



South Staffs Water

Application for New Mains and Communication Pipes

Mains Design and/or approval of Self Lay Mains Design - no charge

The following charges apply for communication pipes.

Application fees Standard 25mm:

- for up to and including 6 new 25mm connections - **£70**
- for more than 6 new 25mm connections - **£137**
- amendment to valid quotes - **£70**
- expired quotes will be reworked and charged at above rates

Application fees Non-Standard (Non-household) 32mm or above:

- for up to and including 6 water supplies of 32mm or larger - **£105**
- for more than 6 water supplies of 32mm or larger - **£206**
- amendment to valid quotes - **£70**
- expired quotes will be reworked and charged at above rates

VAT is applicable for Non-household applications

Please return to:

Developer Services
South Staffs Water
Green Lane
Walsall
WS2 7PD

Tel 0845 3451399
Fax 01922 631779
www.south-staffs-water.co.uk

Application for New Mains and Communication Pipes

Please complete this form if you are applying to lay water mains and or/ communication pipes under sections 41 and 45 of the Water Industry Act 1991. Please complete all sections and provide all the information requested so your application can be processed as quickly as possible.

As the applicant, are you A) The Self Lay Organisation
B) The Developer

NOTE: All self lay organisations will require a letter of authorisation attached to this application form as proof that the developer is asking the self lay organisation to act on their behalf.

Section 1a. Self Lay Organisation

Company Name.....

Contact Name.....

Correspondence Address.....

.....

Email Address.....

Office Nr.....Mobile Nr.....

Fax Nr.....

Registered Address (If different from above).....

.....

WIRS accreditation Full Partial

WIRS registration Nr.....

If on site works are been carried out by a different company, please complete below.

Company Name.....Contact Name.....

Contact Telephone Number.....

WIRS accreditation status Full Partial

Section 1b. Developer Details

Developer Name.....
Contact Name.....
Correspondence Address.....
.....
Email Address.....
Office Nr..... Mobile Nr..... Fax Nr.....
Registered Address (if different from above).....
.....

Section 2a. Site Address and Site Details

Site Name.....
Registered Land Title Nr
Site Address.....
.....
Site Contact Name.....
Email Address.....
Office Nr..... Mobile Nr..... Fax Nr

Section 2b. Land Owner – to be completed if different to the Developers details (1b).

Land Owners Name.....
Contact Name.....
Correspondence Address.....
.....
Email Address

Office Nr..... Mobile Nr..... Fax Nr

Section 3a. Site History

We need to know what the site was used for previously so we can determine whether there are any contaminants that will affect the pipe material to be laid.

It is essential that you specify what the site / land was previously used for :-

1. Greenfield 2. Domestic 3. Brownfield

Does the site contain contaminated ground? (Landfill, Petrol Station, Industrial etc.) Yes No

A soil analysis report must be included with your application.

Section 3b. Previous Usage

Property Address Details

Demolition date

- 1)
- 2)
- 3)..... ..
- 4)..... ..

Continue on a separate sheet if more than 4.

Section 4. Works required (please indicate from the following the areas of contestable works you wish to undertake)

- Self Lay Mains
- SSW Lay Mains
- Self Lay Communication Pipe(s) off New Main(s)
- SSW Lay Communication Pipe(s) off New Main(s)
- Self Lay Communication Pipes(s) off Existing Main
- SSW Lay Communication Pipes(s) off Existing Main
- Undertake Pressure Test
- Undertake Chlorination
- Carry out on site in line connections

Section 5. Phasing

Only complete the table below if the construction of the water mains will be phased over a period of time. You must ensure that your plan outlines each phase clearly.

Phase Number	Plot Numbers	Proposed start date

Section 5 continued.

Please confirm the estimated number of plots to be connected within the years in this table.

Proposed occupation Dates between Jan-June	Plot Numbers	Proposed occupation Dates between July-December	Plot Numbers
2016		2016	
2017		2017	
2018		2018	
2019		2019	
2020		2020	
2021		2021	
2022		2022	
2023		2023	
2024		2024	
2025		2025	
2026		2026	

Water Connections – to be completed for Communication Pipes

Section 6. Sewerage Information (collected on behalf of Severn Trent Water Ltd.)

