



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Environment, Climate Change and Land Reform Committee

**Tuesday 26 February 2019**

**Session 5**



The Scottish Parliament  
Pàrlamaid na h-Alba

© Parliamentary copyright. Scottish Parliamentary Corporate Body

Information on the Scottish Parliament's copyright policy can be found on the website - [www.parliament.scot](http://www.parliament.scot) or by contacting Public Information on 0131 348 5000

---

**Tuesday 26 February 2019**

**CONTENTS**

	<b>Col.</b>
<b>DECISION ON TAKING BUSINESS IN PRIVATE</b> .....	1
<b>PUBLIC PETITION</b> .....	2
Drinking Water Supplies (PE1646).....	2
<b>EUROPEAN UNION (WITHDRAWAL) ACT 2018</b> .....	17
Environment (Miscellaneous Amendments and Revocations) (EU Exit) Regulations 2019 .....	17
Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019.....	17

---

**ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE**  
**7<sup>th</sup> Meeting 2019, Session 5**

**CONVENER**

\*Gillian Martin (Aberdeenshire East) (SNP)

**DEPUTY CONVENER**

\*John Scott (Ayr) (Con)

**COMMITTEE MEMBERS**

Claudia Beamish (South Scotland) (Lab)

\*Finlay Carson (Galloway and West Dumfries) (Con)

\*Angus MacDonald (Falkirk East) (SNP)

\*Mark Ruskell (Mid Scotland and Fife) (Green)

\*Stewart Stevenson (Banffshire and Buchan Coast) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Sue Petch (Drinking Water Quality Regulator for Scotland)

**CLERK TO THE COMMITTEE**

Lynn Tullis

**LOCATION**

The Robert Burns Room (CR1)



## Scottish Parliament

### Environment, Climate Change and Land Reform Committee

*Tuesday 26 February 2019*

*[The Convener opened the meeting at 09:31]*

### Decision on Taking Business in Private

**The Convener (Gillian Martin):** Welcome to the seventh meeting in 2019 of the Environment, Climate Change and Land Reform Committee. I remind everyone to switch off their mobile phones, as they might affect the broadcasting system. Claudia Beamish has sent her apologies.

Agenda item 1 is to decide whether to take item 4 in private. Do members agree to do so?

**Members** *indicated agreement.*

## Public Petition

### Drinking Water Supplies (PE1646)

09:31

**The Convener:** Agenda item 2 is to take evidence from the drinking water quality regulator for Scotland, Sue Petch, on issues arising from PE1646, on drinking water supplies in Scotland. Good morning, Ms Petch, and welcome to the meeting.

I will start with a broad and general question. What is the role of the drinking water quality regulator for Scotland, and how do you fit into the governance arrangements surrounding Scottish Water?

**Sue Petch (Drinking Water Quality Regulator for Scotland):** Essentially, my role is to scrutinise Scottish Water with regard to its drinking water quality duties. We look at whether it is complying with drinking water quality standards as well as the other duties that it has; it is required to treat and disinfect water. We look at all those activities. That is the main part of the role.

Another function that we have concerns local authorities, which we have to supervise in respect of their drinking water quality duties. Those duties are predominantly associated with the private water supplies that they regulate.

Members are aware that there are quite a number of regulators for Scottish Water. The Scottish Environment Protection Agency regulates it in respect of waste water discharges. We are entirely focused on the quality of drinking water as it leaves treatment works and at customers' taps—so throughout the whole supply chain. An economic regulator scrutinises Scottish Water in respect of its price review and whether it is taking customers' views into account, and there is the Consumer Futures unit, which represents consumer views. Therefore, there is quite a broad range of supervision. My particular part of that is to do with drinking water quality.

We review all Scottish Water's regulatory sample data, look at whether improvement is needed, and advise Scottish Water if we consider that improvement is needed. I can take further action if that is necessary—I have quite a wide range of enforcement powers.

