



# Atlantic Shellfish Ltd.

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ENVIRONMENTAL PROTECTION  
AGENCY

28 APR 2008

Dr. Suzanne Monaghan,  
Office of Environmental Enforcement,  
Environmental Protection Agency,  
PO Box 3000,  
Johnstown Castle Estate,  
Co. Wexford.

24<sup>th</sup> April 2008

Dear Dr. Monaghan,

**Re: Middleton WWTP and monitoring the stormwater overflows in the Owenacurra River -  
Ref. No. 04-15-04-06-03**

With reference to your letter of 21<sup>st</sup> August last year and to the report of the site visit you carried out yourself on 3<sup>rd</sup> August, which you kindly sent me, I am concerned about the results being supplied in answer to your recommendation No.2, "to carry out an assessment of the impact of the storm water overflows on the Owenacurra estuary..."

I have asked Cork County Council for the location of their sampling points, but have been informed that "no records exist detailing location of sampling points or time samples taken" – but that the time of sampling is normally approx. 10.00a.m. I was also sent the results of the monitoring from October 2007 to March 2008, which I enclose, from which one would deduce that the water is far cleaner downstream of the storm tank, than above it.

This is especially so for the month of January and yet, in January, the total pumped overflow from the Bailick 1 storm tank was a quite massive 65,360m<sup>3</sup>. Overflows occurred on every day of the month and the storm tank contained probably even more faecal matter than was pumped to the treatment plant itself (sampling records enclosed). There were also significant overflows (>50m<sup>3</sup>) from Bailick 2 on 23 of the days, totalling 10,771m<sup>3</sup>. Knowing this, I am concerned that the sampling programme that you asked to be set up, does not appear to be picking this up.

The photo No.1, which you added to your report, shows the location of a composite sampler on the other side of the stream from the gabions, which hold the 4 x 600mm storm water discharge pipes. Can you tell me if this is the upstream sampler? If it is the downstream sampler, it is not going to pick up any storm water discharge whilst there is any appreciable flow in the river and I would have thought the two sampling points should be either on the same side of the river as the discharge, or a good distance away away? Possibly the upstream sampler could be set to measure the quality of the river water coming in to Middleton – well clear of the storm discharge, which may

well travel upstream at the top of the flooding tide. The site of the County Council's river gauge above the tidal reach at Ballyedmond might be such a place? We are, after all, hoping that there are no other sewage discharges to the river in Midleton any more now. The "Bailick 1 downstream" and "Bailick 2 upstream" sampler could be set at the halfway mark, about 300m from each overflow tank?

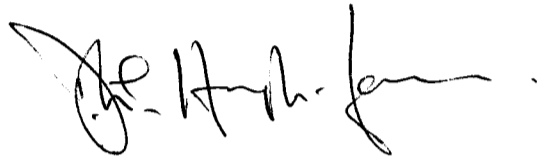
Could you also tell me what length of time the composite sampler is collecting its weekly sample? I presume it is just over the previous 24 hours, but it is most important to know. Do you, perhaps, have a protocol for this sampling?

I would be grateful to hear what you think and whether you could ask that sampling times are recorded because of the tidal nature of the river here.

I look forward to hearing your views.

