

# Comhairle Contae Chorcaí Cork County Council

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Noeleen Keavey,  
Programme Officer  
Licencing Unit  
Office of Licencing & Guidance  
Environmental Protection agency  
Johnstown Castle Estate  
County Wexford  
Ireland

Subject :IPPC Reg No. W0211-01 (AVR-Environmental Solutions Ltd Foxhole ,Youghal , Co. Cork)

11<sup>th</sup> July 2006

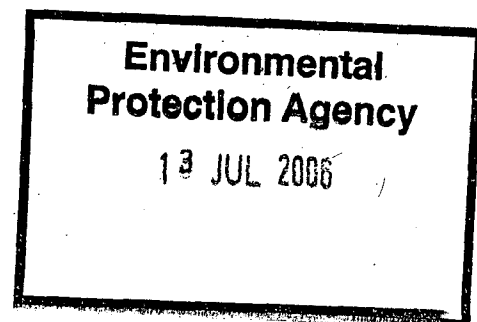
Dear Ms Keavey ,

I wish to acknowledge receipt of the correspondence regarding the sanitary Authority response to Section 52 (Waste Management Act ) regarding a consent to discharge to sewer .  
The Section 52 response request is completed and is attached to this letter. Cork County Council as the sanitary authority will consent to the discharge subject to the attached conditions

Should you have any queries or clarification my contact details are supplied below  
Phone no. 021-4532700  
E mail [valerie.hannon@corkcoco.ie](mailto:valerie.hannon@corkcoco.ie)

Yours Sincerely

Valerie Hannon,  
Executive Scientist  
Wastewater Laboratory



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Instrumental  
Yonkers, N.Y.



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Ms Patrica Power  
Director of Environment  
Cork County Council  
Inniscara  
Cork  
Attn: Ms Patricia Power, Director of Environment

*To Ms Patricia Power  
for attention  
please  
09/06/06*

7 June 2006

Reg No: W0211-01

Dear Ms Power

I am to advise you that the Agency has received an application for a Waste Licence from AVR-Environmental Solutions Limited, for a facility located at AVR-Environmental Solutions Limited, Foxhole, Youghal, Co Cork.

The applicant proposes, as part of this application, to provide for the discharge of process effluent to a sewer, which the applicant has stated is vested in, or controlled by, your Council. Process effluent includes trade effluent or other matter (other than domestic sewage or storm water). I enclose copy extracts from the application form, which detail proposed discharges. A Section 52 request was initially made by the Agency, letter dated 21/04/05, to which the Council responded on two occasions, letters dated 10/06/05 and 03/02/06.

*by  
K. O'Connell  
12/6/06*

The provisions of Section 52 of the Waste Management Acts, 1996 to 2005, provides that the Agency shall obtain the consent of the sanitary authority to the proposed discharge from an activity which involves the discharge of trade effluent or other matter (other than domestic sewage or storm water), to a sewer vested in or controlled by a sanitary authority.

In order to expedite the Agency's consideration of this waste licence application, I am to request your authority's consent to the proposed discharge/s. It should be noted that, your authority's consent may be subject to such conditions as your authority considers appropriate as provided for in Section 52 of the Waste Management Acts, 1996 to 2005 and Section 99E(3) of the Environmental Protection Agency Acts, 1992 and 2003. Your attention is drawn to paragraphs (3) and (4) of the attached copy of the relevant section of the Act. For your convenience please find attached a reply form including a list of draft conditions compiled by the Agency.

*Rec'd VH.  
12/6/06*

In accordance with paragraph (2) of this section of the Act, you are requested to forward your response within 5 weeks of the date of this letter. Please note that any decision given after the expiry period shall be invalid and in those circumstances the Agency may proceed to determine the application concerned as if consent was obtained. Ciara Maxwell is dealing with this matter and can be contacted at the Licensing Unit, Office of Licensing & Guidance Dublin(Tel. No. 01-2680100) if you have any queries.

