

Our Ref: RM/S23/9

Environmental Protection Agency  
Date: 19<sup>th</sup> January 2009.

19 JAN 2009

Environmental Protection Agency,  
P.O. Box 3000,  
Johnstown Castle Estate,  
County Wexford.

**Waste Licence Register Number W0244-01.**  
**Objection to Proposed Decision.**

Dear Sirs,

Please find attached Waterford City Council's schedule of objections to the proposed decision of the Environmental Protection Agency with respect to the above Waste Licence for the Waterford City Waste Water Treatment Plant at Gorteens, Co. Kilkenny.

The plant is currently under construction under a design build operate contract, funded by and in accordance with the DOELG requirements. We are anxious to ensure that the environmental protection afforded by this plant will enhance the environment in Waterford City and surrounding counties, and as a result are pleased to have received a positive decision. We are also anxious to obtain maximum value from this expenditure, particularly in the current economic climate and we have reviewed the proposed conditions with a view to achieving this value, without compromising the environmental performance.

A cheque in the sum of €500 for an objection by the Applicant is also attached.

Yours sincerely,



**Ray Mannix,**  
**Senior Engineer,**  
**Environmental Services.**

Environmental  
Protection Agency  
19 JAN 2009

**WATERFORD MAIN DRAINAGE SCHEME**

**PHASE 2**

**CONTRACT 5**

**WATERFORD CITY COUNCIL  
WASTEWATER TREATMENT PLANT  
SPRINGFIELD HOUSE, GORTEENS, CO. KILKENNY**

**OBJECTIONS TO PROPOSED EPA WASTE LICENCE**

**REGISTRATION NUMBER W0244-01**

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**Waterford City Council  
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Canada Street  
Waterford**

**Mott MacDonald Pettit  
Consulting Engineers  
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Little Island  
Co. Cork.**

**Job Nr. : PA9270**

**January 2009**

**Revision Control Table****The User is Responsible for Checking the Revision Status of this Document**

For & on Behalf of Mott MacDonald Pettit					
Rev. Nr.	Description of Changes	Prepared by	Checked by	Approved by	Date
A	Initial Issue	J. Barrett	J. G. [Signature] per.	[Signature] Brewitt	Jan 2009

Ray Mannix  
Waterford City Council.  
19/1/09.

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**A.0 BACKGROUND**

**A.1** Waterford City Council have made an application for a licence with respect to the Wastewater Treatment Plant currently under construction at Gorteens, Co. Kilkenny.

**A.2** The Environmental Protection Agency has issued a proposed decision on the Waste Licence. The proposed decision contains conditions numbered 1 through 12, with many of the conditions containing a number of sub-conditions. The proposed decision also contains a series of schedules numbered A through D, with each schedule containing a series of sub-schedules. The plant is currently constructed and is in the process of being commissioned.

**A.3** It is noted that several of the conditions state a time frame for items to be completed. It is proposed in relation to certain conditions of the licence that the time frame relates to the completion of the commissioning period or the date of grant of this licence whichever is the later. The date of grant of this licence could potentially be much earlier than the date of the end of the commissioning period.

**B.0 FEE**

A cheque for €500 has been included with this objection.

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**C.O            DETAILED LIST OF OBJECTIONS****Condition 2 Facility Management**

No objection with the exception of the following:-

**C.1            2.1.1 – Facility Manager**

We object and propose that the wording in the last sentence is replaced by:-

“The Facility Manager or a suitably qualified deputy shall be present on the facility during the normal working week. A standby rota system shall be in place to respond to call outs and SCADA system alarms. The standby staff shall receive training to a level agreed with the Agency”.

**Grounds**

The plant will operate on a 24 hour day for 365 days per year. The plant is automatic and alarm signals are sent to suitably trained persons in the event of a plant malfunction. A requirement to have a nominated suitably qualified deputy present on the facility at all times would greatly increase the staffing levels beyond what is considered reasonable for an automatic plant. This is not considered to be necessary and is not the practice in similar plants such as Limerick or Dungarvan.

**Comments**

The Licensee and Agency can agree the appropriate level of the staffing with respect to the call out.

**C.2            2.1.2 – Training**

We object and propose an amendment to the last sentence of this condition as follows:-

“In addition the Facility Manager and a person who deputises for the manager shall have successfully completed an appropriate waste management training course such as the course provided by FAS or an equivalent appropriate course agreed between the Licensee and the Agency”.

