DRAFT FACT SHEET

NPDES #: FL0A00001

PERMITTEE: Kampachi Farms, LLC
PO Box 4239
Kailu-Kona HI 96740

FACILITY: Velella Epsilon

FACILITY TYPE: Aquatic Animal Production (SIC code 0273)

OUTFALL: 001

RECEIVING WATER: Federal Waters of the Gulf of Mexico

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1. Facility Description

The Velella Epsilon project is a "net-pen" aquatic animal production facility that is considered a new discharge.[1] The project will culture a single cohort of approximately 20,000 fish (kampachi; *Seriola rivoliana*) which will be reared for approximately 12 months. The estimated final fish size is approximately 4.4 pounds (lbs) (2 kilograms [kg]), meaning the total maximum harvest weight is estimated to be approximately 88,000 lbs (39,916 kg). The maximum amount of feed is estimated to be 27,268 lbs (12,369 kg) per month.

The operation consists of a supporting tender vessel and a single floating net-pen cage in water depth of approximately 130 feet (40 meters). The net-pen will be a copper alloy mesh submersible circular cage with a diameter of 17 meters and a height of 7 meters, contained within a high-density polyethylene frame. A single CopperNet submersible fish pen will be deployed on an engineered multi-anchor swivel (MAS) mooring system. The engineered MAS will have up to three anchors for the mooring, with a swivel and bridle system. The cage material for the proposed project is constructed with rigid and durable materials (copper mesh net). The mooring lines for the proposed project will be attached to a floating cage that will rotate in the prevailing current direction. The ocean currents will maintain the mooring rope and chain under tension during most times of operation.

The CopperNet cage design is flexible and self-adjusts to suit the constantly changing wave and current conditions. As a result, the system can operate floating on the ocean surface or submerged within the water column of the ocean. When a storm approaches the area, the entire cage array can be submerged by using a valve to flood the floatation system with water. A buoy remains on the surface, marking the net-pen's position and supporting the air hose. When the pen approaches the bottom, the system can be maintained several meters above the sea floor. The cage system is still able to rotate around the MAS and adjust to the currents while it is submerged. After storm events, the cage system is made buoyant to resume normal operational conditions.

2. Industry Description

National Pollutant Discharge Elimination System (NPDES) permits protect water quality by regulating point source discharges. Point sources are operations that discharge pollutants from any discernable, confined, and discrete conveyance (40 CFR § 122.2). Net-pen systems are a stationary, suspended, or floating system of nets, screens, or

[1] In accordance with 40 CFR § 122.2, a new discharger is defined as a facility that has a discharge of pollutants commencing after August 13, 1979, is not a "new source," and has never received an effective NPDES permit. The proposed facility is not considered a new source because the appropriate effluent standards for the aquaculture industry (concentrated aquatic animal production facilities) are not automatically applicable to the proposed facility.

cages that are anchored offshore in open waters of the United States (40 CFR § 451.2(j)). Aquaculture facilities produce and discharge wastes (excess fish feed and fecal material) that contain pollutants (40 CFR § 122.2). Accordingly, marine aquaculture operations are considered point sources that discharge industrial wastewater.

3. Receiving Water Body Description

The effluent discharges into federal waters of the Gulf of Mexico (Gulf) approximately 45 miles (72 km) southwest of Sarasota, Florida. For Clean Water Act (CWA) purposes, federal waters in the Gulf extend seaward from the three nautical mile boundary of each Gulf coastal state, to 200 miles offshore. In the vicinity of the facility, the Gulf is not considered an impaired water pursuant to CWA § 303(d) and is not subject to any total maximum daily load.

Winter months are dominated by south-southwest currents, while spring months are dominated by a north-north east current. The overall current flow direction off the west Florida coast is predominately in the south-southwest direction. More information about the receiving water body characteristics can be found in the Ocean Discharge Criteria (ODC) Evaluation that is included in the Environmental Assessment (EA).

