

Sent:

05 September 2019 10:48

To: Subject:

20190905 - CARL1000233 RE: Loch Tralaig

Dear

I refer to your email addressed to my colleague below and apologise for the delay in responding.

Scottish and Southern Energy (SSE) has been operating the Tralaig Power Station at a lower starting position as a consequence of the relationship between wind and water renewables power generation and to maximise the amount of renewable energy being supplied to the National Grid. We understand that the reservoir may also have been lowered temporarily to undertake maintenance works at the dam or outlet channel. SEPA has no regulatory control over water levels in Loch Tralaig but has requested and is waiting for loch level data which will allow us to compare current average levels to that of previous years, however the reduced water level is not likely to result in a significant adverse environmental impact.

Kames Fish Farming has operated a fish farm on the loch since 1978 and although the number of cages in use on the loch has increased this is not indicative of an increase in annual production. The site is licensed for a maximum standing biomass of 7.5 tonnes and an annual production limit of 20 tonnes and company records indicate that the maximum biomass in 2017-18 was 6 tonnes with an annual production of 6.7 tonnes and for 2018-19 this was 6.5 tonnes with an annual production of 7.1 tonnes. The site used 28 tonnes of food between August 2017 and February 2018 and 42.9 tonnes between August 2018 and April 2019. The 2018-19 cycle was 46 days longer than the previous one and an outbreak of fungus resulted in higher mortalities being experienced over this growing cycle which will account for increased feed use and operator activity.

The fungal outbreak required the use of repeat formalin treatments but the maximum amount being used within a 24 hour period of 150 litres is within SEPA authorised limits. Maximum treatment volumes were determined through modelling to ensure that the treatment quantity cannot exceed environmental quality standards. SEPA is currently reviewing the use of treatment medicines/chemicals at both marine and freshwater fish farm sites and this may result in some changes to the types that can be used and in what quantities. No changes are proposed in the interim and the outcome of our review is likely to require further discussions with the Veterinary Medicines Directorate (VMD) and industry. Veterinary surgeons are currently able to prescribe the use of <u>formaldehyde</u> containing products in aquaculture for the prevention of disease.

The sample location selected by SEPA is not designed to assess an impact on the loch by fish farming activities but to provide water chemistry information for the purposes of loch classification under the Water Framework Directive (WFD). In response to your concerns SEPA has collected an additional sample in closer proximity to the farm and we intend to repeat this process as the farm increases production within the 2019-20 cycle to observe any significant trends. It is likely that the fish farm will cause localised water quality impacts but previous surveys undertaken by SEPA have not indicated a deterioration in overall water quality. Total phosphorous is being monitored monthly and SEPA has also begun a program of phytoplankton monitoring/sampling as part of a wider review of loch ecology; phytoplankton sampling takes place during the summer months and initial results from this year suggest a healthy phytoplankton community. Fish farms are a source of phosphorus but nutrient pressures are also attributed to diffuse pollution inputs from land uses such as forestry. Kames Fish Farming (along with others in the industry) are moving to feed with a lower phosphorous content and SEPA will consider intervention should phosphorous levels show an increasing trend and there is evidence of a wider impact on loch ecology.

SEPA currently holds no information on fish populations in Loch Tralaig although we understand it is host to native population of Artic Charr (Salvelinus alpinus). Water temperatures range from 2 degrees Celsius in the winter to over 18 degrees in the summer but the last three out of four years (2017 excluded) have seen summer water temperatures exceed 18 degrees (as high as 20.9 in June 2016). This may impact on fish behaviour if they choose to

remain in the cooler deeper sections of the loch during the day and become more active in the evening and early morning. The Argyll Fisheries Trust (AFT) may hold some fish population data on Loch Tralaig if they have undertaken surveys on either the loch or its tributaries.

I'm happy to discuss this further by telephone if you prefer, you can contact me at the telephone number below.

Regards,			
Scottish Environ	ment Protection	Agency	
		Lochgilphead, Argyll, PA	N31 8QX
t:	e:	@sepa.org.uk	web: www.sepa.org.uk

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Sent: Tuesday, November 05, 2019 11:38 AM

To:

Subject: RE: Kames 1000l Tank of ??

