iCell Aqua QAAD

Response to the Dec 18th, 2021 RFP Follow Up Questions as requested by State RI, DEM
Follow Up Questions as requested from;

The Office of the Director
Rhode Island
Department of Environmental Management

On Dec 18th, 2021 iCell Aqua / QAAD received these follow up questions via email;

• 1) Financial Plan: Detailed information regarding the capital stack showing in detail how the project would be funded and what the economic impact of the project would be.

• 2) Team Experience: Background and experience of the key executives to be involved with the project, including description of similar projects and the financial track record of those projects.

• 3) Contingencies: It is important for DEM to know if there are contingencies or room to negotiate for a couple of the elements such as lease terms or land ownership requirements.

• 4) Timeline: It is important for us to understand in more detail some of the timelines and whether/how any of the above changes or details may impact those timelines.

• 5) Public Amenities: A detailed explanation of public amenities such as park space or educational or recreational elements that would be part of the project.

Replies to these items are addressed in the following pages of this document.
a “Network of Facilities” to provide economic impact for State of RI

Definition:

Land-Based Recirculating Aquaculture Systems (LB-RAS) are fish farming facilities that are built “inland” and are not located in the open coastal waters where traditional oyster/salmon aquaculture exist.

LB-RAS systems require large volumes of recirculating water to be treated over and over. The aquatic species (fish, eel, shrimp, etc) swim in tanks inside of a building.

LB-RAS is a cornerstone of the new Blue Economy, providing sustainable marine food production around the world.

The joint water treatment of both the LB-RAS and the Regional Seafood process water at Galilee creates the greatest economic impact for RI.
To fully understand the benefits, it is important to understand the technology interplay of the iCell Process with Sustainable, Land-Based Recirculating Aquaculture Systems (LB-RAS).

This video Link explains the Processes and Products of integrated LB-RAS. (CRITICAL that RFP evaluators click the link below and watch the video for 10 min to understand the proposal)

Link: Achieve complete water recycle & waste recovery in aquaculture and produce Single Cell Protein - YouTube

Local Educational Cooperation & Supporting Rhode Island’s contribution to the Blue Economy

Integrated cooperation with the Aquaculture and Environmental departments within local schools and universities will be a cornerstone of the Galilee facility.

The extensive amounts of clean water and system aeration can support Aquaculture R&D activity piggybacking on the new Galilee infrastructure.

Researches can utilize space for tanks and focus on the fish biology research aspects of aquaculture and will not need to worry about equipment or operation of a water cleaning system.

Environmental science majors can have hands on experience with the processes that will shape the future of nutrient capture & clean water in the food processing industry.

Jobs and internships will allow university level students to establish real world work experience with a sustainable water, protein & aquaculture facility.

Galilee will immediately become the showcase site in the USA for the integrated system.
The Blue Economy is sustainable use of ocean resources for economic growth, improved livelihoods and jobs, and ocean ecosystem health.

The Blue Economy encompasses many activities...

**Renewable Energy**
Sustainable marine energy can play a vital role in social and economic development.

**Maritime Transport**
Over 80% of international goods traded are transported by sea, and the volume of seaborne trade is expected to double by 2030 and quadruple by 2050.

**Fisheries**
Marine fisheries contribute more than US$230 billion annually to global GDP. More sustainable fisheries can generate more revenue, more fish and help restore fish stocks.

**Climate Change**
The impacts of climate change on oceans—rising sea-levels, coastal erosion, changing ocean current patterns, and acidification—are staggering. At the same time, oceans are an important carbon sink and help mitigate climate change.

**Waste Management**
80% of litter in the ocean is from land-based sources. Better waste management on land can help oceans recover.

To learn about other aspects of the blue economy, visit [www.worldbank.org/oceans](http://www.worldbank.org/oceans)
The iCell Aqua Project in Galilee aligns with the major pillars of the Blue Economy as defined by the World Bank.