Although South Staffs Water does not deal with sewerage connections we are responsible for the collection of sewerage infrastructure charges on behalf of Severn Trent Water Ltd. Please provide details about how the Foul and Surface water will drain from the site.

How will Foul Water drain? : 1. Public Sewer - Yes No
2. Septic Tank - Yes No

How will Surface Water drain? : 1. Public Sewer - Yes No
2. Soakaways - Yes No

*** Please note your application will not be processed if you fail to provide this information.**

Section 6a. 25mm Water Service Connections Required - Household (where applicable)

* If more than 6 connections are required, please copy this page and complete as necessary

Plot Number(s)	Property Type			Number of Storeys
	Apartment / Terraced / Mobile Home A	Semi-Detached B	Detached C	

Section 6b. Water Service Connections Required - Non-Household (where applicable)

* If more than 6 connections are required, please copy this page and complete as necessary

Plot / Unit Number(s)	Property type (e.g.) office, shop, factory, industrial unit, warehouse, hotel, nursing home, hospital etc.	Is a pulse output connection required on the meter(s)? Please tick box		Site footprint info. per unit		Calculated flow requirements litres per second				Pipe size in mm (OD)	
		Yes	No	Total area of unit sq. metres	Total area of unit sq. metres	Peak flow	Expected duration	Average flow	Daily demand		

Section 6c. Water Fitting Information – Non Household only

Please indicate the total number of new or additional fittings to be installed

*If more than 6 connections are required, please copy this page and complete as necessary

Plot / Unit Number (s)	WC Cisterns	Wash Basin	Baths	Showers	Sinks	Spray Taps	Bidets	Urinal Flush Cisterns/Valve	Hose Taps	Cold Water Storage Capacity	Domestic Appliances (Dish washers washing machines etc)	Communal or Commercial Appliances (Dish washers washing machines etc)

Water Regulations

Water supply (Water Fittings) Regulations 1999-Regulation 5-Notification.

Where applicable the completion of this form will be deemed as your Regulation 5 Notification for the erection of a building or other structure.

Section 7a. Greywater Systems Or Rainwater Harvesting

Are rainwater harvesting or greywater systems to be installed? Yes No

If Yes – please confirm which plot numbers the systems are to be installed in.

Rainwater Harvesting System Plot Numbers

Greywater System Plot Numbers

Section 7b- Approved Plumbers internal fittings.

Will an approved plumber be used for the internal plumbing? Yes No

If yes, please provide their details

NameWIAPS registration Number (if applicable).....

Address.....

Telephone Nr.....Mobile Nr.....

Section 7c- Fire Sprinklers

Are any of the plots to have fire sprinklers fitted? Yes No

If yes, confirm which plot numbers the systems will be installed in.

Section 8a. Provision of Plans / Drawings

In order to process your application we will need you to provide us with the following plans:

#

- Site Location Plan - of 1:500, 1:1250 or 1:2000 scale, indicating the location of the premises in relation to adjacent roads.

#

- A geo-referenced Auto-cad (2007) Site Layout Plan - of 1:500, 1:1250 or 1:2000 scale, indicating the total site boundary, the area occupied by each unit, common areas and your proposed service pipe route. Auto-cad Plans can be provided with the application in disc format or can be emailed to

#####developerservices@south-staffs-water.co.uk#

#

Section 8b. Charges

Please reference the cover sheet for charges relevant to your application. Cheques should be made payable to South Staffs Water Plc and provided at the time the application is submitted.

VAT is applicable for non-household applications

Expired quotes will be charged at the above rates.

If you wish to pay by card, please give us a contact name and telephone number below:

.....
.....

Section 9. Declaration

By signing this application you confirm that you have read and accepted the SSW requirements detailed in this application form.

Signed.....Print Name.....Date.....

Section 10.

