Water main requisitions and service connections guidance notes



Section 1: Developer enquiries

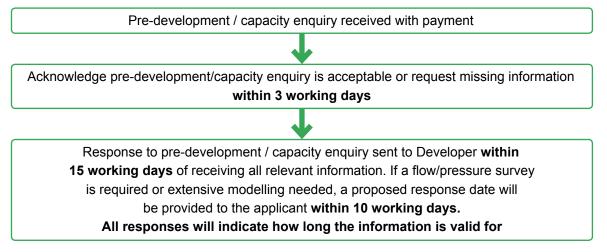
1.1: Pre-development enquiries

Developers are encouraged to submit a pre-development enquiry to Severn Trent Water (STW) at the earliest possible opportunity (although please note, this is not a requirement). This will enable us to assess the impact of the proposed development on the existing infrastructure, using our hydraulic models.

If this is done at an early stage, the information is already available when the Developer makes the full application and can be used for the design of the scheme. If this is not done, the hydraulic modelling can only be done when the full application is made. This can delay getting the design and costs to the Developer.

The Developer will be advised on whether the proposed developments can be accommodated within the capacity of the existing infrastructure, or whether off site reinforcement is needed. The Developer will therefore have upfront knowledge of the work needed before submitting the full application. This will assist with planning when the application should be made and the likely costs to be incurred.

Figure 1 Process for pre-development enquiry



Information the water company will provide the Developer

Once STW have received the above information and carried out the hydraulic modelling, we will respond to the Developer giving the following information:

- 1. Extract showing the position of the existing water and wastewater assets
- Details of any off site and/or reinforcement works that will be required to service the development for water
- Details of any off site and/or reinforcement works that will be required to service the development for wastewater (if requested)
- 4. Budget costs
- 5. Water efficiency information.

1.2: Developer enquiry and application form

If you wish to submit a Developer enquiry request or make a full application, copies of the application packs can be obtained from our website www.stwater.co.uk/newconnections or by telephone: 0800 707 6600

Section 2: Requisitions – general principles

2.1: Water Industry Act 1991

This guide explains STW's duty under Sections 41 to 44 of the Water Industry Act 1991 (the "Act"). When you have read this guide, if you need to requisition a public water main, please complete and return application form: *Application for a water main requisition under sections 41, 51A and 55 of the Water Industry Act 1991*. The form should be returned to:

New Connections Office Miscellaneous Income Team Severn Trent Centre PO Box 5311 Coventry CV3 9FL

2.2: Water UK Guidance

STW adhere to the Water UK "Guidance on the requirement of information and levels of service for water main requisitions and service connections". A copy of these guidance notes can be obtained from Water UK website www.water.org.uk

Section 3: Requisitioning

3.1: Requisitioning

Where mains are required to supply water that is to be used for domestic purposes, Developers can requisition the mains from us. Requisitioning is a legal framework whereby we will offset the cost of financing the main laying by the income we will receive from the connected properties. In some cases, especially where no off-site work is required, our requisitioning terms mean that we will provide mains to housing developments at no charge.

3.2: Requisitioners

You may serve notice on us to requisition a public sewer for domestic purposes if you are:

- · the owner of land or premises
- · the occupier of land or premises
- a Local Authority, New Town Development Corporation, New Town Commissioner or Urban Development Corporation.

And if the premises comprise:

- · land on which there are already buildings
- land on which there are proposals for buildings.

If you are planning a new development site, then your proposals must have sufficient certainty to enable us to design a project to take the proposed flows. The possession of a valid planning permission is generally taken as confirmation of proposals for buildings.

3.3: Costs

The financial calculations for a water main requisition are described in Sections 42, 43 and 43A of the Act. The methods are called the "relevant deficit" and the "discounted aggregate deficit" methods. We provide further explanations of these methods below:

• "Relevant deficit" method – This method assumes that we take out a loan over a twelveyear period to finance the construction of the requisitioned water main. The loan will incur a repayment charge each year, as per a mortgage.

During the twelve-year period, we will receive income, in the form of water charges, from the premises that will be occupied and connected to the requisitioned water main. The income we receive will depend on the rate at which the development and occupation of the site takes place together with any changes in our water charges. We also receive income in the form of interest on the deposit, which you will be asked to make.