**Fisheries** – maximizing value of RI’s current sustainable Squid and Scup fisheries.

**Maritime Transport** – reducing transport of RI Landings through immediate processing at the coast – instead of freezing, shipping to China, thawing, processing, re-freezing, shipping out of China.

**Renewable Energy** – utilize wind energy in conjunction with the new wind farm being developed offshore – furthermore, small blowers directly connected to windmills can be designed into the site, providing “non-electric” aeration for the SCP fermentation tanks. Also, a reduction in Maritime Transport processing ELIMINATES considerable amounts of wasted energy – process in RI, not shipping around the world.

**Waste Management** – the basis of iCell Aqua is Zero Waste Aquaculture – to eliminate the massive amounts of waste created in traditional coastal aquaculture and convert the lost nutrients back into a protein feed ingredient.

**Climate Change** – the elimination of waste nutrients and wasted energy are iCell Aqua’s positive benefit in countering Climate Change. If “Waste Food” were a country, it would be the THIRD Largest contributor of greenhouse gasses in the world.
Education and the Blue Economy

The development of a water technology complex will also become a showcase for biological elements of a Blue Economy. Often associated with the Blue Economy is the “Circular Economy” which describes processing activity that can convert what is otherwise waste, back into the food/feed cycle, thus creating a zero-waste facility.

Educational co-operation with regional schools whereby the site will be designed with “touring lanes” that are isolated from the processing activity occurring in the building. This can allow easy & safe access by school children for educational tour purposes without direct contact to the wet processes or the running machinery.

Students will be able to see in person how these processes work. They can see the Blue Economy / Circular Economy actively operating on a commercial scale – they can envision how they will eventually work in such an environment – or even better – be creators of new Circular Blue business ecosystems spawned from their own ingenuity and exposure to the Galilee facility.

Education is a Cornerstone of the Public Benefit for the iCell Aqua / QAAD approach
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**Education and the Blue Economy**

Office/meeting room space dedicated for State RI use can also be used as venue for hosting training and educational meetings at the iCell Galilee site. Provides a hands-on learning experience that can be shared in a real-world setting.

The world is full of “sustainable business stories” that are only ideas on paper

Choosing iCell Aqua for the Galilee site makes sustainability a tangible reality in the Blue Economy.

Immediately makes Rhode Island the USA leader of integrated Land Based Aquaculture and Nutrient Recycle
Galilee as the catalyst for a “Network” of Facilities creating economic impact for state RI

• Economic Impact Summary
  • Extensive detail was already provided in our original submission
  • Creating the Galilee Water & Nutrient Recycle Site
    • Allows development of 2 additional aquaculture projects in state RI
    • $70MM additional capital investment into the state
    • Total of $100MM capital investment over 3 year period
    • 50+ Direct Jobs
    • Hundreds of Indirect Jobs in Seafood/Fishing/Processing as water processing allows more landings and more value-added processing jobs in the existing seafood processing companies.

Over $100MM/year in GDP Increase in State RI
More than $1Bil over next 10 years
Project Success & Cap Stack

The primary limitation to the project moving ahead is funding,

- ... the water treatment infrastructure in Galilee is key to knowing that the Land Based Aquaculture has sufficient treatment for its liquid nutrient effluent for investors to fund the Land Based Aquaculture.

- ...the Aquaculture element of the Network is the “key economic driver” to obtain funding from the investor community.

The two are inextricably linked.
• Cap Stack Detail for Galilee + Aquaculture Site
  • $70MM Total Investment
    • $20MM Equity
      • Equity support from iCell HKG Technology Company: $1-3MM (Public announcement pending)
      • Range of grant funding support from Federal Funds
        • (ARPA/EPA/EDA Grants already in discussions and filing by State RI Agencies): $10-12MM
        • Equity support from Private Investors: $7-10MM
    • $50MM Debt
      • Infrastructure Bond filing in conjunction with Commerce RI
        • Discussion began in summer 2021.
          • To formalize requires site confirmations by DEM & State RI.
        • Note: iCell has already achieved a $37MM Industrial Infrastructure Bond Inducement from State of Michigan for Project in Michigan.
      • iCell/QAAD has been in communication with RIIB during 2021
        • Competitive Interest Rate Loan available for a site with “water off-take” agreements.

iCell Aqua will combine the funding of the first $40MM aquaculture site with the $30MM Galilee water & nutrient recovery project such that only 1 funding event would be executed.

