

## Response to the AISC on Crocodile Industry Qualifications

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Submitted by: Skills Impact

### Summary

This response is provided prior to project commencement. A full Work Function Analysis with multiple subject matter experts has not taken place. The crocodile farming industry is described as maturing, rather than mature, by the largest employer Porosus Pty Ltd. As a result, the project parameters were and remain written with sufficient flexibility to ensure that industry experts can drive the appropriate creation of the training.

### Qualifications

Probable – one new qualification in SFI with multiple streams

Possible – a second new qualification either in SFI or AHC

### Skill Sets

The original proposal indicates there may be up to three new skill sets. Further consultation has identified approximately six skill sets.

### New units

Between 10 and 15 new units to be developed

Additional note: where possible, existing units may be utilised, however the current usage of the existing unit will need to be considered, given the very different nature of mainstream fish-based or ranger-based work, compared to working with crocodiles. There will need to be sufficient flexibility in the existing units to incorporate contextualisation for crocodiles, without making delivery and assessment of the unit overly difficult to deliver for the mainstream occupations. The overall length of any long-form qualifications will also need to be considered, given the need to deliver in remote locations.

As a result, while not included in the original proposal, there may also be a requirement to review and update up to 12 existing units, which would minimise the development of new units.

### Background

The AISC has requested additional information on the proposed nature of the qualifications relating to the crocodile industry, indicating the nature and scope of the proposed qualifications. The intention of the original submission was to ensure there is enough flexibility of training to cover all jobs focused on crocodiles, while supporting the growing crocodile farm industry. This continues to be a priority to deliver results which align with Ministerial priorities of:

- The training system better supports individuals to move more easily between related occupations
- Improved efficiency of the training system through units that can be owned and used by multiple industry sectors

### Method & Sources

This additional information has been prepared without the benefit of a full Workforce Function Analysis involving a workshop of Subject Matter Experts, which will be undertaken as a starting point if the project is approved. It is based on the previous consultations, further analysis of existing units of competency within multiple training packages, information on the previous Nationally Accredited Training program, and additional stakeholder consultations, including:

- Porosus Pty Ltd (largest crocodile farming operator in Australia)
- Parks & Wildlife Commission NT Crocodile Management
- Charles Darwin University
- North Australian Indigenous Land and Sea Management Alliance
- Industry Skills Advisory Council NT

### **The nature of the work**

Work to support the crocodile farming industry takes place in the wild and on-farm. There are different skills and competencies for each situation. Increasingly, there is a move towards locating crocodile farms within Indigenous communities, requiring workers to operate in both situations.

The way that work is undertaken in Indigenous communities is also relevant to the design of the training. The one worker/one job model is not appropriate for communities where the cultural lifestyle, including ceremonies and seasonal considerations, must also be factored in to ensure an available workforce throughout the year.

The skills requiring most the specialised training are those used in “wild” situations.

### **Crocodile Sustainability**

During the second half of the 20<sup>th</sup> century, there were moves that resulted in banning the culling of crocodiles and then sustainably working with crocodiles as populations recovered. As a result, ensuring crocodile sustainability has successfully been incorporated into industry operations. Farm operators treat the monitoring of crocodile populations and scientific research as “business as usual”. The training design will need to recognise this and include appropriate units which train monitoring of populations and aid scientific research.

### **Foundations for recognised training**

In developing the training, we will need to keep in mind the ability to deliver training on remote communities, often with poor literacy.

Skills Impact is aware of government policies aimed at “Closing the Gap”. Skills Impact submits that creating flexible training, with the ability to deliver both skills sets and qualifications will be the best approach, and this may be achievable through importation of units and streaming of training within existing qualifications, as well as developing one or two new qualifications.

The experts in the field have so far indicated that Certificate II level training is appropriate and deliverable. As a result, the work will focus on units at this level.