We audit what Scottish Water does. We visit its assets and do technical audits of treatment works. We look at some of its activities, such as repairing mains; we do spot audits, particularly on the hygiene of the activity; and we audit the laboratory. There is quite broad range of audit tasks.

We also investigate water quality incidents. Scottish Water is required to tell us and other agencies, such as local authorities and health boards, about any sample failure or about anything that has happened at a treatment works in which a process might have failed. We receive around 800 of those notifications a year. Typically, we would class around 30 of them as more significant, and they would require a detailed investigation. We assess them and issue our findings to the chief executive of Scottish Water. We might make recommendations or observations about how well Scottish Water responded to a problem or about improvements that it is going to put in place.

That is quite a long answer to a straightforward question.

**The Convener:** It was a comprehensive answer, which is definitely what we need. Stewart Stevenson has a quick question about something that you said.

**Stewart Stevenson (Banffshire and Buchan Coast) (SNP):** I just want to be clear whether something is included in what you do, probably in relation to private water supplies. Are you responsible for bottled water plants, of which we have quite a few?

**Sue Petch:** No, I am not.

**Stewart Stevenson:** Who is responsible?

**Sue Petch:** It is Food Standards Scotland, and I imagine that local authorities have a role. That area is treated under food legislation.

**Stewart Stevenson:** That is fine. Thank you.

**The Convener:** You mentioned enforcement. What enforcement powers do you have if something has not been rectified?

**Sue Petch:** I have an enforcement policy. We generally try to work very collaboratively, and we start by recommending that improvements are needed. I will take action if those improvements are not made or, in particular, if something is not included in Scottish Water's current investment programme, which is set for 2015 to 2021. Within the programme there is a technical expression, which is a detailed schedule of all the activities that Scottish Water needs to do for drinking water quality, environmental improvements or resilience activities. That commitment of what it will deliver towards Government objectives is made to the Scottish Government in the price review. If an activity is listed in the programme, I would be unlikely to move to enforcement action unless I was not happy with the pace.

My powers allow me to take enforcement action if there is a significant risk to health, if a drinking water standard needs to be improved or if a

persistent failure has occurred. I also have an emergency power, which is like an emergency notice, to stop an activity, but it has never been used; I could not imagine a scenario in which we would be forced to take that sort of action.

**John Scott (Ayr) (Con):** Your DWQR budget for the next year has gone up by more than 70 per cent. What is the increase for and what additionality will it deliver?

**Sue Petch:** My budget is split into two parts. The Scottish Government recovers a considerable amount from Scottish Water for the delivery of the regulator's functions. It is fair to put the percentage increase into context. Some of the increase from £270,000 to £450,000 is associated with the change to the total operating cost regime. Also, I have two members of staff based in the Scottish Government who look at policy. We have seen a rising need for policy activity. The European Commission is considering a revised drinking water directive, which is creating quite a workload. I increased the number of staff to deal with that and with a new duty that has been placed on us to do with the cybersecurity of Scottish Water network and information systems and the security of water supplies from the point of view of operating technology and information technology.

**John Scott:** Self-evidently, what you do is science based; is that delivered in-house or through contractors? Given what you have just said, do you think that the new water quality regulations will be affected by Brexit? Do you know yet where you will sit in all of that?

**Sue Petch:** We do not have a research budget, so we rely heavily on World Health Organization guidelines and documentation, which are viewed as the authoritative text for drinking water quality safety—that is our go-to place for information. We are a member of the International Water Association, so we have access to its research papers, and we are part of the Scottish Government centre of expertise for waters, which has a theme for drinking water quality—I sit on its steering group, so we can call on that delivery route for specific work to be done. I can also recommend, through the Scottish Government's contract research fund, that specific work be done.

There is also the strategic research programme of work that goes on. We work quite closely with our counterparts in England and Wales, Northern Ireland and the Republic of Ireland. We meet annually to talk about the research programme, and we are well aware of the Department for Environment, Food and Rural Affairs's research programme.

