DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC (Cambridge Region)
Green Lane
Walsall
WS2 7PD

DWI ref: CAM045

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water (Cambridge Region)
DWI Scheme reference: CAM045 – Fowlmere WTW - Nitrate

FINAL DECISION LETTER OF SUPPORT

The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water (Cambridge Region) to provide ion exchange treatment to secure compliance with the nitrate standard for drinking water quality reasons at Fowlmere Water Treatment Works.

The detailed assessment also took in to consideration the outcome of the risk assessment report submitted to the Inspectorate as required by regulation 28(1) of the Water Supply (Water Quality) Regulations 2000 (Amendment) Regulations 2007 for the Fowlmere WTW connected supply system.

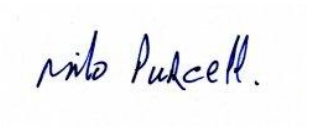
A summary of the outcome of our assessment of this scheme is attached. Based on the information submitted by the Company, the Inspectorate supports the need for a scheme to reduce nitrate concentrations in the treated water, for drinking water quality reasons, and the supported scheme shall be included by the Company in its Final Business Plan, subject to the caveats listed in the attachment.

In this instance the Inspectorate intends to issue a Notice under Regulation 28(4) of the Water Supply (Water Quality) Regulations 2000, as amended, that requires the Company to mitigate the risk of nitrate that has been identified as a potential danger to human health from the water supplied from Fowlmere WTW.

It is expected that the Company will continue to monitor treated water nitrate concentrations, and that it will take all reasonable steps to prevent contraventions of the nitrate standard.

I am copying this letter to Claire Daniel at Ofwat, Anne Dacey at the Environment Agency, Steven Hobbs at CCWater, Professor Bernard Crump - Chair of Cambridge Water's Customer Engagement Forum and Dame Yve Buckland – Chair of South Staffs Water Customer Engagement Forum

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)

PERIODIC REVIEW 2014

SUMMARY OF DWI ASSESSMENT – LETTER OF SUPPORT

	Comment
Water company:	South Staffs Water (Cambridge Region)
DWI scheme reference(s):	CAM045
Scheme name:	Fowlmere WTW - Nitrate
Proposal:	Provision of ion exchange treatment at Fowlmere WTW to secure compliance with the nitrate standard, for drinking water quality reasons.
Supporting evidence:	Risk assessment report for Fowlmere WTW submitted on 29/07/13. PR14 business plan proposal for Fowlmere WTW submitted on 16/10/2013.
Conclusion:	Subject to the caveats listed below, the Inspectorate supports the need for the following scheme: Provision of ion exchange treatment for nitrate removal at Fowlmere WTW.
Timescale:	Completion date: To be confirmed (before 2017)
Estimated cost:	Estimated capital costs: £2.1m Estimated net additional operating costs: £38k pa
Legal Instrument Required:	Notice under Regulation 28 (4)
Caveats:	Subject to the following caveats: 1. Agreement to, and completion of, more intensive investigation to provide further information to confirm steps to be taken and project completion dates. 1. Confirmation from the Environment Agency that there are no additional catchment measures that could be employed to slow the increasing levels of nitrate in the raw water and that installation of nitrate removal treatment at Fowlmere is the most sustainable supply option for the Heydon supply system.
Comment:	DWI has no role in determining proportional allocation of expenditure. Where DWI technical support is given, this should not be taken by the company to imply that the scheme will be partially or wholly funded as a Quality item.

	It is noted that there is an NEP Phase III scheme for catchment measures to address nitrate at Fowlmere, ref. 6CWD17001. Schemes that require a legal instrument are considered necessary to meet statutory drinking water quality requirements. These schemes will be transposed to formal programmes of work by DWI as soon as possible and their implementation and completion will be monitored, audited and closure confirmed by DWI.

DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC
Green Lane
Walsall
WS2 7PD

DWI ref: SST046

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water
DWI Scheme reference: SST046 – Churchill WTW - Nitrate

FINAL DECISION LETTER OF SUPPORT

The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water to provide increased blending capacity to secure compliance with the nitrate standard for drinking water quality reasons at Churchill Water Treatment Works.

The detailed assessment also took in to consideration the outcome of the risk assessment report submitted to the Inspectorate as required by regulation 28(1) of the Water Supply (Water Quality) Regulations 2000 (Amendment) Regulations 2007 for the Churchill WTW connected supply system.

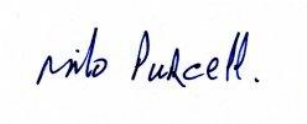
A summary of the outcome of our assessment of this scheme is attached. Based on the information submitted by the Company, the Inspectorate supports the need for a scheme to reduce nitrate concentrations in the treated water, for drinking water quality reasons, and the supported scheme shall be included by the Company in its Final Business Plan, subject to the caveats listed in the attachment.

In this instance the Inspectorate intends to issue a Notice under Regulation 28(4) of the Water Supply (Water Quality) Regulations 2000, as amended, that requires the Company to mitigate the risk of nitrate that has been identified as a potential danger to human health from the water supplied from Churchill WTW.

It is expected that the Company will continue to monitor treated water nitrate concentrations, and that it will take all reasonable steps to prevent contraventions of the nitrate standard.

I am copying this letter to Claire Daniel at Ofwat, Anne Dacey at the Environment Agency, Steven Hobbs at CCWater, Dame Yve Buckland – Chair of South Staffs Water Customer Engagement Forum

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)

PERIODIC REVIEW 2014

SUMMARY OF DWI ASSESSMENT – LETTER OF SUPPORT

Comment	
Water company:	South Staffs Water
DWI scheme reference(s):	SST046
Scheme name:	Churchill WTW - Nitrate
Proposal:	Provision of increased blending capability for water supplied from Churchill WTW
Supporting evidence:	Risk assessment report for Churchill WTW submitted on 29/07/13. PR14 business plan proposal for Hayley Green supply system submitted on 29/07/2013.
Conclusion:	Subject to the caveats listed below, the Inspectorate supports the need for the following scheme: Provision of increased blending capability for Churchill treated water, to through rezoning and modifying the network to allow Churchill treated water to blend with an increased quantity of Hampton Loade water, before supply from Sedgley Reservoir.
Timescale:	Completion date: To be confirmed (before 2017)
Estimated cost:	Estimated capital costs: £2.1m Estimated net additional operating costs: £38k pa
Legal Instrument Required:	Notice under Regulation 28 (4)
Caveats:	Subject to the following caveats: 1. Agreement to, and completion of, more intensive investigation to provide further information to confirm steps to be taken and project completion dates. 1. Confirmation from the Environment Agency that there are no additional catchment measures that could be employed to slow the increasing levels of nitrate in the raw water and that provision of increased blending capacity at Churchill is the most sustainable supply option for the Heydon supply system.
Comment:	DWI has no role in determining proportional allocation of expenditure. Where DWI technical support is given, this should not be taken by the company to imply that the scheme will be partially or wholly funded as a

	Quality item. It is noted that there is an NEP Phase III scheme for catchment investigations for nitrate at Churchill, ref. 6SSD0500. Schemes that require a legal instrument are considered necessary to meet statutory drinking water quality requirements. These schemes will be transposed to formal programmes of work by DWI as soon as possible and their implementation and completion will be monitored, audited and closure confirmed by DWI.

DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC
Green Lane
Walsall
WS2 7PD

DWI ref: SST047

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water
DWI Scheme reference: SST047 – Lead – Chilcote WTW

FINAL DECISION LETTER OF SUPPORT

The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water to install phosphoric acid dosing at Chilcote Water Treatment Works to secure compliance with the standard for lead in drinking water, for water quality reasons, in water supply zones supplied by Chilcote WTW.

