

CNTW.0404

**Modification Consent to
Discharge**

Water Resources Act 1991
Section 88, Schedule 10
(as amended by the
Environment Act 1995)



Modification of Consent to Discharge

Consent Number: B.0404

To: Thames Water Utilities Limited
Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Following a review of the conditions of its consent, the **ENVIRONMENT AGENCY** ("The Agency") exercising its powers under paragraph 7(2)(b) of schedule 10 to the Water Resources Act 1991, **HEREBY MODIFIES ITS CONSENT** for making a discharge **OF:**

Treated Sewage effluent

with respect to Consent No: B.0404 issued on the 21st day of March 1990 and modified on the 9th day of March 2005 and the 28th day of January 2009.

FROM: Stratfield Mortimer Sewage Treatment Works

AT: Stratfield Mortimer Sewage Treatment Works (Main outlet), Stratfield Mortimer, Berks.

TO: the Foudry Brook

FROM NOW ON the consent is modified as follows:

A. Substitution of condition 9, in the Second Schedule by the following condition:

- 9
- (a) The Dry Weather Flow of the discharge shall not exceed 1904 cubic metres per day. The consented Dry Weather Flow limit is set at the Consent Holder's planned annual 80%-exceeded flow.
 - (b) In determining compliance with this consent, the measured Dry Weather Flow is that total daily volume that is exceeded by 90% of the recorded measured total daily volume values in any period of 12 months.
 - (c) The numeric value of the measured Dry Weather Flow shall not exceed the numeric value of the consented Dry Weather Flow limit.
 - (d) If the measured Dry Weather Flow exceeds the consented Dry Weather Flow limit then the Consent Holder shall as soon as is practicable investigate the reasons for the exceedance. The Consent Holder shall report the reasons for the exceedance to the Environment Agency and the steps that it proposes to

take to restore compliance. An exceedance of the Dry Weather Flow limit shall not be recorded as a failure if the Consent Holder takes appropriate steps to restore compliance.

- (e) If the measured Dry Weather Flow exceeds the consented Dry Weather limit because of unusual rainfall during the 12-month period, then it will not be recorded as a failure of the Dry Weather Flow limit. For the purposes of this condition, unusual rainfall shall mean rainfall that causes significantly higher sewage flows during the three-month period that normally records the lowest flows.
- (f) For unusual rainfall to be considered, the Consent Holder shall notify the Agency and provide supporting evidence as part of the normal specified data returns.

And

B. Substitution of condition 10, in the Second Schedule by the following condition:

- 10 (a) A continuous flow measurement and recording system ("the flow system") that complies with MCERTS Flow Monitoring scheme shall be provided and operated to record the total daily volume of sewage through the treatment works;
- (b) The flow system shall also measure and record either the instantaneous flow at least every 15 minutes or the 15-minute averaged flow every 15 minutes. The Consent Holder shall provide and operate on-site visual display from which the Agency can readily obtain the instantaneous or 15-minute averaged flow readings;
- (c) The Consent Holder shall hold records of the total daily volume and the 15-minute flow readings;
- (d) As soon as reasonably practicable after installation of the flow system and before the expiry of any certificate issued, the Consent Holder shall employ an independent expert to certify that the flow system complies with the MCERTS Flow Monitoring scheme;
- (e) The Consent Holder shall immediately on issue provide a copy of the MCERTS certificate to the Agency and shall provide a copy of the independent expert's report to the Agency on request;
- (f) The Consent Holder shall ensure that the flow system is always subject to a current MCERTS certificate;
- (g) The Consent Holder shall produce and maintain documented procedures for the calibration, operation and maintenance of the flow system ("maintenance procedures");
- (h) The Consent Holder shall employ an independent expert to certify that the maintenance procedures comply with the MCERTS requirements;
- (i) The Consent Holder shall calibrate, operate and maintain the flow system in accordance with the maintenance procedures. The Consent Holder shall keep a record of the maintenance procedures and maintenance records available for inspection by the Agency and provide a copy to the Agency on request;

- (j) The Consent Holder shall produce and maintain a formal Quality Management System ("QMS") for the management of the flow system and the implementation of the maintenance procedures. An appropriate independent certifier shall certify the QMS;
- (k) The Consent Holder shall record all failures of the flow system and any other breaks in the flow record. The reasons for all failures and breaks that lead to missing or suspect total daily volume records and all steps taken to prevent a re-occurrence shall be recorded;
- (l) The Consent Holder shall ensure that the flow system remains fully operational at all times and shall remedy any failures as soon as reasonably practicable;
- (m) The Consent Holder shall provide records of the flow readings and the reasons for any significant breaks in the record when requested, in a format specified by the Agency;
- (n) Flows of sewage through the treatment works shall be measured at a point(s) as is (are) agreed by the Agency.

