

Mr Layte – Investigation Response

22 February 2017

Dear Stacey

I acknowledge receipt of your request for a formal investigation for Mr John Layte, Winter Cottage, Goongumpa, s St. Day, Redruth, TR16 5JL dated 08 February 2017.

### Overview

Mr Layte has been in regular contact with South West Water since August 2013. Following thorough investigation of Mr Layte's concerns, the issues were identified as 'private'. Comprehensive water quality sampling and testing confirmed that the supply complied with the Water Quality (Water Sampling) Regulations. Enforcement action by SWW Water Regulations team was required on discovery of the installation of a private rain water harvesting system. This case has been comprehensively discussed with CCWater who concluded that the matter was a private pipework issue and was "clearly outside [their] remit". In October 2015 CCWater closed the case which was after SWW had made its offer of an ex gratia payment of £1500. Consequently SWW informed Mr Layte that everything possible had been done to assist him in resolving his private matter and also reminded him of the independent adjudication service provided by the Water Industry Redress Scheme, WATRS.

To fully resolve this complaint and this investigation you recommended a number of steps for SWW to address. For ease of reference I have responded to each point separately.

1. *That South West Water confirms that GSS was paid for the late reply to Mr Layte's complaint of 27 October 2016 and non-substantive replies of 21 December 2016 and 10 January 2017.*

On 15 October 2015 CCWater (Neil Whiteman) closed its case on Mr Layte as it was a private issue and had exhausted the complaints procedure. Please see email exchange dated 15 October 2015 attached (Appendix 1). CCWater confirmed that it was putting extensive notes on the case onto the system and I assume that you have had sight of those notes. The factual matrix of the case remains as it was at that time.

Mr Layte continued to contact SWW and in April 2016 Tracy Symons (Customer Delivery Manager) asked Mr Layte to bullet point all the questions that he believed remained unanswered for a final response from SWW.

An email was received from Mr Layte on 27 October 2016 (Appendix 2 & 2a). Tracy Symons replied on 27 October 2016 advising Mr Layte that she would respond fully by the end of November with the outcome of her investigations (Appendix 3).

Tracy Symons responded in full as promised on 25 November 2016 (Appendix 4).

Mr Layte telephoned Tracy Symons on 07 December 2016 as he was unhappy with her response, Tracy confirmed her investigation was now concluded and SWW's position would not change.

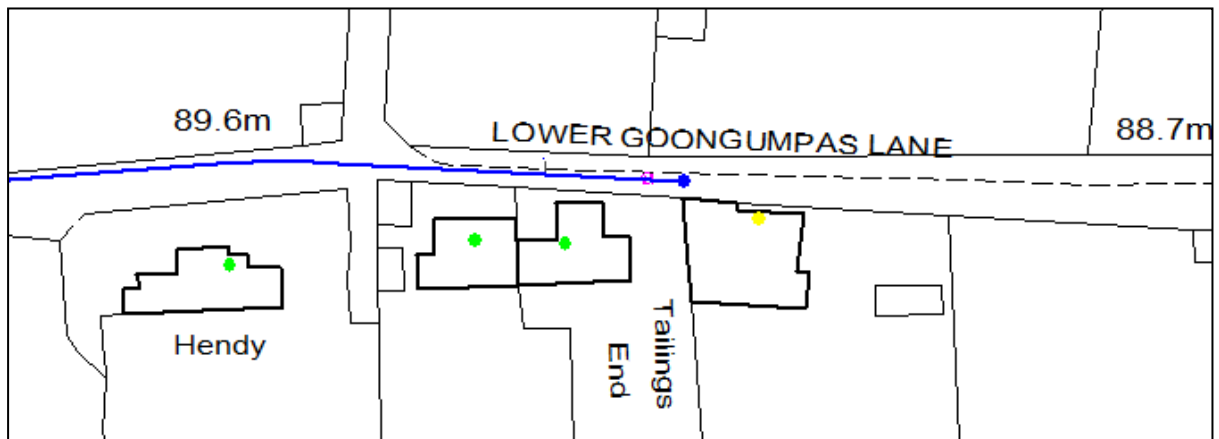
Mr Layte emailed again on 21 December 2016 (Appendix 5). Tracy Symons responded on 22 December 2016 reiterating SWW's position (Appendix 6).