Your co-operation in this matter is appreciated.

Yours sincerely,



Noeleen Keavey  
**Programme Officer**  
**Licensing Unit**  
**Office of Licensing & Guidance**

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**Section 99E (3) & (4) of the Environmental Protection Agency Acts, 1992 and 2003**

- (3) Subject to subsection (4), a consent under subsection (1) may be granted subject to or without conditions and if it is granted subject to conditions the Agency shall include in the licence or revised licence concerned conditions corresponding to them or, as the Agency may think appropriate, conditions more strict than them.
- (4) The conditions that may be attached to a consent by a sanitary authority under this section are the following and no other conditions, namely conditions-
- (a) relating to-
    - (i) the nature, composition, temperature, volume, level, rate, and location of the discharge concerned and the period during which the discharge may, or may not, be made,
    - (ii) the provision, operation, maintenance and supervision of meters, gauges, manholes, inspection chambers and other apparatus and other means for monitoring the nature, extent and effect of emissions,
    - (iii) the taking and analysis of samples, the keeping of records and furnishing of information to the sanitary authority,
  - (b) providing for the payment by the licensee to the sanitary authority concerned of such amount or amounts as may be determined by the sanitary authority having regard to the expenditure incurred or to be incurred by it in monitoring, treating and disposing of discharges of trade effluent, sewage effluent and other matter to sewers in its functional area or a specified part of its functional area,
  - (c) specifying a date not later than which any conditions attached under this section shall be complied with,
  - (d) relating to, providing for or specifying such other matter as may be prescribed.

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## SANITARY AUTHORITY RESPONSE

re: SECTION 52 OF THE WASTE MANAGEMENT ACTS, 1996 to 2005

**Name & Address of Sanitary Authority:** Cork County Council, Inniscara, Cork, Attn: Ms Patricia Power, Director of Environment, .

**Waste Reg. No.** W0211-01

**Waste Facility:** AVR-Environmental Solutions Limited, Foxhole, Youghal, Co Cork,

**Waste Licence Applicant:** AVR-Environmental Solutions Limited

**Consent:** Indicate Yes to one of the following statements:

Consent granted subject to the consent conditions outlined below	Y
Consent granted without conditions	-
Consent refused <sup>Note 1</sup>	-

**Note 1** Where it is proposed to refuse permission the reasons for the refusal should be clearly outlined in the response.

GENERAL CONSENT CONDITIONS	Condition to be included (Yes/No)
1. No specified emission from the installation shall exceed the emission limit value set out in <i>Schedule B: Emissions Limits to Sewer</i> . There shall be no other emission to sewer of environmental significance.	Yes
2. The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as out in <i>Schedule C</i> .	Yes
3. Monitoring and analytical equipment shall be operated and maintained as necessary so that monitoring accurately reflects the discharge or emission.	Yes
4. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the process effluent, and to take samples of the process effluent.	Yes
5. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.	Yes
6. The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.	Yes
7. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.	Yes
8. The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.	Yes
9. In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency, Local Authority and Sanitary Authority as soon as practicable after the incident.	Yes

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ADDITIONAL GENERAL CONSENT CONDITIONS  
in respect of discharges or emissions to sewers, in accordance with Section 52  
of the Waste Management Acts, 1996 to 2005  
(specify, if required)

(a) In accordance with the 4<sup>th</sup> Schedule of the Urban Waste Regs  
(SI No 254 of 2001) No materials may be discharged which  
sewer that will affect the health of staff working in  
Collecting systems and treatment plants

(b) the applicant will connect to the area main  
drainage scheme when the scheme is operational.

(c) the applicant shall supply all information requested  
by CCC as part of the process for the  
tendering + installation of said scheme

(d) the charges levied are subject to review  
by CCC as part of the "Polluter's Pay principle"  
as may be levied by Cork County Council.

(e) The S99 request is subject to review  
after the scheme for the area is  
commenced.