**Grounds**

The training given to the manager and persons who deputise for the manager in response to particular situations shall be appropriate for the functions required.

It is expected that the training provided to the manager and deputies will be acceptable to the Agency. It is also possible that the FAS training course may not be available at a suitable time.

**C.3            2.2.2.3 – Environmental Management Programme**

We object only to the timing of this provision. Submission of the EMP to the Agency within 6 months from the date of grant of this licence may be possible, but depends on the date of grant of licence.

Grounds

The Licence could be issued at an early date while the commissioning period after the grant of the licence could restrict the time available to prepare the programme.

Proposal

"The submittal of the EMP to the Agency shall be within 6 months of the completion of commissioning of the facility, or the date of grant of this licence. There shall be agreement on the timing between the Licensee and the Agency.

C.4

2.2.2.7 – Communications Programme

We object to the phrase "at the facility".

Proposal

Omit "at the facility" and replace with "at the offices of the Licensee".

Grounds

The Licensee has access to the SCADA system and is better placed to provide appropriate staff so that members of the public can obtain information concerning the Environmental Performance of the facility at all reasonable times.

Condition 3 – Infrastructure and Operation

C.5

3.1

We object only with respect to the timing.

Grounds

If the Agency makes a decision that requires additional infrastructure it is likely to take some time to procure same, particularly where agreement with the Agency is required.

Proposal

Add and additional sentence:-

"The infrastructure shall be provided in a time period agreed between the Licensee and the Agency in advance of the commencement of the licensed activities where this is feasible".

3.3 – Facility Security

C.6

3.3.1

We object only with respect to clarification of what is required with respect to fencing, 90% of which has already been installed, and is generally in accordance with this condition.

Proposal

Add a sentence to 3.3.1:-

"The details of the fencing shall be agreed between the Licensee and the Agency".

Grounds

The Licensee requires confirmation that the fencing installed is acceptable to the Agency, or that any proposed additional works satisfy the requirements of the Agency.

**3.4 – Facility Roads and Site Services**

C.7

**3.4.2**

We object to the wording of 3.4.2 and propose that the following wording is included:-

“The precise extent of concrete to be provided shall be subject to agreement between the Licensee and the Agency following a risk assessment”.

Grounds

Large areas of concrete may contribute to additional stormwater volumes and the associated management thereof without increasing the Environmental protection afforded.

**3.11 – Tank, Container and Drum Storage Areas**

C.8

**3.11.1 and 3.11.2**

We have no objection to these conditions provided that it is made clear that the interpretation does not relate to a requirement to bund large predominantly concrete tanks and containers.

Reason

To provide clarity of interpretation of these conditions.

C.9

**3.15**

We object to the second sentence of this condition. We request that the time frame is changed to “within 3 months of the grant of this licence”.

Grounds

To allow time for procurement and installation of alarms in agreement with the Agency.

**Condition 4 – Interpretation**

C.10

**4.1.2 – Non Continuous Monitoring of Emissions to Atmosphere**

We object to the wording of this clause.

Grounds

The proposed sampling for this will comprise discrete sampling so reference to time averages is not appropriate.

**Condition 6 – Control and Monitoring**

C.11

**6.1.1 – Test Programme**

We object to the wording of this condition.



Grounds

The condition refers to test programmes for all components of the waste water treatment plant and associated equipment. The individual items of equipment and the plant as a whole process are subject to a series of tests during construction and commissioning to ensure their correct operation prior to the plant as a whole being put into operation. The tests to be carried out during operation are prescribed by the licence.

Conditions 6.1.2 to 6.1.4 refer specifically to the abatement equipment and it would appear to be consistent that 6.1.1 is primarily intended to apply to the abatement equipment.

Records of the tests that have already been carried out on equipment during construction and commissioning can be made available should the Agency require.

Proposal

We propose that the wording of 6.1.1 be revised to:-  
 "Test Programmes – Abatement Equipment".

C.12

6.10 – Integrity and Water Tightness Testing

We object to this condition only to the extent that it applies to all underground pipes, tanks bunding structures and containers.

Grounds

All liquid containing elements have already been tested for water tightness and records have been retained and can be made available to the Agency. Once the plant is in 24 hour, 365 day work operation it may not be possible to take out of service some of the above elements for additional testing because this will compromise the environmental performance of the plant.