We contribute to and pay for an advisory service from the Water Research Centre, which produces lots of data sheets on a range of chemicals and

microbiological substances. We consider that information in relation to the likely presence of those substances in water, safety, the impact of treatment and so on. That is another source of information.

Our standards are all derived from the drinking water directive, which has been in place since 1998. Most of those standards are ultimately derived from the World Health Organization guideline values. The directive is transposed into Scots law, so the exit from Europe will make no impact on the standards that we have.

**John Scott:** What are the underlying trends in the most recent statistics on water quality in Scotland? Is overall quality improving? I assume that it is.

**Sue Petch:** We report on overall quality as measured at the customer's tap, and it is recorded as a percentage. In 2017, it was 99.91 per cent. We have yet to receive the final data for 2018, but it will probably be slightly worse.

You asked me to pull out the main trends. Trihalomethanes, which are a by-product of disinfection, have been a focus of Scottish Water's investment programme and our attention for some time. The position had been improving but seems to have plateaued for the past couple of years.

Iron and manganese—iron that comes from water mains and manganese that comes from source waters—are another area of activity that needs more treatment at source, with mains cleaning and mains flushing.

Microbiological quality is something that I called out in my report for 2017, when I highlighted concerns about water treatment works and the maintenance of service reservoirs. Scottish Water responded to that concern by increasing its investment in repairs to service reservoirs.

**John Scott:** Let me be parochial for a moment. In my constituency, there has been quite a bit of water discolouration, possibly due to the extraordinary climatic conditions in spring and summer last year. Can you comment on the discolouration, which is continuing?

**Sue Petch:** That is something that we are investigating. We have been aware of the issue—Scottish Water had to report it to us—and it is classed as a significant water quality incident. I understand from one of my inspectors that the assessment is almost complete. We will finalise our report to Scottish Water on that.

I understand that a number of factors have resulted in the discolouration, one of which was the introduction of chloramination at the Bradan water treatment works, which has changed the water chemistry. The introduction of that process coincided with very high water flows and high

demand over the summer, and that seems to have caused a dislodging of mains sediment throughout the network.

Scottish Water responded by flushing. I am advised that that did not have an immediate impact, so Scottish Water had to take specialist advice from the University of Sheffield, which is one of the leading experts in water mains. It has now come up with a programme of low-velocity flushing and turbidity monitoring.

I have asked Scottish Water for its programme of work. We are no longer seeing the high water temperatures and flows of last year, but when I reviewed the complaint data I found that complaints had lessened but were not back at the typical historical levels for that supply area. I am still waiting to see the programme of activities, which will include a timeline; I will then take a view on whether the activities are reasonable and will deliver improvement.

**John Scott:** When you receive that information, I would be very grateful if you could provide your view on it to the committee or to me personally, as the MSP for Ayr.

**Sue Petch:** Yes, I will do that.

09:45

**John Scott:** How do your processes take into account concerns about taste and odour, alongside water quality? Water can be safe, but it can smell.

**Sue Petch:** Taste and odour are included in the standards that we have in Scotland, but they are classed as indicators. The measure is whether customers find the water acceptable. Has the water changed and become unacceptable? In that instance, we would expect Scottish Water to investigate why the taste of the water has changed and why there is an odour when there was not one previously.

The first concern is whether there is something in the water that will cause a risk to health. If there is not, we would look at what is creating the taste. In the summer, problems with algal growth and algal blooms that gave the water an earthy taste caused widespread complaints, which were reported to us. I have asked Scottish Water to carry out a feasibility study to look at what it can do to prevent the problem from happening. I would certainly consider taking action when a problem is particularly widespread.

**Mark Ruskell (Mid Scotland and Fife) (Green):** How do the public and customers interact with the regulator and its functions? What are the public engagement structures that you work with?

**Sue Petch:** It is fair to say that, on a day-to-day basis, we do not normally engage with customers. We are a very small team, so our engagement tends to follow a water quality incident. We might seek people's views on how Scottish Water investigated, responded to or acted on that problem.