Mr Layte emailed Dr Stephen Bird, SWW's Managing Director, on 10 January 2017 (Appendix 7). Richard Gilpin (Director of Operations - Network & Customer Services) responded on behalf of Dr Stephen Bird on 23 January 2017 (Appendix 8) referring him to Tracy Symons' response.

2. *That South West Water review Mr Layte's e-mails of 27 October 2016, 21 December 2016 and 10 January 2017 in line with the investigation letter and attached correspondence letter and reply to all of Mr Layte's points in full.*

### 2.1 Pipe Ownership

SWW records confirm the water main installed in 1955 ends at the hydrant in Lower Goongumpas Lane adjacent to the property Tailings End. The blue dot as displayed on the SWW mapping system below signifies the hydrant. The hydrant is standard apparatus installed at the end of a water main and enables routine maintenance to be performed such as flushing.



The stop tap for Mr Layte's supply is located at the side of Lower Goongumpas Lane and displayed on the photograph below. The location of the hydrant is also displayed in this photograph. The exact location of the communication pipe is not known but assumed to run from the water main to the stop tap. The pipe from the stop tap is Mr Layte's private supply pipe.

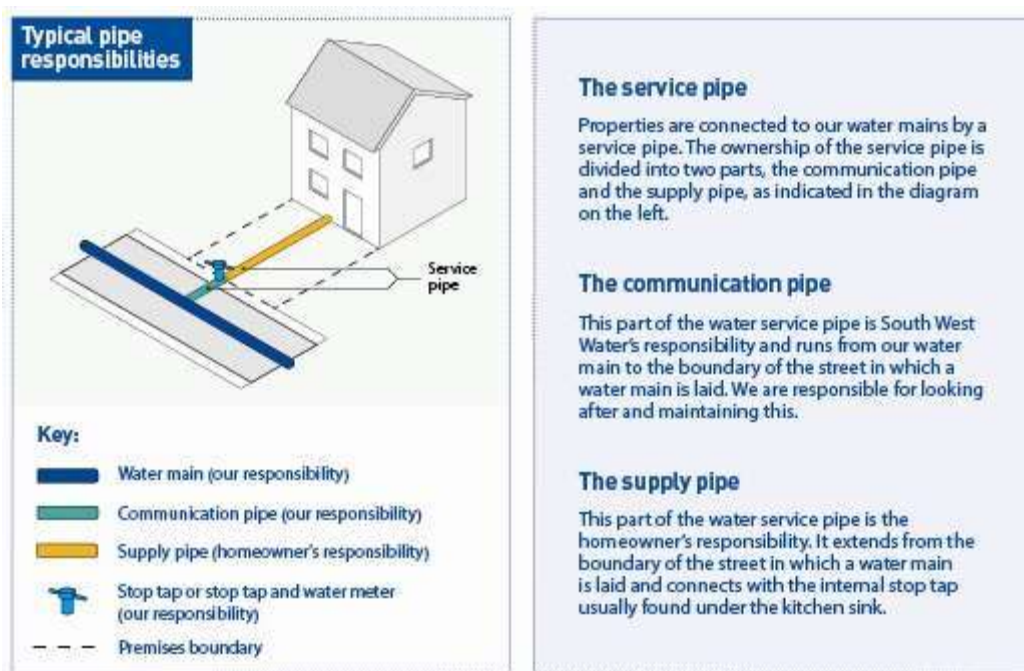
In 2012 two other properties further along Lower Goongumpas Lane applied for new water connections. Both were connected to the main at the location of Tailings End.