And

C. Deletion of condition 5 in the Second Schedule

And

D. Deletion of condition 11 in the Second Schedule

And

E. Deletion of condition Schedule F

And

F. Substitution of condition 7, in the Second Schedule by the following condition:

- 7 (a) For the period up to and including the 30th March 2015, subject to paragraph (d) below, the discharge shall not contain more than;
 - (i) 30 milligrammes per litre of suspended solids (measured after drying at 105^oC);
 - (ii) 20 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20^o C with nitrification suppressed by the addition of allylthiourea);
- (b) For the period up to and including the 30th March 2015, subject to paragraph (d) below, the discharge shall not contain more than;
 - (i) From May to September inclusive in any one year: The ammoniacal nitrogen content shall not exceed 5 milligrammes per litre.
 - (ii) From October in any year to April in the following year inclusive: The ammoniacal nitrogen content shall not exceed 10 milligrammes per litre.

- (c) For the period from 31st March 2015, subject to paragraph (d) below, the discharge shall not contain more than;
- ((i) 30 milligrammes per litre of suspended solids (measured after drying at 105°C);
 - (ii) 18 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20^o C with nitrification suppressed by the addition of allyl-thiourea);
 - (iii) 5 milligrammes per litre of ammoniacal nitrogen (expressed as N).
- (d) The limit for any of the relevant parameters set out in paragraphs (a), (b) and (c) above may be exceeded where, in any series of samples of the discharge taken at regular but randomised intervals in any period of twelve consecutive months as listed in Column 1 of the table in the Third Schedule of this consent, no more than the relevant number of samples, as listed in Column 2 of the said table, exceed the applicable limit for that relevant parameter.

And

G. Deletion of condition 8

And

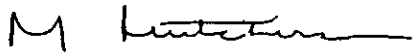
H. From the 31st day of March 2015, addition of new condition 12, to the Second Schedule:

- 12 The discharge shall not contain more than;
- (a) 54 milligrammes per litre of biochemical oxygen demand (measured after 5 days at 20°C with nitrification suppressed by the addition of allyl-thiourea)
 - (b) 20 milligrammes per litre of ammoniacal nitrogen (expressed as N).

Under the provisions of Paragraphs 7 and 8 of Schedule 10 to the Water Resources Act 1991, no notice shall be served by the Agency, which alters the effect of modifications made by this notice, without the agreement in writing of the Consent Holder, during a period of 4 years from the date this notice is served.

This consent modification is served and takes effect on the 10th March 2010

Signed



Mark Hutchinson - Permitting Team Leader

NOTE. All other conditions of this consent remain unaltered and in force. This modification of consent should be read in conjunction with, and attached to Schedule 2 of Consent No B.0404.

CONSENT: B.0404
CNTW/404

CONSENT NO. List 1	Mod Notice 28 th January 2009
-----------------------	---



**ENVIRONMENT
AGENCY**

WATER RESOURCES ACT 1991

**SECTION 88 - SCHEDULE 10
(AS AMENDED BY THE ENVIRONMENT ACT 1995)**

NOTICE OF MODIFICATION OF CONSENT TO DISCHARGE

TO: Thames Water Utilities Limited ("the Consent Holder")
Clearwater Court
Vastern Road
Reading
Berkshire
RG1 8DB

Following a review of the conditions of its consent, the ENVIRONMENT AGENCY ("the Agency") exercising its powers under paragraph 7(2)(b) of Schedule 10 to the Water Resources Act 1991, HEREBY MODIFIES ITS CONSENTS for making discharges

OF: Treated Sewage Effluent

with respect to the attached list of consents, (List 1)

FROM the date upon which this modification takes effect, each of the consents in the attached List 1 is modified as follows:

Addition of the following new conditions OSM 1 – OSM 13 and Annexes OSM1 and LUT1 as specified in this notice of modification

NOTE. This modification notice wholly replaces previous modification notices for Consent No. List 1, which were issued on 14th October 2008, 12th January 2009 and 26th January 2009.

