Eel Assessment – Rijpelaal B.V.

Assessment against:

Component 1: Core requirements
Component 5: Eel farming

Completed by
Alex Senechal

15th January 2019

FINAL

1. Introduction

This document represents the report completed following the 2019 audit carried out under the Sustainable Eel Standard (Version 6.0, June 2018) against Rijpelaal B.V. This assessment has been completed against Components 1, 4, 5 & 7 of the Standard only.

The assessment is of an eel farming business Rijpelaal B.V., based in The Netherlands, near to Helmond. The farm buys in and grows on glass eels for restocking and consumption. The farm buys eels mainly from the (non SEG certified) which are placed on arrival in the nursery units. As the eels grow, they are then moved to the fingerling development section and then onto the two on-growing sections to the grow out until market weight (130 – 300g) is reached. Some of the large eels are allowed to reach higher weights depending on market demand.

All tanks are rectangular allowing for more economy of space and it is felt that this helps to provide a calm environment for the eels to grow in. Tanks are supplied by a 'feed on demand' feeding system. Eels are fed cod roe for the first 15 days of development during which time they are slowly weaned on to a crumbled pelleted feed (supplied by Alltech Coppens).

The farm also processes and smokes a large proportion of its eel production. This involves the humane slaughtering of the eels using an inhouse designed electric stunner which is available on the market to purchase by other companies, the removal of slime, gutting (manual or automatic depending on quantities) and smoking. Product is then most commonly vacuum packed and boxed for dispatch or selling with fresh products as well through the on-site shop and café.

2. The assessment

The assessor was Alex Senechal of Control Union Pesca Ltd, who visited Rijpelaal B.V. on the 15th January 2019. The audit included interviews with the co-owner Mr Paul Meulendijks and office manager, Ms Freya Welten.

3. Client Contact Details

Client Contact Name	Mr Freya Welten
Client Address	Rijpelberg 5, 5703, KD, Helmond
Client Email	info@rijpelaal.nl
Client Phone Number	0492-574444

4. Results of the assessment

The outcome of this assessment is as follows;

A responsible score will result in 1, an aspiring score in 0. Score weighting will be taken into consideration for each element.

That Rijpelaal B.V. has scored the following for Component 1: General Requirements and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 1: General Requirements	Auditor's findings	Weighting	Score
1.1 Commitment to Legality	Responsible	1	1
1.2 Contribution to eel conservation projects	Responsible	1	1
1.3 The facility trades in certified responsibly sourced eels	Responsible	1	1
1.4 Traceability:			
1.4.1 Incoming products, separation and segregation	Responsible	1	1
1.4.2 Outgoing products	Responsible	1	1
1.4.3 Record keeping and documentation	Responsible	1	1
1.5 Biosecurity & welfare –			
1.5.3 - Eel Farming	Aspiring	1	0
1.5.4 - Restocking	Responsible	1	1
1.5.5 - Wholesale / Retail / Processing	Responsible	1	1
	Total	9	8/9
	Percentage Responsibility Score:	89%	

that Rijpelaal B.V has scored the following for Component 5: Eel farming and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 5: Eel farming	Auditor's findings	Weighting	Score
5.1 The total mortality rate during the culture is low	Aspiring	2	0
5.2 The fish meal/oil ingredients in the feed come from a responsible source	Aspiring	1	0
5.3 Feed is used as efficiently as possible	Responsible	1	1
5.4 Water Quality	Responsible	1	1
5.5 There are minimal ecological impacts from effluent discharge	Responsible	1	1
5.6 Grading, slaughter and transportation are carried out with respect to welfare	Responsible	1	1
5.7 The farm provides eel for restocking	Responsible	2	2
5.8 The farm provides eel for restocking	Responsible	2	2
	Total	11	8/11
		73%	

Summary of assessment and scoring

Component	**Aspiring**	**Responsible**
1	1	8
5	3	8
Total	**4**	**16**
Total Responsibility Score		**80%**

5. Recommendations (numbers relevant to standard criteria):

Component 5.1 - Daily mortality figures should be recorded going forward to meet the requirement at the time of a next audit.