Extensive detail regarding economic impact and sources of data for the calculations was provided in our original RFP as well as CONFIDENTIAL P&L and other private information which has been provided to Commerce RI as part of the bond funding process. Detailed information on our business financials and also Michigan Bond can be provided to DEM under this RFP if an NDA can be applied to the documents.
Public Use & Amenities Response

Park space / recreational:

A section of the land, estimated at 20-25% can continue to be used for public parking.

Although this parking is currently shown at the rear of the property, it could also be located streetside nearer to the ocean side of the lot and the Block Island ferry loading zones. At this time, we have no land survey that suggests the iCell Aqua facility must be located in any specific layout on the property site.

The main building (with parking garage under the building) can have office space to be utilized by State RI agencies serving the area.

This new 3 story office space & garage parking would negate the need for the small DEM building currently on the land adjacent to the Lighthouse site – thus freeing up more land for greenspace as desired by DEM – parking, parks or other.
Contingencies Response

Terms of Lease or Land Ownership

YES: iCell/QAAD can be flexible in this area. Beyond this simple answers, we would need to understand the details of any specific request.
Timeline Question

DEM request to understand in more detail some of the timelines and whether/how any of the above changes or details may impact those timelines.

• We do not anticipate any elements of this follow up request dated Dec 18th to affect our timelines.

• Details of iCell/QAAD Timeline
  • As expressed in our original response in next slide
Projected Timeline Detail (as submitted in original RFP)

a. First 90 days
   a. iCell Aqua / QAAD to complete final designs with local 3rd party engineering firms
      a. Can initiate mobile pre-treatment for SeaFresh QDC
   b. Finalize engineering and site designs for Pt. Judith
   c. Finalize Permits with DEM
   d. Finalize Funding & Bond with Commerce RI.

b. 90-180 days
   a. Begin demolition of Lighthouse Inn
   b. Finalize Contracts for major equipment and construction at Pt Judith

c. 180-360 days
   a. Break ground on Galilee Water Treatment site
   b. Initiate additional pre-treatment for some of the existing water in Pt Judith to allow SeaFreeze and others to immediately expand production based on their current infrastructure.
   c. Move ahead with Aquaculture Projects at other sites
Team Experience

Reiteration & Expansion to our original RFP response

www.iCellAqua.com has expanded bios of all executives involved in the company

- (i) Mark Rottmann, B.S.M.E.
  Currently CEO of iCell and previous executive at GE Water
  (30+ years water/protein mfg & project implementation experience)
- (v) Seth Terry MBA & PhD, Environmental Sciences
  (25+ years water industry experience, inventor & patent holder of the iCell process),
- (ii) Nico Falke [MA/MS] Aquaculture from University of Wageningen, Holland;
  (30+ years industry & commercial aquaculture experience);
- (iv) Dagoberto Raul Sanchez-Corrales, Ph.D. Aquaculture and Animal Nutrition, Texas A&M
  (30+ years industry experience) [add additional members if necessary].
- (vi) Scott Hattersley, BS Econ/Finance.
  (20+ years, retail and value-added seafood processing experience).
- (vii) Terry Bradley, PhD – Professor at URI – Dept of Fisheries, Animal Sciences,
  (30+ year career with multiple aquaculture projects, education and R&D)
- (vii) Howard Tang – Masters Economics,
  (20+ years finance, investment banking experience)
- (iii) Kit Munday - MBA from Columbia University
  (20+ years professional experience – finance, trading and aquaculture development)
Track Record of Similar Projects

The facilities developed by or providing historical employment to the executive team are private entities with different private shareholder groups, thus we cannot release detailed financials. The facilities currently operate and produce products today.

