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Deputy Phil Rondel

Chairman, Environment Scrutiny Panel

Morier House, St. Helier

JE1 1DD

5th August 2010

Dear Phil,

Protecting our Marine Environment: Scrutiny Review by the Environment Panel

The Connetable has passed on to me your letter of the 19th. July (your reference 514/14(5)) and asked me to respond. Hopefully my 12 years recent experience in the fish farming business will give me a little more knowledge than most in the matters to be discussed. The biggest threat to Jersey's marine environment is pollution. There are two obvious sources of this pollution. Firstly, that which originates outside our 3 mile limit (oil spills, algal blooms, chemical spills etc) and secondly the pollution that is created "on island" and (accidently or otherwise) allowed to spill into the seawater around our shores. We can do little about the first option, but we must do all we can to protect our marine environment from ourselves! In order to keep this response as short as possible I have tried to use bullet points rather than a standard letter format.

Your sincerely

Stephen

Stephen Luce

(on behalf of the Connétable of St Martin)

There are plenty of rules and regulations in place; they are just not used often enough.

There are more and more streams that are now part of the Jersey Water catchment system. All these potential catchment points are heavily monitored.

Due to the increased monitoring of the catchment system, the potential for industrial/private spills (oil, fuel, chemical etc.) into the sea is greatly reduced.

The Minister (Planning and Environment) is charged with maintaining, and improving, the quality of water that arrives on our shoreline. Although the water leaving the "stream system" is improving, he is NOT fullfilling his obligations in the respect of water in the "foul water system".

This "foul water" is the greatest threat to the marine environment that we currently have.

15 years ago the island's sea water was as clean as anywhere in the British isles. This is no longer the case.

Since April 2009 (and for the first time since the mid 90's) it is no longer possible to sell shellfish directly to the public from Jersey beaches. (see Appendix 1)

The reason that shellfish can no longer be sold directly to the public is because the monthly testing programme is showing excessively high levels of e.coli. These levels can only occur because of discharges from the "foul water system".

The two main sources of pollution are the Bellozane treatment works and the "Cavern".

To a lesser extent, the emergency foul water outfalls around the south east corner of the Island also contribute to pollution. However, it is more general for these stations to continue pumping "to town", and for the excess to be put into the sea via the cavern or Bellozane.

When the UV plant at Bellozane was first commissioned (following pollution of shellfish etc. in the early 1990's) it did an excellent job. That "new" plant was part of a 10 year programme of improvements. <u>This programme is still not completed</u>.

To my knowledge here have been no improvements or, more importantly, expansion of the Bellozane Treatment plant since it was commisioned. In the intervening time the population has increased (!) Jersey residents now expect to have dishwashers, washing machines and other water using domestic appliances as a matter of course. All these contribute to the total amount of water entering the foul sewer, and consequently needing treatment.

The continued addition of rainwater into the foul sewer adds even more pressure on Bellozane. Not enough effort has gone into seperating these two liquids.

The cavern under Fort Regent was built (as part of the 10 year plan) to store water from the foul sewage system at times when Bellozane could not cope (usually due to excessive rainfall). It was originally required very infrequently during the 90's, but with exceptional weather events happening ever more frequently, it is currently brought into use more and more often.

Due to the population increase etc. and other reasons described previously, the number of hours that it takes for Bellozane to become "overloaded" gets shorter every year. (Appendix 2)

At times of high rainfall "the system" (described above) can now no longer cope.

While there is potential for pollution from streams, e.g. the one that runs to sea at the Dicq (this stream runs through Rue des Pres Trading Estate), it has never been proved that these smaller "non catchment area" streams are the cause of major pollution.

Although shellfish farmers are officially informed everytime there is a discharge from Bellozane or the cavern, it is generally felt within the shellfish industry that discharges are made at other times.

