

Directorate for Agriculture, Food & Rural Communities
Animal Health & Welfare
P-Spur, Saughton House,
Broomhouse Drive,
Edinburgh, EH11 3XD

Tel: 0300 244 9833
Fax: 0300 244 9797



EU PILOT 7150/14/SNCO

Request for follow-up

Alleged breaches of Union legislation in relation to the collection and disposal of animal by-products originating from aquaculture establishments in Scotland

Update on progress

The Scottish Government have been working to the timeline for amending the Animal By-Products (Enforcement) (Scotland) Regulations 2013 (ABPR). Some of the timings had moved as this work progressed but the 20 November deadline for ensuring the ABPR is in force for the start of 2016 remains in place.

A draft legislative amendment to the ABPR is attached at **Annex A**. As drafted we are focusing on the aquatic animals species we want to exclude from the remote area derogation.

Stakeholder engagement

We contacted fish farms on 29 May to make them aware that the Scottish Government was in the process of changing how fish farm mortalities and other aquaculture animal by-product (ABP) waste can be disposed of in the derogated ABP remote areas in Scotland. The proposed change will mean that fish farms in the derogated remote area that currently send their waste to a landfill site must use an alternative approved ABP disposal route.

The letter notified fish farmers that this change would need to be implemented through an amendment to the ABPR which we expected to be in force for the end of 2015. In order to work towards this deadline, guidance on the disposal of aquaculture ABP was issued to fish farms in Scotland and published on the Scottish Government website which can be found at the following link:

<http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/ABPs/aquacultureABP>

Public consultation

We launched a public consultation on a change in policy for the disposal of animal by-products in parts of Scotland currently designated as remote areas as defined under the ABPR. The consultation ran from the 17 August to 18 September and we received 23 responses mainly from industry representatives. The consultation invited comments on three options:

- Option 1 – Status quo
- Option 2 – Amend ABPR so remote areas derogation applies to terrestrial livestock animals only

- Option 3 - Amend ABPR so remote areas derogation applies to terrestrial and aquatic animals

The responses we received favoured option 2 as the preferred option but there was interest in extending the derogation to include species of trout.

A partial Business and Regulatory Impact Assessment (BRIA) accompanied the public consultation. The partial BRIA provided information of the benefits of each option but had limited information of their potential costs. The final BRIA - that will accompany the new Scottish Statutory Instrument (SSI) amending the ABPR - will provide details of the costs involved with each option.

The consultation document along with the partial BRIA can be found at the following link:

<https://consult.scotland.gov.uk/enterprise-environment-and-innovation/animal-by-products>

Report on Finfish Mortalities in Scotland

The Scottish Government is funding a project that will:

- Provide evidence for suitable alternative ABP compliant disposal routes for Scottish finfish farming waste e.g. incineration, anaerobic digestion, in vessel composting, rendering and the potential of a recently authorised heat treatment and ensilage process from Norway.
- Review the capacity already existing in Scotland to receive and utilise this material and the logistics involved for the individual solutions identified. This will help to ascertain if there is the capacity to make the best use of the finfish farm waste produced in Scotland, recommending the best options available.
- Identify other options considered to gain a higher value from this waste.

We have recently had a meeting with the contractors to discuss the project's findings and the final report is due in mid-November.

Contingency planning for large scale mortality disposal

The Working Group on Fish Waste Disposal was originally established to look at contingency planning for large scale mortality disposal. The group members signed up to a remit that would draw up operational contingency plans setting out measures to be implemented without delay for the disposal of fish mortalities after a large scale 'event mortality'. These contingency plans shall specify:

- The administrative authorities to be engaged;
- Their powers and responsibilities; and
- Channels and procedures for sharing information between the relevant parties.