All other conditions of the consents in List 1 remain unaltered and in force. This notice of modification should be read in conjunction with, and attached to each consent as specified in the attached list of consents or schedules to consents.

Where a discharge is regulated by a schedule to a consent, then the wording in these conditions shall be taken as referring to that schedule in place of the term 'consent'.

Under the provisions of Paragraphs 7 and 8 of Schedule 10 to the Water Resources Act 1991, no notice shall be served by the Agency, which alters the effect of modifications made by this notice, without the agreement in writing of the Consent Holder, during a period of 4 years from the date this notice is served.

This modification is served on 28th day of January 2009

This modification takes effect on 1st April 2009 or a later date agreed in writing by the Agency but no later than 1st January 2010.

Signed 

**Mark Hutchinson
Permitting Team Leader**

New conditions added: Operator Self Monitoring (OSM) conditions

OSM Monitoring programme

OSM 1 The Consent Holder shall, unless otherwise agreed in writing by the Agency, undertake a monitoring programme for the parameters specified by this consent which control the effluent quality by numeric limits, at not less than the frequencies specified in Annex OSM 1 to this permit.

This does not include List 1 substances included within a consent in the General Standards Table.

OSM 2 The monitoring programme referred to in condition OSM1 shall:

- (a) cover a calendar year, and
- (b) be recorded and referred to in a Quality Management System before the commencement of a calendar year sample period.

QMS and MCERTS

OSM 3 The Consent Holder shall have an appropriate Quality Management System covering Operator Self Monitoring.

OSM 4 The Consent Holder shall ensure that appropriate actions and activities carried out to fulfil the requirements of condition OSM1 are recorded.

OSM 5 Any sampling or analysis carried out to fulfil the requirements of condition OSM 1 shall be managed and operated by the Consent Holder or its appointed organisation or organisations in accordance with ISO 17025 for the MCERTS Performance Standard for Organisations Undertaking Sampling and Chemical Testing of Water (Part1) to the reasonable satisfaction of the Agency.

- OSM 6**
- (a) For the period up to 1 July 2010, any organisation undertaking sampling and analysis to fulfil the requirements of condition OSM1 shall have applied for accreditation to ISO 17025 for the MCERTS Performance Standard for Organisations Undertaking Sampling and Chemical Testing of Water (Part1), unless otherwise agreed in writing by the Agency, and
 - (b) From 1 July 2010, any organisation undertaking sampling and analysis to fulfil the requirements of condition OSM1 shall have gained accreditation to ISO 17025 for the MCERTS Performance Standard for Organisations Undertaking Sampling and Chemical Testing of Water (Part1), unless otherwise agreed in writing by the Agency.

OSM7 The Consent Holder shall ensure that all required records of compliance and accreditation with ISO 17025 for the MCERTS Performance Standard for Organisations Undertaking Sampling and Chemical Testing of Water (Part 1) are maintained.

Records

- OSM 8** All records required to be made by this consent shall:
- (a) be legible, and
 - (b) be made as soon as reasonably practicable, and
 - (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval and
 - (d) be retained, unless otherwise agreed in writing by the Agency, for at least 6 years from the date when the records were made, and
 - (e) where the records have been requested in writing by the Agency, copies shall be supplied to the Agency within 14 days, unless otherwise agreed in writing by the Agency,

Reporting routine analysis

- OSM 9** The analytical results from the monitoring programme required by condition OSM 1 must be supplied to the Agency in an electronic format defined by the Agency, as soon as is reasonably practical for each result, and at least on a quarterly basis.