The interest rate for the annual repayment charge and the interest rate on the deposit are set by the Director General of Water Services (DG). This interest rate will most probably vary throughout the twelve-year period and it is this varying interest rate that will be used to determine the annual repayment charge and income.

The income we receive is offset against the annual repayment charge. If the annual income is less than the annual repayment charge, then there will be a shortfall. This shortfall is known as the relevant deficit. This is the sum you must pay.

We will require you to enter into an agreement with us to guarantee that the relevant deficits will be paid in each of the twelve years. This requires a deposit to be made as security. We reduce the deposit each year in line with the annual repayment charge and annual income.

We review the deposit annually and may make repayments if appropriate. Any deposit left at the end of the twelve-year period will be returned to you. There is a possibility that the deposit may be insufficient to guarantee payment of the relevant deficits over the whole of the twelve-year period. If this were to occur, we will require a further deposit to be made.

 "Discounted aggregate deficit" method – With this method, the annual relevant deficits over the twelve-year period are converted to a single Net Present Value (NPV) payment. The main benefit of this method is that payments are finalised in a few years instead of over the twelveyear period.

The "relevant deficit" method uses the actual number of premises occupied and connected to the requisitioned water main each year and the actual income we receive. However, with the "discounted aggregate deficit" method, both the development profile and the resultant income that is based upon our water charges at the date of completion of the requisition agreement, and which is inflated throughout the twelve-year period are fixed at the outset. The interest rate set by the DG is also fixed at the date of completion of the requisition agreement.

With both methods of financing the water main requisition, the actual costs that we incur in providing the requisitioned water main are used in the calculations to determine the final costs you have to pay.

In addition to the above methods of financing the works, you may alternatively provide security by means of an indemnity from an approved surety who will be required to enter into the requisition agreement to provide for payment, in the event of a default by you, of the deficit between the annual borrowing cost for providing the requisitionable element of the works and the income to be received from the occupied development (in the case of the "relevant deficit" method), or the discounted aggregate of the 12-year estimated relevant deficits (in the case of the "discounted aggregate deficit" method), and any other payments that are due to us under the terms of the requisition agreement.

3.4: Time periods

Under the Act, the requisitioned water main must be available for use within three months of:

- · the day on which the financial conditions are met
- the day on which the places of connection are agreed or determined, whichever is the latter. This period may be extended by agreement, and we will provide you with information relating to the time period as part of the requisition agreement, or where there is a dispute, by the DG. In certain circumstances, it may not be possible to complete the requisitioned water mains within the three month period.

This may be because:

- major construction works are required in which case it may not be physically possible to complete the requisitioned water main within the three month period
- works are required in land in the ownership of undertakings protected under the Act. Such undertakings include British Waterways Board, Network Rail etc. and agreement is required with them prior to our entry upon their land
- land, not in the ownership of the requisitioner, needs to be purchased for elements such as pumping stations.

In such cases, our extended programme will be stated in our formal offer letter. If you wish, we will discuss the programme with you so that you are fully satisfied before completing the requisition agreement.

	Activity	Target response	
3.4.1.1	Enquiry stage. Acknowledge receipt or advise on missing information	Within 3 w/days	
3.4.1.2	Response to pre-development/capacity enquiry	Within 15 w/days of receipt all relevant information	
3.4.1.3	Response to pre-development/capacity enquiry – if flow/pressure survey required – provide proposed response date to applicant	Within 10 w/days	

Water mains requisitions

	Activity	Target response
3.4.2.1	Acknowledge full water main requisition application or request missing information	Within 3 w/days
3.4.2.2	[<500 domestic properties and previous pre-development enquiry completed] Provide design and costings for requisition	Within 20 w/days of receipt of full application
3.4.2.3	[> 500 domestic properties or <500 where changes in capacity / no previous pre-development enquiry; redesigns; where off-site reinforcement required; significant engineering difficulties; specialist advice or investigation required] Provide design and costings for requisition; commercial/ industrial development;	Within 10 w/days of receipt of application mutually agree date for when design and costing will be completed
3.4.2.4	Contact Developer and initiate discussion restart date for construction of main	Within 10 w/days of 'relevant date'
3.4.2.5	Construct and commission main	Within 3 months of 'relevant date' unless extension of timescale mutually agreed.

NB 'relevant date' is when applicant accepts design and costing and pays remittance amount and agreement is completed.