For marine waters off the coast of Florida, Florida's water quality standards apply within three nautical miles off the shore. At the present there are no legally applicable water quality standards that apply for federal waters in the Gulf. CWA § 304 requires the EPA to develop aquatic life criteria that accurately reflects the latest scientific knowledge of the impact of pollutants on human health and the environment. Aquatic life criteria are designed to protect both freshwater and saltwater organisms from short-term and long-term exposure and are based on how much of a chemical can be present in surface water before it is likely to harm plant and animal life. The EPA has established recommended marine aquatic life criteria. The CWA § 304(a) recommended criteria are not laws or regulations; they are guidance for states and tribes to use for their waters when developing water quality standards. The CWA § 304(a) criteria have been considered in evaluating potential impacts from the proposed facility and in developing appropriate conditions to ensure that the proposed discharges will not cause unreasonable degradation of the marine environment and will comply with ODC under Section 303 of the CWA and 40 CFR Part 125, Subpart M.

4. Outfall Description

For this Permit, the net-pen effluent (outfall) is considered to be immediately downstream of the midpoint of the cage with the exact geographical location changing as the cage moves with the current. The proposed facility will be placed within an area that contains unconsolidated sediments that are 3 – 10 ft deep (see Table 1). The applicant will select the specific location within that area based on a diver-assisted assessment of the sea floor when the cage and MAS are deployed. The proposed action area is 3,281 feet (1,000 m) radius measured from the center of the MAS.

Table 1: Target Area with 3' to 10' of Unconsolidated Sediments

Location	Latitude	Longitude
Upper Left Corner	27° 7.70607' N	83° 12.27012' W
Upper Right Corner	27° 7.61022' N	83° 11.65678' W
Lower Right Corner	27° 6.77773' N	83° 11.75379' W
Lower Left Corner	27° 6.87631' N	83° 12.42032' W

5. Rationale for the Permit Conditions and Requirements

The Permit conditions are consistent with and based on the CWA § 402, CWA § 403, and all applicable implementing regulations at 40 Code of Federal Regulations (CFR). The rationale for each part of the Permit is provided below.

Permit Part I – Schedule of Submissions

The schedule of submissions is included to provide a summary of the important submittals that are included within the Permit.

Permit Part II – Monitoring Requirements

The Permit requires water quality, sediment, and benthic monitoring. The monitoring conditions are based on the ODC for NPDES permits (40 CFR § 125.123(a) and 40 CFR § 125.123(d)(2)) and the EPA recommended aquatic life criteria for marine organisms (CWA § 304(a)). Additionally, the monitoring requirements from the concentrated aquatic animal production (CAAP) facility effluent limitation guidelines (ELGs) (40 CFR § 122.24 and 40 CFR Part 451 – Subpart B) are included based on best professional judgement (BPJ) in accordance with 40 CFR § 125.3. See Section 7 for more information on BPJ and the rational for including the CAAP ELGs. See the reasonable potential analysis (section 6), and ODC Evaluation (section 8.2) for additional information. Table 2 provides the monitoring requirements that are included in the Permit.

Permit Part III – Reporting, Monitoring, and Record Requirements

The aquaculture specific reporting requirements are based on reporting that is required by the ELGs for the CAAP Point Source Category (40 CFR § 451.3) and includes requirements related to the use of drugs or other chemicals, structural failure or damage to the facility, and spills of feed, drugs, pesticides, or other chemicals. While this facility is not automatically covered under the CAAP requirements, it is the permit writer's BPJ (40 CFR § 125.3) that the aquaculture specific reporting requirements be implemented due to the similarity of operational characteristics between the facility covered by this Permit and net-pen facilities that are considered CAAP operations. See Section 7 for more information regarding the BPJ determination and the applicability of the CAAP requirements.

The NPDES electronic reporting requirements for monitoring records are included in the Permit in accordance with the CWA and its implementing regulations at 40 CFR § 122.41(l)(4)(i) and 40 CFR Part 127. See EPA's web-based NetDMR internet application contains more information electronic reporting requirements (https://netdmr.epa.gov).

