CONSENT NUMBER: N3095

WATER INDUSTRY ACT 1991

WATER ACT 2003

ENVIRONMENTAL PROTECTION ACT 1990

ENVIRONMENT ACT 1995

THE POLLUTION PREVENTION AND CONTROL ACT 1999

CONSENT TO THE DISCHARGE OF TRADE EFFLUENT

WHEREAS THE UNIVERSITY OF NEWCASTLE UPON TYNE (the "Trader") whose registered office is at 7 Park Terrace, Newcastle University, Newcastle upon Tyne, NE1 7RU and whose registered company number is being the occupier of the trade premises at Newcastle University, Merz Court, Newcastle upon Tyne NE1 7RU (the "Trade Premises") and by an application dated 6/1/2014 (the "Application") has applied to NORTHUMBRIAN WATER LIMITED (the "Company") for consent to discharge trade effluent from the Trade Premises into the Company's sewers

AND WHEREAS the Environment Agency ("EA") or such other body carrying out its functions in respect of The Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No. 675) may issue a permit (" Permit") with regard to a regulated facility thereby setting out particular conditions with regard to part, or all, of the trade effluent discharged from the Trade Premises

NOW THEREFORE in the exercise of the powers conferred upon it by the Water Industry Act 1991 and any Act amending or replacing the same the Company **HEREBY CONSENTS** to the discharge of the trade effluent by the Trader into its sewers **SUBJECT TO THE FOLLOWING CONDITIONS**.

1. **PERMIT**

This Consent is always subject to the provisions of any Permit in force from time to time in respect of prescribed processes carried out at the Trade Premises. In the event of any conflict between the provisions of this Consent and the provisions of the said Permit the more stringent requirement shall prevail.

2. NATURE AND COMPOSITION

The trade effluent discharged under this Consent shall be waste water containing those constituents specified in Clause 8 of the Application insofar as the discharge of those constituents does not breach Clauses 7 to 11 of this Consent.

3. POINT OF DISCHARGE

The sewer into which the trade effluent may be discharged is the Company's public sewer situated at the point shown more particularly in the plan attached hereto. No change shall be made in the location of the discharge point without the prior written consent of the Company.

4. CHANGE IN CIRCUMSTANCE

The Trader shall give to the Company two months' notice in writing of any changes or proposed changes in manufacturing process, raw materials, pre-treatment of the trade effluent or any other circumstances likely to alter the nature or composition of the trade effluent and of any circumstances resulting or likely to result in a cessation of the discharge. Any such changes will be a change of circumstances for the purposes of Section 125 (2) of the Act.

One of the circumstances that constitutes a significant change in the nature of the trade effluent will be a change in the ratio of the Total Chemical Oxygen Demand to the Total 5 day Biochemical Oxygen Demand (ATU modification) of the trade effluent. In such a circumstance the Company will be entitled to issue a variation of the conditions of this Consent in accordance with Sections 124 and 125 of the Act.

5. CHANGE OF NAME etc

- 5.1 The Trader shall notify the Company in writing within twenty one (21) days of any change to the name or address of the owner or occupier of the Trade Premises.
- 5.2 Where there is a change of occupier, this Consent is automatically discharged: the new occupier must serve an application upon the Company for consent to discharge.

6. CONNECTIONS

No connections shall be made to the Company's sewer system without the prior written approval of the Company and all such connections shall be constructed and maintained to the satisfaction of the Company at the expense of the Trader.

7. MAXIMUM QUANTITY OF DISCHARGE

The maximum amount of the trade effluent discharged during any one period of 24 hours shall not exceed five (5) cubic metres, except where no trade effluent is discharged by the Trader from the Trade Premises for a period of six months when Clause 16 of this Consent applies.

8. MAXIMUM RATE OF DISCHARGE

The maximum rate at which the trade effluent may be discharged shall not exceed two (2) litres per second.

9. **TEMPERATURE**

No trade effluent shall be discharged which has a temperature higher than 43 degrees Celsius.

10. **pH VALUE**

No trade effluent shall be discharged having a pH value of less than 6 or greater than 11.

11. MATTERS TO BE ELIMINATED PRIOR TO DISCHARGE TO SEWER

The following are strictly prohibited from entry to the Company's sewers and shall be eliminated from the trade effluent before it is discharged to the sewers of the Company:

- 11.1 Any special category effluent listed in Schedule 1 to The Trade Effluents (Prescribed Processes and Substances) Regulations 1989 (S.I.1156) or any other statutory instrument amending them (the "Regulations") insofar as they are in a concentration greater than the background concentration as defined in the Regulations (see Appendix): unless the discharge of prescribed substances is permitted by an EA Notice of Determination.
- 11.2 Any substance which is not special category effluent but which is within List I designated from time to time under provisions of EC Directive 76/464/EEC and in particular Articles 6 and 12 thereof, or in the Table set down within section 7 of Schedule 1 of the Regulations, in so far as they are in a concentration greater than in water supplied to the Trade Premises for domestic uses (see Appendix): unless they are specifically authorised by a Permit or under section 11.6 below.
- 11.3 Any petroleum spirit or other solvent in mixture or in solution, at levels likely to cause a nuisance or produce flammable, harmful, or toxic vapours in the sewer system; or be dangerous to or cause injury to any person working in the sewer or at the sewage treatment works unless they are specifically authorised under section 11.6 below.
- 11.4 Any other constituent of the trade effluent specified in Clause 8 of the Application as that which is likely to injure or obstruct sewers, or to make the

treatment or disposal of the sewage from those sewers specially difficult or expensive, unless they are specifically authorised under section 11.6 below.

