

## 1. Shot Head application Q&A

### **What is this new licence for?**

We currently operate a fish production site at Roancarriag on the western side of Bantry Bay. We now propose to develop a second production site for Bantry Bay. This site will be based at Shot Head and will be for the production of organic salmon it will support the rotation of our stock around the Cork Beara peninsula.

### **Why have you chosen this location?**

We were looking for a site to complement our existing Roancarriag site. Shot Head represents a location which has appropriate accessibility, currents, depth and shelter. Having two sites in proximity will facilitate greater crop rotation and the annual production of salmon.

### **The site is in a highly attractive amenity area, it will interfere with boating and leisure sailing and many say they don't want it here?**

We have a number of farm sites around the Beara Peninsula and indeed the coast of Ireland. We would not choose a location that we had not fully investigated and ensured there were no problems with maritime activity / traffic. At its narrowest point the estuary is about 5m wide, taking our development into consideration it is 4.6m wide, we don't foresee an issue.

### **What consideration did you give to the feedback from Bantry Bay Pilotage on their concerns about tanker traffic?**

Ahead of our application we contacted all local stakeholders to seek their input on the proposal. We also sought expert opinion to confirm that navigation in the estuary would not be an issue.

Maritime Management, a leading maritime consultancy, carried out an exhaustive study and its conclusion is that the installation of a salmon farm at this deep sea location would not cause a restriction to navigation. To put the proposed development into context the width of Bantry Bay channel between the shore at Shot Head and South Shore is approx 5km. The width remaining for tanker traffic if our application is successful will be 4.4km – more than adequate for any tanker traffic either now or envisaged in the future.

Furthermore, when Leahill Quarry recommences trading there will be more than adequate space for tanker traffic. We hope that this reassures anyone with concerns in this regard

### **Why did you persist with this location when concerns had already been expressed?**

Following our consultations with Maritime Management we believe that shipping traffic will not be affected. In addition, contact has been established both with the operators of Bantry Bay Terminal and the Bantry Harbour Office with whom it has been agreed to establish navigation procedures for aquaculture vessels in the area, should a licence for the proposed Shot Head site be granted.

### **What will the visible impact be?**

Fish farms themselves have a quite small visual impact. On the surface of the water all that is really visible is a large ring, which is the top of the enclosure, and the buoys. We are conscious that while Bantry Bay is a 'working' bay, it is also the site of some considerable scenic beauty and have chosen Shot Head specifically for its minimal impact. The south and western shores do not provide any clear view of the proposed site. It is only on the north shore facing south-west from a point south of Roosk, Co Cork off the main road that you will be able to make out the buoys and the circular shape of the pens.

**Can you put the size of the development into context, how large it will be?**

The visible site on the surface of the water will be just under the size of one and a half Gaelic pitches. Under the surface there are moorings required to secure the farm and they will double the size of that perimeter.

**What do you intend to invest on the Shot Head development?**

We intend to invest just over €3.5 million in setting up the Shot Head site and a further minimum of €10 million bi-annually in running costs over each two year production cycle.

**What will happen if this application is unsuccessful?**

We are hopeful that the application will meet the requirements of the licensing authorities. We have invested heavily in professional analysis and advice and we are confident that we have addressed all the issues involved. MHI wishes to invest in upgrading its organic salmon farms here in Ireland and in the Beara peninsula whether it is Shot Head or other locations.

**How confident are you that this application will proceed?**

We have invested a lot of time in selecting the location and addressing concerns raised during the scoping exercise ahead of our application so we are confident of success. Ultimately however the decision rests with the Department of Agriculture, Food and the Marine.

**When will you know if your application has been successful?**

There is a four week period for public observations to the Department. We will then get the opportunity to respond to any observations, Department officials will then make a recommendation to the Minister and he will then make a decision but the timing of this is at the discretion of the Department and Minister.

**2. Shot Head Construction & Operation****What would your operating facilities be like?**

A seabed area of 42,500m<sup>2</sup> will be used in production. This would include the moorings, pens, a feed barge and room for movement to allow following if needs be. The site would be serviced by a purpose built vessel. The MV Conamara would be used for net maintenance in Bantry Bay and Kenmare Bay. The MV Grip Transporter would be used for a wide variety of general operations; these would include transferring fish from the boat to a pen or vice versa, fish delivery, fish grading, and fish treatment. Feed would be supplied out of Castletownbere.