Component 5.2 – It is recommended that the current supplier of feed should have fully sustainably sourced components to it products within two years if available.

6. Next Audit

At the completion of the audit the client was assessed against the risk assessment set out in the Methodology. This is set out in the table below.

Question		Performance of the Client at Audit	Yes	No
1	Has the client been part of any external investigation which may be of concern to SEG AND/OR been suspended from any other certification standard?	Enhanced Surveillance		Go to Q2
2	Has the client received a borderline[1] pass for a Component in its previous audit?	Enhanced Surveillance		Go to Q3
3	Does the client only buy and sell product (does not physically handle it?)	Minimum Surveillance		Go to Q4
4	All other scenarios	Standard Surveillance		

	Certification Audit	Year 1	Year 2	Year 3	Year 4 Recertification Audit
Minimum Surveillance	On-Site Audit	Remote Audit	Remote Audit	Remote Audit	On-Site Audit
Standard Surveillance	On-Site Audit	No Audit	On-Site Audit	No Audit	On-Site Audit
Enhanced Surveillance	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit

As the client has been seen to fall into the Standard Surveillance bracket, the next audit will be due on the Jan 2021 (in 2 years' time) and shall be an on-site audit.

[1] A borderline pass, under versions 1.0 to 5.0 of the standard, was considered a pass when one less amber indicator is received then would be required to fail (i.e. 5 green indicators and 4 amber indicators) or when a client is certified with equal number of amber and green indicators.

The tables below give the standard and a rationale for the scores given above. The score is highlighted in the appropriate colour.

Component 1 – Generic requirements

Criterion 1.1: Commitment to legality	
Responsible indicators	For at least the past two years: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Aspiring indicators	For at least the past 12 months: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Discussion	The client declared at the time of the assessment that there had not been any legal proceeding against the company under assessment in the past 2 years and that there were no ongoing investigations either.
Score	Pass: Responsible indicator
Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score)	
Responsible indicators	The organisation donates at least 2% of its profits or at least 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Aspiring indicators	The organisation donates 1 – 1.99% of its profits or 10 - 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Discussion	The organisation currently makes contributions through a 2 cents for every kg of feed which is purchased. In addition to this, as a processor and merchant, the facility additionally donates 1.00 EUR for every kilo of filleted eel sold and 0.50EUR for every kilo of whole eel sold. In 2018, the total donations made by the company towards eel conservation amounted to 4.52% of the companies profit.
Score	Pass: Responsible indicator
Criterion 1.3: The facility trades in certified responsibly sourced eel	
Responsible indicators	The organisation trades in at least 50% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Aspiring indicators	The facility trades in 10 – 49.9% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Discussion	In 2018, the organisation purchased three batches of glass eels for its production system, which consisted of 107kg, 303.750kg & 385kg deliveries. However, as the organisation are not currently certified, this has not been sold on as certified fish. 90kg of the fish were designated as being for restocking purposes and all fish was from the Atlantic North-East. Of the fish purchased,

	11% was from a SEG source, therefore based on fish purchased in 2018, an aspiring score is awarded. However, further information was provided following the audit to indicate that glass eels for the 2019 season had been purchased. Of the fish purchased 98.6kg were non-SEG consumption fish, 85kg were Non-SEG restocking fish, and 521.1kg were SEG Consumption fish. Therefore, for the 2019 season, 74% of fish purchased were SEG certified fish. Documentary evidence was provided to the auditor for this and therefore a Responsible indicator is awarded.
Score	Pass: Responsible indicator
Criterion 1.4: Traceability	
1.4.1: Traceability - Incoming product, separation and segregation	
Responsible indicators	• Certified and uncertified eel products can be clearly and easily traced back to their source. • Where a fishery or buyer, an electronic tele-declaration system is used • It operates a clear system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products. • as certified do not contain any non-certified eel-based ingredients. • If resolved through mass- or number- balance calculations, the margin of error does not exceed 2%
Aspiring indicators	• Certified and uncertified eel products can be traced back to their source. • It operates a system which ensures that the product remains separated at all stages from arrival to despatch from non-certified eel products. • The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients • If resolved through mass- or number- balance calculations, the margin of error does not exceed 5%
Discussion	To date, certified and uncertified eels have not been separated or segregated, however the systems present allow for separation of eels and the hope is that all eels in the future will be from certified sources, therefore eliminating the requirement for separation. The volume farmed and processed at the site and general size of eels which are processed here means that any product arriving can be kept separate from others and traced back to the batches received by the farm from suppliers. Varying sizes of tanks from small for glass eels and smaller fingerlings to medium and then large tanks allow for the segregation of the different year classes already by the company. Year classes are kept separated throughout the farming process with the exception of the few slow growers which may be retained for up to 3+ years to attain marketable size and which are therefore occasionally mixed into group tanks because of the volume remaining.
Score	Pass: Responsible indicator