Proposal

Add a sentence:-

"The scope of testing to be carried out every 3 years shall be agreed with the Agency".

C.13

6.15.1 – Annual Noise Survey

We object to this requirement.

Grounds

It is considered unnecessary if there are no noise problems or complaints, or no modifications to the plant.

Proposal

Add a sentence to the end:-

"The Agency will review the need for, and frequency of, further surveys if the first survey is satisfactory and if there are no complaints from the public with

respect to noise, otherwise noise surveys will be carried out as described elsewhere in the licence”.

#### **Condition 8 – Materials Handling**

**C.14**

##### **8.17.9 – Landspreading Methods**

We object to this condition only in so far as clarification is needed.

##### **Grounds**

The methods mentioned may not be appropriate for sludge biocake.

##### **Proposal**

The method of landspreading of sludge biocake shall be in compliance with statutory regulations and guidelines and shall be arrived at in advance by agreement between the Licensee and the Agency.

#### **SCHEDULE B – Emission Limits**

##### **B1 – Emissions to Air**

**C.15**

##### **Odour Control Equipment**

We object and request that the conditions in relation to the odour control system are reworded.

##### **Grounds**

The performance criteria for the odour control equipment installed on site relates to hydrogen sulphide concentration and odour units.

##### **Proposal**

We request that the conditions in relation to the odour control system are reworded to reflect these parameters following agreement between the Licensee and the Agency.

**C.16**

##### **Emissions to Air from the Boilers**

We object to this provision.

##### **Grounds**

The composition of feed biogas will be variable and it is not possible to predict the concentration of oxides of sulphur in the exhaust gas with any degree of certainty.

##### **Proposal**

An appropriate emission limit value is agreed with the Agency in due course.

#### **SCHEDULE C – Control and Monitoring**

**C.17**

We object to the control and monitoring procedures in so far as there are a number of minor differences from the monitoring procedures embodied in the design of the treatment plant.

**Grounds**

The procedures embodied in the design are those described and interpreted from the Department of the Environment Guidelines (PMS) for procedures for operation of such plants. These are normally considered to be adequate and do not differ significantly from those in Schedule C.

**Proposal**

The table enclosed highlights the conditions that are required in the proposed licence and the procedures that are embodied in the design of the plant. We propose that the schedules are revised to accommodate these changes, which do not differ significantly from the schedule in the proposed licence, in agreement between the Licensee and the Agency.

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**Waterford City WWTP – Waste Licence Schedules**

The Monitoring procedures embodied in the design of the Wastewater Treatment Plant are those described and interpreted from the Department of Environment Guidelines (PMS) for the operating of such plants. It appears that there are a number of minor differences between the monitoring required in Schedule C and those proposed in the design. We propose that the schedule be revised to accommodate these changes on the grounds that the proposed procedures are normally considered to be adequate, and do not differ significantly from those in Schedule C.

<b>Schedule C – Control &amp; Monitoring</b>		
<b>C.2.1 Control of Process Parameters</b>		
<b>Parameter</b>	<b>Monitoring (Waste Licence)</b>	<b>Proposed in Specified Management system</b>
<b>Influent</b>		
Main Inlet Channel Flow	Continuous with recorder	Continuous with recorder
Main inlet volume	Continuous	Continuous
Temperature	Weekly	Weekly
pH	Weekly	Weekly
COD	Weekly	Weekly
BOD	Monthly	Monthly
Suspended solids	Weekly	Weekly
Belview inlet flow	continuous	continuous
<b>Screening &amp; grit removal</b>	Daily check equipment	
Screenings: % Total ds	Monthly	3 Monthly
Grit: % Total ds	Monthly	3 Monthly
% Volatile solids	Monthly	3 Monthly
<b>Screened sewage</b>		
Flow (post grit removal)	Continuous with recorder	Continuous with recorder
Temperature	Weekly	Weekly
pH	Weekly	- Not required - same as Influent pH above
COD	5 times/week	Weekly
BOD	Weekly	Weekly
		Request to change Request to change Request to change
		Request to change Request to change