The Working Group has met five times since it was established at the start of 2015. We have used these meetings to discuss the Scottish Government's position and our approach to sending fish farm waste for disposal in licensed landfill sites in the derogated ABP remote area. Through the group we also developed a practical guidance document for fish farmers: **General Guidance on the Disposal of Fish (Annex B)** which has been distributed to all fish farm operators through the Scottish Salmon Producers Organisation (SSPO).

The Working Group will continue to focus on contingency planning for large scale mortality disposal once the amendment to the ABPR comes into force.

Shetland derogation

We received a proposal from the three main salmon producers in Shetland who intend to set up a waste handling facility on the island which will allow the storage and disposal of ensiled category 2 material by a specialist waste carrier in dedicated vessels. Each farming area will establish a macerating and ensiling point where fish waste can be processed. Small storage facilities (~30T) will be available at each of these points. This waste will be transported by road to a central storage point on the island (>500T) from where the waste will be collected by a specialist waste carrying vessel and taken to Norway directly for disposal. In order to achieve this aim the following milestones must be met

- Identify a suitable central storage facility (by end Nov 2015)
- Order macerating and ensiling equipment and small storage tanks (by end Nov 2015)
- Gain planning permission for construction of central storage facility (by end Mar 2016)
- Establish local macerating and ensiling equipment (by end Apr 2016)
- Construct central storage facility (by end June 2016)

It is clear that it is not possible to establish the required facilities before the end of December 2015 when landfilling is expected to cease.

We are proposing to allow a 6 month extension to landfilling in Shetland only. This will allow infrastructure to be put in place that will give the industry a suitable alternative route of disposal for category 2 waste in Shetland.

Are you content with this proposal?

General Guidance on the Disposal of Fish

(fish mortalities / fish waste / fish slaughtered for disease or welfare reasons)

The disposal of dead farmed fish and products originating from fish are covered by the *Animal By-Products (Enforcement) (Scotland) Regulations 2013*. This means that any business generating material of fish origin which is not intended for human consumption needs to be aware of how these regulations apply to their business.

This guidance explains the law relating to disposal, the different categories of animal by-products and the permitted methods of disposal. The regulation is written to deal with all types of animal products which could pose a risk either to humans or animals, for example through the transmission of disease, if not disposed of in the correct way. This can cause some difficulties with the interpretation of the requirements as they relate to fish.

A system of categories is used, which defines the level of risk associated with the material. *Category 1* is the highest risk with *Category 3* the lowest. Routine mortalities are *Category 2* and off-cuts from processing are *Category 3*. The law does not recognise a 'no-risk' category.

The animal by-product categories are as follows:

Category 1:

- Fish containing certain prohibited substances or unacceptable levels of environmental contaminants, e.g. un-licensed medicines or dioxins.

Category 2 (mortalities):

- Fish products containing unacceptable levels of residues of veterinary drugs or high levels of certain contaminants;
- Fish that die, other than being slaughtered for human consumption, including fish killed for disease control purposes. This includes all mortalities occurring during the normal production cycle in aquaculture;
- Fish which die from a notifiable disease (such as ISA).

Category 3 (processing waste / by-product):

- By-products from fish plants manufacturing fish products for human consumption.
- Farmed fish which are slaughtered and fit for human consumption, but cannot go to market;
- Fish or other sea animals, except sea mammals, caught in open sea for the purposes of fishmeal production or bait;
- Shells from shellfish that contain soft tissue or flesh.

Where the fish waste is made up of more than one category, the highest category applies (i.e. *Category 1*).

The Animal and Plant Health Agency (APHA) is the authority responsible for the control of Animal By-Products. Advice on the disposal of fish waste can be found at <http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/ABPs/aquacultureABP>.

Disposal methods for fish and fish products (Meeting the legal requirements to dispose of fish)

It is your responsibility to ensure that you dispose of fish and fish products correctly as required by the Animal By-Products (Enforcement) (Scotland) Regulations 2013. Each category of waste must be disposed of using defined or specified processes due to the risks posed to humans and other animals.