We have identified that the supply to Goon Farm has a stop tap also located at Tailings End. This confirms that Mr Layte's supply is separate from that of Goon Farm.



This information has been provided to Mr Layte on many occasions and most recently in SWW's response dated 25 November 2016.

SWW's legal responsibility for water service pipes ends at the boundary of the street in which a water main is laid. Information to assist customers in identifying what Pipework they are responsible for can be found on SWW's website. An example is below.



#### The service pipe

Properties are connected to our water mains by a service pipe. The ownership of the service pipe is divided into two parts, the communication pipe and the supply pipe, as indicated in the diagram on the left.

#### The communication pipe

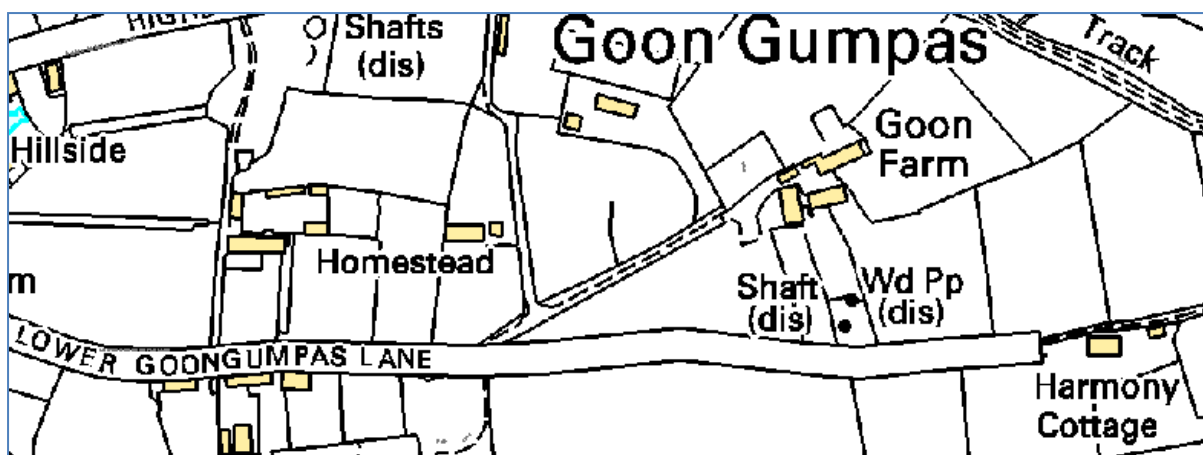
This part of the water service pipe is South West Water's responsibility and runs from our water main to the boundary of the street in which a water main is laid. We are responsible for looking after and maintaining this.

#### The supply pipe

This part of the water service pipe is the homeowner's responsibility. It extends from the boundary of the street in which a water main is laid and connects with the internal stop tap usually found under the kitchen sink.

The responsibility for pipework was explained to Mr Layte by Mike Shannon, SWW Resolution Manager, in a visit to his property on 8 September 2015. Mr Layte was of the opinion that the communication pipe continues down Lower Goongumpas Lane. Mr Layte also believes that the road branching off from Lower Goongumpas Lane and leading to Goon Farm is an extension of Lower Goongumpas Lane.

The Ordnance Survey map below shows that Lower Goongumpas Lane continues straight to the property named Harmony Cottage. The road which branches off to Goon Farm is unnamed but not Lower Goongumpas Lane as Mr Layte suggests and is indeed private.



The exact location of the communication pipe is unknown but can be assumed from the location of the hydrant and the stop tap for Mr Layte's supply. Mr Layte's complaint is that he had to investigate an unexplained consumption issue himself following the issue of a leakage notice. Mr Layte claimed that people had connected to his supply and by shutting off the supply and placing a notice at the stop tap, this usage stopped. At this time Mr Layte padlocked the stop tap so that only he could turn the stop tap back on. This amounts to a criminal offence pursuant to section 174 Water Industry Act 1991. Mr Layte regularly refers to troughs connected to this supply which are on Goon Farm land.