During 2009 tests were taken that proved that the Bellozane outfall was pumping heavily polluted water to sea, but no official notification was issued to shellfish farmers. (Appendix 3)

Oysters and mussels are tested monthly for *e.coli*, and the shellfish beds are graded accordingly. Given the average levels that the results show, and taking into acount the huge tidal volumes of seawater that flow around out shores, there must be much more pollution occuring than is officially admitted.

There is one small oyster bed behind Seymour Tower that is still classed as grade A. The fact that the water further out to sea is much cleaner also proves that the pollution originates from land, and is not seabourne.

It also seems incredible that the island's beaches get top results for their bathing water, but the shellfish farmers get results that show that the sea is polluted on a fairly regular basis.

The current grading of shellfish beds is costing the shellfish industry tens of thousands of pounds every year. This is through no fault of their own.

The obvious answer to all these problems is to stop pumping/discharging polluted water into the sea. The ultimate answer is to build a facility that can cope. It is most likely that any new treatment works would have to be relocated at La Collette. The cost of this will make the new Energy from Waste Plant/Incinerator look cheap!

A more sensible short term compromise would be to extend the outfall pipe from Bellozane some miles south of the island, so that it discharged well away from our shores. This would undoubtedly increase the quality of the seawater on out beaches dramatically.

Whatever the outcome, there is no doubt that things will just continue to worsen while nothng is done. The ever increasing population will make the proper treatment of foul water a more and more difficult goal to achieve.

Decisions need to be made. We are 15 years behind with the replacement of the Bellozane incinerator (and in the last few years we have been pumping all sorts of pollutants into the air). We will shortly be in a similar situation with the water treatment works. It is these facilities that are the greatest threat to the marine environment that we have at present.

Appendix

1)

Oyster beds are graded annually. Shellfish from Grade A beds can be sold direct for human consumption. From 1997 until April 2009, Jersey Oyster had beds at Le Hocq and/or Grouville Bay that were grade A. Since April 2009 Jersey Oyster have not had any grade A beds. (data from Jersey Oyster monthly results/Environment Dept.) The average "limit" for grade A is 230.

Number of Monthly results over 230.

	Le Hocq	Grouville
1999	2	1
2000	2	2
2001	2	2
2002	1	1
2003	1	4
2004	1	2
2005	0	2
2006	1	1
2007	1	4
2008	3	7
2009	4	6
2010 (to date)	1	1

Note 1. Example of pollution affecting shellfish on Jersey Beaches.

On 28th. February 2010, oyster farmers in Jersey were advised of an overspill from the sewerage system, resulting in a discharge into the sea. The following day oysters were sampled from both beaches. (results from Environment Department)

(n.b. acceptable level for human consumption	**230)**
result from oysters at La Hocq (1/4/10)	**2400**
result from oysters in Grouville Bay (1/4/10)	**5400**

2)

Annual total hours of discharge to the sea (overspill) from West of Albert/Weighbridge(Cavern).

Data from Water Resources.

2001 0 hours

2002 0 hours

2003 0 hours

2004 4 occasions (no time data)

2005 no data supplied

2006 17 hours 9 minutes (9 occasions)

2007 6 hours 49 minutes (6 occasions)

2008 36 hours 8 minutes (9 occasions)

2009 8 hours + (3 occasions)

2010 to date, 6 hours 44 minutes (2 occasions)

3)

Details of Incident in June 2009.

In June last year, during a downpour, Jersey Oyster suspected that there might be untreated liquid being discharged on to the beaches. 4 samples were taken from various outfalls by Jersey Oyster and submitted for analysis. No specific indication was given of where the sampling sites were. It was assumed by TTS/Water Resources that all the samples had been taken from the East coast, when in fact the last sample came from the First Tower outfall (i.e. from Bellozane Treatment Works)

■ **Analysis:**

The samples have been analysed with the following results;

	coliforms, faecal, presumptive cfu/100ml
1	21000
2	23000
3	76577
4	590909

Nick Hubbard BSc MChemA MBA CChem MRSC

Official Analyst to the States of Jersey

- **Because the samples were not presented for analysis within a short enough time period they were not able to be officially recognised.**