Permit Part IV – Best Management Practices

The Permit requires the implementation of best management practices (BMPs) and a BMP plan to prevent or minimize the discharge of wastes and pollutants to the receiving water body and to ensure disposal of wastes in such a way as to minimize negative environmental impacts and comply with relevant solid waste disposal regulations. The BMPs and the BMP plan requirements included in this Permit are based on the effluent limitation guidelines for the CAAP point source category (40 CFR § 122.24 and 40 CFR Part 451– Subpart B) due to the similarity of operational characteristics between the facility covered under this Permit and the net-pen operations considered CAAP facilities. The BMPs and BMP plan are included in the Permit in accordance CWA § 402(a)(1), 40 CFR § 122.44(k)(4), CWA § 403, 40 CFR § 125.123, and the BPJ of the permit writer (40 CFR § 125.3). Further information about BMPs and plans applicable to the net-pen aquaculture industry are available in the CAAP effluent limit develop document[2] and the CAAP Compliance Guide.[3]

[2] U.S. Environmental Protection Agency. 2004. Technical Development Document for the Final Effluent Limitations Guidelines and New Source Performance Standards for the Concentrated Aquatic Animal Production Point Source Category (Revised August 2004). EPA-821-R-04-012. U.S. Environmental Protection Agency, Office of Water, Washington, DC <http://water.epa.gov/scitech/wastetech/guide/aquaculture/tdd.cfm >.

[3] U.S. Environmental Protection Agency. 2006. Compliance Guide for the Concentrated Aquatic Animal Production Point Source Category. EPA-821-B-05-001. U.S. Environmental Protection Agency, Office of Water, Washington, DC. < http://water.epa.gov/scitech/wastetech/guide/aquaculture/upload/2006_05_03_guide_aquaculture_guidance_full-final.pdf >.

Table 2: Summary of Monitoring Requirements

Parameter	Units	Parameter Code [1]	Daily Maximum	Average Monthly	Location	Monitoring Frequency [2]	Sample Type
Water Quality Monitoring							
Current measurements	m/s		Report	Report	EF1	Continuous	Instantaneous
Fish biomass	lbs				EF1	Monthly	Measured
Feed rate	lbs/day	45603			BT1	Monthly	Measured
Feed Conversion Rate	ratio	45603			BT1	Monthly	Calculated
Medicinal products	lbs or gal				BT1	As applicable	Measured
Chlorophyll-a	mg/l	32230			UC1, EF1, EF2, DC1, DC2	Monthly	Grab
Copper, Total (as Cu)	mg/l	01042					
Nitrogen, Ammonia Total (as N)	mg/l	00610					
Nitrogen, Total (as N)	mg/l	00600					
Oxygen, Dissolved	mg/l	00300					
pH	s.u.	00400					
Phosphorus, Total (as P)	mg/l	00665					
Solids, Total Suspended	mg/l	00530					
Sulfide, Total (as S)	mg/l	00745					
Temperature	°C	00010					
Sediment Monitoring							
Carbon, Total Organic (TOC)	mg/l	00680	Report	Report	SD1, SD2, SD3	Biomass based	Grab
Hydrogen sulfide	mg/l	71875					
Sediment Oxygen Demand	mg/l	51812					
Nitrogen, Total (as N)	mg/l	00600					
Particle size distribution	-						
Phosphorus, Total (as P)	mg/l	00665					
Solids, Total	mg/l	00500					
Total volatile solids	mg/l	00505					
Benthic Monitoring							
Benthic macroinvertebrates	-		Report		SD1, SD2, SD3	Biomass based	Grab

Permit Part V – Environmental Monitoring

The Permit requires environmental monitoring and implementation of an environmental monitoring plan (EMP) to meet the requirements of the CWA § 402 and CWA § 403. The EPA completed an ODC Evaluation and determined that sufficient information exists to conclude that the discharge from the facility would not cause unreasonable degradation of the marine environment in accordance with 40 CFR § 125.123(a) and 40 CFR § 125.123(d). The EMP within the Permit meets the requirements 40 CFR § 125.123(d)(2) which allows the EPA to "specify a monitoring program, which is sufficient to assess the impact of the discharge on water, sediment, and biological quality including, where appropriate, analysis of the bioaccumulative and/or persistent impact on aquatic life of the discharge." (40 CFR § 125.123(d)(2)).