We review complaint data from Scottish Water and we act as a second tier, so we will investigate if someone is not happy with how Scottish Water responded to an incident. We include on our website information about water quality, including frequently asked questions. That is probably the extent of the engagement.

**Stewart Stevenson:** Part of what Scottish Water is doing is cleaning and disinfecting the water before it reaches the tap, which is where you measure it. What input, if any, do you have into the methods that Scottish Water uses for disinfection?

**Sue Petch:** The legislation requires Scottish Water to disinfect the water using only approved products and processes. There is an approvals process, so it cannot just select any pipe or filter. My colleagues in the drinking water inspectorate for England and Wales run the United Kingdom approvals process. In the approvals process, the chemicals that are used are referred to as traditional chemicals, which are required to have a certain level of purity, as set out in the British standard European norms.

I look at whether the decisions and choices that Scottish Water makes deliver the required outcome. If I think that the choice of process will not deliver the outcome, I will voice that and perhaps take stronger action. However, the choice of how water is disinfected and treated lies with Scottish Water.

**Stewart Stevenson:** In an earlier answer, you focused on iron as a contaminant, and you identified water mains. Clearly, there are two types of water mains: mains that take the water to the processing plant and mains that take the water from the plant to the customer. I can see how the plant can limit the contamination of the water that arrives at the plant, but how does it detect contamination by iron and other contaminants in the part of the distribution network that goes from the plant to the customers? How does it do that, and what is your role in that?

**Sue Petch:** Scottish Water uses iron coagulants or an aluminium coagulant to treat the water as it leaves the plant. It has to get the levels of iron manganese and aluminium as low as possible as the water leaves the treatment plant.

When the water enters the distribution system, it encounters a mix of materials. Some of the pipes are up to 100 years old and might be made of

unlined iron and, obviously, the more recent pipes that have been installed over the past 20 or so years have been made of PVC. One of the tactics that Scottish Water can use to reduce contamination involves renewing the pipes. It also uses flushing to clean material out of the pipes that is left as the iron degrades. Ultimately, if the degradation gets too bad, it will need to renew those pipes, because the degradation may well lead to burst mains, which can create water quality issues around discolouration and risk of ingress.

As the water travels from the treatment works to customers' taps, it contains a residual disinfectant—a small amount of free chlorine or monochloramine—which protects it as it passes through the distribution system and ensures that there is not an increase in biological activity in the mains.

**Stewart Stevenson:** So those additives that are in the water as it leaves the water treatment plant are an essential part of protecting the water that comes out of our tap from things that might happen in the retail distribution network.

**Sue Petch:** Yes.

**Stewart Stevenson:** And it would be impossible to put water into the system that had no protection from what it might encounter in the network.

**Sue Petch:** It would not be recommended. It is not set out in our regulations that there must be a residual disinfectant, but that is viewed as best practice, certainly in the United Kingdom.

**Stewart Stevenson:** You made that qualification about the United Kingdom quite deliberately. I would be interested to know what solutions have been adopted elsewhere.

**Sue Petch:** Not all countries have the residual disinfectant in the water. In particular, in Germany, there tends not to be a free chlorine residual in the water as supplied. They have much more extensive water treatment processes, which involve more stages of treatment than Scottish Water has. The networks in Germany are perhaps newer, as well, and I know that some other countries have more rapid network mains renewal rates than Scotland and the rest of the UK have. There are different policies in different countries.

**Stewart Stevenson:** It sounds like the distance that the water travels from the water treatment plant to the tap in Germany is quite different from the distance here.

**Sue Petch:** I do not know. I cannot comment on the distance, but there are certainly many more stages of treatment.

**Stewart Stevenson:** Water in Germany goes through several treatment plants.



**Sue Petch:** It goes through several processes and stages.

**Angus MacDonald (Falkirk East) (SNP):** I will turn to disinfection by-products, or DBPs, which you touched on earlier. We know that, in Scotland, regulation 29(2) of the Public Water Supplies (Scotland) Regulations 2014 places a requirement on Scottish Water to keep DBP levels

“as low as possible without compromising the effectiveness of the disinfection or treatment”.