*[Faint, illegible handwritten text covering the majority of the page]*

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## Limit Values for Process Effluent to Sewer

### Schedule B: Emission Limits

Waste licence application Register No. W0211-01

Emission Point Reference No: SE1

Emission to (sewer description): to be agreed with Voughal udc + Water Services

Volume to be emitted: Maximum in any one day: 170 m<sup>3</sup>

Maximum rate per hour: 7. m<sup>3</sup>

Parameter (delete parameters which are not applicable)	Emission Limit Value	
	Daily Mean Concentration (mg/l)	Daily Mean Loading (kg/day)
BOD	5	-
COD	125	-
Suspended Solids	35	-
PH	6.0 to 8.5	-
Temperature	25°C	-
<b>ADDITIONAL PARAMETERS</b>		
(if required)		
V. O. C.	50 µg/l	-
Sulphate	100 mg/l	-
Total Nitrogen - N.	10 mg/l	-
Total Phosphorus - P.	1.0 mg/l	-
Ammonia - N.	0.5 mg/l	-
Faecal coliforms	< 250 FC / 100mls	-
Cyanide	0.01 mg/l	-
Zinc	100 µg/l	-
Copper	30 µg/l	-
Cadmium (total)	5 µg/l	-
Arsenic (total)	20 <sup>(v#)</sup> µg/l	-
Semi V. O. C.	50 µg/l	-
Lead	5 <sup>v#</sup> µg/l	-
Chromium	15 µg/l	-
Nickel	25 µg/l	-

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## Frequency of Monitoring Process Effluent to Sewer

### Schedule C

Waste Licence application Register No. W0211-01

Emission Point Reference No: SE1

Parameter <small>(delete parameters which are not applicable)</small>	Monitoring Frequency <small>(e.g. monthly, quarterly, annually)</small>	Sampling Type <small>(grab, composite)</small>
Flow to sewer	Daily	/
Temperature	Daily	Comp
pH	Daily	Comp
BOD	Monthly	Comp
COD	Weekly	Comp
Suspended Solids	Weekly	Comp
<b>ADDITIONAL PARAMETERS</b> <small>(if required)</small>		
V. O. C	Quarterly	Comp
semi V.O.C.	Quarterly	Comp
Faecal Coliforms	Quarterly	Comp
Cyanide	2 per year	Comp
Lead, Copper, Cadmium, Zinc, Arsenic, Nickel, Chromium	Annually	Comp
Total Phosphate	2 per year	Comp
Total Nitrogen	Quarterly	Comp
Sulphate	Quarterly	Comp
<b>SANITARY AUTHORITY CHARGES</b>		
Charge per cubic metre of process effluent (per s52 of the Waste Management Acts, 1996 to 2005)	to be charged by San Auth.	
Payment Frequency	once as per billing periods.	
Annual Monitoring Costs	€1000	

Signed on behalf of Cork County Council

V. Hannan

Date 11/7/06

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**TABLE E.3 (i): EMISSIONS TO SEWER** (One page for each emission)

**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	SE 1
Location of connection to sewer :	Exact location to be agreed with Youghal Town Council but in close proximity to waste water treatment plant and storm water retention tank
Grid Ref. (10 digit, 5E,5N):	20973E 07986N
Name of sewage undertaker:	Sanitary Authority Youghal Town Council

**Emission Details:**

(i) Volume to be emitted			
Normal/day	132m <sup>3</sup>	Maximum/day	168 m <sup>3</sup>
Maximum rate/hour	7m <sup>3</sup> *		

\* this includes for any additional cooling water required. modelling and discharge calculations carried out on worst case scenario discharge. Thermal impact discharge takes account of impact of cooling/dilution water

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included*):

Periods of Emission (avg)	60 min/hr	24 hr/day	350day/yr
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TABLE E.3(ii): EMISSIONS TO SEWER - Characteristics of the emission (1 table per emission point)