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Suspended solids Total nitrogen (as N) Total Phosphorus (as P) Oils, fats, grease	Weekly Weekly Weekly Weekly	Weekly Weekly Weekly Weekly	Weekly Weekly Weekly Weekly	
<u>Storm Water</u> Storm overflow: flow COD BOD Storm return flow Total flow to storm	Continuous with recorder Daily when in operation Daily when in operation Continuous with recorder Calculated from above meters	Continuous with recorder Daily when in operation Daily when in operation Continuous with recorder Calculated from above meters	Continuous with recorder Daily when in operation Daily when in operation Continuous with recorder Calculated from above meters	All as proposed
<u>Aeration Selector Tank</u> Flow COD BOD Suspended solids RAS flow to Selector	Continuous with recorder Weekly Weekly Weekly Continuous with recorder	Continuous with recorder Weekly Weekly Weekly Continuous with recorder	Continuous with recorder Weekly Weekly Weekly Continuous with recorder	All as proposed
<u>Aeration Tanks</u> DO Suspended solids Settled sludge volume: SSV Sludge settled Index: SSI Sludge floc microscopy MLSS F/M ratio	Continuous in ATs 5 times per week Twice weekly Twice weekly Once weekly Daily Weekly calculation	Continuous in ATs 5 times per week Daily Twice weekly Twice weekly Continuous with meter Weekly calculation	Continuous in ATs 5 times per week Twice weekly Twice weekly Once weekly Daily Weekly calculation	Request to change Request to change Request to change
<u>Return Liquors</u> Flow to PST splitter At Liquor chamber: COD	Continuous Monthly	Continuous Monthly	Continuous Monthly	

<p><b>BOD</b> Suspended solids In Sludge building: pH liquor from GBT 1&amp;2</p>	<p>Monthly Monthly Monthly</p>	<p>Monthly Monthly Monthly</p>	<p>Request to change</p>
<p><b><u>Sludge Thickening</u></b></p>	<p>Continuous Monthly</p>	<p>Continuous Monthly</p>	<p>All as proposed</p>
<p><b>Primary sludge to PFT:</b> Flow % Total ds at PFT</p>	<p>Continuous Monthly</p>	<p>Continuous Monthly</p>	
<p><b>SAS to GBT:</b> Flow % total ds at GBT</p>	<p>Continuous Monthly</p>	<p>Continuous Monthly</p>	
<p><b>GBT to Blending Tank:</b> Flow % Total ds at blending</p>	<p>Continuous Monthly</p>	<p>Continuous Monthly</p>	
<p><b><u>Blended Sludge to Pasteuriser</u></b> Flow to pasteuriser pH Alkalinity % Total ds % Volatile solids FE from pasteuriser cooler</p>	<p>Continuous Monthly Monthly Weekly Monthly Continuous</p>	<p>Continuous Monthly Monthly Weekly Monthly Continuous</p>	<p>All as proposed</p>
<p><b><u>Pasteurised Sludge</u></b> pH Alkalinity % total dry solids</p>	<p>Not proposed Not proposed Not proposed</p>	<p>Not proposed Not proposed Not proposed</p>	<p>Monitoring at this location presents technical difficulties.</p>

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	Monthly	Not proposed	We propose that the appropriate monitoring be agreed with the Agency	
<b><u>% volatile solids</u></b>				
<b><u>Anaerobic Digesters</u></b> Flow in inlet Flow in outlet Sludge level Temperature Gas pressure	Continuous Continuous Continuous Continuous Continuous	Not proposed Continuous Continuous (HL/LL) Continuous Continuous	Request change	
<b><u>Control System in Gas Holder</u></b> Biogas production:	Continuous	Continuous (ultrasonic level monitor)		
<b><u>Digested Sludge</u></b> % Total dry solids % Volatile solids Flow to Dewaterers	Monthly Monthly Continuous	Monthly Monthly Continuous	All as proposed	
<b><u>Polyelectrolyte dosing</u></b> Polymer use: Mixed poly to GBT-A Mixed poly to GBT-B Mixed poly to dewaterer 1 Mixed poly to dewaterer 2	Dose per tonne dry solids Continuous Continuous Continuous Continuous	Continuous (local flow indicator) Continuous (local flow indicator) Continuous (local flow indicator) Continuous (local flow indicator)		
<b><u>Dewatered (Final) Sludge</u></b> % Total dry solids % Volatile solids	Weekly Weekly	Weekly Weekly	All as proposed	

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**D.0 ORAL HEARING**

**An oral hearing is not requested with this application.**

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