1.4.2: Traceability - Outgoing product	
Responsible indicators	• Where a fishery or buyer, an electronic tele-declaration system is used • Documentation is well maintained with a maximum of 2% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All product to be sold as certified by an organisation is accompanied by an invoice which meets the following criteria: - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Aspiring indicators	• Documentation is well maintained with a maximum of 5% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All products to be sold as certified by an organisation are accompanied by an invoice which meets the following criteria: - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Discussion	No certified product is currently being sold by the organisation therefore batch coding is not required, however correct labelling will be based on the requirements set out by SEG in addition to Dutch food labelling requirements which include weight of the product sold and to whom it is sold (company name). The number of fish sold is not usually placed on invoices as clients will indicate the weight of fish required and the size of fish requested e.g. 20kg of 130g-170g eels, therefore a number of fish can be accurately estimated. Numbers are known internally from grading.
Score	Pass: Responsible indicator
1.4.3: Traceability - Record keeping and documentation	
Responsible indicators	• The organisation operates a system that allows the tracking and tracing of all eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel • If a fisherman or buyer, a tele-declaration system is used to report catches and trade • The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period. • The organisation maintains records for a minimum of three (3) years.

Aspiring indicators	The above requirements are met except that: • Records have been maintained for less than three (3) years • If a fisherman or trader, a tele-declaration system is planned to be used to report catches and trade in the next season
Discussion	The organisation has retained invoices for the purchase of glass eels dating back to at least 2016 separate from other accounting and dating back for a minimum of 7 years, in accordance with national requirements. Each batch sale of processed and unprocessed eels is given a company specified batch number with weight and size range of eels processed and sold. A copy of this batch sheet is sent to the client while the original is retained for internal records, therefore it is known which tanks the eels are taken from to produce a batch of eels.
Score	Pass: Responsible indicator
Criterion 1.5: Biosecurity & welfare – Eel and eel products are provided with minimal risk of diseases, parasites and alien species	
1.5.3 Eel farming: Biosecurity is present and disease is treated rapidly and appropriately	
Responsible indicators	• The facility has the appropriate permissions to operate from the relevant authority. • The use of chemicals follows legal requirements of the EU and of the country concerned • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Daily records are available showing monitoring of fish health and signs of stress and daily mortality is recorded • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility • UV is used at an appropriate level and separation between tanks
Aspiring indicators	• The facility has the appropriate permissions to operate from the relevant licensing authority • The use of chemicals follows legal requirements of the EU and of the country concerned. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly inspected for disease (although this may not be documented) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	The facility has the appropriate licencing permissions from the national authorities for the cultivation, processing and sale of fish products. The Dutch Food Standards Agency equivalent NVWA have issued the certificate no. E.G No. 3744 to the company. The main chemical used at the facility is Bac Cid 100 for disinfecting. This is used both in the farming and processing sections of the business. Training manuals for hygiene and sanitation are used in annual training course and

