

Atlantic Shellfish Ltd.

Rossmore, Carrigtwohill, Co. Cork, Ireland

Tel: + 353 21 4883248

Email: farm@oysters.co.uk

Environmental Licensing Programme, Office of Climate, Licensing and Resource Use, Environmental Protection Agency, P.O.Box 3000, Johnstown Castle Estate, Co. Wexford, Ireland.

4th July 2008

Dear Sirs,

Waste Water Discharge Licence Application D0056-01 Carrigtwohill WWTP

Further to our submission of 28th March; to Cork County Council's Revised Application posted on your website on 26th May and to my letters to Dr. Suzanne Monaghan of 24th April and 27th May, which she said she was passing on to you as referring to the above application, I am concerned that they have not been posted on the website, nor that I cannot get a reply from you on the seeming inadequacy of the County Council's monitoring programme to show up storm overflows from the two storm overflow tanks at Bailick 1 & 2 pumping stations.

I think it is very important that I register with you that it would appear that there has been little observable benefit from the County Council's infiltration remediation programme last year. This would support our observations over the years that the greater the flow that enters the WWTP, the greater the BOD load. Clearly infiltration should dilute what would be expected to be, a constant daily load of sewage.

I understand that the remediation was completed in the summer of 2007 and that the Dwyer's Road pumping station, which was constructed to avoid the sewage from the north-west of Midleton having to be pumped under the river, where major infiltration was suspected, began pumping into the WWTP on 12th September 2007. Yet, three months after all this work was completed and tested by not abnormally high rainfall in January this year, the storm overflows were as bad as they ever were.

I enclose again the figures for the storm overflows for January this year, which were 76,131m3 (76,131 tons or 76 million litres - whatever the public may best understand). You can see from the following table that they were unchanged from the huge storm overflows of the 2006/07 winter.

Storm Overflow data for winter 2006/07

| Month | Rainfall (mm) | No. >40m3 | Total vol. m3 | Av. spills/day | Av.vol/day m3 |
|--------|------------------|-----------|------------------|----------------|------------------|
| Oct-06 | 151.8 | 55 | 64,272 | 1.8 | 2,073 |
| Nov-06 | 173.2 | 57 | 75,589 | 1.9 | 2,520 |
| Dec-06 | 160.7 | 62 | 155,327 | 2.0 | 5,011 |
| Jan-07 | 70.0 | 50 | 52,891 | 1.6 | 1,706 |
| Feb-07 | 136.9 | 53 | 80,202 | 1.9 | 2,864 |
| Mar-07 | 76.7 | 57 | 68,022 | 1.8 | 2,194 |
| Apr-07 | 37.3 | 19 | 5,841 | 0.6 | 307 |
| May-07 | 57.3 | 19 | 6,408 | 0.6 | 337 |
| Jun-07 | 161.1 | 25 | 18,571 | 0.8 | 743 |
| Jul-07 | 106.8 | 36 | 13,873 | 1.2 | 385 |
| Aug-07 | 85.4 | 19 | 9,450 | 0.6 | 497 |
| Sep-07 | 28.8 | 5 | 1,310 | 0.2 | 262 |
| Oct-07 | 46.6 | 24 | 6,948 | 0.8 | 290 |
| Nov-07 | 58.4 | 15 | 3,746 | 0.5 | 250 |
| Dec-07 | 92.9 | 24 | 9,828 | 0.8 | 410 |
| Jan-08 | 155.4 | 54 | 76,131 | 1.7 | 1,410 |



It has often claimed been claimed by the County Council and their consulting engineers that these storm overflows have had the "first flush" of sewage settled out in the storm tank and what reaches the river is extremely dilute. This certainly no longer applies at Midleton, where the tanks are overflowing every day and the cells are full. In fact the bacteriological concentrations in the Bailick 1 storm tank were as least as high as the sewage entering the WWTP:

Faecal coliform concentration of influent to WWTP and storm tank overflows to river.

| Date | Influent to WWTP (f.c./100ml) | Storm overflows to river (f.c./100ml) |
|----------|-------------------------------|---------------------------------------|
| 04.01.08 | 7,000,000 | 4,000,000 |
| 11.01.08 | 520,000 | 1,800,000 |
| 18.01.08 | <1,000,000 | 20,000,000 |
| 25.01.08 | 2,100,000 | 1,500,000 |

I am copying this letter to the Legal Unit in DG Enveronment, Brussels, as I know they are aware of the infiltration remediation programme and they will be as disappointed as we are that it does not appear to have made any difference.

They are also aware of your website and the transparency with which the process of Waste Water Licensing and involvement of the public should be being carried out and I was hoping that your own correspondence with Cork County Council would be being posted up, as it appears to be being put on the website for Westport WWTP and other Co. Mayo applications. Could I ask you please to do this.

There may also be others watching your Midleton WWDL website, who will be equally dismayed at what is still going on in Midleton, when they gave up most of last summer to the inconvenience of the main street being dug up and thus I would be grateful if you can not only take these observations into account in determining the WWDL's for Midleton, but will also post them on the website.

