STATE OF MAINE

BOARD OF ENVIRONMENTAL PROTECTION

IN THE MATTER OF

NORDIC AQUAFARMS, INC Belfast and Northport Waldo County, Maine	) APPLICATION FOR AIR EMISSION, SITE) LOCATION OF DEVELOPMENT,) NATURAL RESOURCES PROTECTION) ACT, and MAINE POLLUTANT) DISCHARGE ELIMINATION) SYSTEM/WASTE DISCHARGE LICENSES))

PRE-FILED DIRECT TESTIMONY OF CATHAL DINNEEN, M.S. NORDIC AQUAFARMS, INC.

1. My Name is Cathal Dineen. I hold a Master of Science Degree in Aquaculture from University College Cork, Ireland. I have 22 years' experience with land-based farming technologies and developing production management systems in various countries including Ireland, the UK, Iceland, Canada & Norway. I have been involved in the development and operation of some of the largest land-based facilities in the world growing a variety of different fish species, including brown trout, rainbow trout, arctic char, salmon, turbot and halibut. My professional experience and qualifications are further detailed by my curriculum vitae, which is included as Addendum A to this Testimony.

2. In 2017, I joined Nordic Aquafarms AS as the Head of Production, directing operations at Fredrikstad Seafoods, a subsidiary company of Nordic Aquafarms AS. In 2018 I was appointed Production Director of Nordic Aquafarms, Inc., a US subsidiary of Nordic Aquafarms AS. I subsequently moved to Belfast, Maine in July of 2019 to assume this role.

3. To satisfy Section 22 of the Site Location of Development Act I prepared the following testimony identifying the nature and potential sources of offensive odors at the proposed facility. Also described are the measures taken to ensure areas outside the limits of the development will not be affected by offensive odor.

4. Nordic Aquafarm's facility will be designed to prevent the detection of offensive odors outside of the facility. Production of odiferous gases will be mitigated using appropriate storage and handling techniques and best management practices.

5. Odors that are produced will be effectively controlled by the installation of proven air treatment infrastructure in key production buildings. HVAC systems within these buildings will be designed to ensure air is appropriately treated by these air treatment installations.

   Air treatment infrastructure will include tested and proven air filtration technology such as industrial multistage scrubbers and/or carbon adsorption filters selected and installed in collaboration with experts in the field of industrial odor control.

6. HVAC systems route air through air treatment infrastructure. This ensures that all air exiting areas with the potential for harboring offensive odors is treated prior to expulsion. Likewise transport vehicles will be appropriately outfitted to treat any gasses displaced as hauling vessels are loaded.

7. Nordic Aquafarms will partner with established recycling and disposal professionals with years of experience in odor control (See Nordic Exhibit 18). Air treatment systems will be selected and installed through consultation with these partners.

8. Potentially odiferous materials and specific means for odor control are discussed below (9). Processes generating these materials and any storage of the materials will be in enclosed buildings. These materials will be expediently and regularly conveyed off site by disposal partners such that they do not accumulate on-site. These materials have value that is compromised if they are allowed to deteriorate in quality such that they become odiferous. Byproducts can be ameliorated in various ways to add value such as, for example, reducing disposal costs, or creating secondary revenue streams. Generally, the realization of such benefits requires these materials be managed in ways that prevent spoilage and thus odor. Nordic Aquafarms has received written letters indicating the capacity and readiness of various companies to ameliorate the byproducts generated on site (Nordic Exhibit 18)

9. Potential sources of odor in land-based aquaculture operations include:
   a. Ensilage of mortalities. While best efforts are made to minimize mortalities, they are a natural part of any farming operation. Mortalities will be removed, ensiled and tank-stored in a weak organic acid solution to maintain a pH below 4. This prevents spoilage and the accumulation of odiferous compounds. The ensiling tank is contained within an enclosed building which is ventilated through a carbon filter to capture any impurities in the air. Stored materials will be transported to an appropriate receiving facility regularly.
   b. Fish processing. After processing of the fish, the offal is immediately chilled or frozen and stored in insulated, for pick-up by partners.
   c. Filtrate from the Waste-Water Treatment Plant. Organic material removed by water filtration systems will be stored in a sealed tank and removed regularly.
   d. Feed. Due to the cost of feed and its importance to the health of the fish, preventing its spoilage is paramount. Feed will be stored indoors in enclosed silos in temperature-controlled rooms. Due to the constant use of feed during operations, the limited duration for which it is stored on site precludes spoilage and production of offensive odors.