We also know that the World Health Organization guidelines highlight the importance of limiting the presence of DBPs in the public water supply as much as possible and establishing a robust monitoring and testing regime to ensure that that happens.

How is a balance struck between the requirement to disinfect drinking water and the limiting of disinfection by-products in the water?

**Sue Petch:** The primary requirement is treatment and disinfection for public health protection. To minimise disinfection by-products, Scottish Water has to try to minimise what we refer to as the precursors—the compounds that react with chlorine or other disinfection products to form the by-product. Part of the pre-treatment—the coagulation and filtration of that water—is designed to reduce those precursors as much as possible.

Going further back, Scottish Water can look at source control and how to protect sources from deterioration. In some areas it has looked at peatland restoration to reduce organic loading. It is about removing the precursors to minimise the formation of by-products.

**Angus MacDonald:** The WHO guidelines state:

“the risks to health from these by-products are extremely small in comparison with the risks associated with inadequate disinfection, and it is important that disinfection efficacy not be compromised in attempting to control such by-products.”

Do you have the balance right?

**Sue Petch:** Yes.

**Angus MacDonald:** How do you respond to concerns that a number of DBPs are not regulated and therefore not tested for?

**Sue Petch:** We have a standard for trihalomethanes. Their presence is viewed as an indicator of the presence of other disinfection by-products such as haloacetic acids. Historically, that is how we have viewed THMs and that is why they are so important. We always look not only at areas where standards have failed, but also at the level—whether it is at the 90th percentile of the standard—and try to drive that down.

We recently requested that Scottish Water extend its monitoring to other disinfection by-products, such as haloacetic acids and N-nitrosodimethylamine. Although they are not regulated, I have taken the view that further evidence to support minimisation is required.

In 2016, Scottish Water contracted Cranfield University to do further research. That research has looked at a much broader range of disinfection by-products, so that Scottish Water can build an evidence base to demonstrate that it is minimising by-products.

**Angus MacDonald:** When is that work likely to be completed?

**Sue Petch:** The analysis of samples has been completed and the report is at the final stages of confirmation and completion.

**John Scott:** Has any further work been done on the possible health impacts of chloramination since the committee last discussed the issue with Scottish Water?

**Sue Petch:** Any further work?

**John Scott:** That could be work on chloramination's direct effects or the exacerbation of existing health conditions that it has been suggested could be caused by it.

**Sue Petch:** I am not aware of any work on disinfection by-products by NHS Highland or Health Protection Scotland following the work that has been done by Cranfield University for Scottish Water.

**John Scott:** Do you have any concerns about potential effects of chloramination on things such as kidney dialysis?

**Sue Petch:** I am aware that there are concerns about disinfection by-products that are related to chloramination. I am always clear with Scottish Water that it needs to look at the sources and types of water that they use. Certain risk factors would increase the prevalence of the formation of NDMA and Scottish Water needs to take those on board when it decides whether a technique is appropriate or not.

**John Scott:** I suppose that the bottom line is that you are content that the process is safe.

**Sue Petch:** Yes, I am.

10:00

**John Scott:** We certainly want to hear that assurance from you.

I will move on. We know that drinking water that is treated with monochloramine can be a source of nitrates and nitrites, which can be harmful to humans in high concentrations. Can you offer the

committee reassurances that those concentrations do not ever reach dangerous levels?

**Sue Petch:** The main concern is the combination of nitrate and nitrite, which can result in something that is called blue baby syndrome, which is a health concern. In the regulations, there is a calculation of the levels of both of those that should not be exceeded. We have had no concerns over the combination of the two, but I have had concerns over nitrite, on which there have been a number of sample failures, and I have taken that up with Scottish Water in terms of its control of the process. I was pleased that the position for 2018 was much improved compared to the performance in 2017. Scottish Water put in place flushing programmes and programmes of work that, for a short period, changed the disinfection to reduce nitrite problems forming in particular parts of the network.