All stop taps and meters for the properties in the vicinity have been traced to the water main at Tailings End. In a prior agreement with SWW, Mr Layte's water meter was located at his property along with that of his tenants. Identifying the exact location of the communication pipe is not possible without a significant excavation involving road closures.

In the event that the pipe travels from Mr Layte's stop tap along Lower Goongumpas Lane and within the boundary of the street then this would be a communication pipe and the responsibility of SWW. However, this responsibility would end where the road branches off to Goon Farm. There is nothing connected to the water main from where the hydrant is positioned and the road which branches off to Goon Farm. The trough supplies Mr Layte refers to are located in the fields surrounding Goon Farm. Therefore, should the communication pipe extend further along Lower Goongumpas Lane this would have no bearing on Mr Layte's argument. The investigation undertaken by Mr Layte was a private matter on his private supply pipe.

SWW mapping systems use both Ordnance Survey and National Street Gazetteer. We have explained to Mr Layte that if he disagrees with the road names he needs to present his argument to either or both of these organisations. SWW cannot amend corporate systems unless instructed to do so by an official source. This has been explained many times to Mr Layte and most recently in the response dated 25 November 2016 (appendix 4).

The deeds supplied by Mr Layte outline the Pipework arrangements to his property. The supply is shown as travelling along Lower Goongumpas Lane and branching off along the unnamed road to Goon Farm and then on to Mr Layte's property. The deeds outline

the right of access over Goon Farm land for repairs and maintenance for the private supply pipe.

## *2.2 Water Quality*

Mr Layte reported a water quality issue by telephone by the 28 April 2015. Samples were taken on the 29 April 2015 from where SWW responsibility ends at Tailings End. The preliminary results were received from the laboratory on 18 May 2015. The official report from the laboratory was received on the 29 May 2015. This is a standard timescale for this activity. A letter was sent to Mr Layte dated 29 May 2015 advising the sample results (Appendix 9). Tim Ball, SWW Scientist, also discussed the results with Mr Layte by telephone on the 9 June 2015. Further samples were taken on 26 May from Mr Layte's property. We do not consider that there was a delay in the sampling.

## *2.3 Contamination from Animal Troughs*

Mr Layte has raised concerns regarding contamination caused from animal drinking troughs at neighbouring premises. SWW have advised Mr Layte on a number of occasions that our Regulations Team have completed investigations in the area. Mr Layte was advised of this in our letters dated 14 September 2015 (Appendix 10), 19 October 2015 (Appendix 11), 15 February 2016 (Appendix 12) and 25 November 2016 (Appendix 4).

Pursuant to section 206 Water Industry Act 1991 SWW is unable to disclose information which relates to the affairs of any individual without that individual's consent. Therefore SWW was unable to share the results of the investigations with Mr Layte as any Regulations and compliance issues are confidential between SWW and the land owners. Again this has been explained to Mr Layte on a number of occasions, letters dated 19 October 2015, 15 February 2016 and 25 November 2016.

A SWW Water Regulations Officer has visually inspected the troughs in question and can confirm that there are no contamination concerns present. The last inspection of the trough was completed on the 30 December 2016.

SWW has therefore provided reassurance to Mr Layte that his concerns are being taken seriously, investigations have been completed and any issues identified have been addressed with the relevant property / land owners. SWW has confirmed that none of the non-compliances identified in the wider area would have had any impact on the supply to Mr Layte's property.

## *2.4 Rainwater Harvesting System*

The Water Supply (Water Fittings) Regulations 1999 ("the Regulations"), arise under sections 74, 84 and 213 (2) of the Water Industry Act 1991. The Regulations belong to the government and water companies have to enforce them on their behalf; enforcement of, and complying with the Regulations are both mandatory. South West Water, like all water companies, has to complete Regulations inspections of both, new and existing non-domestic and new domestic premises (Appendix 13).