Permit Part VI – Facility Damage Prevention and Control

The Permit requires implementation of Facility Damage Prevention and Control (FDPC) practices and a FDPC Plan to ensure that the facility has procedures in place for the prevention and mitigation of natural and man-made disasters. The Permittee is required to develop practices and follow the FDPC Plan which prescribes the facility-specific procedures for dealing with fish/aquatic life containment and transfer, disaster prevention practices, and disaster cleanup. The FDPC requirements within the Permit are based on the reporting requirements found in 40 CFR § 451.3(b) and 40 CFR § 451.21 (c), (d), and (f). The requirement to implement FDPC practices and plan are in accordance with CWA § 402(a)(1), 40 CFR § 122.41(e), CWA § 403, 40 CFR § 125.123(d)(3), and 40 CFR § 125.3.

Permit Part VII – Quality Assurance

The Permit requires the implementation of quality assurance procedures and submittal of a quality assurance project plan (QAPP) to ensure that the water quality data collected by the Permittee is reliable. The QAPP is designed to support sample collection and analysis objectives, document representative sampling conditions of all monitoring activities, and document data anomalies at the facility, in the effluent, and in the receiving water body. The implementation of quality assurance procedures and the requirement to submit a QAPP are included in the Permit in accordance CWA § 402(a)(1), 40 CFR § 122.41(e), 40 CFR § 122.41(j), 40 CFR § 125.3 (see section 6 for more information regarding EPA's BPJ determination), CWA § 403, and 40 CFR Part 125, Subpart M.

Permit Part VIII – Standard Conditions

This section of the Permit contains the general conditions and definitions applicable to NPDES permits issued by the EPA and are established in 40 CFR § 122.41.

6. Reasonable Potential Analysis

The NPDES implementing regulations require limitations for all pollutants or pollutant parameters that are discharged at a level that will cause, have the reasonable potential to cause, or contribute to an excursion of a water quality standard (40 CFR § 122.44(d)). A reasonable potential analysis is the process used to determine whether a discharge, under a certain set of facility-specific conditions, could cause or contribute to an excursion of an applicable water quality standard. Due to the location of the facility within federal waters of the Gulf, there are no applicable water quality standards that apply to marine waters seaward of the Florida state water boundary (seaward of three (3) nautical miles). However, in order to ensure that the discharge does not cause unreasonable degradation of the marine environment, as required by CWA § 402 and 40 CFR Part 125, Subpart M (Ocean Discharge Criteria), the CWA § 304(a) criteria were used in a manner similar to a reasonable potential analysis for this facility.

The EPA worked with the National Oceanic and Atmospheric Administration (NOAA) to conduct environmental quantitative modeling at the proposed project site. Given that the facility is new, actual effluent and receiving water body water quality information was not available. Appropriately representative effluent feed characteristics from similar marine aquaculture facilities were used as modeling inputs as part of the analysis. Physical water characteristics from the Gulf were obtained from a previous EPA study[4] and more recently from a NOAA buoy.[5]

A numerical production model for two cohorts of fish was constructed based upon anticipated farming parameters including configuration (net-pen volume and mooring configuration), fish production (species, biomass, size), and feed input (feed rate, formulation, content). Using aquaculture industry standard equations, daily estimates of

[4] U.S. EPA 2012. Ocean Current and Wave Measurements at the Tampa Ocean Dredged Material Disposal Site. Technical Memorandum. U.S. Environmental Protection Agency. Region 4. Water Protection Division. 29 pp.

[5] Current data were obtained from NOAA Buoy Station 42022 along the 50-m isobath and located 45 miles northwest of the project location (27.505 N, 83.741 W). Currents were recorded continuously from July 2015 through April 2018. Currents were measured at 1-meter intervals from 4.0 meters to 42.0 meters below the surface. Bathymetric data were obtained from the NOAA Coastal Relief Model.

biomass, feed rates, total ammonia nitrogen production, and solids production were developed under a production scenario to estimate the maximum biomass of 20,000 fish (88,000 lbs) throughout the production lifecycle. The maximum daily excretion of total ammonia nitrogen produced is estimated at 36 lb/d (16 kg/d) for a total of approximately 2,745 kg (6,052 lbs) of ammonia nitrogen produced during the anticipated fish production cycle. The maximum daily solids production is estimated at 140 kg (309 lbs). The report estimated that ammonia nitrogen will be undetectable within 30 meters of the cage at the typical flow regimes in the vicinity of the proposed site. In addition, the calculated flow-averaged total ammonia concentration at the cage/water interface is below EPA's published ammonia saltwater criteria of 3.5×10^{-2} milligrams per liter (mg/L) (4-day average) and 2.33×10^{-1} mg/L (1-hour average). See the ODC Evaluation in Appendix A of the draft EA for more information on these calculations.