- **High Level Overview**
  - Thousands of tons/year of products and ten’s of millions in revenues each year in facilities previously developed by the Board members and Managers in the iCell Aqua group.
  - Industry Demand is strong in all segments and more capacity is needed.
  - Global protein demand is strong – averaging above $1,000/mt for the protein products which will be produced – and several thousands of dollars per ton for the fish & fish processing activities. Margins in the 25-50% range.

- **Protein Projects.**
  - Historical Fish Protein Processing Sites in Peru, Mexico, Ecuador, Spain, Morocco have been built.
  - New sites are planned in Mexico & Chile next 2 years to increase protein production for the global market.
  - iCell Single Cell Protein – recovered from water:
    - 3 sites in China – operating today, Expansion sites planned for year 2022-23 in China, Chile & Mexico.
    - Similar to Galilee – the projects solve water issues while creating new protein.

- **Fish Processing**
  - Fish Smoking facility in West Chester USA is a profitable on-going concern.
  - Partners in Protein plants also operate adjacent fish processing – HGT
  - We expect to add new processing partners in Galilee with regional experience as well.

- **Aquaculture**
  - Australia, China, Peru, Ecuador, Northern Europe, Rhode Island and Maine are locations where team members have designed or built or ran aquaculture systems on multiple species over the last 30 years, including species of Salmon, Trout, Eel, Shrimp, Mahi & Yellowfin.
  - The regional aquaculture sites which will be spawned from the Galilee water treatment capacity are land-based systems comparative to the other systems previously developed by key executives on the team.
Key Executives – Career Images

The saying “a picture is worth a thousand words” is so true – and yet we often fail to capture enough pictures of our work in day to day business.

Luckily, we do have a few photos showing key iCell Aqua executives at site work from previous years.

Our team is experienced in all aspects of water, protein & aquaculture.
Dr. Seth Terry & Dr. Andrew Logan
iCell China Site

commercially operating SCP water purification facility
• Hosn Song of iCell (left photo) with customers at China production facility who utilize iCell Single Cell Proteins (SCPs) as feed ingredients.
• USA Clients visit iCell China for technical meeting
SCP finished product coming off conveyor belt for packaging

3 China Facilities
• Top: URI Aquaculture site visit with Evoqua Water & iCell.
• Left: International Sustainability Webinar Featured Host
• Bottom: Norway/Sweden Aquaculture Project meeting with banks and local government entities.
Kit Munday, holding eels at Maine USA R&D site in 2016-17

Large Scale, Asia Eel Project design by iCell Aqua staff member Nico Falke
Peru Protein Site Inauguration with President Alan Garcia of Peru 2012
Spain & Peru Protein Plants Construction

Mr. Mark Rottmann – COO
Bluewave Marine Ingredients
Welcome to Sugartown Smoked Specialties, Inc.

Columnist Rick Nichols of the Philadelphia Inquirer says of Sugartown Smoked Specialties, “It’s an addictive crowd-pleaser!”

Thank you for visiting the Sugartown Smoked Specialties Web site. The smokehouse staff at Sugartown is proud to provide you with the finest artisinal hot and cold smoked, fish, fowl and game available.

Located in Historic Chester County Pennsylvania, Sugartown Smoked Specialties, Inc. began providing local restaurants, clubs and specialty stores with exceptional smoked foods in 1992.

Our gourmet line of succulent artisanal products is processed under strict quality control guidelines, using recipes developed by our own smokehouse staff. Small production lots, and meticulous attention to quality and detail have brought Sugartown Smoked Specialties to the forefront of the smoked foods.
Mr. Rottmann – COO Bluewave
Shrimp Aquaculture in Ecuador and Large Protein Project Ecuador.
Commercial Protein Products marketed for Petfood Industry (center)

International Client Visits From Fish Protein and iCell SCP’s (right)
iCell SCP Plant in Shandong
Closing

We hope that our original RFP document and subsequent responses herein fully address the questions of the RFP.

Please advise if any additional information is needed.

Regards, Mark Rottmann
CEO iCell Aqua / QAAD