As per my last email,

We are proposing to visit the site again this week and are currently taking up formalin usage issues with Kames. They are decanting from a 1000l IBC into smaller containers to allow them to safely lift this material over the side so what appears to be going into the cages may not necessarily be getting used in one treatment.

SEPA is in the process of arranging some ecology work on the loch and formalin is one of the chemicals under assessment for use in aquaculture, both freshwater and marine.

Regards,

Scottish Environment Protection Agency (SEPA)

Environmental Performance - Argyll, Hebrides and South Highland

AHSH@sepa.org.uk

Kilbrandon House I Manse Brae I Lochgilphead I PA31 8QX



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From:

Sent: Monday, November 04, 2019 10:36 AM

To: '

Subject: RE: Kames 1000l Tank of ??

we are continuing making enquiries with Kames about their treatments. The IBC you observed contains formalin and they shouldn't be using anything else alongside that to treat the fish in the cages. Oxygen is used in bath treatments to ensure fish do not suffer from overcrowding when tarpaulin are used around cages, is it possible the hose you observed relates to this?

SEPA staff were our at the loch side last week and they did not observe any detectable odour from the formalin treatments. I understand further treatments are proposed for this week and an officer will arrange to attend the site on one of these days.

Regards,

Scottish Environment Protection Agency (SEPA)
Environmental Performance - Argyll, Hebrides and South Highland
AHSH@sepa.org.uk

## Kilbrandon House I Manse Brae I Lochgilphead I PA31 8QX



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Sent: Wednesday, November 06, 2019 11:50 AM

To: '

**Subject:** RE: Apologies for .. well you know

Following our discussion this morning I have left a message for Environmental Health to contact me.

SEPA has begun investigating the use of formalin at this site including volume and timings although this is not something that we can resolve or conclude immediately.

I have requested additional ecology work and this has to be planned although initial results phytoplankton sampling undertaken this summer did not indicate any impact on loch ecology from the presence/activities of the fish farm. I'm pretty sure I referred to this in my original email to you but I am not able to locate a copy of that correspondence at the moment on our files. I did mistakenly misinterpret their biomass/production figures in that email as we subsequently discussed on the phone.

We may need to obtain copies of video footage and a statement from yourself depending on the outcome of our investigations.

SEPA is already involved in discussions at a national/UK level with the Veterinary Medicine Directorate (VMD) about formalin and other chemicals used in freshwater and marine aquaculture. I am not directly involved in these

discussions but I will be made aware of any outcomes that affect day to day use of chemical treatments for fish welfare or disease issues.

Regards,

**Sent:** 13 November 2019 17:19

To:

**Subject:** 20191113 \_\_\_RE: Day 20

To reiterate what I have already stated in previous correspondence, SEPA only regulates the use of formalin in terms of its impact on the water environment and compliance with aquatic environmental quality standards (EQS).

At present Kames Fish Farming is permitted to use a quantity of formaldehyde to treat fish at the Loch Tralaig site. SEPA is investigating the use of formalin/chemicals on the basis of the concerns you have raised but we are not going to discuss the detail of that investigation or advise on a timeframe for when it may be completed.

Regards,



Scottish Environment Protection Agency (SEPA)
Environmental Performance - Argyll, Hebrides and South Highland
AHSH@sepa.org.uk

Kilbrandon House I Manse Brae I Lochgilphead I PA31 8QX



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**Sent:** 18 November 2019 16:42

To:

**Subject:** 20191118 RE: Formaldahyde monitor

For advice on air monitors I would recommend that you contact Argyll & Bute Council Environmental Health and/or the Health and Safety Executive (HSE). There are workplace kits that you can buy (such as draeger tubes) which are capable of detecting very low levels of substances such as formaldehyde but I would not claim to be an expert in this kind of monitoring.

For information, the substance formaldehyde is also present in a number of household products such as OSD, particle board, foam insulations and furniture so there may be issues with respect to results depending on where you planned on taking readings and what levels were being detected. It is my understanding that any levels that may be present in the house atmosphere from these products are well within relevant health guidelines.