Section 4: Upscaling

On some sites in addition to supplies for domestic purposes Developers also require mains capacity for non domestic or process water uses. This includes providing fire fighting capacity to meet the requirements of the local fire authority or likely insurance requirements on the connected properties. Where mains are upsized for a non domestic requirement the Developer will be required to pay the full cost of providing the additional capacity.

Section 5: Self construction

STW operates a scheme which allows Developers to appoint competent accredited installers Self Lay Organisation (SLOs) to self construct new mains and services. Work must be carried out in accordance with the current UK Water Industry Research (UKWIR) Self-Laying of Water Mains and Services Code of Practice for England and Wales, and the STW Addendum to that Code of Practice. Self Construction work must not start until the appropriate agreements are in place.

Full details are available separately. A key element of the scheme being that SLOs must be able to demonstrate their competence. Current membership of the Lloyds Register Water Industry Registration Scheme (WIRS) will satisfy this requirement. A list of accredited installers can be found at **www.lloydsregister.co.uk**

Where a Developer elects to self lay the mains that could have been requisitioned we will allow the Developer an asset value for the self constructed mains. This asset value is then used in calculating the asset payment to be made to the Developer once the self laid main is vested in STW. For further information on the self lay option, please contact New Connections on: Telephone: 0800 707 6600

Email: newconnections.selflayteam@severntrent.co.uk

STW operates a standard charging scheme for new service pipe connections; the charges for services up to 12m long, being based upon the type of surface that needs to be excavated. A separate information sheet is available covering our service pipe connection charges.

Note: The charges do not include the costs associated with complying with the New Roads and Street Works Act 1999 and the Traffic Management Act 2004. Costs, such as Highway Permits, 3 or 4 way lights, working out of normal hours, road closures, extra reinstatement, etc will be charged as supplementary Traffic Management Act (TMA) charges.

Service pipe connections to a programme agreed with STW can be self constructed by Lloyds accredited SLOs. When you have read this guide, if you require service pipe connections, please complete and return application form: *Application notice for new standard water supply connection (25mm – 32mm)* **or** *Application to provide a large diameter connection of 50mm and above* (as appropriate). This form should be returned to the New Connections Office.

Please note, if you require a water main requisition, the service pipe connections will be included as part of your mains requisition and will not require a separate application.

6.1: Conditions of connections

Unless otherwise agreed, each separate premises has to have its own separate supply and must be separately metered. There cannot be a single supply that connects to two or more properties.

The Developer must lay the water supply pipe from the property to the boundary of the highway in which the main is laid.

The supply pipe must be installed in accordance with the Water Supply (Water Fittings) Regulations 1999 ("the regulations"). When the supply pipe is laid, a one metre length of pipe should be left at the point where your property boundary meets the back edge of the public footpath or verge, or to the point where we have agreed to make the connection. The pipe tail should be capped off using a mechanical fitting to prevent the ingress of dirt and marked with the plot or house number it serves. The other end of the pipe should enter the property in an appropriately sized duct, insulated against frost. A suitable stop tap must be fitted internally where it enters the building. The stop tap should be left in the closed position until the water has been connected. Prior to connection, the supply pipe installation will be subject to inspection for compliance with the regulations. The Developer, immediately prior to the installation of the service connection, must locate and expose the ends of any associated road ducts.

In addition, where multiple new metered connections are to be made to the main at the same position (via a manifold box), or within close proximity of each other, it will be necessary for the top and tail of the respective supply pipes to be labelled with the relevant plot number. This is necessary in order to prevent the possible cross connection of supply pipes.

6.2: Levels of service

	Activity	Target response
6.2.1.1	Acknowledge receipt of full application or request missing information	Within 3 w/days
6.2.1.2	Send out cost advice for on site service connections	Within 10 w/days of relevant date for water main
6.2.1.3	Send out advice for off site service connections	Within 20 w/days
6.2.1.4	External Water Regulations inspections carried out	Within 5 w/days following payment and request for connections
6.2.1.5	Make service connection	Within 15 w/days of service connection 'relevant date'*
6.2.1.6	Developer to provide owner details, postal address and meter details and reading	Within 5 w/days of sale

NB

- 1. 'Relevant date' is when payment received and external Water Regulations passed
- 2. Water Act specifies 21 calendar days.

*Time for off site connections could exceed 15 working days due to restrictions or conditions imposed by local authorities and highway authorities under the traffic management regulations.

