

# Variation notice with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

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Davyhulme WwTW Sludge  
Treatment Facility

United Utilities Water PLC  
Urmston  
Manchester  
M41 7JB

Variation notice number  
EPR/HP3931LJ/V004

Permit number  
EPR/HP3931LJ

# Davyhulme WwTW Sludge Treatment Facility

## Permit number EPR/HP3931LJ

### Introductory note

***This introductory note does not form a part of the permit***

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations 2010 S.I.2010 No. 675 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility.

The changes within this variation are summarised as follows:

- a) Introduction of a temporary re-liquidation process. This is on the basis of a limited trial period. The purpose is to test the feasibility of re-liquidation of the raw undigested sludge cake, normally disposed of via agricultural land. The long term aim is to optimise the installation energy efficiency via increasing the methane generated within and captured from the on-site primary digesters.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions, Schedule 3 lists any conditions that have been added and Schedule 4 shows any changes to the plan.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status Log of the permit		
Detail	Date	Response Date
Application SP3631LL (EPR/SP3631LL/A001)	Duly made 30/06/06	
Request for additional information	23/08/06, 08/09/06, 28/09/06, 29/09/06, 06/10/06, 19/10/06, 27/10/06, 07/11/06, 17/08/07 04/09/07	22/09/06, 29/06/06 22/09/06, 29/09/06, 21/10/06 25/10/06 16/10/06 09/10/06 25/10/06 06/12/06 23/11/06, 11/12/06 31/08/07 15/10/07
Additional information received	09/02/07	
Additional information received	30/04/07	
Additional information received	29/05/07	
Additional information received	28/08/07	
Additional information received	15/10/07	
Permit HP3931LJ determined (EPR/HP3931LJ)	24/10/07	
Application for Variation EPR/HP3931LJ/V002	Duly Made 19/11/08	
Additional Information	Requested 03/12/08	29/12/08

**Status Log of the permit**

Detail	Date	Response Date
Variation EPR/HP3931LJ/V002	Issued 26/02/09	
Application for Variation EPR/SP3631LL/V003	Duly made 11/03/09	
Additional information received	Requested 12/05/09	21/05/09 & 25/08/09
Variation notice EPR/HP3931LJ/V003 issued.	Notice issued 15/10/09	
Variation application EPR/HP3931LJ/V004	Received 31/12/09	
Additional Information	Requested 29/04/10	28/05/10
Variation notice EPR/HP3931LJ/V004 issued.	Notice issued 02/07/10	

**Other permits relating to this installation**

Operator	Permit Number	Date of Issue
United Utilities Industrial Ltd	EP3031LB	24/10/07

**Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation**

Holder	Reference Number	Date of Issue	Fully or Partially Superseded
United Utilities Water PLC	WML 0996	27 March 1998	Partially

**Other existing Licences/Authorisations/Registrations relating to this site**

Holder	Reference Number	Date of issue
United Utilities Water PLC	WML 0996	27 March 1998

End of Introductory Note.

Notice of variation

Environmental Permitting  
(England and Wales) Regulations 2010

Permit number

**EPR/HP3931LJ**

Variation number

**EPR/HP3931LJ/V004**

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) varies the permit as set out below.

**United Utilities Water PLC** ("the operator"),

whose registered office is

**Haweswater House**

**Lingley Mere Business Park**

**Great Sankey**

**Warrington WA5 3LP**

company registration number **2366678**

holds a permit to operate a regulated facility at

**Davyhulme Wastewater Treatment Works**

**Urmston**

**Manchester**

**M41 7JB**

and that permit is varied to the extent set out in Schedules 1 to 4 of this notice.

The notice shall take effect from 02/07/2010

Name	Date
<b>PAUL BUTLER</b>	02/07/2010

Authorised on behalf of the Environment Agency.

## Schedule 1 – conditions to be deleted

None.

## Schedule 2 – conditions to be amended

Table S1.1 Activities as referenced by condition 1.1.1 is amended by the addition of two extra rows for directly associated activities:

<b>Table S1.1 activities</b>		
<b>Activity listed in Schedule 1 of the PPC Regulations</b>	<b>Description of specified activity and WFD Annex IIA and IIB operations</b>	<b>Limits of specified activity and waste types</b>
S5.3 A1 (c)(i)	D8: Biological treatment (anaerobic Digestion) of sludge for the purposes of disposal.	From receipt of the waste to the transfer to storage, including the digestion of the waste which is limited to the following plant:- 8 Primary digesters; 14 secondary digesters; Waste types and quantities specified in Table S3.3
S5.3 A1 (c)(ii)	D9: Physical and chemical treatment of sludge for the purposes of disposal	From receipt of the waste to the transfer to storage including treatment of the waste which is limited to the following plant:- 2 Sludge Strain Presses; 3 Gravity Belt Thickeners; 1 Centrifuge (for contingency purposes only) Waste types and quantities specified in Table S3.3
S1.1 A1 (b)(iii)	The combustion of fuel (biogas) for the purpose of generating electricity and heat for use within the installation.	From receipt and storage of Biogas to the delivery of heat to the digesters and electricity to the Wastewater Treatment Works and National Grid. The combustion units are limited to CHP plant and 3 dual fuel boilers (including 1 domestic boiler) with a combined thermal input (gross) of approximately 9 MW.
<b>Directly Associated Activity</b>		
Combustion of standby gas oil	Burning of gas oil (standby fuel) for use in the dual fuel boilers	From receipt of gas oil, combustion of fuel and delivery of heat to the digesters. Gas oil is only to be used where there is either <ul style="list-style-type: none"> <li>• insufficient biogas available for use;</li> <li>• poor quality biogas being produced; or</li> <li>• operational malfunction which prevents biogas usage</li> </ul>
Gas Flare	Flaring of excess bio-gas	From receipt of the gas at the flare. To the combustion of the gas. Biogas is only to be flared where it cannot be beneficially used for the production of heat and energy.
Storage of waste	Storage of waste prior to and after treatment	Storage of sludge prior to and after treatment. Waste types and quantities specified in Table S3.2.
Raw material storage	Storage of raw materials	From receipt of raw materials to dispatch for use
Use of centrifuge	Centrifugation of sludge	Centrifugation of sludge for the purpose of recovery
Re-liquidification Trial	Re-liquidification of imported sludge cake for enhancement of methane generation within the primary generators	Limited trial period