All organic waste materials (9a-c) will be regularly removed from the facility by a partner with demonstrated experience in the transportation, disposal and odor control of similar materials (Nordic Exhibit 18).

[INTENTIONALLY LEFT BLANK]

Dated: December 10,2019

By. C. Dineen

Cathal Dineen

Nordic Aquafarm, Inc

STATE OF MAINE

December 10, 2019

County of Waldo, ss.

Personally appeared the above-named Cathal Dineen and made oath as to the truth of the foregoing pre-filed testimony.

Before me,

Candice Hutchison
Candice Hutchison

Notary Public/ Attorney at Law

Commission expires: 2/1/2021

CATHAL DINNEEN

1B Løvliveien, 1639 ● Gamle Fredrikstad, Norway
+47 468 40629 ● dinneencathal@yahoo.ie

BUSINESS OPERATIONS MANAGEMENT PROFILE

Results-driven, award-winning Business Management Executive, with extensive experience including operations, production management, organizational development, HR, business development and team building within diverse industries. Skilled in planning, coordinating and executing successful production programs, with a track record of improving operational stability, efficiency, and profitability. Exceptional relationship builder and negotiator, successfully presenting and selling strategic business plans and programs to executive-level decision makers. Collaborate with senior stakeholders to effectively prioritize activities and achieve defined objectives, translating business requirements into solutions to achieve corporate performance goals and targets. Broad expertise in aquaculture.

Organizational Management ● Business Strategy Development ● Production Management ● Revenue Generation
Program Management ● Organizational Development ● Performance Management ● Regulatory Compliance
Financial Management ● Team Building/Leadership ● Facility Management ● Relationship Development

PROFESSIONAL EXPERIENCE

FREDRIKSTAD SEAFOOD'S (Nordic Aquafarms affiliated), Øraveien 2, Fredrikstad, Norway ● 2017 – Present

Operations / Head of Production

- Collaborate in the development of some of the largest and most advanced RAS systems ever conceived in the 2000T RAS2020 systems and 33,000T D-tank modular concepts.
- Participate in the integration of innovative technologies to increase production and reduce operating costs.
- Maintain compliance with timeframe and budget parameters, while assisting design teams in resolving technical and operational issues jeopardizing project success.
- Optimize production and maximize net returns through continuous optimization of fish husbandry practices, operating parameters and equipment, with the objective of stable and efficient production
- Create models to determine a number of KPIs, monitor system performance and streamline production.
- Procure and develop operating protocols for equipment and develop SOPs, operations manual and program of continuous process improvement.

Key Achievements:

- Played instrumental role in getting these ground-breaking facilities off the ground and progressing to the next phase encompassing the maximization of biological, engineering and operational efficiencies.
- Streamlining operations by integrating advanced Quality Management software tools used to improve data collection, implement continuous risk assessment programs, syncronize training needs, centralize key documenation and consolidate compliance requirements for accreditation bodies and regulatory authorities.

NAMGIS CLOSED CONTAINMENT PROJECT, Vancouver Island, Canada ● 2012 – 2016

Operations / General Manager

- Direct the development of a PR Aqua 470T RAS pilot scale project, designed to test the technical and economic feasibility of growing Atlantic salmon to 5kg market size in tanks on land.
- Set and implement plans and budgets for key areas consistent with the overall strategy and financial and other business objectives. Develop and manage supplier contracts for key services and supplies.
- Ensure production supports approved annual business plan with full accountability for quality standards, legal requirements and cost control.
- Defined biosecurity protocols and detailed health plan for the site which has some of the most stringent biosecurity protocols of any fish farm in the world.
- Handle diverse HR functions, recruitment, staff development, leadership, performance management, and health & safety. Developed a training program that was awarded $30k funding in recognition of its efficacy.
- Monitor compliance with industry codes, governmental regulations and environmental standards.
- Serve as spokesperson and contact point with customers, stakeholders, potential investors, high profile visitors and media.
- Liaise with and compile reports for key organizations and funding institutions.