**Finlay Carson (Galloway and West Dumfries) (Con):** We are aware that Scottish Water is designing or currently constructing three water quality improvement works that will use chloramination. How effective is the use of chloramination relative to other disinfecting methods and what financial considerations or other considerations with regard to existing infrastructure, water sources or land-use practicalities in the catchment area are taken into account?

**Sue Petch:** Chloramination is not recommended as the primary disinfection process, because it is not as effective as chlorine, and I would not be happy if Scottish Water used it as such. Scottish Water generally uses chloramination after chlorine just to deal with residual issues. I am aware of three treatment processes that are all about disinfection by-products and particularly THMs. In the decision-making process, Scottish Water has to consider the whole-life cost of the processes. I do not want to stray too much into the financing, which is the economic regulator's territory, but Scottish Water generally looks at the costs and benefits of a process and considers whether it will deliver the required outcome for drinking water quality.

**Finlay Carson:** We have heard suggestions that a water plant was costing too much to run so Scottish Water decided to use dechlorination to replace the mechanical cleaning of water. What financial consideration came into that? Is there sometimes a presumption that, if a method costs too much, Scottish Water will use another one?

**Sue Petch:** I am not familiar with that example, but I am happy to follow up on it if you give me more information.

**Finlay Carson:** I can certainly do that. With that in mind, do you anticipate that there will be an

extension of the use of chloramination and do you have an indication of what percentage of water might eventually be treated in that way?

**Sue Petch:** I am aware from speaking to Scottish Water that it is considering installing chloramination in three treatment works. It is also carrying out a feasibility study in relation to a number of other treatment works because of concerns over disinfection by-product risks. It is considering a number of options for those. There is a combination of treatment options, such as ion exchange and GAC, or granular activated carbon, and those are all in the mix. It is difficult to say how much more Scottish Water might do, but it is not concentrating solely on chloramination—it will consider all the treatment options and then do the project appraisal on that basis. It has three ion exchange treatment processes under construction, and that is because of the need to minimise disinfection by-products.

**Mark Ruskell:** You have already given us a little bit of information about the different direction in which countries such as the Netherlands and Germany might be going, and you have highlighted how Germany is taking more of a precautionary approach to NDMA. Why, in your view, have we not gone down the same route in the UK? Is it because of the age of our infrastructure, particular problems with land use or peat soils or something else? There seems to be quite a divergence in the European Union on this issue, and I am interested in finding out why you think we are taking this direction.

**Sue Petch:** That is an interesting question. I am not sure that there has been a deliberate policy choice and divergence with regard to not being more prescriptive. The regulations contain a duty to minimise disinfection by-products; admittedly, there has been a lot of focus on THMs, but the duty exists, and I think that, instead of being very prescriptive in delivering it, the UK has decided to allow some choice within quite a set context of minimisation.

That is, I think, the background—I do not think that the issue is the infrastructure. The choice of treatment process has to be appropriate to the source and the risks that are being dealt with. Some of the English companies have more stages in the treatment process, because they have more issues with their source water; for example, in England there is much more prevalence than in Scotland of pesticides that need to be removed. The choice of process must be tailored to the problem, and I think that Germany will have had similar issues. Of course, I should not be second-guessing the problems that the Germans might have, but the process has to be designed for and tailored to the source that is being treated.

**Mark Ruskell:** You have mentioned the removal of precursors, which is a particular issue in Scotland, given its peaty soils, the high number of livestock on the hills and so on. As drinking water quality regulator, do you feel the impact of the land use strategy or catchment-level approaches to managing the land in a way that reduces not only flooding but the loss of peat soils?