Reporting exceedances

- OSM 10** When the Consent Holder becomes aware that a sample result has exceeded a numeric water quality limit specified within this Consent, (including those covered by the Look-up Table) the Consent Holder shall, unless prior agreement has been given in writing by the Agency, notify the Agency as soon as is reasonably practicable by a reporting system and format specified by the Agency.
- OSM 11** When the Consent Holder becomes aware that the Discharge is not compliant with the Look-up Table (as set out in Annex LUT1) for a numeric water quality limit specified within this Consent, the Consent Holder shall, unless prior agreement has been given in writing by the Agency, notify the Agency as soon as is reasonably practicable by a reporting system and format specified by the Agency.

Reporting sample missed or lost

- OSM 12** After becoming aware, or following notification that, a sample has not been taken on the Monitoring Programme pre-scheduled date, or is lost, or a result for that sample can not be reported, the Consent Holder shall record the details and reschedule the sample.

Annual monitoring summary compliance report

- OSM 13** A summary report :
- (a) of compliance with the monitoring programme referred to in condition OSM1 shall be made for each calendar year, and
 - (b) shall be submitted to the Agency within two months following the end of the year and shall have the data summarised and shall be in the format required by the Agency.

Annex OSM1 – Opra Tier 3 Sampling Frequency

Determinand	Normal frequency of samples per year	Reduced Sampling frequency after 12 consecutive months of numeric consent compliance, samples per year or pro rata over the remainder of a year	On consent failure return to Normal frequency as soon as reasonably practicable, samples per 12 months	Out of hours samples
Sanitary	24	12	24	For 24 samples 2 out of hours samples per annum
Non sanitary	12	12	12	For 12 samples 1 out of hours sample per annum

Annex OSM1 relates to spot samples which must be collected at approximately equal intervals during the year, but should include samples from different days of the week and different times. Approximately 10% of samples should be outside of the normal sampling window which is 9am - 3pm, Monday to Friday.

Annex LUT 1

Series of samples taken in any period of 12 consecutive months	Maximum number of samples for a given determinand permitted to exceed limit
4-7	1
8-16	2
17-28	3
29-40	4
41-53	5
54-67	6
68-81	7
82-95	8
96-110	9
111-125	10
126-140	11
141-155	12
156-171	13
172-187	14
188-203	15
204-219	16
220-235	17
236-251	18
252-268	19
269-284	20
285-300	21
301-317	22
318-334	23
335-350	24
351-365	25

Consent: B.0404



**ENVIRONMENT
AGENCY**

ENVIRONMENT AGENCY

**THE WATER RESOURCES ACT 1991
as amended by The Environment Act 1995**

SECTION 88

NOTICE OF MODIFICATION OF CONSENT TO DISCHARGE

**TO: Thames Water Utilities Limited
Clear water Court
Vastern Road
Reading
Berks
RG1 8DB**

WHEREAS the Environment Agency (the "Agency") in pursuance of its powers under the Water Resources Act 1991 **GRANTED CONSENT** to the making of a discharge of sewage effluent on the 21st day of March 1990.

FROM: Stratfield Mortimer Sewage Treatment Works (Main outlet), Stratfield Mortimer, Berks.

TO: the Foudry Brook.

NOTICE IS GIVEN that for the purposes of implementing the requirements of the Urban Waste Water Treatment Regulations 1994, and the Flow Policy, the conditions specified in **Schedule U** and **Schedule F** as attached are hereby appended to the consent as Schedule U and Schedule F.

Subject to the provision of Schedule 10 of the Water Resources Act 1991 (as amended by the Environment Act 1995), no notice shall be served by the Agency, which alters the modifications made by this notice, without the agreement in writing of the discharger, during a period of 48 months from the date this notice is served.

Dated: *9th March 2005* Signed: *R Knight*

**Regulatory Water Quality Team Leader
West Area of Thames Region**

NOTE: All other conditions of the consent remain in force.
Consent B.0404 is updated accordingly.