Key Achievements:

- Serve on the Business Development Committee, responsible for development of ancillary businesses such as a hatchery, reducing related operational capital costs more than $250K.
- Worked closely with Seafood Watch, arguably the world's most influential arbiter of seafood sustainability, in

helping to establish a Monterey Bay green "Best Choice" ranking for land based fish farming of Atlantic salmon, a stamp of approval which has helped to positively influence consumers and the entire business supply chain.

ACHILL ISLAND TURBOT FARM, CO., Mayo, Ireland ● 2010 – 2011

Operations / General Manager

- Oversaw all operations of new marine recirculation units for the production of 120T of Turbot, implementing protocols and standard operating procedures.
- Played a key role in designing the layout and organization of the new facilities, integration of systems and technology and ensuring deadlines were met.
- Recruiting, managed, trained and mentored employees, and increased business growth and revenue through cost reductions, maximizing growth of the fish and ensuring that all production targets were met.

Key Achievements:

- Received nomination for Irish Rural Enterprise Award (2011); named winner of "Start-up" category.

GLEN OAK FISHERIES, Co. Antrim, Ireland ● 2004 – 2009

Operations / General Manager

- Directed day-to-day operations for first and second generation recirculated hatchery units.
- Evaluated and reviewed procedures and systems to optimize operations and productivity.
- Ensuring compliance with requirements of The Irish Quality Trout Standard, Tesco's and the License and Local Authorities during regular internal checks and audits.
- Personally designed and developed a computer program to calculate O_2 consumption in raceways aligned in series.

Key Achievements:

- Successfully redeveloped infrastructure of the hatchery operation which resulted in a 75% increase in production from 200T to over 350T.
- Reduced costs and overheads through close monitoring and control and through introduction of cost reduction measures such as implementing modern techniques and systems.
- Gained recognition and positive feedback by meeting and achieving the new Eco-Standard for which Glen Oak Fisheries was selected as the Pilot Farm in Ireland.

SIMPLE SEAS LTD., Co. Kildare, Ireland ● 1999 – 2004

Assistant Manager

- Played a pivotal role in helping to increase production by 35% by using extensive aquaculture knowledge.
- Received Naturlands' Organic Accreditation by meeting all the required standards for an organic smolt farm.
- Implemented nutritional and health management practices, including measures for avoiding stressful or disease inducing environmental conditions in some of Europe's largest tanks.

Key Achievements:

- Received promotion from trainee to assistant manager as result of exemplary performance.
- Completed multiple contract assignments at other fish farms, with responsibility for operations management, production optimization, employee supervision, financial management, health & safety, quality control, and regulatory compliance. Ensured adherence to specified performance deliverables.
- Contracted by one of the World's largest feed producers, Skretting, to undertake a hygiene based risk assessment at Curraun Fisheries fish processing plant. Minimized occurrence of Listeria Monocytogenes by over 90%, avoiding major impact on sales and revenue.

FISKELDI, Atlantic Halibut Marine Farm, Iceland ● 07/1998-11/1998

Aquaculture Technician

- Carried out growth trials to compare the %SGR, FCR, and Chemical Composition of Atlantic halibut, fed diets produced by different commercial feed companies.

Key Achievements:

- Identified the optimal diet for the farm to feed this newly cultured species, which dramatically improved performance and revenue.