**Sue Petch:** Could you repeat the question, please?

**Mark Ruskell:** Does your work or influence stretch into the land use strategy and catchment management policies?

**Sue Petch:** No, but I work with the Scottish Environment Protection Agency. Indeed, I have recently been discussing with that organisation its water sector plan, which has been out for consultation, and exploring with it issues around the protection of source waters used to produce drinking water. It is very much focusing on the water framework directive, particularly the issue of pollutants, but I am quite keen for organic material and metals such as manganese to form part of that. In its strategic plan, Scottish Water has highlighted the challenge that it faces over the next 20 to 25 years with rising levels of organics in its source water, which is a key challenge in managing the water environment.

**Mark Ruskell:** In that case, is enough work going into land management solutions to try to remove those precursors?

**Sue Petch:** We would all probably say that there is always more that can be done. Scottish Water has a sustainable land management team, who work with local land agents and do a lot of research work with the Forestry Commission on its activities. That is a routine part of its business, but I would sound a note of caution that although land management is an essential part of the multibarrier approach, it will not result in the complete removal of precursors. Certainly, there needs to be a focus on those catchments where Scottish Water has highlighted deterioration; in fact, I would encourage it to start work now before what comes out of the treatment works moves into higher risk.

**The Convener:** Members have a number of questions about the progress that has been made in addressing the concerns that were raised in petition 1646. I ask Angus MacDonald to start.

**Angus MacDonald:** You wrote to the Public Petitions Committee in June 2017 with details on the work that you had done in relation to the Aviemore water treatment works. Can you update the committee on any further work that has been done since then?

**Sue Petch:** We have met Scottish Water a couple of times to review its sampling programme. We requested that the programme be extended—I think that that was last year—and that Scottish Water continue with some of the additional monitoring that it was doing, and reviewed how well it was controlling things like pH at the treatment works. Scottish Water has been focused on improving that. We have also had updates from Scottish Water on the number of contacts that it has been receiving. The data that we have received on that shows that the number of contacts or complaints about taste has decreased.

The main areas of activity have been predominantly to speak to Scottish Water, get an update on what it is doing and ensure that it has in place the right levels of monitoring, that it is still engaging with customers and that it is continuing with sampling when customers are concerned.

**Angus MacDonald:** Have the pH levels improved?

**Sue Petch:** The stability has improved. It did not vary widely, but Scottish Water had highlighted that it wanted to improve that aspect.

**John Scott:** You will be aware that the petitioner made a further written submission on 8 March 2018, which stated:

“we have shown that between 2012 and 2017 parameters set by the EU of taste and odour ‘acceptable to consumer and no abnormal change’ were not adhered to and it took an independent survey for SW to acknowledge this. The DWQR did not ensure that Scottish Water complied.”

What is your response to that criticism that the DWQR did not hold Scottish Water to account between 2012 and 2017?

**Sue Petch:** In 2012, which is when the new treatment process came on, we were very much aware that there were concerns regarding taste, so we audited the treatment process and reviewed Scottish Water sample data. One of my inspectors went on site, but also went to service reservoirs to look at chlorine residuals and taste the water. We were concerned about how Scottish Water had introduced that treatment works into the supply, because it had gone into supply with quite a high chlorine residual that raised concerns. We suggested that it improve that for future new treatment processes that were coming online. We also thought that Scottish Water could have had much improved consumer engagement on the introduction of that process.

It was my understanding that the number of contacts in that regard had decreased. We received summary data from Scottish Water on the number of customer contacts, and that number had not specifically stood out for us. However, it is fair to say that one of the learning points for us has

been to focus more on customer contact data regarding taste. We tend to do quite detailed analysis on discolouration and to look at pockets of concern about that. The learning point that we took away was to look in more detail at the level of contacts in specific areas.

**John Scott:** In my area of Ayrshire, there was quite a fuss about the introduction of chloramination. My colleague Mark Ruskell might also deal with this, but do you think that there are lessons to be learned by Scottish Water on better informing its customers about how it is proceeding, certainly in my part of Ayrshire?