I would be grateful for your confirmation.

With many thanks.

Yours sincerely,

D.Ll.Hugh-Jones

Copy with attachments to the Legal Unit, DG Environment, Brussels

torinspection purposes only any other use.

| | | Bailick No.1: | storm pump | No.1: | hours run | 0.00 | 0.10 | 0.02 | 0.03 | 0.51 | 0.03 | 0.08 | 0.04 | 0.2 <u>7</u> | 1,71 | 0.723 | -,0775 | 26,0 | | 20.47 | 30,317° | 0.28 | 0,33 | 0.52 | :0.62 :-: | , 051 % | £0.64 | . 10.04 | *** 50.29° | 21.0 | 2025 | 3C1:05 | 0.41 | 0.04 | .0.13 | 0.02 | 10.94 |
|--------------|------------|----------------------------|-------------------------|-----------------|------------------------------|--------------------|-----------|---|-----------|-----------|-----------|-----------|---------------|--------------|---|--------------|---------------|-----------------|--|-----------|------------|--------------|-----------|-----------|------------|-----------|------------|------------|--|------------|-------------|------------|-----------|-----------|-----------|----------|-----------|
| | Storm | discharge as | percent of | total volume | % | 5 | 9 | 3 | 4 | 48 | 8 | 21 | 13 | 32 | 92 | 49 | 53 | 58 | 39 | 37 | 27 | 20 | 24 | 32 | 46 | 36 | 44 | 30 | 23 | 17 | 18 | 11 | 11 | 4 | 10 | 2 | 31 |
| Total volume | arising in | scheme; storm discharge as | + treated | effluent | m3 | 5,433 | 5,022 | 5,183 | 4,928 | 8,229 | 5,390 | 2,660 | 6,163 | 7,380 | 15,512 | 11,261 | 9,316 | 13,086 | 8,654 | 9,233 | 8,761 | 8,228 | 8,894 | 9,870 | 10,031 | 8,715 | 10,308 | 9,427 | 8,970 | 8,396 | 9,642 | 7,123 | 7,167 | 7,615 | 8,632 | 7,638 | 259867.00 |
| | | Volume s | pumped to | treatment plant | m3 | 5,156 | 4,745 | 5,005 | 4,730 | 4,611 | 4,983 | 4,587 | 5,448 | 5,213 | 3,169 | 6,138 | 4,519 | 6,133 | 5,418 | 6,033 | 6,453 | 6,619 | 992'9 | 6,769 | 5,706 | 2,597 | 5,972 | 6,693 | 6,932 | 7,042 | 7,945 | 6,342 | 6,393 | 7,298 | 7,802 | 7,519 | 183736.00 |
| | | Total volume of | storm effluent | pumped to river | m3 | 277 | 277 | 178 | 198 | 3,618 | 407 | 1,073 | 715 | 2,167 | 12,343 | 5,123 | 4,797 | 6,953 | 3,236 | 3,200 | 2,308 | 1,609 | 2,128 | 3,101 | 4,325 | 3,118 | 4,336 | 2,734 | 2,038 | 1,354 | 1,697 | 781 | 774 | 317 | 830 | 119 | /6131.00 |
| | | to river | a No. 2 | ē | | | | | | | | | | 2.5 | | | | | | | | | | | 4.5 | | | ej Nas | | | | - 4.1 | | | | 0 | 0.00 |
| | | Volume pumped to river | from Ballinacurra No. 2 | esnoydwnd | m3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Ο. |) | 0 . (| > (| o \ | O (1) | tor 60 | o day | o diner | 0 R | 0 | 0 | 0 | o (| 3 | ၁ (|) | O zi | 5 | 0 (| 0 | 0 0 | o | |
| | | volume pumped to | river from Bailick | No. 2 pumphouse | m3 |) | 0 0 | 0 (| 0 | 648 | | 298 | 10 C | 500 d | 00000000000000000000000000000000000000 | ion ow | Dur. | 251,1 2011,1 | 425 460 | 468 | 36/ | 03 00 | 67 | 7/ | 583 30 | 67 | 554 480 | 180 | 295 | 245 | 727 | 108 | 101 | 0 793 | 13/ | 10771 20 | 07:17:01 |
| | | 0 | river from Bailick | No. 1 pumphouse | 2 1 1 1 1 1 1 1 1 1 1 | 107.117 107.117 | 277.20 | 7.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1.4 1 | 198.00 | 29/0.00 | | ** | 27.78 2.77 | | 1000000 100000000000000000000000000000 | 57.75 | | 506 108C | 100 TO 10 | 2/3/240 | | ? //3 | 00.0607 | | 20 74 CO | 3,000,000 | | 7.07 | 47 40° 00° 00° 00° 00° 00° 00° 00° 00° 00° | | CHICAGO | | 24E 80 | 00.000 | 035.00 | 65359 80 | |
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