EDUCATION

MSc in Aquaculture, 1999 - University College, Cork, Ireland
BSc in Zoology, 1997 - University College, Cork, Ireland

AFFILIATIONS

Member - World Aquaculture Society, European Aquaculture Society and Aquaculture Association of Canada

TECHNICAL SKILLS

- Aquaculture Software Packages for fish growth modelling, feed purchase prognosis, production planning.
- Computer controlled environmental monitoring and alarm systems.
- Computer operated feeding and oxygen injection systems.

March 22, 2019

Carter Cyr
Nordic Aquafarms, Inc.
PO Box 283
159 High Street
Belfast, Maine 04915

Letter of Intent – Agri-Cycle Energy

Agri-Cycle Energy along with its sister company Exeter Agri-Energy in Exeter, Maine, has the capacity to accommodate the waste streams outlined in this LOI that will be generated by Nordic Aquafarms. Furthermore, Exeter-Agri Energy in conjunction with our digestion partners across New England will be able to manage the anticipated increase in volume of these waste streams as the facility reaches its maximum production capacity over the next 5 years.

Exeter Agri-Energy was commissioned in late 2011 and has experienced unmatched production and reliability throughout the northeast. Exeter is co-located on Stonyvale Farms a family owned operation that manages over 3,500 acres of land base in which the farm and digester are co-located. Food waste and organic waste streams fueling the facility are exclusively supplied by Agri-Cycle and the renewable power is exported to the ISO New England grid system under a 20 yr, fixed rate power purchase agreement with Emera Maine.

Exeter Agri-Energy (EAE) is one of the premier dairy-based biogas plants in the nation utilizing proven technologies from CH-Four Biogas and Martin Energy Group. The 3-megawatt facility is capable of processing up to 100,000 tons per year of organic waste while reusing bi-products as animal bedding and nutrient rich liquid fertilizer. The anaerobic digestion system relies on three vessels operating at approximately 100°F and totaling 3 million gallons of treatment capacity.

Since its inception in 2012, Agri-Cycle Energy, our logistics and hauling company has expanded our collection capabilities across New England, operating a variety of route collection assets and long-haul vehicles in order to move food waste and other organic waste streams from our client locations to our host digester in Exeter as well as a number of other partner digestion facilities across the region. Agri-Cycle has succeeded in moving large volumes of food waste and organic waste streams from generators to these digestors since its formation and services these clients in a manner that contains any vectors or odors which is a critical component to any large-scale operation in the waste industry.

This integrated network of personnel, technology, and equipment has enabled the company to scale exponentially utilizing logistical efficiencies as the primary catalyst. Relying on Exeter Agri-Energy as the insurance outlet for all volume, the result is a reliable, interconnected service offering the following key attributes which are unmatched by any other provider in the Northeast:

- Collection – existing routes covering ME, NH, VT, MA, and NY
    - (15) food waste packer and rendering body vehicles focused on collection of food waste
    - (10) tractor trailers supporting long haul activities
    - (6) 60-100 yard dump trailers to move 30-ton max payloads down the highway
    - (4) 9,000-gallon vacuum tankers supporting liquid organic waste accounts

- Transfer – (5) material aggregation points across the Northeast:
    - Portland, Maine
    - York, Maine
    - Westborough, Massachusetts
    - Charlestown, Massachusetts
    - Springfield, Vermont

- Processing – food waste de-packaging operations:
    - Exeter Agri-Energy - Exeter, Maine
    - EL Harvey & Sons - Westborough, Massachusetts
    - Waste Management – Charlestown, Massachusetts

- Disposal Partners – existing relationships with digestion facilities in five states and Canada:
    - Exeter Agri-Energy – Exeter, Maine
    - Laforge Bioenvironmental – Grand Falls, New Brunswick
    - Vanguard Renewables – (3) locations in Rutland, Haverhill, and Hadley, Massachusetts
    - Lewiston Auburn Pollution Control Authority – Lewiston, Maine

Waste Management, Charlestown, Massachusetts
Client relationships throughout the region with exceptional organizations such as Hannaford, Wal-Mart, Patriot Place, Massachusetts General Hospital, Colby College, Whole Foods, Trader Joe's, Wellesley College, Big Y, Amazon Fresh, Simon Malls, Jones Lang LaSalle, Fidelity, Maine General Medical Center, Bertucci's, Boston Seaport Hotel, Sysco, Kerry Coffee, E.L. Harvey, Newport Biodiesel and Tyson Foods further demonstrate the positive reputation and comprehensive service offering deployed by Agri-Cycle.