- 11.5 Any living genetically modified organisms.
- 11.6 Any constituents excepting the following not exceeding the concentrations stated:-

Constituents	Limit	When expressed as	
	(milligrams per litre)		
Total Chemical Oxygen	80000	O2	
Demand (Dichromate			
Value)			
Suspended solids dried	5000		
at 105°C			

The analytical method used to determine the concentration of the constituent in any sample shall be that method used from time to time by Northumbrian Water Limited's analyst or agent. The method will be a Standing Committee of Analysts or equivalent method, where "equivalent" relates to the same accuracy and precision.

11.7 The maximum daily load of COD that mey be discharged pursuant to this Consent shall not exceed 20g COD as O2.

12. **PAYMENT**

- 12.1 The Trader shall pay to the Company such charges for the reception, conveyance, treatment and disposal of the trade effluent in accordance with the Company's Charges Scheme in force from time to time and made in pursuance of section 143 Water Industry Act 1991 (or any subsequent amendment) and such charges shall be due and payable on demand and will include any additional expenses incurred or likely to be incurred by the Company in connection with the reception, conveyance, treatment and disposal of the Trader's trade effluent.
- 12.2 Where the Trader is in arrears of four weeks or more in payment of the charges specified above, this Consent may be terminated by the Company straightaway.

13. ENTRY AND SAMPLES

13.1 An inspection chamber or manhole shall be provided and maintained by the Trader in the position indicated on the plan attached hereto and shall be so constructed and maintained as to enable a person authorised by the

Company readily to obtain samples at any reasonable time of the trade effluent so discharged.

- 13.2 The Trader shall permit duly authorised representatives of the Company to inspect examine and test at all reasonable times any works and apparatus installed in connection with the trade effluent and to take samples of the trade effluent.
- 13.3 The Trader shall ensure that no matter other than trade effluent shall pass through the inspection chamber or manhole.

14. **MEASUREMENT AND DETERMINATION OF DISCHARGE**

- 14.1 The Trader shall keep a daily record of the volumes of trade effluent discharged from any individual process where that volume is likely to exceed 5m3 per day.
- 14.2 For the absence of doubt a record of the volumes of water supplied to a process area will be accepted as the basis of the record of the volume of trade effluent discharged from the process.
- 14.3 If the measuring and/or recording apparatus ceases to function correctly then the Company shall have the right to make estimates of the volume and composition of the trade effluent until such time as the apparatus is again operating to the satisfaction of the Company.
- 14.4 The Company and the Trader may from time to time agree alternative methods of complying with the foregoing provisions.

15. BREACH OF CONDITIONS OF CONSENT

The Trader shall notify the Company immediately by the quickest practicable means (usually by telephone) of any discharge from the Trade Premises which contravenes any of the provisions of this Consent. The initial notification shall be followed up by a written report which shall be submitted by the Trader to the Company within 7 working days setting out the nature of the breach, the circumstances that resulted in the breach and the action taken by the Trader.

16. **EXPIRY**

16.1 Unless otherwise agreed in writing by the Company where no trade effluent is discharged by the Trader from the Trade Premises for a period of six months the maximum amount of the trade effluent discharged during any one period of 24 hours shall be zero, *ie* this Consent will automatically expire. For this six month period of non-discharge the Trader will be charged the minimum amount on the trade effluent scale as provided by the Company's Charges Scheme in force from time to time.

- 16.2 If the Trader later wishes to resume the discharge after such six month period of non-discharge, a new application for a Consent must be served on the Company.
- 16.3 This Consent may be terminated at any time by agreement between the parties subject to a minimum of four weeks notice on either side.
- 16.4 This Consent will expire automatically on the grounds set out at section 5.2 above.

17. REFERENCE PURSUANT WATER INDUSTRY ACT 1991 PART IV CHAPTER III

17.1 Where any notice of determination or other document is issued by the EA pursuant to section 132 Water Industry Act 1991 (the "Notice") in respect of any part of the trade effluent discharge from the Trade Premises the terms and conditions of the Notice will be given effect by this Consent.

18. **INTERPRETATION**

Words and expressions to which meanings are assigned by the Environment Act 1995, the Environmental Protection Act 1990, the Water Industry Act 1991, Water Resources Act 1991, Water Consolidation (Consequential Provisions) Act 1991 (or any legislation amending or affecting the same) shall have the same meaning assigned to them when used in this Consent.

Dated this Friday, December 12, 2014

SIGNED: SCIENTIFIC SUPPORT WASTEWATER MANAGER For and on behalf of Northumbrian Water Limited

NOTE: Your attention is drawn to Section 122 Water Industry Act 1991 which provides that any person aggrieved by any condition attached to this consent may appeal to The Water Services Regulation Authority.