Section 7: Mains connections

To protect our existing customers the connection of constructed mains to the live water network is carried out by STW. SLOs can only undertake routine in line connections providing they have the relevant WIRS accreditation to do so. They need to inform STW of this at application stage.

Section 8: Design for supply and connection of water

8.1: Key design stages

There are two elements to mains design. These are:

- 1. The technical appraisal of our network to determine where the development can be connected and, from this, the extent of any necessary off site reinforcement.
- The design of the on site mains and, if needed, off site mains layout. Whilst the technical appraisal has to be done by STW Developers can elect to design the mains layout themselves. An information sheet setting out design criteria is available.

STW assumes that all the elements provided by the Developer need to be handled as part of the arrangements to supply a new development. Our application allows for the design work to be done once. However where a Developer requires us to rework stages specific charges will apply.

8.2: Design – on site

Once the on site layout has been confirmed Developers need to submit a detailed application specifying what they are constructing and, where the water will be used for domestic purposes, a profile of the demands and when they envisage the properties becoming occupied. This information is required to assess water charge income.

For self lay work, if the design is not being done by ourselves, the Developer also needs to provide a design layout prepared by his WIRS accredited design contractor for checking.

On receipt of this information we will either prepare a design ourselves, or where a design has been submitted by an SLO, check the design. Then we will issue an agreement to the Developer for their approval. Where the Developer needs to make a contribution to the cost of the work the required payment will be specified in the agreement.

Note A – where known in advance we can stage on site construction to suit the Developers own phasing and incorporate the costs of the additional connections etc, in our overall pricing. Additional charges will apply, both for the design and for on site disruption, where the agreed work pattern is changed by the Developer.

Note B – where the design is done by the SLO the Developer needs to consult with the local Fire Authority to ascertain their requirements for the development. Construction will not be able to proceed prior to the Fire Authority consultation being completed.

8.3: Design – off site (where applicable)

There may be a requirement as part of a requisition to provide off site water mains. Once an off site main has been requisitioned, we are responsible for its provision in accordance with the Act. This means those legal and administrative arrangements for its design and construction must comply with the Act. Any arrangements or negotiations with Highway Authorities, other utilities, landowners and other customers are also our responsibility. For these reasons, we retain control of the design and construction of the requisition project.

Water main requisition projects generally follow the same procedures as any other construction project in our capital works programme. This includes our normal procurement methods. The requisitioned water main will be constructed using our statutory powers. This may involve the serving of notice to enter the land through which the requisitioned public water main is to be laid, in accordance with the provisions of Section 159 of the Act.

8.4: Layout changes

Where the Developer makes changes to the site layout which requires us to rework either the technical appraisal or design stages, including income allowances, they will be charged, in accordance with the charges given below, the cost of our additional work.

If the change affects the agreed mainlaying proposals, such as diverting a previously laid main or interrupting the planned mainlaying, additional construction charges will apply.

8.5: Instruction changes

Where a requisition has been received and the Developer subsequently wishes the work to be self constructed any abortive design work will incur a charge in accordance with the 'Layout Change' set out in our New Connections Charges leaflet.

Section 9: Key construction stages

9.1: Role of Customer Experience Managers

Our Customer Experience Managers deal with on site co-ordination of the delivery of agreed new water supplies. They will liaise directly with the Developer's site staff. Contact details for the Customer Experience Managers will be provided once the work has been agreed.

The role of the Customer Experience Manager is to liaise with Developers to establish customers' requirements, provide technical advice, and co-ordinate self construction activities. They ensure through liaison with site managers and construction teams that the water mains and service pipe connections are delivered to an agreed schedule. They also need to approve all private pipework on newly constructed premise where an STW WaterMark approved plumber has not undertaken the work. The Customer Experience Managers will provide the Developer with a site pack that contains useful information with regards to our processes and procedures relating to site delivery.

9.2: Water meters

STW requires a water meter to be installed to every new property. Developers have the option to either fit water meters themselves or request STW to fit the meter on their behalf. Where water meters are to be fitted by STW a charge will be made for this service as detailed in our current New Connections Charges leaflet. Where the Developer elects to fit the meters himself they are provided by STW but you will be charged a commissioning charge as detailed in our current New Connections Charges leaflet.