Please check out our website that outlines our company and highlights our services offerings. www.agricycleenergy.com We have also included the following below:

- Process overview of Anaerobic Digestion
- Photos of the Exeter Agri-Energy and Stonyvale Farm
- Photos of Agri-Cycle Energy's collection Fleet

AGRI-CYCLE

What happens to the waste?

Food waste is saved in separate bins by area businesses, reducing waste discarded in landfills.

Bins are collected regularly and transported to a processing facility.

Food waste is processed through a depackager, and then mixed with manure inside the anaerobic digester.

Microorganisms reproduce by feeding on the organic matter in the anaerobic digester, creating biogas.

Biogas becomes fuel for the system, a combined heat and power unit.

Excess electricity is sold back to the grid, reducing fossil fuel consumption and CO2 emissions.

A bio-separator recovers solid material for use as animal bedding or a compost product.

A bio-separator recovers the virtually odorless liquid material for use as natural cropland fertilizer, reducing the need for petroleum-based chemicals

Cow manure is collected and pumped into the anaerobic digester.

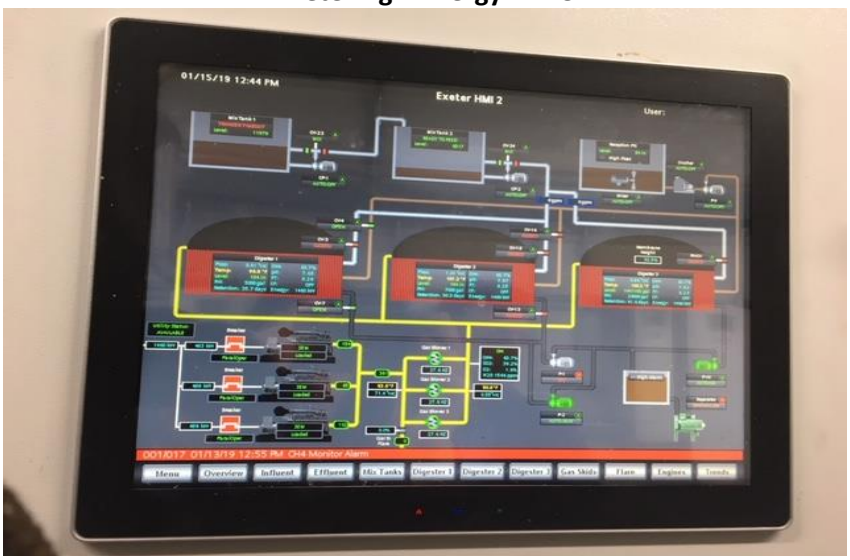
Anaerobic Digestion

can reduce landfill use, save fuel, create energy and produce valuable farm products.