With best wishes,

Yours sincerely,



D.L. Hugh-Jones

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DATE	UPSTREAM OF BAILLICK 1 OVERFLOW				Overflows at Baillick 1				DOWNSTREAM OF BAILLICK1/UPSTREAM OF BAILLICK2 OVERFLOWS				Overflows at Baillick 2				DOWNSTREAM OF BAILLICK2 OVERFLOW				
	Sample A		Sample B		Sample A		Sample B		Sample A		Sample B		Sample A		Sample B		Sample A		Sample B		
	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	Total	Faecal	
19/10/07	22,000	8,800	21,000	8,400	20,000	6,700	14,000	9,300	14,000	9,300	14,000	9,300	14,000	9,300	14,000	9,300	14,000	9,300	14,000	9,300	
26/10/07	200,000	80,000	15,000	10,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	19,000	<1,000	
02/11/07	14,000	3,600	17,000	10,000	6,000	<1,000	7,200	2,900	7,200	2,900	7,200	2,900	7,200	2,900	7,200	2,900	7,200	2,900	7,200	2,900	
09/11/07	7,900	7,900	5,200	5,200	5,800	4,300	6,200	2,500	6,200	2,500	6,200	2,500	6,200	2,500	6,200	2,500	6,200	2,500	6,200	2,500	
16/11/07	9,100	9,100	12,000	4,800	2,000	400	400	<100	400	<100	400	<100	400	<100	400	<100	400	<100	400	<100	
23/11/07	51,000	38,000	31,000	16,000	2,200	<1,000	3,400	780	3,400	780	3,400	780	3,400	780	3,400	780	3,400	780	3,400	780	
30/11/07	29,000	<1,000	24,000	9,600	3,700	740	740	<1,000	3,700	740	3,700	740	3,700	740	3,700	740	3,700	740	3,700	740	
07/12/07	4,400	880	1,000	<100	7,800	2,600	11,000	<1,000	7,800	2,600	11,000	<1,000	7,800	2,600	11,000	<1,000	7,800	2,600	11,000	<1,000	
14/12/07	18,000	<1,000	9,600	6,400	900	300	570	<100	900	300	570	<100	900	300	570	<100	900	300	570	<100	
19/12/07	17,000	<1,000	6,600	4,400	5,400	2,700	2,700	7,200	5,400	2,700	2,700	7,200	5,400	2,700	2,700	7,200	5,400	2,700	2,700	7,200	
04/01/08	13,000	5,200	20,000	8,400	10,000	10,000	10,000	6,200	10,000	10,000	10,000	6,200	10,000	10,000	10,000	6,200	10,000	10,000	10,000	10,000	6,200
11/01/08	36,000	<1,000	>200,000	>200,000	12,000	7,200	24,000	<1,000	12,000	7,200	24,000	<1,000	12,000	7,200	24,000	<1,000	12,000	7,200	24,000	<1,000	12,000
18/01/08	>200,000	160,000	23,000	4,400	6,700	<1,000	3,000	6,200	6,700	<1,000	3,000	6,200	6,700	<1,000	3,000	6,200	6,700	<1,000	3,000	6,200	6,700
25/01/08	22,000	4,400	71,000	36,000	5,000	3,000	3,000	<1,000	5,000	3,000	3,000	<1,000	5,000	3,000	3,000	<1,000	5,000	3,000	3,000	<1,000	5,000
01/02/08	120,000	60,000	34,400	<1,000	4,200	1,100	1,100	2,200	4,200	1,100	1,100	2,200	4,200	1,100	1,100	2,200	4,200	1,100	1,100	2,200	4,200
08/02/08	8,400	<1,000	16,000	5,400	4,700	1,600	1,600	2,200	4,700	1,600	1,600	2,200	4,700	1,600	1,600	2,200	4,700	1,600	1,600	2,200	4,700
15/02/08	21,000	11,000	7,600	2,500	6,000	<100	<100	6,600	6,000	<100	<100	6,600	6,000	<100	<100	6,600	6,000	<100	<100	6,600	6,000
22/02/08	6,400	1,300	4,400	<100	4,000	1,300	1,300	2,200	4,000	1,300	1,300	2,200	4,000	1,300	1,300	2,200	4,000	1,300	1,300	2,200	4,000
29/02/08	3,200	<100	3,700	1,500	20,000	<1,000	53,000	<1,000	20,000	<1,000	53,000	<1,000	20,000	<1,000	53,000	<1,000	20,000	<1,000	53,000	<1,000	20,000
07/03/08	2,000	<100	770	<100	4,700	1,900	4,700	940	4,700	1,900	4,700	940	4,700	1,900	4,700	940	4,700	1,900	4,700	940	4,700
14/03/08	10,000	10,000	8,000	6,400	8,200	1,600	8,800	5,300	8,200	1,600	8,800	5,300	8,200	1,600	8,800	5,300	8,200	1,600	8,800	5,300	8,200
20/03/08	8,900	<100	8,000	6,400	47,000	19,000	52,000	<1,000	47,000	19,000	52,000	<1,000	47,000	19,000	52,000	<1,000	47,000	19,000	52,000	<1,000	47,000