	refreshers provided to all staff working at the facility. This is compulsory requirement of the company which is attended by all staff and includes biosecurity elements. In previous years, medicines were used following inspection and approval from vets. Records administered at the facility have been maintained and provided dating back to 2015. This included some precautionary administration of antibiotics up to 2017 however, since 2018, the decision has been made to limit all use of medication where ever possible and to mitigate against outbreaks with the use of pH control in the water. Currently no UV system as in place at the facility as was the case previously before the facility rebuild in 2016.
Score	Pass: Aspiring indicator
1.5.4 Restocking: The risk of restocked eels introducing disease into wild populations has been assessed and is minimal	
Responsible indicators	Eels are tested before restocking and found to be free of disease AND/OR eels are from a known source which is tested on at least an annual basis and known to be free of disease.
Aspiring indicators	Eels are tested before restocking when first sourced from a new area, and periodically (at least annually) thereafter to ensure they are free from disease.
Discussion	Fish being sold for restocking are normally tested prior to transportation and sale. This is dependent on the buyer, however no eels are permitted to leave the facility without the approval of Mr P Meulendijks who completes quality controls on the fish destined for restocking.
Score	Pass: Responsible indicator
1.5.5 Wholesale / Retail / Processing: Hygiene Plans are followed and there are rare examples of infection	
Responsible indicators	Food processing hygiene plans are followed
Discussion	As stated above, the company runs food hygiene training internally for all staff regardless of the period of time they have worked at the facility. This is done through a training manual which was developed with food hygiene standards in mind and is compulsory at the company.
Score	Pass: Responsible indicator

Component 5 -Eel Fishing

Criterion 5.1: The total mortality rate during the culture process is low	
Weighting: 2	
Responsible indicators	• The Percentage Mortality Rate of eels in culture is less than or equal to 10% on average in the current and previous year OR as an average of the previous five years

	• An accurate daily log is maintained of the number and causes of mortality
Aspiring indicators	• The Percentage Mortality Rate of eels in culture is between 10 and 15% on average in the current and previous years OR as an average of the previous five years. • An accurate daily log is maintained of the number of mortalities
Discussion	Mortality at the facility is currently recorded on a weekly basis through what is sent for destruction as biological waste. This has been recorded as a weight per week and totalled for 2017 and 2018 as 3.03% and 3.59% respectively based on production weight (kg) per year, therefore around 6.06-7.18% over a 2-year period. Following discussions with the auditor during the site visit, it was agreed that daily mortality figures would be recorded going forward to meet the requirement at the time of a next audit.
Score	Pass: Aspiring indicator
Criterion 5.2: The fish meal/oil ingredients in the feed come from a responsible source	
Weighting: 1	
Responsible indicators	Fish meal/oil in the feed (including juvenile feeds) is certified by IFFO or MSC or shown in some other way to be from responsible or sustainable sources
Aspiring indicators	Fish meal/oil in the feed (including juvenile feeds) is not certified by IFFO or MSC or shown to be from responsible sources, but there are credible plans to move to such a supplier within 2 years
Discussion	The farm uses the 'Extreme' eel feed sourced at Allteck Coppen. Fish meal used in the feed has been shown to be from a IFFO RS certified source however, the fish oil part of the feed is not currently certified. The feed company has indicated that they are currenly working on using new oil sources with an aim to have proof of certification within the next 2 years.
Score	Pass: Aspiring indicator
Criterion 5.3: Feed is used as efficiently as possible	
Weighting: 1	
Responsible indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.1 or less fingerlings to 200g: 1.6 or less large eels: 2.0 or less
Aspiring indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.3 or less fingerlings to 200g: 1.8 or less large eels: 2.2 or less
Discussion	Feeding at the farm is done in a number of ways. Glass eel tanks are fed by automatic hoppers which are filled by hand each day and turned on 3 times per day depending on feeding rates. Medium and large tanks use pendulum feeders meaning that eels are fed based on activity. This is monitored closely by the staff