The person responsible for the product must ensure that it is disposed of via the following routes:

Category 1 fish animal by-products can be disposed of by:

- Incineration or co-incineration at an approved plant;
- Processing (rendering) at a *Category 1* ABP approved plant. Example: pressure sterilisation (133°C for 20 minutes at 3bar pressure);
- Using them as fuel for combustion at an approved combustion plant.

Category 2 fish animal by-products can be disposed of by:

- Any *Category 1* method;
- Ensiled using the Fish Silage Processing Method (ensiling followed by heat treatment);
- Composted at an approved site that operates to European standards (EC 1069/2009);
- Transformed into biogas at an approved anaerobic digestion plant that operates to European standards (*EC 1069/2009*);
- Following processing at an approved plant, fish waste can be:
 - made into organic fertilisers/ soil improvers;
 - used for manufacture of certain cosmetic products, medical devices and safe industrial or technical use.

Category 3 fish animal by-products can be disposed of by:

- Any *Category 1* or *2* method;
- Rendering them in an approved plant, if they are not decomposed or spoiled, and using them to make fish oil and fish meal as feed for farm animals (*These products should not be recycled into ingredients for same species feeds*);
- Processing in an approved plant and using them to make pet food;
- Processing in an approved plant and using them to make organic fertilisers and soil improvers;
- Using to make cosmetic products or medical devices.

Your local authority or your local APHA office will be able to help you locate approved animal by-product disposal sites for you to use. Alternatively, helpful information can be found at <http://www.gov.scot/Topics/farmingrural/Agriculture/animal-welfare/ABPs/ABPpremises#top>.

ABP approved processing methods can be found at <https://www.gov.uk/how-to-operate-an-animal-by-product-abp-processing-facility>.

Practical methods for dealing with fish waste

Ensiling: formic acid

Ensiling fish mortalities is a process of stabilising fish waste by adding formic acid to macerated fish. When a pH <4 is reached, the ensiled waste is stable and can be stored safely prior to disposal. SEPA has issued a guidance note which can be found at <http://www.sepa.org.uk/media/114862/fish-farm-manual-attachment-10.pdf>. This explains the requirements for operators storing up to 10m³ of waste at shore bases. Small ensilers with storage <10m³ are excluded from requiring a Pollution Prevention Control (PPC) permit unless there is evidence of offensive odours outwith the site. Larger ensiling plants with storage >10m³ require to be authorised by SEPA under the PPC regulations.

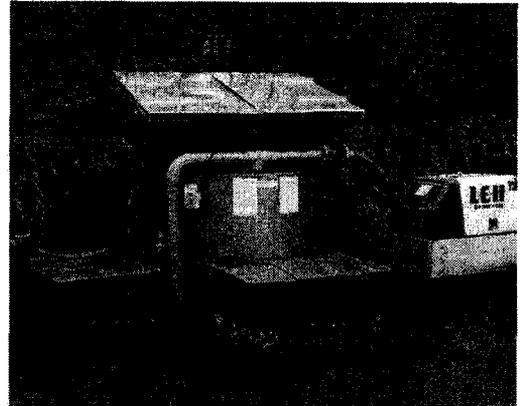


Image courtesy of Norfab Products Ltd.

N.B. This method is for storage only and is not a final disposal solution for fish waste.

The ensiled waste must then be further processed at an ABP regulated site such as an incinerator, anaerobic digester, composter or rendering plant.

Routes for disposal

Ensiling: Fish Silage Processing Method (known as the Norwegian method)

This is an approved method for the treatment of *Category 2 and 3* waste. This method, approved for use in early 2015, is based on ensiling macerated (particle size <10 mm) fish waste using formic acid to pH<4, followed by heat treatment to at least 85°C for at least 25 minutes and subsequent storage for at least 24 hours. If you plan to use this process you should contact your local APHA office (<https://www.gov.uk/government/organisations/animal-and-plant-health-agency/about/access-and-opening#scotland>) to achieve approval. Small ensilers with storage <10m³ are excluded from requiring a PPC permit unless there is evidence of offensive odours outwith the site. Larger ensiling plants with storage >10m³ must be authorised by SEPA under the PPC regulations. The resulting liquid may be spread to land as a fertiliser if a licence and approval are granted by SEPA.