Don't forget to:

- Complete all relevant sections
- Enclose the relevant fee
- Enclose the requested plans and provided Auto-cad (CD/Email)
- Provide a letter of authority if application form completed by the SLO
- Complete the enclosed "Contamination Land Assessment Form" and return with a copy of the site soil analysis report including results

Please return the completed form to:-

**Developer Services
South Staffs Water Plc
Green Lane
Walsall
WS2 7PD**

**Telephone 0845 345 1399
Email: developerservices@south-staffs-water.co.uk**



South Staffs Water

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Contaminated Land Assessment Form

Contaminated Land Assessment Guidance

Introduction

In January 2011, UK Water Industry Research (UKWIR) published "Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites" (Ref 10/WM/03/21; the 'UKWIR Guidance'). Its aim is to ensure that the correct materials are selected for water pipes and components to be used below ground in brownfield sites to protect the quality of drinking water whilst taking into account the service life of the water distribution system. It supersedes the Water Regulations Advisory Scheme (WRAS) Information and Guidance Note 9-04-03 "Laying Pipes in Contaminated Land" which has been withdrawn.

The UKWIR Guidance is for use by developers, self-lay organisations, water companies and consultants when planning, designing and constructing water mains and/or services in brownfield sites. It defines brownfield sites as "land or premises that have previously been used or developed. They may also be vacant or derelict. However, they are not necessarily contaminated." The UKWIR Guidance states that it does not apply to greenfield sites; however, we consider this supplementary guidance and the relevant sections of the UKWIR guidance as being equally suitable for application to those greenfield sites considered to be potentially affected by contamination. Where greenfield sites are not affected by contamination a preliminary risk assessment (see below) will suffice.

The UKWIR Guidance also states that there should be no departure from its provisions "except where formally approved by the water company, such departure being technically justifiable or representing advances in knowledge or product development".

We have adopted the UKWIR Guidance in principle and produced this supplementary guidance which includes the Risk Assessment for Water Pipes (the 'RA').

This guidance does not cover operative safety, health exposure modelling or accidental pipe damage.

Risk Assessment for Water Pipes in Land Potentially Affected by Contamination

Any application for new water supplies to a development (construction of new properties, or renovation or conversion of existing buildings) in land potentially affected by contamination shall include a completed RA.

As a minimum a desk study (preliminary risk assessment) shall be provided with the RA in accordance with the framework in the Environment Agency publication "Model Procedures for the Management of Land Contamination" (ref: CLR11) that sets out whether the land through which the pipes are to be laid may be affected by contamination. The application of the source, pathway, receptor concept will be an integral part of any pipeline risk assessment. For each potential source (the contamination) and each potential receptor (the water pipe), consideration shall be given to whether a potential pathway between source and receptor exists, or may exist in the future, linking the two. There are normally only three pathways by which contamination may come into contact with water pipes. These are direct contact with the soil or backfill, an excessive vapour phase or a contaminated groundwater regime. If none of these conditions exist on site (adopting the source, pathway, receptor concept) then it is likely that extended

and/or targeted soil testing will not be required and a simple risk assessment will suffice. For those sites where land may be affected by contamination appropriate testing shall be undertaken on the materials within which the pipes are to be laid, whether they are existing ground materials, remediated materials or imported capping materials. The testing requirements are as described in the following section.

The signatories of the Water Supply Application Form and the RA must ensure that all assessments of land condition have been carried out in accordance with applicable current standards and guidelines by or under the direction of a suitably qualified competent person.

The competent person to be a) a chartered member of an appropriate professional body (such as the Institution of Civil Engineers, the Geological Society of London or the Royal Institution of Chartered Surveyors) with relevant experience of investigating contaminated sites or b) a Specialist in Land Condition (SiLC) with appropriate geo-environmental experience.

Testing Requirements

The soil, rock and if appropriate groundwater tests that are required on all sites where the potential for organic contamination has been identified in the desk study and where water pipes are proposed to be laid must be accredited by the United Kingdom Accreditation Service (UKAS) as a minimum and where commercially available the Environment Agency's Monitoring Certification Service (MCERTS). These accredited tests should be undertaken for:

- Banded hydrocarbons EC5-EC10, EC10-EC16, EC16-EC40 (Total aliphatic and aromatic hydrocarbons for each banding may be summed). Aliphatic/aromatic fractionation and subsequent banding may be required should a more detailed site specific risk assessment be undertaken. The bandings have been amended to take into account readily available laboratory tests. The equivalent carbon number (EC) is used to assess petroleum hydrocarbon mixtures rather than the actual number of carbon atoms in the molecule in line with guidance issued by the Environment Agency (2005).
- Volatile organic compounds (VOCs) (method by headspace or purge & trap GCMS) with tentative identification of compounds greater than 20µg/kg. The method used should be capable of detecting a wide range of compounds listed in US EPA Method 8260C or similar. The method should include analysis of naphthalene.
- BTEX (Benzene, toluene, ethyl benzene and xylenes) plus MTBE (Methyl-tertiary butyl ether) (by headspace GCMS).
- Semi-Volatile Organic Compounds (SVOCs) (method by GCMS) with tentative identification of compounds greater than 20µg/kg. The method used should be capable of detecting the compounds listed in US EPA Method 8270D or similar. The total concentration of SVOCs excludes polycyclic aromatic hydrocarbons, ethers, nitrobenzene, ketones, aldehydes, phenols, cresols and chlorinated phenols. Phenols, cresols and chlorinated phenols which are detected by the SVOC analysis are given their own assessment criteria.

Table G1 and Table 3.1 of the UKWIR Guidance are not considered to be a definitive guide for assessing total concentrations. Table 1 in the RA below replaces Table 3.1 of the UKWIR Guidance.

Where previous site uses include the use, storage, treatment, disposal or manufacture of any of the following, appropriate testing for these substances will be required:

- Ethers, nitrobenzene, ketones, aldehydes and amines. Note that the presence of amines on any site at the proposed pipe depth +/- 1.0m precludes the use of polyethylene. The methods of analysis and method of calculation of total concentrations of these compounds will need to be agreed with the water company.

To comply with the testing requirements, the suites of tests that are required on all brownfield sites where wrapped steel, wrapped ductile iron or copper pipes are to be laid as minimum must include:

- pH, conductivity and redox potential

Sufficiency of Testing

Water pipes are normally laid at between 0.75 and 1.35m from finished ground level to the crown of pipe.

Samples taken and tested must represent both;

- a) the soil in which the water pipes are to be laid, and
- b) the soil down to at least 500mm below the underside of the proposed pipe.

Where the proposed depth of the pipes is unknown at the time of application, soil samples representative of the ground condition between surface level and 1.5m below finished ground level shall be taken as a minimum. Where appropriate (see UKWIR Guidance) groundwater sampling and groundwater monitoring will also be necessary. Photo-ionisation detection (PID) monitoring along the proposed route of the pipeline may be employed, though this does not provide a definitive guide to the suitability of water pipe materials.

Where required a sufficient number of test results should be obtained from the material in which the pipes are to be laid. CLAIRE/CIEH 2008 "Guidance on comparing soil contamination data with a critical concentration" may be used, where appropriate, to justify the number of soil samples tested; however, this statistical model should not be used on heterogeneous materials or used to average test results from different types of materials.

Further guidance on representative sampling is contained within BS10175:2011 Code of Practice for the Investigation of Potentially Contaminated Sites, the Department of the Environment's Contaminated Land Research Report "Sampling strategies for contaminated land" prepared by The Centre for Research into the Built Environment, Nottingham Trent University (Ref: CLR 4; 1994) and the Environment Agency's "Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination" (Ref: R&D Technical Report P5-066/TR; 2000).

Where remediation has been carried out on the site, the test results obtained from validation samples will be used in the assessment. Where a horizontal capping system has been or will be employed using materials spread across a site, sufficient samples will need to be taken to characterise the capping material used and the results presented. However, the sufficiency of sampling on the horizontal capping system, in which the pipeline will be placed, may be assessed on the basis of the source, quantity and type of materials used.

Detection Limits

Only positive concentrations, ie those above the limit of detection should be used in summation of VOC and SVOC (or other test groups of compounds ie phenols, cresols and chlorinated phenols). Laboratory methods shall provide a minimum limit of detection of 10µg/kg for each individual VOC or SVOC (or other test groups of compounds) quantitatively detected in accordance with the methods described above. For tentatively identified compounds (TICs), only those compounds with a concentration of 20µg/kg or greater shall be used in the summation of VOC and SVOC (or other test groups of compounds).