Exeter Agri-Energy & Stonyvale Farm

Exeter Agri-Energy - Plant Overview

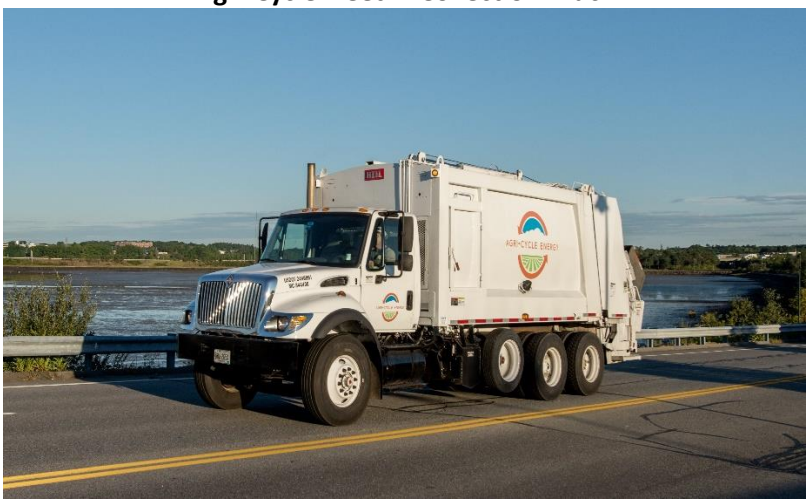
Exeter Agri-Energy – PLC



Agri-Cycle Fleet – Dump Trailer

Agri-Cycle Fleet – 8,500 gallon vacuum tanker

Agri-Cycle Fleet – Collection Truck



Agri-Cycle is prepared to manage, dispose and process the waste streams outlined below for Nordic Aquafarms as they come online and scale their operation over the next 5 years.

Waste Streams Generated from Nordic Aquafarms:

Agri-Cycle will work with Nordic Aquafarms to manage and dispose of the current amounts listed below and can handle the slow increase to 50% volume from August 2020-August 2021 (Phase 1), followed by a slow Increase from 50-100% from 2024-2025 (Phase 2). We have the capacity to accommodate these volumes for at least five years of operation following each phase.

Sludge (WWTP)	250 cubic yards/day (wet @ 20% DM)
Irone Slough (IWTP)	22 cubic yards/day (wet @ 3%DM)
Salmon Processing Solids (heads, guts, mortalities, etc.)	22 yards/day
Salmon Processing Grease (Fat Trap)	1.5 yards/week

Please feel free to contact us with any questions.

Sincerely,

Daniel J. Bell
Agri-Cycle Energy
Partner / General Manager
(207) 671-3642
dan@agricycleenergy.com

April 2, 2019

Carter Cyr
Nordic Aqua Farms, Inc.
159 High Street
Belfast, Maine 04915

Re: Capabilities Statement

Dear Carter,

This letter is to confirm that Casella Organics has the capabilities to transport, recycle and/or dispose of the all volumes of organic byproducts and waste produced by Nordic Aqua Farms Construction and demolition debris as outlined by the attached Nordic Aquafarms Solid Waste Summary Table A (attached). According to your build-out schedule, Nordic Aqua Farms will eventually be producing 11,500 US short tons of rack waste and 15,400 dry tons filter sludge annually. Of particular importance due to the volumes generated, Casella Organics is uniquely positioned to manage all this waste through one or more of several outlets we manage, namely:

- Transportation Services – Casella operates a fleet of front load, rear load and roll-off collection services to meet any waste generators needs. Additionally, Casella has close relationships with haulers for large volume dump trailer, belt trailer and/or live floor trailer hauling. Our hauling division, Pine Tree Waste Services, can also transport volumes of non-hazardous MSW (Municipal Solid Waste) to the Penobscot Energy Recovery Corporation facility located in Orrington, ME. We are prepared to handle all amounts of recycled products that may be generated from this development, as well Universal Waste and Land Clearing Debris.

- Composting – Casella's Hawk Ridge Compost Facility converts 40,000 tons annually of organic waste into 80,000 yards of commercial compost that is sold throughout Maine and New England. The facility was opened in 1989 and was upgraded to a state of the art in-vessel Gicom tunnel composting technology in 1994. The facility has received many awards over its tenure.

- Land Application – Casella Organics has been operating material marketing and land application programs in the State of Maine since 1983. Many organic residuals can qualify for direct land application which is often less expensive than other recycling or disposal options. Casella offers a turnkey service including material and program licensing, marketing, transportation, field operations, analytical data management and regulatory reporting services. Casella has over 200 farm customers in the State of Maine.

- Anaerobic Digestion – Casella has a close relationship as a supplier to Village Green Ventures, LLC, operator of a commercial anaerobic digestor in Brunswick, Maine. The

facility converts food and organic waste energy to methane which is burned to power energy generation. It is licensed to receive both solid and liquid organic waste.