A solids deposition model (DEPOMOD) was used to determine the environmental impact of this facility on the surrounding sea floor and benthic community. The depositional model was executed for two different production simulations that assume maximum biomass and maximum feed rate for the entire production cycle; therefore, the model predicts the worst-case scenario. The first simulation represented the maximum standing biomass for the proposed facility. The model was run for 365 days assuming a net-pen with a constant maximum biomass and a daily feed rate of 1.1 percent of biomass. The second simulation doubled production to assess sediment related impacts at higher levels of biomass and feed rates. Under the second simulation, the model was run for 365 days assuming two net-pens each with a combined constant daily standing biomass at 72,550 kg (28 kg/m^3 per net-pen).

The results of the deposition model predict that net organic carbon accumulation would be at 3.0 grams per meter squared per year (g/m^2/yr) or less for 99.7 percent of the test grid area, at the estimated worst-case maximum production values. When doubling the estimated production values, net organic carbon accumulation would be 5.0 g/m^2/yr or less for 99.0 percent of the grid. Even with doubling the estimated production values, the model predicts that the net accumulation of particulate wastes following a 1-year production cycle would likely not be distinguishable from background levels through measurement of organic carbon.

To meet the Permit requirements for the ODC (40 CFR §§ 125.123(a) & (d)(2)) the water quality parameters listed in Table 2 are included in the Permit; however, due to the lack of demonstrated reasonable potential to cause or contribute to an exceedance of these parameters, all water quality, sediment, and benthic parameters will be monitor and report only.

7. Best Professional Judgement

The proposed facility will commence construction after promulgation of national standards of performance for CAAP facilities set forth at 40 CFR Part 451; however, those standards do not automatically apply to facilities producing less than 100,000 lbs of warm water aquatic animals annually. Where the EPA has not promulgated technology-based effluent guidelines for a particular class or category of industrial discharger, EPA must establish technology-based effluent limitations on a case-by-case basis based on BPJ. Technology-based limits constitute a minimum level of controls that must be included in a NPDES permit. The EPA establishes such limitations pursuant to its authority under CWA § 402(a)(1) which authorizes the EPA to include in permits "such conditions as the Administrator determines are necessary to carry out the provision of [the CWA]" in accordance with 33 USC § 1342(a)(1)(B).

The EPA used several factors in setting BPJ limitations pursuant to 40 CFR § 125.3. First, the proposed facility's maximum annual production of 88,000 lbs is relatively close to the 100,000 lbs threshold for which the CAAP effluent limit guidelines are automatically applicable for warm water aquatic species. Second, the discharge and operational characteristics of the facility covered by this Permit are substantially similar to the marine aquaculture facilities covered by the effluent limit guidelines for the CAAP facility. Finally, the proposed facility will be the first marine net-pen aquaculture facility to operate and discharge in the eastern Gulf. The EPA has determined that implementation of the CAAP conditions should not be overly burdensome and should pose minimal economic hardship to the permittee.

Further authority for the Permit conditions is provided by CWA § 403 and the ODC (40 CFR Part 125, Subpart M), because these conditions help ensure that the discharges will not cause unreasonable degradation of the marine environment.

8. Compliance with Other CWA Requirements

8.1 CWA § 401 Certification

Under CWA § 401, a federal agency cannot issue a permit or license for an activity that may result in a discharge to waters of the United States until the state or tribe where the discharge originates has granted or waived Section 401 certification. Based on a review of the application and other relevant information, including the location and nature of the proposed discharge, the EPA has determined that a Section 401 certification is not required as the proposed discharge will not affect the water quality of any neighboring state or tribal waters.

