Written submission from Europharma Scotland Ltd

Re: Sections 53-57, Policy Memorandum, Aquaculture & Fisheries (Scotland) Bill

I wish to bring to your attention that - contrary to the implications of section 55 of the Policy Memorandum relating to SP Bill 17 (copied below) - in Norway the genotyping methodology for traceability of farm escapes is not the only approach being taken, and recommend that Scotland also evaluate the alternative method being trialled there: physical tagging of fish.

Genotyping is limited as it cannot provide a tool to identify from which individual farm a given fish has escaped, but rather it will only inform which strain - and family within a strain - a fish comes from. Strain/family are not farm-specific, as not only are fish from given families sold by breeders to several hatcheries/producers, but at a given hatchery, the fish are graded into multiple groups several times and then sent to several marine sites, such that a single family will often be split into at least 9 different populations, and with egg production almost year-round now, part of a family may even be released in a different year class/ or generation from the rest.

Given the above Norway is also trialling coded wire tagging, which has been used for many years on many millions of hatchery-released fish in the US Pacific North West as a means of monitoring numbers returning and from which hatchery and population the fish came from. In the context of farmed Atlantic salmon this may be carried out such that all fish in a given population, destined for a particular seasite, are tagged with the same unique code at point of vaccination, i.e. shortly before seawater transfer. The tag is tiny and inserted into the snout of the fish and the suppliers are able to provide an industry-wide database of ID codes for all farms, facilitating instant identification; this is unaffordable and impractical in genotyping, as reflected in section 57 below.

I thus recommend the policy be amended to recognise that tagging is being trialled in Norway, and provision for testing this method be similarly included alongside genotyping in Scotland.

AQUACULTURE AND FISHERIES (SCOTLAND) BILL

Policy Memorandum

October 2012

55. Marine Scotland Science is developing a methodology on the use of forensic tracing of escaped farm salmon in Scotland. A scoping study considered the feasibility of adopting Norwegian fish farm escapee traceability methods and is based on the development of molecular genetic methods for the discrimination of farmed and wild salmon, and for the determination of whether wild caught salmon originate from local farms or have an alternative wild or non-wild origin. The methodology now requires robust field-testing.

56. If the method is proved in a Scottish context, in the absence of other evidence, Marine Scotland may use it to determine which farms are losing fish so that
companies can be notified accordingly to mitigate against further losses. This is likely to result in an investigation at a site where escapes are suspected, but have not been reported. Existing provisions do not permit inspectors to take samples of fish from neighbouring farms upon which future investigations and tracing could be based. The powers proposed will allow for inspectors to take fish from:

- a farm suspected to be the origin of an escape, although that site has not reported an escape;
- a farm which either supplied the ‘escaped’ stock under investigation or a site to which the remainder of the stock was moved for growing-on; or
- a site operating in the vicinity of a suspected escape and which may be the origin of the escape.

57. It is not the intention to undertake universal sampling or to create a national database of genetic samples, as this would be impractical, unaffordable and unnecessary. Powers would be used on a targeted basis when other methods of tracing have proved unsuccessful. Methods employed will not be restricted to genetic testing but may also include taking samples for testing using chemical methods.