Casella has a cooperative relationship with Exeter AgriEnergy located in Exeter Maine that receives 80,000 tons annually. Casella provides EAE with commercial and municipal food waste from Maine communities.

- Landfill Services - Special waste such as organic waste and demo debris can also be disposed of at the State of Maine's Juniper Ridge Landfill Facility located in West Old Town, ME that is operated by Casella.

To successfully manage this program, Casella envisions a diverse program utilizing a net work of facilities mentioned above. Casella can provide disposal at Juniper Ridge Landfill as a back-up to the program.

Key Reference Projects – Names and phone numbers of references are available upon request.

Dupont Nutrition USA, Inc. – located in Rockland Maine this plant extracts carrageenan from seaweed and produces approximately 32,000 tons annually of seaweed waste, trademarked as Algefiber. Dupont has a high service need requiring Casella to supply 6 dedicated dump trailers and a 350 day per year operating schedule. Casella markets Algefiber to agricultural and horticultural markets. Casella offers a turnkey service including marketing, transportation, material sampling and analytical, regulatory reporting and back-up storage when fields are unavailable.

Portland Water District – Casella manages the biosolids transportation, recycling and disposal program for Portland Water District East End and Westbrook facilities managing approximately 25,000 tons of biosolids annually to compost, anaerobic digestion and landfill outlets. Casella also provides 3 dedicated water tight dump trailers and services the facilities 365 days per year.

Verso Paper Company – located in Jay, Maine, Casella manages approximately 17,000 tons annually of varied materials including wood ash, primary sludge, combined primary and secondary sludge, flume waste and log truck cleanings. The marketing programs include the processing and production of dairy farm bedding, direct land application and soil blending and horticultural uses.

Carter, I hope this description of service options and reference projects demonstrate the broad capabilities of Casella Organics. This letter is not a quote for services but, rather, it is a statement of capabilities. The sole purpose of this letter is to communicate the willingness and capabilities that Casella Organics has towards providing the service as requested.

Please feel free to contact me with any future requests. I can be reached at (207) 461-1000.

Sincerely,

John Leslie
Division Manager – Maine

TABLE A
NORDIC AQUAFARMS SOLID WASTE STREAMS

Solid Waste Type	Estimated Quantities	Estimated Schedule
Construction Phase		August 2019-August 2020, 2024-2025
Construction & Demolition Debris	90 yards/day during construction	August 2019-August 2020, 2024-2025
Land Clearing Debris (timber)	1,146 cords (5433 cubic yards)	August 2019-August 2020, 2024-2025
Land Clearing Debris (brush & stumps)	TBD	August 2019-August 2020, 2024-2025
Land Clearbing Debris (soil)	20,000 cubic yards	August 2019-August 2020, 2024-2025
Land Clearing Debris (rock)	14,000 cubic yards	August 2019-August 2020, 2024-2025
Universal Waste	5 yards/week	August 2019-August 2020, 2024-2025
Special Waste (asbestos insulation and roofing)	100 cu ft vermiculite insulation & 800 sq ft asphalt roofing	August 2019-August 2020
Special Waste (PAH-impacted soils)	TBD	August 2019-August 2020, 2024-2025
Belfast Bay Sediment	15,000 cys	August 2019-August 2020, 2024-2025
Operations Phase		
Sludge (WWTP)	250 cubic yards/day (wet @ 20% DM)	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Irone Slough (IWTP)	22 cubic yards/day (wet @ 3%DM)	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Salmon Processing Solids (heads, guts, mortalities, etc.)	22 yards/day	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Salmon Processing Grease (Fat Trap)	1.5 yards/week	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Municipal Solid Waste	60 yards/week	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Universal Waste	2 yards /week	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025
Recyclable Products	60 yards/week	Slow increase to 50% volume from August 2020-August 2021, Slow Increase from 50-100% from 2024-2025

WASTE MANAGEMENT

THINK GREEN®

March 25, 2019

Mr. Carter Cyr
Nordic Aquafarms Inc
159 High Street
Belfast, Maine 04915

RE: Letter of Commitment to Manage Solid Waste Streams

Dear Mr. Cyr:

Waste Management Disposal Services of Maine, Inc. (WMDSM) is excited to work with Nordic Aquafarms (NAF) to responsibly and sustainably manage the solid waste streams that will be generated from your proposed project in Belfast, Maine. This letter confirms that WM can manage the waste streams that will be generated from the construction and initial operation phases of the proposed project, as identified in the attached Table A.