The detailed assessment also took in to consideration the outcome of the risk assessment report submitted to the Inspectorate as required by regulation 28(1) of the Water Supply (Water Quality) Regulations 2000 (Amendment) Regulations 2007 for the supply systems connected to Chilcote WTW, principally in the Winshill Water Supply Zone.

A summary of the outcome of our assessment of this scheme is attached. Based on the information submitted by the Company, the Inspectorate supports the need for a scheme to reduce the risks to wholesomeness associated with the above named parameter in the treated water for water quality reasons, and the supported scheme shall be included by the Company in its Final Business Plan submission, subject to the caveats listed in the attachment.

In this instance the Inspectorate intends to issue a Notice under Regulation 28(4) of the Water Supply (Water Quality) Regulations 2000, as amended, that requires the Company to mitigate the risk of lead that has been identified as a potential danger to human health in water supply zones supplied by Chilcote Water Treatment Works.

It is expected that the Company will continue to monitor this parameter in the water supplied to consumers, and that it will take all reasonable steps to ensure that water supplied to consumers from Chilcote WTW complies with the standards for drinking water quality.

I am copying this letter to Claire Daniel at Ofwat, Steven Hobbs at CCWater, and Dame Yve Buckland – Chair of South Staffs Water Customer Engagement Forum

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)

PERIODIC REVIEW 2014

SUMMARY OF DWI ASSESSMENT – LETTER OF SUPPORT

	Comment
Water company:	South Staffs Water
DWI scheme reference(s):	SST047
Scheme name:	Chilcote WTW - Lead
Proposal:	To install phosphoric acid dosing for plumbosolvency control
Supporting evidence:	Risk assessment report for the Winshill supply system ref SWW1359 submitted on 29th July 2013 PR14 business plan proposal for Chilcote WTW submitted 29th July 2013.
Conclusion:	Subject to the caveats listed below, the Inspectorate supports the need for the following scheme: To install phosphoric acid dosing for plumbosolvency control.
Timescale:	Completion date: 31st March 2016
Estimated cost:	Estimated capital costs: £173k Estimated net additional operating costs: £25k p.a.
Legal Instrument Required:	Notice under Regulation 28 (4)
Caveats:	Subject to the following caveats: 1. Agreement to, and completion of, more intensive investigation to provide further information to confirm steps to be taken and project completion dates. 2. In addition to an enhanced monitoring strategy for lead, demonstration of benefits must include additional evidence that the phosphate dosing has been optimised. It is expected that this would include monitoring data for phosphate in the final water, and in the zones supplied.
Comment:	Where DWI technical support is given, this should not be taken by the company to imply that the scheme will be partially or wholly funded as a Quality item. Schemes that require a legal instrument are considered necessary to meet statutory requirements. These schemes will be transposed to formal programmes of work by DWI as soon as possible and their implementation and completion will be monitored, audited and closure confirmed by DWI.

DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC
Green Lane
Walsall
WS2 7PD

DWI ref: SST048

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water
DWI Scheme reference: SST048 – Catchment Management covering Hampton Loade and Seedy Mill WTWs – Pesticides, including Metaldehyde

FINAL DECISION LETTER OF SUPPORT

The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water to undertake catchment management activities to facilitate compliance with the pesticide parameter Metaldehyde at the Hampton Loade and Seedy Mill water treatment works.

The detailed assessment also took in to consideration the outcome of the risk assessment reports submitted to the Inspectorate as required by regulation 28(1) of the Water Supply (Water Quality) Regulations 2000 (Amendment) Regulations 2007 for the connected supply systems.