### **Units of Competency and Clusters**

#### ***Foundation Units***

There are two units which should underlie all training in the field:

- Crocodile Nature and Behaviour (New Unit) – This unit will need to be developed and will include some elements from the current “work with crocodiles” unit (see below) and some additional information, which will provide the background knowledge required for crocodile care, animal welfare and work safety
- SFIAQU216 Work with crocodiles – this unit will require revision, and should include Indigenous respect for and approach to crocodiles, with some elements will be transferred to the other foundation unit. It is likely that the changes will be so significant as to result in a new unit

These units may also incorporate elements of SFI201 Work Effectively in the Seafood Industry, to ensure that while learners will be focused on crocodiles, elements of working in the broader seafood industry are also covered.

### **Cluster 1**

This cluster covers two identified work areas that take place in “wild” situations:

- Crocodile population surveys and nest surveys
- Control of problem crocodiles and capture of wild crocodiles

Critical existing elements for this cluster will be:

- AHCILM202 Record information about country – It is likely that this unit can be imported, however modifications may be needed
- Boat handling – this will require importing (without modification) an existing relevant unit, such as MARK007 Handle a vessel up to 12 metres

There are skills that are specific to crocodiles in this cluster, which will need to cover the skills of:

- Trapping, including baited traps
- Roping
- Harpooning
- Sedation and chemical immobilisation (the application of the chemicals can only be undertaken by workers cleared by Veterinarians, so this training will likely be designed around assisting sedation, and the limitations and regulations around the practice)
- Preparing crocodiles for live transport (this is significantly different in wild capture situations than the transportation of other stock)

These skills may require one or two new units. An additional skill would be electro-immobilisation; however, this cannot be used in “wild” situations. We will need guidance as to whether this should be included in this cluster, however initial indications are it should not be included.

Other elements related to this cluster would be:

- Observe and report on crocodiles and nests (AHCILM203 Observe and report plants and/or animals may be appropriate)
- Participate in environmentally sustainable work practices (SFIEMS210 may be appropriate)
- Communicate in the crocodile industry (SFI201 may be appropriate, however this will be dependent on adequate coverage of the scientific and environmental monitoring aspects)

This training would be of great use to Indigenous Rangers and other park rangers working in Northern Australia. As a result, we would envisage this cluster as at least one Skill Set, and possibly as a stream within existing AHC qualifications, such as Certificate II qualifications AHC21216 in Rural Operations or AHC20616 in Parks and Gardens.

### **Cluster 2**

This cluster will cover two identified work areas that take place in both “wild” and/or “on-farm” situations:

- Egg harvesting and incubation
- Hatchling maintenance

Egg collection may take place in wild situations, with egg maintenance for a short period until they can be transported to on-farm hatcheries. Increasingly, there will be opportunities for hatchery operations to take place in remote situations. There are also on-farm breeding operations, which will

include egg collection and care, however these skills would already be covered if the training is designed for wild operations.

We have been advised that crocodile egg care is markedly different to caring for eggs in other commercial operations. Crocodile eggs are relatively delicate, facing both dehydration and overhydration issues, and requiring humid and relatively hot growth environments. The care of eggs is not seen as difficult, but the skills required for monitoring and care are different.

Wild egg collection may occasionally be undertaken in very difficult situations, with some stakeholders expressing the requirement for extensive experience beyond the scope of vocational training. However, other stakeholders have suggested that this is not always the case and that skills have previously been successfully trained and implemented. This seems to be dependent on the nature of the location and the experience of collectors living around crocodiles.

New units will probably need to be developed to cover:

- Egg Collection
- Egg handling and transport (at multiple stages of development)
- Creating and monitoring the hatchery environment
- Egg care within the hatchery environment

It is possible that these areas could be covered using a variety of Units, including:

- SFIXSI201 Work effectively in the seafood industry
- SFIWHS201 Meet workplace OHS requirements
- SFIAQU201 Collect broodstock and seedstock
- SFIAQU202 Handle Stock
- SFIAQU101 Carry out basic aquaculture activities
- SFIXSI101 Apply basic food handling and safety procedures
- SFIAQU206 Feed stock
- SFIAQU207 Monitor stock and environmental conditions
- SFIAQU209 Carry out on-farm post-harvest operations
- SFIAQU308 Support hatchery operations

These units are not focused on crocodiles, and there are too many units identified to be delivered appropriately in the situations required. The project will examine these existing Units and work out which ones can be imported, potentially with minor changes, and where new units should be developed. However, the specialist nature of care of crocodile eggs will probably require new units.