SWW was not aware that Mr Layte had installed a rainwater harvesting system until April 2015. Mr Layte mentioned that he would be installing a rainwater harvesting system during a conversation with Customer Services in January 2015 but no further detail was provided. This telephone conversation did not constitute sufficient notice. Regulation 5, of the Regulations, (material change of use) provides very specific requirements for notifications, including a description of the proposed installation, particulars of the premises and the proposed use of those premises, a plan of the plumbing system etc and only once sufficient information has been received, can the Water Regulations team of South West Water make a reasoned decision on whether to consent to the installation. It is the customer's legal duty to comply with these requirements a minimum of ten working days prior to installing a rainwater harvesting system.

When SWW became aware of a rainwater harvesting system installed at Mr Layte's premises, details were passed to SWW Water Regulations Department in April 2015 as SWW had not received notification of this installation. As the installation of a rain water harvesting system is considered to be a material change of use, prior notification, as set out in Regulation 5, is a legal requirement and SWW therefore was required to complete an inspection of the installation. Inspections and re-inspections were undertaken between April and July 2015.

Richard Harrison, SWW Regulations Officer for the area, undertook an inspection and identified several breaches of the Regulations. On 16 April 2015 Mr Layte was issued with a non-compliance notice stating the date by which remedial works should be completed (Appendix 14).

On 19 May 2015 SWW sent a reminder letter together with a notice detailing the outstanding contraventions (Appendix 15). On 8 July 2015 SWW sent the final reminder and contravention notice (Appendix 16). The remedial works was required to ensure Mr Layte's plumbing system was compliant with the Regulations. This is clear in all the notices that have been issued (Appendix 17).

During a telephone conversation on 28 July 2015 between Rob Goulden, SWW Water Regulations Team Manager and Mr Layte, he confirmed that he had no intention of creating the correct air gap to the rainwater harvesting system. He believed that his current installation more than met the requirements of the Regulations and that the probability of contamination occurring was negligible. He also stated that by creating the correct fluid category 5 air gap this would cause issues with stagnant water and increase the risk of flooding his roof space.

Mr Layte was unwilling to accept the reasons why remedial works were necessary and was fixated with his perception that the air gap would create stagnant water and increase risk of flooding his roof space, was he to comply with the requirements of the Regulations.

The Regulations are in place to help maintain the quality of water supplied by a water undertaker. The creation of an air gap simply provides a physical break between the mains water supply and any potential contaminants; in this case the rain water. A correctly set up air gap prevents water from flowing back down the supply pipe work as water cannot jump back up across an air gap, which has been explained to Mr Layte on many occasions.

The issue of stagnant water to which Mr Layte refers is easily mitigated as was explained during the telephone conversation with Rob Goulden and during site visits by the

Regulations Officers. In theory, the length of pipe work supplying the rain water harvesting cistern, and providing the mains back up supply, could stagnate if there was no demand for the mains water backup supply. i.e. we had continuous rainfall or vast volumes of rainwater were being stored. In this event Mr Layte is correct and the few meters of pipe work, from the point where it tees off the internal cold water supply pipe, up to the float valve in the cistern could stagnate. However, a single check valve (backflow prevention device) installed at the tee off on the mains back up supply pipe would prevent potentially stagnant water from getting back into the supply. Equally, the installation of a water draw off point immediately before the float valve would promote a turnover of the water and prevent any stagnation from occurring (Appendix 18). These options were described to Mr Layte and had the Water Regulations department received prior notification (Regulation 5) before he installed the system, he would have been advised of these requirements.

