

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

United Utilities Water PLC

Davyhulme Wastewater Treatment
Works
Rivers Lane
Urmston
Manchester
M41 7JB

Variation notice number

EPR/HP3931LJ/V006

Permit number

EPR/HP3931LJ

Davyhulme Wastewater Treatment Works

Permit number EPR/HP3931LJ

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

Davyhulme Wastewater Treatment Works (WwTW) operates sludge treatment at the facility, prior to being sent for recovery into agriculture or for disposal by incineration.

New sludge storage and processing equipment is being installed which will be served by the existing 3-stage chemical scrubber odour control unit (OCU) located within the permitted installation. The existing OCU would normally serve the Gravity Belt Thickeners (GBTs) which are due to be decommissioned.

This variation authorises the installation of an additional temporary two-stage OCU, which consists of a catalytic iron filter and carbon filter, exhausted via a new 6 metre stack (emission point O3t). This additional OCU will treat the existing odour load from the GBTs to maintain odour compliance until such time as the last GBT unit is decommissioned.

With the temporary OCU in operation there will be a reduction in odour loading to the existing OCU during commissioning of the new equipment, and therefore emissions from the temporary OCU will not contribute any additional odour to the site odour profile.

There are no Special Areas of Conservation, Special Protection Areas or SSSI's within 2km of this site.

United Utilities operate an Environmental Management System which is certified to the ISO 14001 standard.

The schedules specify the changes made to the original permit.

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 SP3931LL (EPR/SP3931LJ/A001)	Duly made 30/06/06	
Request for further information	23/08/06 – 04/09/07	22/09/06 – 15/10/07
Additional information received	09/02/07 – 24/10/07	
Permit HP3931LJ determined (EPR/HP3931LJ)	24/10/07	
Application for Variation LP3839GF	Duly made 19/11/08	
Additional information received	Notice served 03/12/08	29/12/08
Variation EPR/HP3931LJ/V002	Issued 26/02/09	
Application for variation EPR/HP3931LJ/V003	Duly made 11/03/09	
Request for further information via e-mail	12/05/09	21/05/09, 25/08/09
Variation notice EPR/HP3931LJ/V003	Issued 15/10/09	
Variation application EPR/HP3931LJ/V004	31/12/09	
Additional information	29/04/10	28/05/10
Variation notice EPR/HP3931LJ/V004	Issued 02/07/10	
Variation notice EPR/HP3931LJ/V005	Duly Made 02/11/10	
Further information Schedule 5	17/02/11	25/03/11
Additional information received	01/12/11 Document No 16666- 51-A-00000-22 166661-88-A-00002-20 166661-51-A-00000-29	
Variation notice EPR/HP3931LJ/V005	Issued 01/03/12	
Variation Application EPR/HP3931LJ/V006	Duly made 12/07/2012	
Variation notice EPR/HP3931LJ/V006	Issued 08/08/2012	

Other Part A installation permits relating to this installation

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

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/HP3931LJ

issued to:
United Utilities Water PLC (“the operator”)

whose registered office is

Haweswater House
Lingley Mere Business Park
Lingley Green Avenue
Great Sankey
Warrington
WA5 3LP

company registration number **2366678**

to operate a regulated facility at

Davyhulme Wastewater Treatment Works
Rivers Lane
Urmston
Manchester
M41 7JB

to the extent set out in the schedules.

The notice shall take effect from 08/08/2012

Name	Date
M Bischer	08/08/2012

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator

Table S1.1 referred to in conditions 2.1.1 and 2.3.3 is amended to:

Table S1.1 activities

Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity and WFD Annex IIA and IIB operations	Limits of specified activity and waste types
A1	S5.3 Part A (1) (c) (ii)	D9: Physical and chemical treatment of sludge for the purpose of disposal	From receipt of the waste to the transfer to storage including treatment of the waste which is limited to the following plant:- 5 Sludge Strain Presses; 4 Gravity Belt Thickeners; 3 Sludge Screening; 6 Sludge Dewatering (centrifuges); DAF Plant Thermal Hydrolysis (4 no. pulper vessels, 20 no. reactor vessels, 4 no. flash tanks)
A2	S5.3 Part A (1) (c) (i)	D8: Biological treatment (anaerobic digestion) of sludge for the purpose 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; 12 Secondary digesters Waste types and quantities as specified in Table S3.3
A3	S1.1 A1 (b) (iii)	The combustion of fuel (biogas) for the purpose of generating electricity and heat for use within the installation	From the 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 5 CHP engines and 3 dual fuel boilers with a combined thermal input (gross) of approximately 45MW. The combined number of engines/boilers running at any one time are limited to the assessment scenario of 4 gas engines and one boiler (or equivalent thereof) and therefore cannot produce more than 4.815grams/second NO ₂ (ref Table 2.4 Air Modelling Report November 2011)
Directly Associated Activity			
	Siloxane unit	Siloxane removal system	Filtration of siloxane compounds from biogas and associated filter regeneration
	Storage of Waste	Cake import and export handling facility	Storage of cake before and after treatment prior to dispatch off site.
	Degassing Tank	Degassing	Remove excess CO ₂ and minimise residual anaerobic activity in downstream pipes.