This training could be of use to a wide range of workers in crocodile farming, animal care and parks, and these could also be offered as one or more Skill Sets. It is likely they are unsuitable as a stream in existing qualifications, due to the specialist nature of the job roles.

### **Cluster 3**

This cluster will cover identified work areas that take place in “on-farm” situations.

Current indications are that if the two foundation units are delivered, the rest of the standard “on-farm” situations can be covered with existing training related to basic farm operations of feeding and cleaning, handling chemicals and using equipment. As a result, it is likely that existing units can be packaged with the two foundation Units in Skill Sets to deliver this training.

This training would cover some of the following:

- SFIBIO201 Inspect and clean aquatic work equipment

- SFIBIO301 Identify and report signs of aquatic diseases or pests
- SFIAQU207 Monitor stock and environmental conditions
- SFIAQU204 Undertake routine maintenance of water supply and disposal systems and structures
- SFIAQU205 Monitor water quality
- Driving tractors – AHCMOM202 or similar
- Buggy and/or Quad driving - AHCMOM216 - Operate side by side utility vehicles and AHCMOM217 - Operate quad bikes or similar
- Chemical handling - AHCCHM101 - Follow basic chemical safety rules or similar

The project would aim to identify Units which could be delivered in one or more skill sets.

### **Processing**

Slaughter – the Unit SFIPRO303 Slaughter and process crocodiles should be sufficient

Skinning – this is a highly specialised operation with exacting standards in the export market due to the market being high quality fashion items. Basic skinning may require a unit, as crocodile skinning is different to other animals. Further guidance will be needed on whether there is any additional requirement for training, which would be a maximum of one new unit

Meat processing – there does not appear a requirement for additional training in this area, with existing training in AMP and SFI packages covering the field.

### **Generic**

There will also need to be some standard generic units available, including safety and emergency procedures given the nature of the industry. Given the design of other elements of the proposed training, it is unlikely that new units will need to be developed. This training should be appropriately covered by incorporating elements into previously identified units or new units, or by fully importing the following units:

- SFISSI102 Communicate in the seafood industry
- SFIWHS201 Meet workplace OHS requirements
- SFIAQU309 Carry out emergency procedures

### **Packaging**

Reviewing the identified skills requirements, Skills Impact currently believes that there is sufficient depth and volume of learning to justify a qualification for the industry, given that a full-time industry participant would require training covering all or part of:

- Foundation Units, Cluster 1 and Cluster 2; or
- Foundation Units, Cluster 2 and Cluster 3

However, the nature of the industry also requires additional flexibility, leading to identification of skill sets based on the foundation units plus one cluster.

It is likely that the training may require only one qualification with multiple streams. However, we would want to consult more broadly with the AHLCLM IRC, and particularly with those involved with the Indigenous Rangers program, to identify their needs fully.

### **Suitable Training Package**

While there are clearly arguments relating to having some or all of the training within the SFI, AHC and ACM Training Packages, it is submitted that as the package deals with live animals and that the

major industry being supported is crocodile farming resulting in skin and meat products, that the primary qualification should remain in the SFI Training Package.

As the crocodile industry is in the maturing phase of development, it is likely that new techniques will be introduced, current techniques modified and enhanced, and that this training will need to be reviewed on a reasonably regular basis over the next few years. More frequent review to better meet the needs of the maturing industry is possible through the SFI Training Package, than in the much larger AHC Training Package.

There will need to be Skill Sets or streams in the AHC Training Package, in particular the areas overseen by the AHLCLM IRC, and this is the rationale for that IRC to be included as a key stakeholder.

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