The issue of flooding his roof space was also discussed with Mr Layte and the risk is no more increased with the provision of the correct air gap – his existing cistern, if not maintained, will flood his loft space irrespective of the air gap. His concern was over the creation of a type AB air gap in his existing storage cistern. This involved cutting a letter box shape slot in the side of the cistern, below the float valve, to create the correct air gap. He was concerned that if he did this and the cistern spilled it would flood his roof space. However, every storage cistern should be fitted with an overflow warning pipe; in this case the warning pipe would be installed below the level of the letter box slot. The warning pipe should discharge in a conspicuous place (to an external wall of the property) and will visually warn of an impending problem with a leaking or dripping float valve. The responsibility is on the owner/occupier to maintain their plumbing system in compliance with the Regulations and repair faults e.g. leaking float valves. The creation of a letter box weir merely changes the spill over level/capacity of the cistern and spill in the event of a fault and any warning, via the warning pipe, is ignored. If a leaking float valve is ignored a cistern without a letter box slot will still spill and flood his loft space, the only difference is that it will fill to the top and submerge the float valves first (a contamination risk); the letter box slot provides the required air gap and cannot cause stagnation as Mr Layte states.

During his inspection, and on subsequent re-inspections, Richard discussed the nature of the contraventions identified and offered suggestions to Mr Layte as to how they could be rectified. This was subsequently confirmed in writing to Mr Layte by letter dated 07 August 2015 (Appendix 19).

Mr Layte remedied some of the contraventions however refused to rectify the most serious issue regarding the provision of the correct backflow protection between the mains water supply and his rain water harvesting system. Rain water is considered by the Regulations to be of the highest category of contamination risk; fluid category five.

SWW explained in detail why the current arrangement does not comply with the Regulations and what Mr Layte's options were. SWW invited Mr Layte to respond on or before 14 August 2015 and if no response was received, SWW would pass the case to SWW Legal Team to pursue enforcement action pursuant to the Water Supply (Water Fittings) Regulations 1999.

Backflow can occur through backsiphonage (loss or reduction in pressure in the upstream supply pipework) or back pressure (water being pushed backwards or in the opposite direction to which it is intended).

Backsiphonage occurs most commonly owing to bursts pipes (mains or otherwise), high demand for water, e.g. fire brigade taking large volumes of water or simply by turning on more than one outlet within a property. Water will always take the line of least resistance and if it is easier to flow from one outlet back to another where there is more demand and less resistance to flow it will, potentially taking any contaminated water with it.

Back pressure occurs because there is a greater pressure downstream (after it has been supplied) of the mains supply pipework. Pumps are usually responsible for increasing pressure in plumbing systems and similarly stored water e.g. cistern/reservoir located at such a height can also create more pressure than the mains supply.

In order to protect the water supplies within premises, the Regulations require that adequate backflow protection is installed at point of use – Schedule 2, paragraph 15; it may also be necessary to install additional zone protection and or whole-site protection (Appendix 20). The works required by the notice served on Mr Layte were necessary under Regulation 3, Regulation 4, Schedule 2 paragraph 15 (1), (3), (4,(a),(b)), (5) of the Regulations and the Regulators Specification for Backflow protection. His system was non-compliant and the only way to bring it into compliance was to carry out the required works or disconnect the system from the mains supply.

Point of use backflow protection is required by law to prevent backflow occurring between outlets within a site or from getting back in to the water mains. Point of use backflow must always be appropriate to the fluid category of risk identified i.e. a category 5 risk must have a category 5 air gap etc. Appropriateness is defined in the Regulators Specification for Backflow protection (Appendix 21)

Zone protection is a means of providing backflow protection to large areas e.g. an industrial process or residential flats to stop backflow between the different floors. The level of backflow protection required for zone protection is usually the same as that required for point of use, but could in some circumstances be less depending on the installation. For example, a category 5 process, with multiple outlets, may be protected with one category 5 break tank/air gap. Equally, a series of category 5 outlets, each fitted with category 5 point of use protection, could also require additional backflow protection to be installed on the supply to that zone for an additional level of protection. In this situation, because there is already the correct point of use protection in place, a lesser level of backflow protection could potentially be accepted to protect that zone.

