submitted to MCS for grading.

A sample of seawater was taken by the Water Resources Section at St.Brelade's Bay on 11th September. On analysis it showed significantly elevated levels of coliforms above the *Imperative* standard. The most likely explanation was that this was due to runoff following very heavy rainfall on the 9th September, when 45mm of rain was measured at Bellozanne. Following this result, the Water Resources Section carried out a pollution investigation at St. Brelade's Bay. No evidence was found that indicated anything else but that storm runoff had been responsible for the deterioration in water quality.

Because the results of only 10 samples were submitted to MCS for 2002, including the 11th September result, St. Brelade only achieved a compliance rate of 90% for that year and failed to achieve the *Imperative* standard overall. This led to a down-grading of the beach in the 2003 Good Beach Guide. However, it should be noted that all the other 11 beaches submitted passed, with 10 achieving the MCS's highest recommendation.

Summer of 2003 This year's bathing water sampling and analysis programme is now under way and the results to date from St. Brelade's show that the water quality is on a par with previous years. Given a good summer, it is hoped that St. Brelade's will achieve the highest grading again in the 2004 Good Beach Guide.

In addition to the bathing water sampling programme, the Water Resources Section has implemented a monitoring programme for the non-seage outfalls that discharge into St. Brelade's Bay (and other bays) in order to further quantify the impact of runoff on bathing water quality.