9.3: Service pipe connection quotations

Although service pipe connection charges can be provided in advance of mainlaying our usual practice is for our Customer Experience Managers to first discuss the way in which the Developer intends to provide the services with the Developer's site staff. Once this is done a call-off schedule can be prepared. Developers then need to liaise with the Customer Experience Managers to schedule the connections in accordance with their construction programme but you will be charged a commissioning charge as detailed in our current scheme of charges. Where the Developer makes any changes to the service connections which requires us to rework either the technical appraisal or design stages they will be charged a requotation fee.

9.4: Self lay supervision

Where either the mains or services are to be self constructed our Self Lay Technician needs to coordinate a pre start meeting between the Developer, the SLO and our Production Supervisor. The purpose of the meeting is to:

- · confirm what is being constructed both self lay and by STW
- · agree the timings and inspection arrangements
- agree that the SLO has the required competence and hygiene requirements for self lay works.

It is a condition of the self lay agreement that this pre start meeting must be held before any self construction works take place. Failure to comply with this requirement could result in STW refusing to adopt any mains already constructed.

Section 10: Mainlaying charges and mains connection charges

10.1: Charging structure

Our standard terms for mainlaying incorporate:

- Construction cost (labour and materials)
- Design
- · Construction supervision and inspection
- Technical services (such as administering the agreement) within the overall scheme cost. The key
 elements of these charges, which may be applied in isolation and the arrangements for self lay
 work are detailed below.

10.2: Design charges

The New Connections Charges Leaflet shows the charges that we will apply to scheme reworks and checking of designs submitted by others for a normal range of housing developments. Charges for large developments and non housing developments will be assessed on a site specific basis.

10.3: Mains connection and on site interruptions

The charges for mains connections and connections caused by on site disruptions are assessed on a site specific basis.

10.4: Charging example

The following is a typical scenario to illustrate charging for mains. Note: values used are examples only and do not necessarily reflect current STW charges

10.4.1 Example 1: requisition

- · Lay 358m of main to supply a new housing development of 99 properties
- · All mainlaying done by STW

Site supply uses previously provided additional capacity on a neighbouring	i site,
hence contribution would be required, in this example:	£8,000
Cost of on-site mainlaying is	£17,000
Total cost of supplying this site is	£25,000
Cost of financing the work (over a 12 year period of equal amounts of	
capital and interest) is	£3,106 per annum
Total cost of financing the work (including interest)	£37,272

Year	Borrowing cost	Income (from new props) £	Deficit (cost less income)	Discount factor	Commuted value NPV £
1	3106	2,804	302	0.941	285
2	3106	7,566	0	0.886	0
3	3106	11,086	0	0.834	0
4	3106	11,334	0	0.785	0
5	3106	11,334	0	0.738	0
6	3106	11,334	0	0.695	0
7	3106	11,334	0	0.654	0
8	3106	11,334	0	0.616	0
9	3106	11,334	0	0.579	0
10	3106	11,334	0	0.545	0
11	3106	11,334	0	0.513	0
12	3106	11,334	0	0.483	0
					Total: 285

Properties to be occupied over 2 years – income from connected properties is shown in the following table.

Section 11: Mainlaying charges – self lay

11.1: Asset value - self lay work in lieu of a requisition

For mains that are self constructed but could have been requisitioned i.e. the water supply was for domestic purposes, we will allow in accordance with the Act the Developer an estimated asset value. This value known as the Asset Payment is calculated as the sum of the estimated offsets for each of the 12 years following adoption of the main in each case discounted to a net present value. The offset is the lesser of the estimated revenue from the adopted main or the annual borrowing costs of a hypothetical loan for the costs of providing the main.

The Asset Payment is payable when the main is vested in (adopted by) STW. Corresponding values for mains on commercial and industrial developments will be determined on a site specific basis.

11.2: Charges to a Developer – self lay work in lieu of a requisition

Having determined the construction value for the self lay main laid in lieu of a requisition, the Developer will be required to make good any shortfall between the cost of financing the construction of the mains and the income we receive from the connected properties. The calculation will be done on the basis of financing the main through equal payments of capital and interest over a 12-year period. The method of calculation is as set out in the Act and uses rates of interest set by the Director General of Water Services.

11.3: Self lay work not done in lieu of a requisition

For self constructed work not done in lieu of a requisition i.e. the water supply is for non domestic purposes the Developer is required to: a) do the work at their own cost b) pay a charge for checking the design and inspecting the work c) pay a technical appraisal charge.