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Date	Volume pumped to river from Baillick No. 1 pumphouse m3	Volume pumped to river from Baillick No. 2 pumphouse m3	Volume pumped to river from Baillick No. 2 pumphouse m3	Volume pumped to river from Baillick No. 2 pumphouse m3	Total volume of storm effluent pumped to river m3	Volume pumped to treatment plant m3	Total volume arising in scheme; storm effluent + treated m3	Storm discharge as percent of total volume %	Baillick No.1: storm pump No.1: hours run
01-Jan-08	277.20	0	0	0	277	5,156	5,433	5	0.00
02-Jan-08	277.20	0	0	0	277	4,745	5,022	6	0.10
03-Jan-08	176.20	0	0	0	178	5,005	5,183	3	0.02
04-Jan-08	198.00	0	0	0	198	4,730	4,928	4	0.03
05-Jan-08	2970.00	648	0	0	3,618	4,611	8,229	48	0.51
06-Jan-08	198.00	209	0	0	407	4,983	5,390	8	0.03
07-Jan-08	475.20	598	0	0	1,073	4,587	5,660	21	0.08
08-Jan-08	217.80	497	0	0	715	5,448	6,163	13	0.04
09-Jan-08	1663.20	504	0	0	2,167	5,213	7,380	32	0.27
10-Jan-08	10276.20	2,066	0	0	12,343	3,169	15,512	92	1.71
11-Jan-08	4237.20	886	0	0	5,123	6,138	11,261	49	0.72
12-Jan-08	4494.60	302	0	0	4,797	4,519	9,316	53	0.75
13-Jan-08	5801.40	1,155	0	0	6,953	6,133	13,086	58	0.97
14-Jan-08	2811.60	425	0	0	3,236	5,418	8,654	39	0.46
15-Jan-08	2732.40	468	0	0	3,200	6,033	9,233	37	0.47
16-Jan-08	1940.40	367	0	0	2,308	6,453	8,761	27	0.31
17-Jan-08	1544.40	65	0	0	1,609	6,619	8,228	20	0.28
18-Jan-08	2098.80	29	0	0	2,128	6,766	8,894	24	0.33
19-Jan-08	3029.40	72	0	0	3,101	6,769	9,870	32	0.52
20-Jan-08	3742.20	583	0	0	4,325	5,706	10,031	46	0.62
21-Jan-08	3088.80	29	0	0	3,118	5,597	8,715	36	0.51
22-Jan-08	3781.80	554	0	0	4,336	5,972	10,308	44	0.64
23-Jan-08	2554.20	180	0	0	2,734	6,693	9,427	30	0.44
24-Jan-08	1742.40	295	0	0	2,038	6,932	8,970	23	0.29
25-Jan-08	1108.80	245	0	0	1,354	7,042	8,396	17	0.17
26-Jan-08	1445.40	252	0	0	1,697	7,945	9,642	18	0.25
27-Jan-08	673.20	108	0	0	781	6,342	7,123	11	0.12
28-Jan-08	673.20	101	0	0	774	6,393	7,167	11	0.11
29-Jan-08	316.80	0	0	0	317	7,298	7,615	4	0.04
30-Jan-08	693.00	137	0	0	830	7,802	8,632	10	0.13
31-Jan-08	118.80	0	0	0	119	7,519	7,638	2	0.02
<b>Totals</b>	<b>65359.80</b>	<b>10771.20</b>	<b>0.00</b>	<b>0.00</b>	<b>76131.00</b>	<b>183736.00</b>	<b>259867.00</b>	<b>31</b>	<b>10.94</b>

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DATE	DB1 INFLUENT TOTAL	DB1 INFLUENT FAECAL	DB2 PRE UV TOTAL	DB2 PRE UV FAECAL	DB3, POST UV TOTAL	DB3, POST UV FAECAL	DB4 BABYS WALK TOTAL	DB4 BABYS WALK FAECAL	DB4A STORM TOTAL	DB4A STORM FAECAL	DB5 INDUSTRIAL TOTAL	DB5 INDUSTRIAL FAECAL	DB5 INDUSTRIAL TOTAL	DB5 INDUSTRIAL FAECAL	DB6 RATHCOURSE TOTAL	DB6 RATHCOURSE FAECAL	DB7 BALLINACOURR TOTAL	DB7 BALLINACOURR FAECAL	DB7 BALLINACOURR TOTAL	DB7 BALLINACOURR FAECAL
04/01/08	11,000,000	7,000,000	210,000	110,000	280	280	2,000	2,000	4,000,000	4,000,000	1,300	1,300	300	300	1,100	1,100	1,100	1,100	440	440
11/01/08	860,000	520,000	19,000	15,000	76	76	2,200	2,000	3,000,000	1,800,000	24,000	24,000	24,000	24,000	<100	<100	570	570	570	570
18/01/08	<1,000,000	<1,000,000	110,000	110,000	34	34	500	2,200	30,000,000	20,000,000	480	480	250	250	600	600	390	390	<10	<10
25/01/08	5,300,000	2,100,000	48,000	9,600	11	11	7	500	4,400,000	1,500,000	1,500	1,500	900	900	430	430	430	430	260	260

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