The continued use of formalin at this site remains a matter of investigation; my colleagues notified me that they met you on site when they were collecting water samples from the loch.

Regards,

Scottish Environment Protection Agency (SEPA)
Environmental Performance - Argyll, Hebrides and South Highland
AHSH@sepa.org.uk

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From: Sent:	12 December 2019 11:56
To: Cc:	
Subject:	20191212 RE: 20191123bt_ Sepa's responsibilties

Dear

Thank you for your email below, which was sent to on 23 November. Thanks also for the emails you have sent since then. As a SEPA manager responsible for site compliance issues in your area, I would like to offer a response to the points you have been raising in recent months.

In relation to duties to monitor and control air pollution, it is only in specific circumstances that these duties fall to SEPA. For example, SEPA regulates the operators of certain industrial processes such as landfill sites, cement batching plants, and intensive agricultural units under the Pollution Prevention and Control (Scotland) Regulations 2012.

The Fish Farm operated by Kames on Loch Tralaig is regulated by SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2011 – or CAR for short. These regulations deal with issues affecting the quality of the water environment, and there is no provision for regulating emissions to air. In this circumstance the duties for regulating air quality and odours fall to the Local Authority, Argyll and Bute Council, with whom SEPA has been working on this case.

I see that you have been in contact with the Health and Safety Executive (HSE) about the carriage of hazardous substances and health and safety in the workplace. I also see that HSE have indicated that the first of these issues does not fall within their enforcement remit, and have indicated that SEPA may be able to help. SEPA would only become involved in an issue such as this, alongside other agencies, in the event of a road traffic incident resulting in the release of hazardous substances to the environment.

As intimated in his email to you of 13 Nov, SEPA is investigating the use of chemicals at Loch Tralaig in response to the very serious concerns you have raised, but we are not going to discuss every detail of that investigation or give a timeframe for when it might be completed.

I understand that you are aware that SEPA took water quality samples on 14 Nov in order to check the levels of formaldehyde. I can confirm that 3 samples were taken in total, one each from the loch shoreline about 150 m to either side of the Fish Farm, and one from the river downstream of the loch. In all three cases the results were below the lower limit of detection for formaldehyde, giving reassurance that levels of formaldehyde in the surrounding water environment are very low.

In response to the various points you have raised in your emails to since the one below, I will only say at this stage that SEPA's investigation continues, and in the meantime there is no requirement for you to continue to collect evidence in order to reinforce the concerns you have raised, although you are of course free to do so. Should SEPA substantiate any breach of CAR licence conditions, impact on water quality or threat to human health, we will take proportionate action as appropriate under the regulations we enforce, and notify other authorities as appropriate.

Best regards

Unit Manager – Argyll, Hebrides and South Highland SEPA Dingwall Office, Graesser House, Fodderty Way, Dingwall Business Park, Dingwall, IV15 9XB SEPA Stornoway Office, 2 James Square, James Street, Stornoway, Isle of Lewis, HS1 2QN SEPA Fort William Office, Carrs Corner Industrial Estate, Lochybridge, Fort William, PH33 6TL SEPA Lochgilphead Office, Kilbrandon House, Manse Brae, Lochgilphead, PA31 8QX

t: e: @sepa.org.uk web: www.sepa.org.uk

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**Sent:** 03 January 2020 17:01

To:

**Subject:** 20200103 RE: DAY 70 of using 3 times licence amount

I refer to my Unit Manager's email from 12 December and previous correspondence.

The licence SEPA issued to Kames places conditions on "discharges" to the water environment from fish farming activities such as chemical bath treatments to protect the water environment (water chemistry and overall loch ecology). SEPA has no regulatory control over emissions to air that may result from this activity, the potential impact on workers from a health and safety perspective or issues concerning the carriage of dangerous goods if applicable.

The use of formalin in bath treatments at this site is an ongoing concern and the quantities being used remain under investigation.

Regards,

Scottish Environment Protection Agency (SEPA)
Environmental Performance - Argyll, Hebrides and South Highland
<a href="mailto:AHSH@sepa.org.uk">AHSH@sepa.org.uk</a>

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