Protective Measures

Where polyethylene, ductile iron, steel or copper pipes are to be laid on a brownfield site or other land potentially affected by contamination (whether or not it has been remediated) and where the concentrations exceed the generic guideline values set out in Table 1 of the RA, the developer shall provide either:

- a) a robust risk assessment to show how any contaminants will not significantly impact on proposed water supplies or buried assets over the lifetime of the assets; or
- b) more suitable pipe materials; or
- c) an engineering solution to protect the pipework backed up by an adequate assessment of the risk.

Liquid free phase product (e.g. oil or free solvent layers) shall not remain in the ground or groundwater in the vicinity of water pipes, whether barrier pipe or any other pipe materials are used.

When designing pipe routes on land potentially affected by contamination, new preferential contamination pathways along the route of new water pipes shall not be created. Particular measures may be required to prevent the possible migration of contamination through pipe bedding and into controlled waters.

References

BS10175:2011 "Investigation of Potentially Contaminated Sites Code of Practice"

CLAIRE/CIEH "Guidance on comparing soil contamination data with a critical concentration" 2008

Department of the Environment Contaminated Land Research Report "Sampling strategies for contaminated land" prepared by The Centre for Research into the Built Environment, Nottingham Trent University (Ref: CLR 4) 1994

Environment Agency "Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination" (Ref: R&D Technical Report P5-066/TR) 2000

Environment Agency "Model Procedures for the Management of Land Contamination" (Ref: CLR11), 2004

Environment Agency P5-080/TR3 "The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons in Soils" 2005

UK Water Industry Research (UKWIR) "Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites" (Ref 10/WM/03/21)" January 2011

Water Regulations Advisory Scheme (WRAS) Information and Guidance Note 9-04-03 "Laying Pipes in Contaminated Land" 2002

Contaminated Land Assessment

The risk assessment for water pipes will help you choose appropriate materials for your development.

Please complete all relevant sections and return with your application to Developer Services. Please ensure that you include relevant supporting information, such as site contamination investigation reports, that confirm the data supplied in the assessment below.

Risk Assessment for Water Pipes (RA)

Section 1: Development Details	
Development Name (if it has one):	
Development Address:	
OS Grid Reference (mid-point):	
Developer's Name:	
Water Company reference number: (For South Staffs Water use only)	
What was the site previously used for? (Please cross out all that don't apply)	Greenfield / Domestic / Brownfield
Please provide details below of the current and historical use of the site and adjacent sites. <i>If your supporting information has details of the current and historical site use, please reference below the relevant sections of your report.</i>	

Section 2: Pipe selection	
What pipe materials are intended to be used on site? (Please cross out all that don't apply)	PE / Barrier pipe / Other Please specify _____

Section 3: Preliminary Risk Assessment	
Has your desk study and site walkover identified any land potentially affected by contamination? (Please cross out all that don't apply)	Yes / No
If the site is potentially affected by contamination and you have not completed site investigations but intend to use barrier pipework for all water pipes please indicate here. <input type="checkbox"/>	
If the site is potentially affected by contamination but you have not completed any intrusive site investigations please provide details below of the rationale behind the intended pipe selection. <i>If your supporting information has details below of the rationale behind the intended pipe selection, please reference below the relevant sections of your report.</i>	

Section 4: Intrusive Site Investigation	
Have you completed any intrusive site investigation? (Please cross out all that don't apply)	Yes / No
Date(s) when the site investigation(s) undertaken:	
At what level has groundwater been encountered? (Please cross out all that don't apply)	_____ metres below ground level / Not encountered
<p>Table 1 (Pipeline Selection Risk Assessment Summary (PSRAS)) below classifies testing required where the preliminary risk assessment has identified land potentially affected by contamination. Please provide details below of any test groups which have not been tested and the rationale for not testing. <i>If your supporting information has details of the rationale behind not testing any particular test groups, please reference below the relevant sections of your report.</i></p>	
<p>If the intrusive site investigation has identified concentrations above the PE threshold (see PSRAS) and your intended pipe selection is PE please provide details below of the rationale behind the intended pipe selection (section 2). <i>If your supporting information has details of the rationale behind the intended pipe selection, please reference below the relevant sections of your report.</i></p>	

Section 5: Site Remediation	
<p>Please provide details below of any site remediation (which may include a change in site levels) already completed. <i>If your supporting information has details of the site remediation already completed, please reference below the relevant sections of your report.</i></p>	
Has the PSRAS (Table 1) been completed using appropriate data after remediation? (Please cross out all that don't apply)	Yes / No / Not applicable

Section 6: Site Remediation (continued)

Please provide details below of any proposed site remediation and an analysis of whether this will affect your intended pipe selection.