	to ensure that there is no waste of feed through the silo control system. Figures for FCR were calculated for each of the size ranges identified in the standard as 1.0,1.2 and 1.3-1.7 for the glass eels, fingerlings to 200g and larger eels. The large eels were shown to be as a range due to very large eels (1.2kg+) also being grown at the farm and therefore having a higher FCR to those grown to around 800g.
Score	Pass: Responsible indicator
Criterion 5.4: Water quality	
Weighting: 1	
Responsible indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable • Water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality • The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
Aspiring indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
Discussion	The farm employs a computer system which maintains oxygen and temperature within set parameters. This system is alarm based enabling staff to be alerted should these parameters shift outside of the optimal range. The pH is also monitored and adjusted automatically for each system at the farm. The quanityt of water changed from the tanks is done based on nitrate levels and not as a percentage of the water volume or as a volume per stocking density as with other farms. A back-up generator system is present at the facility which is started up every 3 weeks as part of the maintenance schedule to ensure it is fully functioning. This is not an automatic start up but manual following receipt of the alarm message.
Score	Pass: Responsible indicator
Criterion 5.5: There are minimal ecological impacts from effluent discharge	
Weighting: 1	
Responsible indicators	• The system is closed-circuit and has no discharge OR • Effluent discharge is regularly tested by the farm AND • Effluent discharge complies with all local and national requirements AND • Has not been found to be non-compliant in the past 5 years.
Aspiring indicators	• Effluent discharge is regularly tested by the farm AND/OR • Has been found to be non-compliant on no more than 1 occasion in the past 5 years.

Discussion	Manure is removed from the recirculated systems and stored for use as fertiliser by local farmers. No infringements have been noted with regards to water quality discharged from the facility in the past and the water discharged from the facility is tested at random by the local authorities.
Score	Pass: Responsible indicator
Criterion 5.6: Grading, slaughter and transportation are carried out with respect to welfare	
Weighting: 1	
Responsible indicators	• Grading is completed in an efficient manner • Slaughter is completed by a method that provides an instant death or renders them insensible to pain, i.e. electric stunning or percussive stunning. • Procedures are in place to ensure transportation provides suitable conditions for fish welfare.
Aspiring indicators	• Other, previously acceptable methods of stunning before slaughter are used, e.g. chilling, but there are credible plans in place to invest in the latest methods within the next 2 years
Discussion	Grading is completed in an efficient manner using an air pump to move fish from the tanks to the top of the 4-size range grading machine. An electric stunner designed by the owners of the farm is used to stun the eels before plunging in either hot (>40 Deg C water) or iced water. The eels are then de-slimed, emptied either using an automated machine or by hand depending on the quantity processed. This is all done to limit any unnecessary stress or welfare issues for the animal prior to processing. Any fish departing the facility for onward transportation alive are separated after grading and lowered in temperature and allowed to “purge” prior to transportation. Eels at the farm are never allowed to dry out.
Score	Pass: Responsible indicator
Criterion 5.7: The farm provides eel for restocking	
Weighting: 2	
Responsible indicators	The farm can provide documented evidence that 10% or more of the farm’s annual eel production (by piece) has been provided for restocking for the purpose of conservation / escapement.
Aspiring indicators	The farm can provide documented evidence that it makes 10 % of their annual eel production (by piece) available for restocking for the primary purpose of conservation / escapement AND/OR for new clients, the farm can demonstrate that they have bookings for re-stocking in the following year at more than 10% of the predicted annual eel production (by piece) for the purpose of conservation / escapement.

Discussion	In 2018, restocking was done with a total of 3280kg, calculated to be approximately 257,100 pieces. This was equivalent to 12.24% for the year based on estimate number of pieces taken into the facility as glass eels. Numbers were expected to be higher but were not unfortunately sold during 2018 and remain at the facility presently.
Score	Pass: Responsible indicator
Criterion 5.8: Eels for restocking are not graded out slow-growers	
Weighting: 2	
Responsible indicators	The size range and quantities in the eels for restocking reflect 100% that for the age group in the whole farm
Aspiring indicators	The size range and quantities indicate no more than a 25% supplement of those for restocking are from slower growing fish of the same age group.
Discussion	Eels purchased for restocking are not graded out and therefore reflect a representative sample of the population the fish were they were caught. Any grading of the fish is to limit unnecessary competition for feed within tanks, however fish remain separated from consumption fish.
Score	Pass: Responsible indicator