Combustion of standby gas oil	Burning of gas oil (standby fuel) for use in the 3 dual fuel boilers	From receipt of gas oil, to 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"> • Insufficient biogas available for use • Poor quality biogas being produced; or • Operational malfunction which prevents biogas usage
Gas Flares (2 in number)	Flaring of bio-gas	From receipt of gas at flare, to combustion of gas and discharge of combustion products. Biogas only to be flared where it is unable to be used for the production of heat and energy.
Odour abatement plants (3 in number)	Abatement of odour emissions to air	From receipt of odours from Gravity Belt Thickeners and sludge storage and processing equipment, to emissions to air.

Table S1.2 referred to in conditions 2.3.1, 3.4.2 and 3.4.3 is amended to:

Table S1.2 Operating techniques

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

Application	Sections 3, 3a, and 3b of the application document in response to section 3 – operating techniques , Part C of the application form	30/06/10
Application	Odour management plan reference OMP1 in response to section 5B, Table 3 – General Requirements, Part B of the application form	30/06/10
Response to Schedule 5 Notice dated 17/02/11	All Parts	25/03/11
Application for variation EPR/HP3931LJ/V006	Parts C2 and C3 (and the supplementary information supplied with these parts), and the responses to requests for further information (dated 19/06/12 and 02/07/12).	28/05/12 19/06/12, and 12/07/12

Condition 2.6.1 is amended to:

- 2.6.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4A have been completed.

Table S1.4A referred to in condition 2.6.1 is amended to:

Table S1.4A Pre-operational measures		
Reference	Requirement	Required by
1	The operator shall update the accident management plan having regard to the requirements set out in Section 1 of Environment Agency Guidance - How to comply with your environmental permit. The documents and procedures shall be made available for inspection at the installation.	Prior to the operation of each individual new activity included in variation EPR/HP3931LJ/V005
2	The operator shall extend the Environment Management System (EMS) protocols to include the above units, having regard to the requirements set out in Section 1 of Environment Agency Guidance - How to comply with your environmental permit. The documents and procedures shall be made available for inspection at the installation.	Prior to the operation of each individual new activity included in variation EPR/HP3931LJ/V005
3	The operator shall submit an amendment to the existing Odour Management Plan (OMP) to cover each new activity included within this variation. The Operator shall have regard to Part III of Defra's Code of Practice on Odour Nuisance from Sewage Treatment Plants dated 2006 and the Environment Agency Sector Guidance S5.06 Guidance for the disposal and recovery of hazardous and non-hazardous waste The documents and procedures shall be made available for inspection at the installation.	At least 30 days before final commissioning of each individual new activity included in variation EPR/HP3931LJ/V005
4	At least 30 days before final commissioning commences of these facilities the operator shall submit a report demonstrating that the necessary infrastructure and operating procedures are in place as detailed in operator application EPR/HP3931LJ/V005 for the Installation to allow environmental compliance with the permit EPR/HP3931LJ. This report shall include but not be limited to: <ul style="list-style-type: none"> • Cake silo discharge dust minimisation measures in place during off-loading to lorries. No operations shall commence until this report has been approved by the Agency.	Completed
5	The operator shall carry out an odour air dispersion assessment taking into account the requirement of section 2.2.6 in the Agency guidance document IPPC S5.06.	Prior to the operation of the proposed new raw sludge thickening and cake import facility
6	The Operator shall update the Environment Management System (EMS) to include the operation of the temporary Odour Control Unit and submit a copy to the Agency and make available for inspection all documents and procedures which form part of the EMS. The EMS shall be developed in line with Part 1 of 'How to comply with your Environmental Permit (EPR1.00)', Horizontal Guidance Note H6 'Environmental Management Systems'.	Within 6 weeks of permit issue
7	The Operator shall update the Odour Management Plan to incorporate the temporary Odour Control Unit and submit to the Agency for approval.	Within 3 months of permit issue