ADDRESS TO WHICH ALL COMMUNICATIONS SHOULD BE SENT:

John Zurawlew Northumbrian Water Limited Leat House Pattinson Road, District 15, Washington Tyne and Wear NE38 8LB

Telephone:		0191 419 6593
Fax:		0191 419 6750
Attachments	1	Appendix
	2	Drainage Plan

APPENDIX

THE TRADE EFFLUENTS (PRESCRIBED PROCESSES AND SUBSTANCES) REGULATIONS 1989

(as at 31 August 1990)

Section 120 Water Industry Act 1991 and the above Regulations oblige Northumbrian Water Limited (unless it intends to refuse the application) to refer to the Environment Agency any application to discharge special category trade effluent which;

- a) contains any of the substances listed in Schedule 1 below in a concentration greater than the background concentration or,
- b) is derived from a process in Schedule 2 below if either chloroform or asbestos is present in a concentration greater than the background concentration.

In these circumstances consent for the discharge cannot be granted except to the extent that the Secretary of State consents and subject to any conditions he may specify.

PRESCRIBED SUBSTANCES - SCHEDULE 1

Mercury and its compounds	Dichlorvos
Cadmium and its compounds	1.2-Dichloroethane
gamma-Hexachlorocyclohexane	Trichlorobenzene
DDT Atrazine	
Pentachlorophenol and its compounds	Simazine
Hexachlorobenzene	Tributyltin compounds
Hexachlorobutadiene	Triphenyltin compounds
Aldrin Trifluralin	
Dieldrin	Fenitrothion
Endrin Azinphos-methyl	
Carbon Tetrachloride	Malathion
Polychlorinated Biphenyls	Endosulfan

PRESCRIBED PROCESSES - SCHEDULE 2

Any process for the production of chlorinated organic chemicals Any process for the manufacture of paper pulp Any process for the manufacture of asbestos cement Any process for the manufacture of asbestos paper or board Any industrial process involving the use in any 12 month period of more than 100Kg of the product resulting from the crushing of asbestos ore.

BACKGROUND CONCENTRATION

This is defined in the Regulations and in effect means the concentration of a substance present in the water supplied to, or abstracted for use, in the premises and which is present in rainfall onto the premises. If the trade process adds to that background concentration then the substance should be regarded as being present at a concentration greater than the background concentration.

CONSENT REGISTER NUMBER: N3095

DISCHARGE OF TRADE EFFLUENT - SUMMARY OF CONDITIONS

Name of Firm:		THE UNIVERSITY OF NEWCASTLE UPON TYNE	
Registered Number:			
Registered Office: Situation of Premises:		7 Park Terrace, Newcastle University, Newcastle upon Tyne, NE1 7RU Microbrewery Newcastle University, Merz Court, Newcastle upon Tyne,	
		NE1 7RU	
Receiving Works:		Howdon	
Sewer Connection:			
Waste Derived From:		Brewery wash down	
Maximum Permitted Daily Volume of Discharge Maximum Permitted Rate of Discharge Maximum Permitted Temperature of Discharge Range of pH Permitted	:	five (5) cubic metres two (2) litres per second 43 degrees Celsius 6 to 11	

Limitations (other than standard conditions)

Constituents	Limit (milligrams per litre)	When expressed as
Total Chemical Oxygen Demand (Dichromate Value)	80000	O2
Suspended solids dried at 105°C	5000	

Date of Application: Date of Consent/Agreement:

6/1/2014 Friday, December 12, 2014

Body Account No.	10236093	PRN	729791	Meter	
Site Ref:	990021219	PLR		Drainage Area	05-d28
Contact:	Matt Dunlop		Telephone No.	0191 208 3964	

Our Ref: DW/ *Date:* Friday, December 12, 2014

The Company Secretary THE UNIVERSITY OF NEWCASTLE UPON TYNE 7 Park Terrace Newcastle University Newcastle upon Tyne NE1 7RU

Dear Sirs

CONSENT TO THE DISCHARGE OF TRADE EFFLUENT : REGISTER NUMBER N3095 (THE "CONSENT")

I enclose the Consent to Discharge Trade Effluent from the premises situated at Newcastle University, Merz Court, Newcastle upon Tyne, NE1 7RU.

If you have any queries regarding the Consent, please contact John Zurawlew on 0191 419 6593.

I take this opportunity to remind you that under powers granted by virtue of s124 Water Industry Act 1991 Northumbrian Water Limited may give a direction varying conditions which have been attached to the above Consent. These powers are available two years after the date of the enclosed document: or at an earlier time if both Trader and Northumbrian Water Limited agree in writing.

Your attention is drawn to the right of appeal which is noted below the signature on the Consent. An appeal against this Consent must normally be made to The Water Services Regulation Authority within two months of your receipt of this Notice. For your information his address is:-

The Water Services Regulation Authority Office of Water Services Centre City Tower 7 Hill Street Birmingham B5 4UA

Please acknowledge receipt of the enclosed legal document.

Yours faithfully

DEREK WAITES SCIENTIFIC SUPPORT WASTEWATER MANAGER