Consent: B.0404

Schedule: F

Date Issued: - 9 MAR 2005

CONDITIONS OF CONSENT TO DISCHARGE

FLOW MONITORING

FROM: STRATFIELD MORTIMER SEWAGE TREATMENT

1. a) A continuous flow measurement and recording system, to a specification provided by the Agency, shall be provided and operated to record the total daily volume, and the instantaneous or 15-minute integrated flow every 15 minutes of the discharge. An on-site visual display from which instantaneous or 15-minute integrated flow readings can be readily obtained by the Agency shall be provided and operated. The Consent Holder shall hold records of the flow readings.
- b) As soon as practicable after completion of the flow system installation and subsequently on the expiry of any certificate issued, the Consent Holder shall employ an independent expert to certify that the installation and its quality management system complies with the Agency's specification. The independent expert shall be accredited to a competency scheme approved by the Agency. A copy of the certificate shall be sent to the Agency and the certifier's report shall be provided to the Agency on request. If a certificate issued for a flow system has no expiry date included then the certificate shall be deemed to expire five years after the issue date of the certificate.
- c) The Consent Holder shall produce and maintain a documented quality management system, approved by the independent expert and to the satisfaction of the Agency, specifying procedures for the calibration, operation and maintenance of the flow measurement equipment. The flow measurement equipment shall be calibrated, operated and maintained by the Consent Holder in accordance with the provisions of the QMS. The Consent Holder shall keep a record of these procedures available for inspection by the Agency and provide a copy to the Agency on request.
- d) The Consent Holder shall record all failures of the continuous flow measurement system and any other breaks in the flow record. The reasons for all significant failures and breaks, which lead to missing or suspect data, and all steps taken to prevent a re-occurrence shall be recorded and details shall be provided to the Agency on request. A failure or break is significant for the purposes of this condition if it prevents the calculation of the total daily volume to the required level of uncertainty. The Consent Holder shall ensure that as far as possible the recorder remains fully operational at all times. Any failures shall be remedied as soon as possible.
- e) Records of the flow readings or the reasons for any breaks in the record, as described in condition d) above, shall be provided to the Agency when requested, in a format specified by the Agency.
- f) Flows of sewage through the treatment works shall be measured at the inlet or such other point(s) as are agreed by the Agency.

Consent: B.0404
Schedule: U
Date Issued: - 9 MAR 2005



**ENVIRONMENT
AGENCY**

CONDITIONS OF CONSENT TO DISCHARGE

TREATED URBAN WASTE WATER ("the Discharge")

**FROM: STRATFIELD MORTIMER SEWAGE TREATMENT WORKS (MAIN
OUTLET)**

- U0 (a) The Consent Holder shall comply with the Urban Waste Water Treatment (England and Wales) Regulations 1994 ("the Regulations").
- (b) For the purpose of conditions U1 and U2 below, interpretations and references to a numbered regulation or Schedule shall have the meaning as in the Regulations, unless otherwise indicated.
- U1 (a) The Discharge derives from an agglomeration with a population equivalent of 2,000 and 10,000 discharging to fresh waters.
- (b) The Consent Holder shall inform the Agency in writing of any change, or proposed change, to the population equivalent such as would make a material change to the application of the Regulations and shall, on request, inform the Agency in writing of the actual population equivalent.
- (c) The Discharge shall be subject to Regulation 5(1) and shall satisfy the relevant requirements of Part I of Schedule 3.
- U2 (a) The Consent Holder shall provide apparatus for the purpose of:
- (i) measuring or recording the volume, rate of flow, nature, composition or temperature; and
- (ii) collecting samples of any waste water, as is necessary to ensure compliance with paragraph (b) below.
- (b) The Consent Holder shall monitor the Discharge to verify compliance with the requirements of condition U1(c) above in accordance with the control procedures as set out in Part II of Schedule 3.
- (c) The Consent Holder shall provide to the Agency any information collected in complying with paragraph (b) above in a manner agreed with the Agency.
- U3 a) Condition U2 above shall apply for the purpose of verifying compliance with the Directive from the date as specified in the relevant paragraph of Regulation 5 as incorporated into this consent under U1(c) above.



- U4 a) An appropriately labelled sampling point shall be provided and maintained by the Consent Holder so that a representative sample of the Influent may be obtained. The position of the sample point ('UWWTR Influent Sample Point') shall be agreed in writing by the Agency.
- b) An appropriately labelled sample point shall be provided and maintained by the Consent Holder so that a representative sample of the Discharge may be obtained. The position of the sample point ('UWWTR Discharge Sample point') shall be agreed in writing with the Agency.