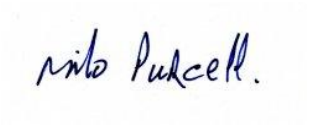
A summary of the outcome of our assessment of this proposal is attached. Based on the information submitted by the Company, the Inspectorate supports the need for this programme of catchment management activities to reduce the risk of contraventions of the pesticides parameter in water supplied from the named water treatment works, for drinking water quality purposes. The supported proposal shall be included by the Company in its Final Business Plan submission, subject to the caveats listed in the attachment.

In this instance the Inspectorate requires the Company to submit an Undertaking under Section 19(1)(b) of the Water Industry Act 1991 for the purposes of securing or facilitating compliance with Regulation 4 of the Water Supply (Water Quality) Regulations 2000, as amended, for the water treatment works listed.

It is expected that the Company will continue to monitor concentrations of metaldehyde and other pesticides likely to be present, in the raw and treated waters, and that it will take all reasonable steps to prevent contraventions of the pesticide standards.

I am copying this letter to Claire Daniel at Ofwat, Anne Dacey at the Environment Agency, Steven Hobbs at CCWater, Dame Yve Buckland - Chair of South Staffs Water Customer Engagement Forum.

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)

PERIODIC REVIEW 2014

SUMMARY OF DWI ASSESSMENT – LETTER OF SUPPORT

Comment	
Water company:	South Staffs Water
DWI scheme reference(s):	SST048
Scheme name:	Catchment Management – Hampton Loade and Seedy Mill water treatment works – pesticides, including Metaldehyde.
Proposal:	Comprehensive programmes of catchment management activities to address metaldehyde.
Supporting evidence:	Risk assessment reports for the connected supply systems submitted on 29/07/13. PR14 business plan proposal for Catchment Management submitted on 29/07/13.
Conclusion:	Subject to the caveats listed below, the Inspectorate supports the need for the following scheme: Programmes of catchment management activities to address metaldehyde in the catchments and sub-catchments supplying the above named WTWs
Timescale:	Completion date: Ongoing programme of work to 31/03/2020
Estimated cost:	Allocated to the NEP
Legal Instrument Required:	Undertaking under S19.
Caveats:	Subject to the following caveats: 1. Agreement to, and completion of, more intensive investigation to provide further information to confirm steps to be taken and milestone dates. 2. Additional parameters may be added to the legal instrument, as appropriate, if a risk to wholesomeness is identified that can be mitigated through the same or similar catchment measures.
Comment:	DWI has no role in determining proportional allocation of expenditure. Where DWI technical support is given, this should not be taken by the company to imply that the scheme will be partially or wholly funded as a Quality item. It is noted that there are catchment measures schemes for Blithfield and Hampton Loade

	catchments in the NEP Phase III that cover pesticides, including metaldehyde, refs. 6SSD04001 and 6SSD04002 respectively. Schemes that require a legal instrument are considered necessary to meet statutory drinking water quality requirements. These schemes will be transposed to formal programmes of work by DWI as soon as possible and their implementation and completion will be monitored, audited and closure confirmed by DWI.

DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC
Green Lane
Walsall
WS2 7PD

DWI ref: SST049

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water
DWI Scheme reference: SST049 – Lead Strategy

FINAL DECISION LETTER OF SUPPORT

The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water to secure compliance with the new standard for lead in drinking water due to take effect on 25th December 2013, in zones supplied by South Staffs Water.

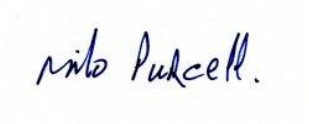
A summary of the outcome of our assessment of this scheme is attached. Based on the information submitted by the Company, the Inspectorate supports the need for this risk-based programme of work to deliver compliance with the standard for lead in water supply zones supplied by South Staffs Water, for water quality reasons, and the supported scheme shall be included by the Company in its Final Business Plan submission, subject to the caveats listed in the attachment.

In this instance the Inspectorate intends to issue a Notice under Regulation 28(4) of the Water Supply (Water Quality) Regulations 2000, as amended, that requires the Company to mitigate the risk of failures of the standard for lead that has been identified as a potential danger to human health in water supply zones supplied by South Staffs Water.