8.2 CWA § 403 (Ocean Discharge Criteria)

All CWA § 402 permitted discharges into the territorial sea, the waters of the contiguous zone, or the oceans must be consistent with the ODC pursuant to the CWA § 403. Consequently, NPDES permits can require any necessary limits that are consistent with EPA's ODC.[6] The implementing regulations of the ODC (40 CFR Subpart M) "establishes guidelines for issuance of NPDES permits for the discharge of pollutants from a point source into territorial sea, the contiguous zone and the oceans" to prevent unreasonable degradation of the marine environment. Unreasonable degradation of the marine environment is defined in 40 CFR § 125.121(e) as the following:

1. Significant adverse changes in ecosystem diversity, productivity and stability of the biological community within the area of discharge and surrounding biological communities
2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms, or
3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

The EPA completed an ODC Evaluation and determined that sufficient information exists to conclude that the point source discharge from the marine aquaculture facility covered by this Permit would not cause unreasonable degradation of the marine environment in accordance with 40 CFR § 125.123(a). More information about the ODCE Evaluation can be found in Appendix C of the draft EA.

9. Compliance with Other Applicable Federal Laws

Additional information regarding other applicable Federal laws can be found in the draft EA prepared by the EPA with cooperating agency support from the U.S. Army Corps of Engineers (USACE) and the National Marine Fisheries Service (NMFS).

9.1 Coastal Zone Management Act

Under the Coastal Zone Management Act (CZMA), federal agency activities that have coastal effects must be consistent to the maximum extent practicable with federally approved enforceable policies of a State's coastal management program (CMP). The CZMA's implementing regulations in 15 CFR Part 930 require that any federally permitted activity affecting the coastal zone of a state that has an approved CMP be reviewed by that state for consistency with the state's program. Additionally, the implementing regulations for the CWA prohibit the EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State CMP, and the state concurs with the determination (40 CFR § 122.49(d)).

On January 3, 2019, the permit applicant submitted a CZMA consistency determination to the Florida State Clearinghouse with the Florida Department of Environmental Protection. On January 15, 2019, the Florida

[6] The CWA § 403(a) states that a NPDES permit can not be issued for discharges into the territorial sea, the waters of the contiguous zone, or the oceans except in compliance with the guidelines for the determination of degradation of those waters.

Department of Agriculture and Consumer Services (FDACS) documented that the coastal consistency determination submitted by the applicant was consistent with all FDACS statutory responsibilities for aquaculture. On February 18, 2019, the Florida Fish and Wildlife Conservation Commission (FWC) found that the applicant's coastal consistency determination was consistent with Florida's CMP. Therefore, the EPA has determined that the action covered by this permit is consistent with the CZMA and its implementing regulations.

9.2 Endangered Species Act

In accordance with the Endangered Species Act (ESA) § 7, interagency consultation and coordination with the NMFS and the U.S. Fish and Wildlife Service (USFWS) is required to insure that any action authorized, funded, or carried out by an action agency is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of any designated critical habitat (ESA § 7(a)(2)); and confer with the NMFS and USFWS on any agency actions that are likely to jeopardize the continued existence of any species that is proposed for listing or result in the destruction or adverse modification of any critical habitat proposed to be designated (ESA § 7(a)(4)). Additionally, the implementing regulations for the CWA related to the ESA require the EPA to ensure, in consultation with the NMFS and USFWS, that "any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat" (40 CFR § 122.49(c)).

The EPA determined that the discharge authorized by the NPDES permit will have "no effect" on any federally listed species, proposed species, or critical habitat for sea birds that are under the jurisdiction of the USFWS and within the proposed action area. Regarding federally listed species, proposed species, or critical habitat under the jurisdiction of the NMFS, the EPA determined that the discharges authorized by the NPDES permit "may affect, but not likely to adversely affect" certain fish, invertebrates, marine mammals, and reptiles within the proposed action area. On August 12, 2019 EPA provided the ESA assessment to the NMFS and initiated abbreviated consultation with the NMFS. On August 13, 2019 EPA provided the ESA assessment to the USFWS and initiated abbreviated consultation with the USFWS. Consultation will occur during the public comment period. It is anticipated that the consultation will be completed prior to the issuance of the EPA's NPDES permit. Completion of the informal consultation with the USFWS and NMFS will satisfy the EPA's obligations under ESA § 7(a)(2). More information about the ESA consultation including the draft Biological Evaluation and consultation coordination documents are provided in Appendix D the draft EA.