**Sue Petch:** Yes, I think so. When I looked at the information that had been provided, I thought that it could have been clearer on the reason for the introduction of chloramination. I also think that it was done quite quickly, although Scottish Water had obviously known for some time that it intended to chloramine.

A relevant issue was perhaps people who keep fish needing to change the treatment chemical that they use quite close to the time of chloramination. However, I do not think that Scottish Water engaged particularly with, for example, community councils. There are perhaps some learning points for Scottish Water on how it should do that in advance of a change.

10:15

**John Scott:** Will you put in place a request for Scottish Water to change its practice on that?

**Sue Petch:** It has already committed to doing that. I had a follow-up meeting with the chief executive and the director of corporate affairs and communications, who talked to me about the changes that they were going to put in place when they were next making a change. Those changes include more engagement at the community council level. Citizens Advice Scotland was also involved in that discussion, to get its views on how communication could be improved. I am therefore content that Scottish Water has taken the issue on board and has learned from it.

**Finlay Carson:** In my earlier question, I confused two different topics. I was thinking about a waste water plant, so it had nothing to do with drinking water quality. Therefore, we will not need to look into that any further.

**The Convener:** Are you content that everything has been done to satisfy the petitioner's complaints about the water quality in the Badenoch and Strathspey and Aviemore areas?

**Sue Petch:** Yes, but my concern is that the current regulations do not seem to provide that level of reassurance. On what Scottish Water has been doing and NHS Highland has done in

reviewing in Badenoch and Strathspey, I am not sure what further steps could be taken. However, there is a question in my mind that the regulations have not given reassurance and about whether in the longer term we need to consider whether we should expand a little on the minimisation of disinfection by-products and whether we should choose to bring in different additional standards to THMs, as almost 30 per cent of the population receive chloraminated water.

**The Convener:** Thank you very much for your time. I suspend the meeting briefly to allow Ms Petch to leave.

10:17

*Meeting suspended.*

10:20

*On resuming—*

## **European Union (Withdrawal) Act 2018**

### **Environment (Miscellaneous Amendments and Revocations) (EU Exit) Regulations 2019**

### **Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019**

**The Convener:** Agenda item 3 is consideration of a request to the committee from the Scottish Government to consent to the United Kingdom Government legislating using the powers under the European Union (Withdrawal) Act 2018 in relation to the Environment (Miscellaneous Amendments and Revocations) (EU Exit) Regulations 2019 and the Detergents (Safeguarding) (Amendment) (EU Exit) Regulations 2019. Does anyone have any comments on those regulations?

**Members:** No.

**The Convener:** Are members content for the Scottish Government to give its consent for UK ministers to lay the regulations in the UK Parliament?

**Members** *indicated agreement.*

**The Convener:** I confirm that the committee will write to the Scottish Government on that basis.

At our next meeting, on 5 March, the committee will consider a number of statutory instruments. We will hear from the cabinet secretary on the Conservation of Habitats and Species (Scotland) (EU Exit) (Amendments) Regulations 2019 and from Scottish Government officials and Scottish Natural Heritage on the proposal to provide additional protections to beavers in Scotland.

As agreed earlier, we move into private session. I ask that the public gallery be cleared, as the public part of the meeting is closed.

10:21

*Meeting continued in private until 12:42.*



This is the final edition of the *Official Report* of this meeting. It is part of the Scottish Parliament *Official Report* archive and has been sent for legal deposit.

---

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

---

All documents are available on  
the Scottish Parliament website at:

[www.parliament.scot](http://www.parliament.scot)

Information on non-endorsed print suppliers  
is available here:

[www.parliament.scot/documents](http://www.parliament.scot/documents)

For information on the Scottish Parliament contact  
Public Information on:

Telephone: 0131 348 5000

Textphone: 0800 092 7100

Email: [sp.info@parliament.scot](mailto:sp.info@parliament.scot)

---



The Scottish Parliament  
Pàrlamaid na h-Alba