4496 W

Consent Number B0404

NATIONAL RIVERS AUTHORITY

WATER ACT 1989

CONSENT

to discharge sewage or trade effluent or other matter

TO Thames Water Utilities Ltd.

Nugent House,
Vastern Road,
Reading,
Berkshire.

The NATIONAL RIVERS AUTHORITY ('the Authority') pursuant to Section 108 of the Water Act 1989 HEREBY CONSENT to the making of the discharge described in the First Schedule overleaf in accordance with your application dated 9th March 1987 and the plan accompanying the same SUBJECT to the conditions set out in the Second Schedule overleaf.

The terms of this consent will not, without the agreement in writing of the person to whom this consent is given (or his successor) be altered before the expiration of the period of 24 months from the date of this Consent except in accordance with the provisions of Paragraph 7 of the 12th Schedule to the Water Act 1989.

Dated 21 MAR 1990

G. W. C. [Signature]

Kings Meadow House
Kings Meadow Road
Reading
Berks RG1 8DQ



FIRST SCHEDULE

Description of discharge

The making of a discharge of sewage effluent from Main outlet, Sewage Treatment Works, Stratfield Mortimer, Berkshire to the Foudry Brook.

SECOND SCHEDULE

Conditions

1. The discharge shall be made at National Grid Reference SU 6746 6450 at the point indicated on the submitted plan.
2. The discharge shall be made by means of one or more pipe outlets.
3. The discharge shall consist only of treated sewage effluent.
4. Facilities to enable the Authority's officers to take samples of the discharge shall be provided and maintained as indicated on and in accordance with the plan attached hereto.
5. The discharge shall not contain any matter which will cause or be likely to cause the water in the Foudry Brook to be poisonous or injurious to fish or the spawning grounds, spawn or food of fish.
6. The discharge shall not contain more than 20 mg/l of oil or grease and in any event shall not cause any visible trace of oil or grease to appear on the surface of the Foudry Brook.
7. Subject to the third schedule of this consent, the discharge shall conform to the following standard throughout the year:
 - a) Suspended solids content (dried at 105 degrees Celsius) shall not exceed 30 mg/l.
 - b) Biochemical oxygen demand in 5 days at 20 degrees Celsius (nitrification suppressed with allylthiourea) shall not exceed 20 mg/l.
8. Subject to the third schedule of this consent, the discharge shall conform to the following standard;
 - A. From May to September inclusive in any year:
The Ammoniacal nitrogen content shall not exceed 5 mg/l.
 - B. From October in any year to April in the following

year inclusive;

The Ammoniacal nitrogen content shall not exceed
10 mg/l.

9. The volume of the discharge in dry weather shall not exceed 1150 cubic metres per day.
10. An efficient meter to measure the volume of effluent discharged in any one day shall be provided and installed by the discharger before any discharge is made in pursuance of this consent and thereafter maintained in good order to the satisfaction of the Authority's officers.
11. A log of the total quantity of effluent discharged each day as indicated by the meter readings shall be kept available for inspection by the Authority's officers at all reasonable times and details of the quantity of effluent discharged on each day in each twelve month period 1st January to 31st December shall be notified to the Catchment Control Manager, Kings Meadow House, Reading, Berkshire within 31 days of the end of each such period.



THIRD SCHEDULE

The limits for the determinands set out in condition 7 of the Second Schedule hereto shall not be exceeded except where, in any series of samples of the discharge taken (whether before or after the grant of this consent) by the Authority or its predecessor in the period of twelve months ending on the date of the discharge in question, as listed in column 1 of the table below, not more than the relevant number of samples, as listed in Column 2 of the said table, exceeds the applicable limit for that determinand at the time when a sample was taken.

<u>Column 1</u>	<u>TABLE</u>	<u>Column 2</u>
Series of samples taken in any period of twelve months		maximum number of samples for a given determinand permitted to exceed limit
4 - 7		1
8 - 16		2
17 - 28		3
29 - 40		4
41 - 53		5
54 - 67		6
68 - 81		7
82 - 95		8
96 - 110		9
111 - 125		10
126 - 140		11
141 - 155		12

For the purpose of this schedule the applicable limit shall be the limit for the relevant determinand contained in the consent in force at the date when the sample in question was taken.