Whole-site backflow protection is installed at the property boundary on the incoming supply pipe, before any branches of pipe, to protect the water undertakers water mains. Whole-site protection is akin to the latter scenario of zone protection where appropriate point of use protection has been installed but where the nature of the site, the processes or risks are significant enough to warrant additional protection to the mains supply.

In Mr Layte's case rain water is considered to be a category 5 risk (the highest risk) so category 5 backflow protection (a type AB air gap) is required at point of use. The point of use in this case is the mains float valve inlet to the rain water storage cistern, located in Mr Layte's roof space. The lesser backflow protection offered by a double check valve on the incoming supply was installed as whole-site/zone protection. This was required to protect Mr Layte's neighbours, who share his supply pipe, and provide the SWW main and customers with an additional level of protection.



## 2.5 Central Heating Header Tank backflow

The point raised by Mr Layte regarding the potential contamination risk from his heating circuit is a valid one. He is correct in his understanding that domestic heating circuits do represent a backflow and contamination risk and were classified in government guidance as a fluid category 3 risk. However, he is incorrect in his perception that there is an issue from a Regulations perspective; there is not, this section of his installation was found to be compliant.

Fluid category 3, under Schedule 1 of the Regulations is defined as a:

*Fluid which represents a slight hazard to health because of the concentration of substances of low toxicity, including any fluid which contains:*

- (a) Ethylene glycol, copper sulphate solution, or similar chemical additives; or*
- (b) Sodium hypochlorite (chloros and common disinfectants)*

Closed primary circuits (pressurised), as would typically be found on a combination boiler, are usually filled via a temporary filling loop (removed after use) and a double check valve (DCV), which is appropriate for category 3 risks.

For open vented heating circuits (not pressurised, at atmospheric pressure) as with Mr Layte's system, the primary circuit is filled via a feed and expansion (F&E) cistern located in the loft. It is the arrangement of the float valve (a type AG air gap) in the F&E cistern and the fact that it fills the primary circuit via gravity, which provides category 3 backflow protection; equivalent to the DCV that is utilised in a closed circuit type system.

Mr Layte claims that his concerns regarding the heating circuit were ignored. Had there been an issue with primary circuit at the time of the first Regulations inspection, it would have been highlighted and included on the contravention notice served on Mr Layte. It was because the F&E cistern was found to be compliant at the time of our inspection that no further comment was made or deemed necessary. During a later inspection on 13 October 2015 Mr Layte drew out a sketch of his plumbing system which included the primary circuit. His sketch was tidied up by the inspecting officer Jeff Steere and Mr Layte confirmed his tidied up sketch to be an accurate representation of his installation. Again owing to the fact that the F&E cistern for the primary heating circuit was compliant at the time of the inspection no further comment or enforcement action was necessary or warranted. In fact Mr Layte's F&E cistern has an AUK 1 air gap, an interposed cistern arrangement, which offers a great level of backflow protection than the required AG air gap for this type of installation. (Appendix 22).

## 2.6 Poor Service

In order to resolve the matter of wasted water Mr Layte attached a padlock to the SWW stop tap chamber and positioned a notice at the location alerting people that the supply had been turned off. A key for this padlock was provided to the local SWW Customer Support Representative (CSR) to enable the meter to be read monthly. This service was offered as a gesture of goodwill. Unfortunately the CSR went on long term sick leave and was unable to fulfil this task. As an alternative arrangement SWW agreed to log the supply. This confirmed that the high water usage had stopped and therefore the monthly meter read was no longer necessary or considered relevant to Mr Layte's argument concerning pipework responsibility.

SWW accept that an agreed action was not completed and this would form part of the compensation offer provided to Mr Layte.

Despite SWW never receiving any complaint from either Mrs Layte or Mr Bellward a further meeting was scheduled for the 4 March 2016 to discuss the matter with all parties. Mr Layte had confirmed twice by telephone that all parties would be present, however when SWW attended the meeting Mrs Layte was absent and the meeting could not proceed as planned.