STW will also charge for any work it carries out including each bacteriological sample it tests and will require a surety or deposit to be paid and held until the end of the defects liability period (i.e. two years after the main is commissioned or the service is connected).

Additionally any work undertaken by STW to connect the new self lay main to the company's network will be charged at the full estimated cost.

11.4: Charging example

Note: values used are examples only and do not necessarily reflect current STW charges.

11.4.1 Example 2: self lay

 Site details as example 1 but work to be self constructed 	
STW assessed estimated asset value for on-site mains	£15,840
Connections on to site done by STW	£1,200
Off-site works	£8,000
Total cost of supplying site is	£25,040
Cost of financing the work (over 12 year period of equal payments of	
capital and interest) is	£3,111
Total cost of financing the work (including interest)	£37,332

Properties to be occupied over 2 years – income from connected properties is shown in the following table.

Year	Borrowing cost	Income (from new props) £	Deficit (cost less income)	Discount factor	Commuted value NPV £
1	3111	2,804	307	0.941	289
2	3111	7,566	0	0.886	0
3	3111	11,086	0	0.834	0
4	3111	11,334	0	0.785	0
5	3111	11,334	0	0.738	0
6	3111	11,334	0	0.695	0
7	3111	11,334	0	0.654	0
8	3111	11,334	0	0.616	0
9	3111	11,334	0	0.579	0
10	3111	11,334	0	0.545	0
11	3111	11,334	0	0.513	0
12	3111	11,334	0	0.483	0
					Total: 289

Asset Payment to Developer	= £25,436
Work done by STW	= £9,200
Payment due to Developer	= £16,236

Section 12: Infrastructure charges

These charges are made under Section 146 of the Water Industry Act 1991. Liability for infrastructure charges arise when newly created premises are connected to the public water or sewerage systems and can receive water for domestic purposes. On redevelopment sites a credit is given for each premises which had a water connection in the last five years.

Infrastructure charges will be included in the quote you receive for the water supply connections (although payment is not legally required until the water connection has been made).

Please refer to our current charges scheme which sets out further information relating to infrastructure charges (Please note this does not apply to the connection charges which must be paid in advance).

Section 13: Final costs

We will try to inform you as soon as possible, if our estimate of final costs is likely to exceed the amount quoted in the Requisition Agreement. The final recalculation of the cost of the water main requisition project cannot be carried out until all costs are known. The project could continue for a number of years after completion of the works.

This is because:

- the owners of affected businesses along the route of the requisitioned public water main have up to six years in which to lodge a claim for losses incurred as a result of the water main construction works
- the owners of land through which the requisitioned public water main passes can claim compensation. Negotiations can, however, sometimes take several years to resolve
- the final account with the contractor will not be settled until repairs to any faulty workmanship have been completed
- other service utilities may delay sending in their bills for any diversions of their pipes or cables
- there is usually a minimum three-year warranty period on any reinstatement work for highway surfaces.

Until all matters are resolved, final costs cannot be determined. We will, however, attempt to provide you with an estimated final cost of the project within six months of commissioning the requisitioned works.

Section 14: Complaints

What to do if you are unhappy about the service you have received

If you feel your initial enquiry has not been properly answered or you still have a problem which our staff cannot resolve, please telephone, email or write to our Duty Manager. If you are still not satisfied, you can have your enquiry reviewed by our Customer Service Team. Please write to:

Severn Trent Water Ltd Sherbourne House St. Martin's Road Finham Coventry CV3 6SD Telephone: 03457 500 500 mail: customer.relations@severntrent.co.uk

Taking the process further

If you have had your complaint fully reviewed by us and you remain dissatisfied, you can ask for an independent review by calling the Consumer Council for Water Central (CCWater Central) on 0845 039 2837 (local call rates) or 0121 345 1000 or:

Consumer Council for Water Central 1st Floor Victoria Square House Victoria Square Birmingham B2 4AJ or via email to: enquiries@ccwater.org.uk or via their website on: www.ccwater.org.uk

If you are unhappy with the way in which your complaint has been handled locally, the Consumer Council for Water (CCWater) also based at Victoria Square House will consider matters. The Consumer Council for Water will advise customers about the dispute resolution powers that Ofwat may have regarding their complaint. Ofwat can be contacted by writing to the following address:

Ofwat Centre City Tower 7 Hill Street Birmingham B5 4UA or by telephoning: 0121 644 7500