9.3 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) requires that Federal agencies consult with the USFWS, the NMFS, and State wildlife agencies for activities that affect, control or modify waters of any stream or bodies of water, in order to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. The FWCA establishes fish and wildlife conservation as an objective of all Federally funded, permitted, or licensed water-related development projects. The FWCA states that the consultation purpose is for "preventing loss and damage to wildlife resources." Federal action agencies developing water-related projects are to include justifiable means and measures to benefit and reduce impacts to fish and wildlife, and mitigation and enhancement recommendations are to be given full and equal consideration with other project purposes. Additionally, the implementing regulations for the CWA related to the FWCA require the EPA to consult with the USFWS and NMFS, and the appropriate state agency exercising jurisdiction over wildlife resources to conserve those resources, before issuing a permit proposing or authorizing the impoundment (with certain exemptions), diversion, or other control or modification of any body of water (40 CFR § 122.49(e)).

The EPA is not permitting any loss or damage to wildlife resources and has conducted environmental and wildlife consultations or evaluations as documented throughout this fact sheet; therefore, the EPA does not anticipate any impacts resulting in substantial modifications to the receiving water body. During the public notice of this permit, the USFWS and NMFS will be consulted with to ensure compliance with the FWCA.

9.4 Magnuson-Stevens Fishery Conservation and Management Act

The Essential Fish Habitat (EFH) provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) sets forth a mandate to identify and protect important marine habitat. Pursuant to the MSA § 305(b), federal agencies are required to consult with NMFS on any action that may result in adverse effects to EFH or habitats of

particular concern. Federal action agencies which fund, permit, or carry out activities that may adversely affect EFH are required to consult with NMFS regarding the potential impacts of their actions on EFH and respond in writing to NMFS recommendations. EFH is defined as the water and substrate necessary for fish spawning, breeding, feeding, and growth to maturity.

The EFH assessment determined that the minimal short-term impacts associated with the discharge will not result in substantial adverse effects on EFH, habitats of particular concern, or managed species within the facility area. Based on the EFH assessment, the EPA will require mitigation measures to be incorporated into the NPDES permit to avoid or limit organic enrichment and physical impacts to habitat that may support associated hardbottom biological communities. The NPDES permit contains a condition that the facility must be positioned at least 500 meters from any hardbottom habitat.

An EFH assessment was prepared by the EPA and the United States Army Corps of Engineers (USACE). On March 8, 2019, the EPA provided the EFH assessment to the NMFS and initiated abbreviated consultation with the NMFS. On March 12, 2019, the NMFS concurred with the EFH determination made by the EPA and the USACE. After completion and concurrence of the assessment, minor changes were made to the EFH document, though the updates did not change the findings of the assessment. On August 2, 2019 EPA provided the updated EFH assessment to NMFS for concurrence. Consultation with NMFS on these changes will occur during the public comment period. It is anticipated that the consultation will be completed prior to the issuance of the EPA's NPDES permit. Completion of the abbreviated consultation with NMFS will satisfy the EPA's obligations under MSA § 305(b)(2). More information about the EFH consultation including the assessment and consultation coordination documents are provided in Appendix E the draft EA.

9.5 National Environmental Policy Act

The EPA prepared a draft EA to support the draft NPDES permit pursuant to its authority under the Policy for Voluntary Preparation of National Environmental Policy Act (NEPA) documents (63 Federal Register 58045, 10/29/98) and consistent with the requirements at 40 CFR § 6.205(a). On April 8, 2019, the draft EA was authorized for release by the Responsible Official (Regional Administrator). The draft EA also supports the USACE Section 10 permit.