Incineration: On-site

Small scale incinerators are available for on-site incineration of fish waste. The operation of these incinerators to dispose of fish waste is approved by the Scottish Government through a licence, with inspections carried out by APHA. SEPA will only regulate this activity if it consistently gives rise to nuisance outside the site, such as odour.



Image courtesy of Waste Spectrum Environmental Ltd

Incineration: Combined Heat and Power Plants

There are a number of combined heat and power plants which will accept fish waste. The water content of the waste can be an issue and will limit the amount accepted. Contact details for these plants are provided in the approved ABP premises list.



Image courtesy of Shetland Islands Council

Rendering Plants

Rendering plants can accept all categories of ABP fish waste and some will accept ensiled waste. Certain conditions may be placed on the acceptance of material depending on level of spoilage and the materials used to contain the materials during transport such as liner bags. Contact details for these plants are provided in the approved ABP premises list.

Anaerobic Digestion

Category 2 and 3 fish waste can be used in AD plants without prior processing provided they are approved to European standards (EC 1069/2009). If they have a capacity exceeding 10 tonnes per day they must have a permit issued by SEPA.

The plants which accept fish waste are detailed in the approved ABP premises list. Details of the locations of AD plants can be found at <http://www.biogas-info.co.uk/resources/biogas-map/>.

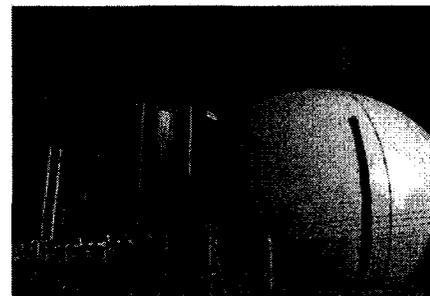


Image courtesy of Zero Waste Scotland

Composting

Category 2 and 3 fish waste is accepted at composting sites approved to European standards (EC 1069/2009) which are detailed in the approved ABP premises list. If they have a capacity exceeding 10 tonnes per day they must have a permit issued by SEPA.

More information can be obtained on the website of the UK industry body for composting at

<http://www.organics-recycling.org.uk/category.php?category=975&name=Compost%2Fdigestate+benefits+and+uses>.

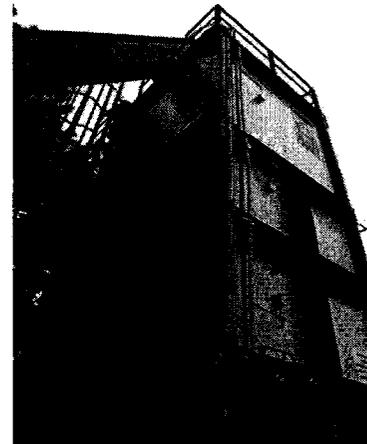


Image courtesy of VCU Europa Ltd

Other methods

Freezing: This can be an effective way of storing small numbers of fish mortalities prior to disposal using one of the above approved methods.

De-hydration: This is a potential method to reduce water content and volume of waste prior to disposal using one of the above approved methods.

Landfill: As a last resort during a mass mortality event, where there is a risk of disease transfer or a risk to human health, APHA and SEPA may permit disposal to an appropriate landfill site.

Export: In cases where a mass mortality event has occurred, using a non-UK contractor to remove fish by boat for further processing abroad may be approved. Approval should be obtained following discussion with the appropriate Scottish Government officials.

The ABP approved premises list can be found at

<https://www.gov.uk/government/publications/animal-by-product-operating-plants-approved-premises>.