Table S1.2 Operating Techniques as referenced in condition 2.3.1 is amended to:

<b>Table S1.2 Operating techniques</b>		
Application	The response to section 2.1, excluding 2.1.3 and 2.1.5, and 2.2 in the Application but excluding 2.1.2, 2.1.18, 2.2.10, 2.2.12, 2.2.13-2.2.15, 2.2.24, 2.2.27-2.2.37, 2.10.22 and 2.10.28	30/06/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 22/09/06. RE: Agency letter dated 23/08/06	Answers 1,2, 3, 5, 6, 10, 11 and 12	26/09/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 22/09/06. RE: Agency letter dated 08/09/06	Answers 7, 8, 13 and Davyhulme answers 1, 2, 3 and 4	26/09/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 29 September 2006	Answers for Davyhulme only 1, 2, 3, 4, 5 and 6	29/09/06
Email from Amanda Molyneux dated 29/09/09	Response for Davyhulme only	29/09/09
Letter from Amanda Molyneux of United Utilities Water PLC dated 28 September 2006	Answers to Davyhulme only	26/10/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 16 October 2006	Answers 1 and 3 only	16/10/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 25 October 2006	Responses to parts 1-8 and the response to Davyhulme only	25/10/06
Email from Amanda Molyneux of United Utilities Water PLC dated 26 October 2006	All	26/10/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 24 November 2006	All	24/11/06
Letter from Amanda Molyneux of United Utilities Water PLC dated 6 December 2006	Actions 1-3, 5 and 7 for Davyhulme only	06/12/06
Email from Amanda Molyneux of United Utilities Water PLC dated 11 December 2006	Answers for Davyhulme only	11/12/06
Email from Amanda Molyneux of United Utilities Water PLC dated 02 January 2007	Answers relating to Davyhulme only	02/01/07
Variation Application	All of section B2 in variation application – techniques	17/11/08
Response to notice requesting further information dated 23.12.08	All parts	29/12/08
Response to e mail 13.1.09	All parts	29/01/09
Variation application EPR/HP3931LJ/v003	All of Part C variation application	11/03/09
Request for additional information – email to Lynda Fellows on the 12/05/09	All	21/05/09 & 25/08/09
Variation application EPR/HP3931LJ/V004	All of Part C variation application	31/12/09
Additional information Requested 29/4/2010	All	28/05/10

Condition 3.4.1 is to be amended as follows:

- 3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures, including, but not limited to those, specified in an approved odour management plan, to prevent or where that is not practicable to minimise the odour.

### Schedule 3 – conditions to be added

Conditions 2.9.1, 2.9.2, 2.9.3 and 2.9.4 are to be added as follows:

- 2.9 Technical Evaluation of Sludge Re-liquidification Process
- 2.9.1 The Operator shall be permitted to undertake a technical evaluation trial of the optimisation of sludge re-liquidification, subject to the conditions in this variation or as otherwise agreed in writing by the Agency.
- 2.9.2 The Operator shall give the Environment Agency 14 days notice, in writing, before commencement of the re-liquidification trial. The commencement date indicated in this notification shall be taken as the start of the technical evaluation period.
- 2.9.3 The technical re-liquidification trial shall be completed within 6 months from commencement date referenced in condition 2.9.2 of this variation, unless otherwise agreed in writing by the Agency.
- 2.9.4 The Operator shall notify the Agency in writing within 7 days of the completion of the technical evaluation.

Conditions 3.4.2 and 3.4.3 are added to the permit as follows:

- 3.4.2 The activities shall, subject to the conditions of this permit be operated using the techniques and in the manner described in the documentation specified in Schedule 1 Table 1.2 unless otherwise agreed in writing by the Agency.
- 3.4.3 If notified by the Agency that the activities are giving rise to pollution the operator shall submit to the Agency for approval within the period specified, a revision of any plan specified in Schedule 1, Table 1.2 or otherwise required under this permit, and shall implement the approved revised plan in place of the original plan from the date of approval, unless otherwise agreed in writing by the Agency.

Table S1.4 B as referenced by condition 2.6.2 shall be amended to add the following:

**Table S1.4B Pre-operational measures for future development**

Reference	Pre-operational measures
1	<p>At least 14 days before operation of the re-liquidification trial the operator shall submit an amendment to the existing Odour Management Plan to cover the odour control measures in place for this trial. The Operator shall have regard to Part III of Defra's Code of Practice on Odour Nuisance from Sewage Treatment Plants dated 2006 to verify the effectiveness of these measures to minimise potentially odorous emissions from the Permitted Installation. In addition the Odour Management Plan needs to ensure the installation complies with condition 3.4.1.</p> <p>The Environment Agency is to provide written approval on receipt of this report to allow operations to commence.</p>

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At least 14 days before operation of the re-liquidification trial the operator shall submit a written operating procedure for this trial having regard to the environmental risks and including but not limited to procedures for handling fugitive emissions.

The Environment Agency is to provide written approval on receipt of this report to allow operations to commence.

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#### **Schedule 4 – amended plan**

None.