If your supporting information has details of any proposed site remediation and whether this will affect your intended pipe selection, please reference below the relevant sections of your report.

Section 7: Final Use of Site

Please provide details below of any chemicals (including fuel) to be stored on site and any other future contamination risks which may affect your intended pipe selection.

If your supporting information has details of potential contamination risks which may affect your intended pipe selection, please reference below the relevant sections of your report.

Section 8: Additional Information

Please use the section below to provide any additional details to support your intended pipe selection.

If your supporting information has additional information to support your intended pipe selection, please reference below the relevant sections of your report.

Section 9: Risk Assessor	
Name and relevant qualifications of person directing the risk assessment for water pipes:	
Name and address of risk assessor's company:	
Date risk assessment performed:	

Section 10: Declaration			
I confirm I have completed this form and provided supporting information in accordance with 'UKWIR Guidance for the Selection of Water Supply Pipes to be used in Brownfield Sites' and the water company's Contaminated Land Assessment Guidance. I also confirm that if any further site investigation is needed and carried out, I will be required to submit an additional Risk Assessment for Water Pipes with the relevant supporting information. I understand that failure to supply any of the required information may delay my application being processed.			
Signature:		Company:	
Name:		Position:	
Phone number:		Date:	

Please return the completed form to:
Developer Services, South Staffs Water, Green Lane, Walsall WS2 7PD

Table 1: Pipe Selection Risk Assessment Summary (PSRAS)

- 1) Testing must be undertaken on the materials within which the pipes are to be laid, whether they are existing ground materials, remediated materials or imported capping materials. Please use the appropriate testing data to complete Table 1 below.
- 2) If more than one pipe selection is being made, for example, for pipes in different areas of a large site, a completed PSRAS is required for each selection.

What materials have been tested to populate Table 1 below? (Please cross out all that don't apply)

Existing ground materials / Remediated materials / Imported capping materials

All concentrations in mg/kg

Test group	Testing required?	PE threshold	Metal Pipes/ Barrier Pipe	Laboratory Detection Limit	Testing UKAS accredited Y/N	Maximum concentration at proposed pipeline depth See Note [2]	Maximum site concentration See Note [3]	Locations and depths where concentrations exceed proposed pipeline threshold
Total VOCs	Where Preliminary Risk Assessment (PPRA) has identified land potentially affected by contamination	0.5	Pass					
Total BTEX & MTBE		0.1	Pass					
Total SVOCs (excluding PAHs and those substances marked with an *)		2	Pass					
EC5-EC10 aliphatic and aromatic Hydrocarbons		2	Pass					
EC10-EC16 aliphatic and aromatic Hydrocarbons		10	Pass					
EC16-EC40 aliphatic and aromatic Hydrocarbons		500	Pass					
Phenols* (from SVOC analysis)		2	Pass					
Cresols and chlorinated phenols* (from SVOC analysis)		2	Pass					
Ethers*		0.5	Pass					
Nitrobenzene*		0.5	Pass					
Ketones*	Only where identified	0.5	Pass					
Aldehydes*		0.5	Pass					
Amines		Fail	Pass					
Corrosive	Conductivity, Redox and pH	Pass	See Note [1]					

Note [1] Threshold: For wrapped steel – corrosive if pH<7 and conductivity > 400µS/cm. For wrapped ductile iron – corrosive if pH<5, Eh not neutral and conductivity > 400µS/cm. For copper – corrosive if pH<5 or >8 and Eh positive.

Note [2] Water pipes are normally laid at 0.75-1.35m below finished ground level.

Note [3] Also state if liquid free product is present in soil or groundwater.