Mr Layte has not presented anything new in his most recent correspondence and all points have been answered during the numerous meetings and or letters sent to Mr Layte. Tracy Symons, SWW Customer Delivery Manager, explained the role of CCWater and the facility of WATRS to Mr Layte by telephone and in written responses dated 25 November 2016 and 22 December 2016. Mr Layte has stated a preference for using publicity rather than standard complaint procedures.

The compensation offer was in recognition of:

- The incorrect notice issued (leakage rather than wasted water)
- The meter not being read monthly as agreed
- The time and effort Mr Layte has put into formulating his complaint

None of these areas have any bearing on Mr Layte's primary argument regarding pipework responsibility but it was felt appropriate to offer an ex gratia payment for some of the minor omissions made in the handling of his complaint and to try and bring this matter to an amicable confusion.

SWW has continuously stipulated to Mr Layte that this is a private matter.

SWW has not offered compensation to Mrs Layte or Mr Bellward due to it never having received any complaint from them. The situation affecting both Mrs Layte and Mr Bellward has been created by Mr Layte and is as a result of the infrequent method he has adopted with regard to using his supply available from the mains. The intention was to discuss this at the meeting scheduled for 4 March 2016 and which, as mentioned above, was unable to proceed due to Mrs Layte's absence. A letter was sent to Mr Layte dated 4 April 2016 for him to provide another suitable date for the meeting. No response was ever received from Mr Layte.

Mr Layte requested SWW provide copies of correspondence as evidence that they had sight of them and reviewed them as part of their investigation. It was deemed unnecessary to email the correspondence back to Mr Layte.

SWW did not recommend that Mr Layte complete a Subject Access Request (SAR) as the letters / emails would not have been included in a SAR.

3. *That South West Water provides a breakdown of the £1,500 offered and if any part of the breakdown is for a failing experienced by Mr Layte's neighbours as well as Mr Layte that the same amount is also offered to Mrs Layte and Mr Bellward.*

Please see SWW response above at 2.6 Poor Service.

4. *That South West Water investigate and report on the contamination risks for the central heating header tanks and the animal troughs.*

Please see SWW response above under 2.3 and 2.5.

- 5. If South West Water are unable to evidence that the communication pipe leaves the highway at Five Acres at the hydrant, that Mr Layte's costs and time for investigating the leak are reimbursed.*

SWW cannot be certain of the exact location of the communication pipe without excavating. This will be a costly operation involving road closures and or traffic management. The section in question would not alter the position and therefore this action was deemed unnecessary. If the communication pipe continues to the road branching off to Goon Farm Mr Layte would still have incurred his costs. The trough supplies Mr Layte refers to are located in the field surrounding Goon Farm.

- 6. If South West Water is unable to evidence that the compliance works it required Mr Layte to complete under Statutory Notice were necessary, that the cost of those works is reimbursed to Mr Layte.*

Please see SWW response above under to points 2.4 Rainwater Harvesting System confirming that the compliance work was necessary.

- 7. An apology is made to Mr Layte. Although South West Water has offered £1,500 towards service failings, CCWater is not aware of any apology being offered*

We are sorry that this matter has continued for so long; this is not of SWW's making. As already mentioned above, CCW closed this matter in October 2015. This was after SWW had made its offer of an ex gratia payment of £1500. Although the time for the acceptance of this offer has now passed, SWW would be prepared to extend the offer to 31 March 2017. In writing to Mr Layte to confirm that, SWW will also include an apology for the service failings detailed above under 2.6 Poor Service.

I trust that the enclosed information demonstrates that this complaint related to a private pipework issue, which SWW had attempted to conclude amicably with an ex gratia payment of £1,500. Unfortunately this was not accepted by Mr Layte despite, as the CCWater stated in its email dated 15 October 2015, this was "more than reasonable" and thereafter closed the case.

Please do not hesitate to call me on 01392 443163 if you wish to discuss any aspect of this case.

Yours sincerely

Dr Huw G M Parry

Customer Support Manage