**Upon receipt of your licence how quickly will the farm be operational?**

There are various steps in this process from confirmation of our application it will take up to 14 weeks to put the farm in place. Once this stage is completed we will begin to stock the farm and once this process begins it will take between 24-36 months to complete a fish production cycle.

Once we receive our licensing we will begin recruitment of staff and commence construction of the farm. This will take approximately 10 weeks and will involve up to six workers constructing the cages on Dinish Island. Once this work is complete the pens will be moved out to sea from Castletownbere harbour and anchored to the sea bed. This will involve two work boats, one of which will have to be hired for the task while the other will come from our existing fleet and will take four weeks weather permitting. Once this stage is complete we will begin to stock the farm. As mentioned above it will take 24-36 months for a fish production cycle to complete.

**Where will the pens be constructed?**

The pens will be assembled at the MHI Dinish Island Operations Yard and towed from the pier at Castletownbere Harbour to the Shot Head location.

**How many will you employ?**

Once the farm is up and running there will be eight long term positions for operatives. We will advertise locally and are confident that we can fill these positions with local expertise. During the construction phase six people will be employed.

### **What qualifications/skills do you need to work on a salmon farm?**

There is a varied level of experience we look for in our employees. For the husbandry staff we require a level of fitness and enthusiasm. All training to work on our farms is provided by MHI through an intensive programme which is regularly reviewed and updated to ensure our employees are fully competent in the latest developments in the industry.

### **How much fish will you produce?**

It is proposed that we will introduce 850,000 smolt into the facility for each two year period. This will result in us harvesting some 3,400 tonnes of farmed salmon over a two year period; the average weight of the salmon being between 4.5kg and 5.6kg.

## **Environmental Issues**

### **What impact will your activity have on the local environment?**

The Shot Head facility will have no negative environmental impact on Bantry Bay. The wind, wave and currents in Bantry Bay will dilute and disperse any waste from the farm. This is digestive waste produced by food passing through the fish's digestive system. But Salmon farming is primarily an organic activity and as such produces mostly organic waste. Sustainable amounts of organic waste are dispersed and diluted in the waters. Our Environmental Management Plan is designed to negate environmental impact.

It should be pointed out that the harmful elements associated with human digestive waste are simply not present in the digestive waste of cold water fish such as the Atlantic salmon. The harmful organisms present in human waste cannot be and never can be produced by a fish such as the Atlantic salmon.

### **What about the scale of the organic waste to be discharged? Won't this pose difficulties?**

This will not pose any difficulties but Marine Harvest is aware that, because of the scale of fish farming activities in some regions, aquaculture is a contributor to marine organic discharge. The company therefore works continuously with feed and feeding equipment suppliers to increase further the efficiency of feeds and feeding.

The number and location of fish farms are closely controlled by national or local authorities in all the countries in which Marine Harvest has aquaculture activities. This is to ensure that the farms are adequately spaced, are sited in places where there is a good flow of water to carry away the waste feed and faeces, dispersing it for natural biodegradation.

The size of a permitted farm is dictated by the carrying capacity of the site. Elaborate mathematical models are developed to calculate the carrying capacity of sites before licences are granted and Marine Harvest actively participates in gathering the required data, and in monitoring the state of the environment around its farms while they are active.

### **What is your environmental record?**

Salmon farming is dependent on a clean and healthy environment and requires pristine waters for the fish to grow and thrive. We were Ireland's first primary food producer to be certified under ISO 14001:1996 (International Environmental Standard). Our focus is on environmental responsibility. We make every effort to ensure that we do not disturb the ecological balance at our sites by maintaining secure fish stocks and by ensuring that only environmentally sound products are used to feed and treat our fish.

### **What emergency measures are you putting in place to ensure your fish do not escape?**

The loss of salmon stock represents a financial loss to our business so we take every measure to ensure that it does not happen. That is why we have a zero tolerance policy on escapes. We invest in the very best infrastructure, nets, moorings and monitoring technology and they are inspected and replaced regularly, it is something on which we put a lot of emphasis.

### **What impact would a release of your fish into the local waters have?**

Atlantic salmon and Farmed salmon are virtually genetically identical. However, there is a difference in their behaviour. Atlantic salmon are predatory and used to finding food. Farmed salmon are not used to hunting for food and thus often fail to survive in the wild. Some farmed salmon may be tough enough to survive in the wild, allowing them to breed with local wild stocks. This could be regarded as a negative as it may impact on local genetic traits in salmon.