Table S4.1 referred to in conditions 3.1.1, 3.6.1 and 3.6.4 is amended to:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method (see Note 1)
A2 CHP Engine exhaust stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Bio-gas engine	650mg/m ³	4 Hourly average*	Quarterly	BS EN 14792
A2 CHP Engine exhaust stack	CO	Bio-gas engine	1,500mg/m ³	Hourly average	Annually	BS EN 15058
A2 CHP Engine exhaust stack	Total VOC's	Bio-gas engine	1,750mg/m ³	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A2 CHP Engine exhaust stack	NM VOC	Bio-gas engine	150mg/m ³	Hourly average	Annually	BS EN 13649:2002
A3 CHP Engine exhaust stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Bio-gas engine	650mg/m ³	4 Hourly average*	Quarterly	BS EN 14792
A3 CHP Engine exhaust stack	CO	Bio-gas engine	1,500mg/m ³	Hourly average	Annually	BS EN 15058
A3 CHP Engine exhaust stack	Total VOC's	Bio-gas engine	1,750mg/m ³	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A3 CHP Engine exhaust stack	NM VOC	Bio-gas engine	150mg/m ³	Hourly average	Annually	BS EN 13649:2002
A4 CHP Engine exhaust stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Bio-gas engine	650mg/m ³	4 Hourly average*	Quarterly	BS EN 14792
A4 CHP Engine exhaust stack	CO	Bio-gas engine	1,500mg/m ³	Hourly average	Annually	BS EN 15058
A4 CHP Engine exhaust stack	Total VOC's	Bio-gas engine	1,750mg/m ³	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A4 CHP Engine exhaust stack	NM VOC	Bio-gas engine	150mg/m ³	Hourly average	Annually	BS EN 13649:2002
A21 CHP Engine exhaust stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Bio-gas engine	500mg/m ³	4 Hourly average*	Quarterly	BS EN 14792

A21 CHP Engine exhaust stack	CO	Bio-gas engine	1,400mg/m ³	Hourly average	Annually	BS EN 15058
A21 CHP Engine exhaust stack	Total VOC's	Bio-gas engine	1,000mg/m ³	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A21 CHP Engine exhaust stack	NM VOC	Bio-gas engine	75mg/m ³	Hourly average	Annually	BS EN 13649:2002
A22 CHP Engine exhaust stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Bio-gas engine	500mg/m ³	4 Hourly average*	Quarterly	BS EN 14792
A22 CHP Engine exhaust stack	CO	Bio-gas engine	1,400mg/m ³	Hourly average	Annually	BS EN 15058
A22 CHP Engine exhaust stack	Total VOC's	Bio-gas engine	1,000mg/m ³	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A22 CHP Engine exhaust stack	NM VOC	Bio-gas engine	75mg/m ³	Hourly average	Annually	BS EN 13649:2002
A23 Composite Boiler Exhaust Stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 14792
A23 Composite Boiler Exhaust Stack	CO	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 15058
A23 Composite Boiler Exhaust Stack	Total VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A23 Composite Boiler Exhaust Stack	NM VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 13649:2002
A24 Composite Boiler Exhaust Stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 14792
A24 Composite Boiler Exhaust Stack	CO	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 15058

A24 Composite Boiler Exhaust Stack	Total VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A24 Composite Boiler Exhaust Stack	NM VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 13649:2002
A25 Composite Boiler Exhaust Stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 14792
A25 Composite Boiler Exhaust Stack	CO	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 15058
A25 Composite Boiler Exhaust Stack	Total VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 12619 or BS EN 13526 dependant upon concentration
A25 Composite Boiler Exhaust Stack	NM VOC	Dual Fuel Boiler	No limit	Hourly average	Annually	BS EN 13649:2002
A26 Siloxane Removal System Vent Air Burner Exhaust Stack	H ₂ S	Siloxane unit	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency
A26 Siloxane Removal System Vent Air Burner Exhaust Stack	NM VOC	Siloxane unit	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency
A26 Siloxane Removal System Vent Air Burner Exhaust Stack	Total VOC	Siloxane unit	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency	To be agreed with Agency
A27 Flare Stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)		No limit	-	-	-
A27 Flare Stack	CO		No limit	-	-	-
A27 Flare Stack	SO ₂		No limit	-	-	-
A27 Flare Stack	NM VOC		No limit	-	-	-
A27 Flare Stack	Total VOC		No limit	-	-	-
A27B Flare Stack	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)		No limit	-	-	-

A27B Flare Stack	CO		No limit	-	-	-
A27B Flare Stack	SO2		No limit	-	-	-
A27B Flare Stack	NM VOC		No limit	-	-	-
A27B Flare Stack	Total VOC		No limit	-	-	-
A28 Gasholder	No parameters set	PRV	No limit	-	-	-
A29 Gasholder	No parameters set	PRV	No limit	-	-	-
A30-A57 Thermal Hydrolysis vessel	No parameters set	PRV's	No limit	-	-	-
O1 – as detailed on figure 6 of the application, issue C (dated 08/04/07)	No parameters set	General odour control unit (wet scrubber)	No limit set	-	-	-
O2 – as detailed on figure 6 of the application, issue C (dated 08/04/07)	No parameters set	General odour control unit (dry scrubber)	No limit set	-	-	-
O3t – as detailed on the plan submitted by email in response to request for further info dated 02/07/12	No parameters set	Temporary odour control unit (catalytic iron filter and carbon filter)	No limit set	-	-	-

Schedule 3 – conditions to be added

None