It is expected that the Company will continue to monitor concentrations of lead in water supplied to consumers, and that it will take all reasonable steps to prevent contraventions of the lead standard.

I am copying this letter to Claire Daniel at Ofwat, Steven Hobbs at CCWater, Dame Yve Buckland - Chair of South Staffs Water Customer Engagement Forum.

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)

PERIODIC REVIEW 2014

SUMMARY OF DWI ASSESSMENT – LETTER OF SUPPORT

Comment	
Water company:	South Staffs Water
DWI scheme reference(s):	SST049
Scheme name:	Lead Strategy
Proposal:	Risk-based programme of work to reduce the risk of exceedances of the new standard for lead and to reduce consumers' exposure to lead.
Supporting evidence:	PR14 business plan proposal for lead submitted on 17/10/13
Conclusion:	Subject to the caveats listed below, the Inspectorate supports the need for the following scheme: A risk-based programme of work that includes a range of measures to address lead in identified high risk areas, and targeting high risk properties and vulnerable consumers. The proposed strategy is consistent with DWI PR14 Guidance for managing lead in drinking water.
Timescale:	Completion date: Continuous programme of work to 31/03/20
Estimated cost:	Estimated AMP6 total cost: £548k
Legal Instrument Required:	Regulation 28 Notice
Caveats:	Subject to inclusion in the Company's lead strategy of: • Continued appraisal of monitoring data to identify high risk zones and appropriate remedial action • Agreement to, and completion of, more intensive investigation to provide further information to confirm steps to be taken, milestone dates and detail on how benefits will be measured
Comment:	DWI has no role in determining proportional allocation of expenditure. Where DWI technical support is given, this should not be taken by the company to imply that the scheme will be partially or wholly funded as a Quality item. Schemes that require a legal instrument are considered necessary to meet statutory drinking water quality requirements. These schemes will be transposed to formal programmes of work by DWI as soon as possible and their implementation and

	completion will be monitored, audited and closure confirmed by DWI.

DRINKING WATER INSPECTORATE
Area 7e, 9 Millbank
c/o Nobel House
17 Smith Square
London SW1P 3JR

Direct Line: 030 0068 6413
Enquiries: 030 0068 6400

E-mail: milo.purcell@defra.gsi.gov.uk
DWI Website: http://www.dwi.gov.uk

31st October 2013

Steve Morley
Compliance Director
South Staffs Water PLC
Green Lane
Walsall
WS2 7PD

DWI ref: SST050

Dear Steve,

PERIODIC REVIEW 2014: South Staffs Water
DWI Scheme reference: SST050 – Regulation 26(1A) - Disinfection Byproducts

FINAL DECISION COMMEND FOR SUPPORT

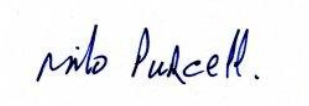
The Inspectorate has completed its detailed assessment of the scheme proposed by South Staffs Water to investigate the causes of disinfection byproducts in water supplied from Hampton Loade and Seedy Mill water treatment works and to facilitate compliance with Regulation 26(1A).

The Inspectorate **commends for support** the investigative proposals to improve the Company's understanding of DBP formation potential in the treated water, with the following caveat: The research should identify clear company targets for concentrations of named DPBs (including compounds other than trihalomethanes) to measure the benefit of any future proposed capital solution.

We consider that this work will add to the Company's understanding of the contribution of the treatment processes and other factors towards the formation of disinfection byproducts, which will inform any future proposals for operational measures implemented to improve compliance with Regulation 26(1A).

I am copying this letter to Claire Daniel at Ofwat, Steven Hobbs at CCWater, Dame Yve Buckland - Chair of Anglian Water's Customer Engagement Forum.

Yours sincerely



Milo Purcell
Deputy Chief Inspectorate (Regulations)