### **How much stock have you lost over the years from your other locations?**

In over thirty years we have only had two stock losses in Ireland. In 2010 we lost a total of 85,073 fish from one pen in Donegal Bay which was damaged during a force 10 gale with 125 km/hr westerly winds. Prior to that, our last loss was in 1995 in Lough Swilly when we lost fish after storms. Since these occurrences we have upgraded the design of the pens on all of our farms.

### **What impact did this have on local fish stocks?**

There was no detectable impact in both cases. Marine Harvest lost its stock, they swam out to sea. They may have been caught by fishermen later on.

## **Health & Food Safety**

### **What drugs do you feed the fish?**

Our fish stocks are managed in such a way as to attempt to prevent disease. This includes monitoring, vaccinations and management of stock and stock conditions. However, as with any living creature avoiding illness completely is not possible. When fish become ill we may use approved veterinary medicines by prescription and under the supervision of a veterinarian or other fish-healthcare professional.

### **I have heard that farmed fish are fed a lot of antibiotics is this true?**

We never use antibiotics preventively or to promote growth. This was an issue for the industry maybe 20 years ago but not anymore, at least for progressive companies.

### **Do fish get sick and when they do, how are they treated? Do they recover or could they end up in the human food chain?**

The industry has been very proactive in the development of vaccines so the incidences of sickness are minimal. If fish are being treated by any medicine we monitor withdrawal and ensure that appropriate time has passed to allow drug residue fall to safe levels before those fish can be used in production. We work hard to ensure quality eggs and smolts are produced and ensuring that the highest standards of hygiene are maintained; this reduces the impact of fungus and the need for antibiotics.

### **How safe is farmed salmon?**

Farmed salmon is completely safe. Our farmed salmon is a premium quality food product that is both enjoyed and in demand from the most sophisticated markets in Western Europe, like Germany, Switzerland and in the US also, it is a very high value premium food product.

### **What measures do you take to ensure your fish are not lice infested?**

We have implemented tried and tested operational procedures to control sea lice. Through our experience we have learned that the management of sea lice is best handled through a combination of medicinal and non-medicinal treatments. These non-medicinal treatments include the use of wrasse and food supplements as well as good production management and stock rotation in a number of sites. The desirability of stock rotation is among the main drivers of our current application for an additional site at Shot Head.

### **What do you feed your farmed fish?**

Our fish feeds are made of a combination of fishmeal, fish oil and vegetable meal and oil, made mainly from sunflower, soy and rapeseed. As we use wild fish trimmings for our feed we ensure that wild fish stocks used are sustainably managed.

**Where is that fish food produced?**

Our fish food is currently produced in the UK.

**Licence & Regulation****Who regulates the fish-farming sector in Ireland and how is it regulated?**

Ireland has a very stringent and strictly enforced regulatory regime for aquaculture. Regulations are enforced through the Department of Agriculture, Food and the Marine. In addition, as our salmon farms are classified as organic there are additional independent audits undertaken annually to ensure the highest organic standards are maintained.

**How has MHI performed in terms of compliance in Ireland?**

MHI's policy is to always operate within the confines of its licences and general industry regulation. There is however, an issue in Ireland at the moment where the current licensing and regulatory regime is in need of updating. Some of the parameters set down in 1980's and 1990'ss are now outdated in light of technological developments within the industry internationally. One simple example being that larger more robust pens are now being used and it is a challenge to keep these within the parameters set many years ago.

**What is the record of the parent company and its subsidiaries internationally?**

Marine Harvest is the world's leading seafood company and largest producer of farmed salmon and takes its environmental responsibility very seriously; we report regularly on our environmental status and work closely with the regulatory bodies in each of the 21 countries we have operations in. Our global quality system and environmental responsibility is built on the four P principals – People, Planet, Profit and Product.

**Has the company ever been found in breach of or in non-compliance with any aspect of its international operations, vis a vis environmental or regulatory requirement?**

No it has not. The company publishes an annual sustainability report on its website where its environmental record is fully accessible.

**MHI Irish Operations****Who is Marine Harvest?**

Marine Harvest Ireland is a seafood company; we have been in Ireland for 30 years and employ 260 people around the coast of Ireland on our fish farms. We are part of one of the world's leading seafood companies and provide products to over 50 markets worldwide.

**How many sites/operations do you currently have in Ireland?**

We currently have 16 sites around the Irish Coast.

**What is your current turnover?**

It is currently €60m

**Will you be investing in your other sites on the Beara Peninsula?**

Yes, MHI are continually investing in the upgrade of all sites to employ the best available technology and techniques for the development of our salmon.

**Ends.**