Emission point reference number : SE1

Parameter	Prior to treatment				As discharged				Efficiency %
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
BOD	<2		0.264	92.4	<2		0.264	92.4	NR
Mercury	<0.00005		0.0000066	0.0231	<0.00005		0.0000066	0.0231	NR
Potassium	4.8		0.6336	221.76	4.8		0.6336	221.76	NR
Sodium	42.5		5.61	1974	42.5		5.61	1974	NR
sVOC's	<0.001		0.000132	0.462	<0.001		0.000132	0.462	NR
VOC's	<0.001		0.000132	0.462	<0.001		0.000132	0.462	NR
Total Solids	286		37.752	13213	286		37.752	13213	NR
Total Suspended Solids	119		15.708	5497.8	35		4.62	1617	95
Total Phosphorous	0.8		0.1056	36.96	0.8		0.1056	36.96	*
Dissolved Aluminium	0.083		0.010956	3.8346	0.083		0.010956	3.8346	NR
Dissolved Arsenic	0.002		0.000264	0.0924	0.002		0.000264	0.0924	NR
Dissolved Boron	0.014		0.001848	0.6468	0.014		0.001848	0.6468	NR
Dissolved Calcium	38.8		5.1216	1792.56	38.8		5.1216	1792.56	NR
Dissolved Cadmium	<0.001		0.00132	0.462	<0.001		0.00132	0.462	NR
Dissolved Cobalt	<0.001		0.00132	0.462	<0.001		0.00132	0.462	NR



Turbidity	1.5	0.198	69.3					
Kjeldhal nitrogen	15	1.98	693	10				
Ammoniacal nitrogen NH3	8.5	1.122	392.7					
COD	199	26.268	9193.8	125				95
Free cyanide	<0.05	0.0066	2.31	<0.05		0.0066	2.31	
Total nitrogen as N	24	3.168	1108.8	10				
Total alkalinity	210	27.72	9702	210		27.72	9702	Assuming no pH correction
*Micro	Not relevant							NR
Temperature	25°C			25°C				NR

MRB is not designed to remove metals. Metals associated with suspended solids in the feed will be removed by the process. Dissolved metals are not removed by process. Therefore, no metal reduction was assumed and figures are provided as worst case scenario data.

\*\* no assumption made for reduction in P as emission are lower than emission limit requirements and therefore no while greater removal can be achieved by the addition of ferric chloride or ferric sulphate for P removal, none is considered necessary. System is designed to sterilise so is pathogen free and foul water is treated separately.

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Dissolved Chromium	0.006	0.000792	0.2772	0.006	0.000792	0.2772	NR
Dissolved Cobalt	<0.001	0.00132	0.462	<0.001	0.00132	0.462	NR
Dissolved Copper	<0.001	0.00132	0.462	<0.001	0.00132	0.462	NR
Dissolved Iron	0.103	0.013596	4.7586	0.103	0.013596	4.7586	NR
Dissolved lead	0.018	0.002376	0.8316	0.018	0.002376	0.8316	NR
Dissolved magnesium	0.008297	0.001095204	0.3833214	0.008297	0.001095204	0.3833214	NR
Dissolved nickel	0.01	0.00132	0.462	0.01	0.00132	0.462	NR
Dissolved selenium	<0.001	0.00132	0.462	<0.001	0.00132	0.462	NR
Dissolved zinc	0.047	0.006204	2.1714	0.047	0.006204	2.1714	NR
TOC	5	0.66	234				NR
Chloride	28	3.696	1293.6	28	3.696	1293.6	0
Flouride	0.2	0.0264	9.24	0.2	0.0264	9.24	0
Orthophosphate	1.72	0.22704	79.464				
Sulphate	17	2.244	785.4	17	2.244	785.4	0
Total oxidized nitrogen (N)	<0.3	0.0396	13.86				
pH	8.13						No change unless pH correction is required
Total dissolved solids	273	36.036	12612.6				