We will work with NAF to recycle, or develop plans to recycle, as much of the waste as possible. These options may include, but are not limited to, direct land application, composting, anaerobic digestion, and/or other advanced forms of material conversion to create value added products. Development of long-term recycling plans for any specific waste stream are subject to waste stream characterization, material suitability, an economic and environmental feasibility analysis, and regulatory permitting.

WM has disposal capacity at its site in Norridgewock through December 2024 at present fill rates. We are presently going through the landfill expansion permitting process with the State of Maine to add additional capacity beyond 2024.

Many of the waste streams can be landfilled at our fully permitted landfill in Norridgewock, Maine, provided that the wastes meet all facility, state, and federal requirements for landfill disposal. These requirements include that each waste stream be non-hazardous, have no free liquids, are sufficiently firm to maintain stability, and have low odor. Special waste acceptance at our Norridgewock landfill is also subject to completion of WM waste approval forms, meeting our acceptance criteria, and, in some cases, sufficient compatible waste streams to meet our guidelines for responsible landfill management.

Our services will include comprehensive waste disposal and recycling permitting (if and as needed), full transportation services, and disposal and/or recycling management services.

All services outlined in this Letter are subject to the negotiation of the terms of a mutually acceptable service agreement to be entered into by the parties.

We look forward to working cooperatively with Nordic Aquafarms to manage all the identified waste streams safely, responsibly and sustainably.

If you have any questions, please do not hesitate to call. Thank you.

Sincerely,

Waste Management Disposal Services of Maine, Inc.

Steven Poggi
Director Disposal Operations
New York - New England Market Area

TABLE A
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(617) 569-3200
FAX (617) 561-8471

CHANNEL FISH CO., INC.

370 EAST EAGLE STREET
EAST BOSTON, MASSACHUSETTS 02128-2571

March 11, 2019

Carter Cyr
Nordic Aquafarms, Inc.
PO Box 283
159 High Street
Belfast, Maine 04915

Dear Carter:

Channel Fish Company is a family owned and operated fish processing business in East Boston, Massachusetts. We specialize in processing seafood and seafood by-products for pet food, human consumption, and for bait.

As discussed in our meeting on the 1/11/19, Channel Fish is interested in continuing to discuss opportunities to purchase the salmon by-product that will be generated by Nordic Aquafarms' proposed facility in Belfast, Maine. We believe we are well-positioned to service your needs and have the capacity to do so.

Our facility has a capacity of appx. 10,000 pounds an hour and appx. 40,000 MT per year. As such, we are interested in the appx. 10,000 metric tons/year (21 cubic yards/day) of salmon by-products (fish heads, cuttings, bones, skin, viscera, etc.) you expect to generate. The by-products would be transported in insulated plastic bins and in refrigerated trucks to ensure freshness and minimize any odors or dripping. If needed, liner bags can be used in the bins as another safeguard. We would also work closely with Nordic Aquafarms to develop a comprehensive logistical plan that prioritizes these considerations.

Beyond this, Channel Fish has partnerships and relationships with various other organizations that will allow us to collaborate with Nordic Aquafarm's to help recycle its other waste streams:

1. Sludge (filtrate removed from water treatment containing organic nutrients)
   6,000 metric tons/year (10-22 cubic yards/day)

2. Fish mortalities
   600 metric tons/year (1 cubic yard/day)

We look forward to continuing our discussions.

Sincerely,

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