9.6 National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR Part 800) require Federal agencies to take into account the effects of their activities on historic properties. Additionally, the EPA must adopt measures when feasible to mitigate potential adverse effects of the licensed activity on properties listed or eligible for listing in the National Register of Historic Places before issuing a NPDES permit (40 CFR § 122.49(b)). NHPA's requirements are to be implemented in cooperation with state historic preservation officers (SHPO) and upon notice to, and when appropriate, in consultation with the Advisory Council on Historic Preservation.

During the interagency permitting process for the proposed project the applicant coordinated with the Florida SHPO to ensure compliance with NHPA. On January 3, 2019, the applicant submitted a NHPA consistency determination to the Florida State Clearinghouse with the Florida Department of Environmental Protection. On February 8, 2019, the Florida SHPO found that the proposed project will not affect historic properties if the facility anchors are placed within 50 feet of the surveyed lines on the seafloor. The Florida SHPO also recommended that the permit include a "unexpected discovery protocol" condition.[7] The appropriate permitting agency with jurisdictional oversight for an unexpected discovery protocol permit provision is the USACE; the USACE will include this provision within their Section 10 permit.

[7] The "unexpected discovery protocol" provision recommended by the Florida SHPO states "In the event that any project activities expose potential prehistoric/historic cultural materials not identified during the remote-sensing survey, operations should be immediately shifted from the site. The respective Point of Contact for regulatory agencies with jurisdictional oversight should be immediately apprised of the situation. Notification should address the exact location, where possible, the nature of material exposed by project activities, and options for immediate archaeological inspection and assessment of the site."

9.7 Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) and its implementing regulations (50 CFR Part 216) prohibits the harassment, hunting, capturing, or killing of marine mammals incidental to commercial fishing operations in U.S. waters without a permit from the Secretary of Commerce. The MMPA delegates the NMFS as the authority responsible for the conservation and management of cetaceans (whales, dolphins, porpoises) and pinnipeds (other than walruses). Marine aquaculture facilities are currently considered commercial fishing operations under the MMPA.

Section 118 of the MMPA addresses the incidental capture of marine mammals during commercial fishing operations and establishes the Marine Mammal Authorization Program (MMAP). The MMAP provides an annual exemption for accidently killing or injuring marine mammals, referred to as incidental take, during commercial fishing activities. The Permittee's aquaculture facility is not an exempted fishing activity under the MMAP. To comply with of the MMPA Section 118, the Permittee is required to obtain a MMAP certificate that includes reporting any marine mammal injuries to NMFS within 48 hours.

The Permittee partnered with NMFS to develop a protected species monitoring plan (PSMP) to protect marine mammals and collect valuable information about potential interactions between aquaculture operations and protected species. The data collected under the PSMP will help the NMFS determine the appropriate MMAP category that aquaculture facilities should be placed in based on the level of interaction that occurs at the facility. Monitoring under the PSMP will occur throughout the life of the project and represents an important minimization measure to reduce the likelihood of any unforeseen potential injury to all protected species.

9.8 The Wild and Scenic Rivers Act

According to 40 CFR § 122.49(a), Section 7 of the Wild and Scenic Rivers Act prohibits the EPA from assisting by license or otherwise the construction of any water resources project that would have a direct, adverse effect on the values for which a national wild and scenic river was established. The proposed project is located in federal waters of the Gulf of Mexico and will not impact any national wild and scenic rivers. Therefore, the Wild and Scenic Rivers Act is not applicable to the proposed facility or the proposed NPDES permit.

10. Effective Date of Effluent Limits, Permit Conditions, and Compliance Schedule

The Permittee shall achieve compliance with all monitoring conditions and permit requirements immediately upon the effective date of the Permit. A compliance schedule is not included in this Permit.

11. EPA Administrative Record and Contact

The public notice for this draft permit will be published in the Sarasota Herald-Tribune. The entire administrative record including the permit application, draft permit, fact sheet, public notice, comments received, consultations, evaluations, and other supporting information is available by contacting the EPA using the below information. Some of the administrative record is available on the website.[8] The public comment period will be open for 30 days after publication of the public notice. A response to comment document will be drafted and included with the final permit should any significant comments be received.

U.S. Environmental Protection Agency, Region 4
Permitting and Grants Branch Chief
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[8] www.epa.gov/aboutepa/about-epa-region-4-southeast