UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL APPEALS BOARD

In re:)
Ocean Era, Inc Velella Epsilon Facility)
NPDES Permit No. FL0A00001)
)

NPDES Appeal No. 20-08

EPA REGION 4's RESPONSE TO PETITION FOR REVIEW

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2	Fact Sheet
3	Permit Application
4.	Final Environmental Assessment
5.	Manna Fish Farms Overview
6.	Draft Permit Public Notice
7	Public Hearing Notice
8	Public Hearing Transcript
9	Biological Evaluation
10	Letter Transmitting BE to USFWS
11	USFWS Email of August 27, 2019
12	Letter Transmitting BE to NMFS
13	NMFS Concurrence Letter
14	Essential Fish Habitat Assessment
15	Draft Environmental Assessment
16	Response to Comments
17	Finding of No Significant Impact
18	Ocean Discharge Criteria Evaluation
19	BioMarine NPDES Permit Issued March 2013

I. INTRODUCTION

On October 30, 2020, Friends of Animals ("Petitioner") petitioned for Environmental Appeals Board ("Board") review of a Clean Water Act ("CWA") National Pollutant Discharge Elimination System ("NPDES") permit issued by EPA Region 4 (hereinafter "the Region") for a pilot-scale, offshore aquaculture facility in the Gulf of Mexico ("Petition").

The relevant permit was issued by the Region on September 30, 2020 (the "Permit"). The Permit authorizes the discharge of wastewater from a yet-to-be constructed aquatic animal production facility known as the Velella Epsilon facility (the "Facility"), owned by Ocean Era, Inc. ("Permittee"). Attachment 1 (Permit).

The Facility, when constructed, will be a "net pen" aquatic animal production facility. The Permit authorizes discharges associated with a single, approximately 12-month production cycle, during which the Facility will produce approximately 20,000 fish of the taxonomic group Kampachi (*Seriola rivoliana*), a variety of longfin yellowtail, representing up to 80,000 pounds of marketable fish. *See* Attachment 1 (Permit), at 1; Attachment 2 (Fact Sheet), at 1. A "net pen system" is a "stationary, suspended or floating system of nets, screens, or cages in open waters of the United States." 40 C.F.R. § 451.2(j). Net pens may be anchored and floating offshore and rely on tides and currents to continually supply high-quality water to the animals in production. *Id.* The Facility's operation consists of a supporting tender vessel and a single floating "net pen" cage anchored at a subsurface water depth of approximately 130 feet (40 meters). Attachment 2 (Fact Sheet), at 1. The Facility would discharge "pollutants" as that term is defined in CWA section 502(6), 33 U.S.C. § 1362(6), and 40 C.F.R. § 122.2, predominantly fish fecal material and any excess fish feed.

The Permittee has proposed to locate the Facility approximately 45 miles (72 km)

southwest of Sarasota, Florida, in "federal" waters, i.e., beyond the three nautical mile boundary that demarcates the limit of state NPDES program jurisdiction. *Id.* State waters, for CWA purposes, extend seaward only to the three nautical mile boundary of each coastal state. *See NRDC v. EPA*, 863 F.2d 1420, 1434-36 (9th Cir. 1988). Accordingly, EPA Region 4 issued the permit rather than the State of Florida.

The Petition challenges the Permit on three broad grounds:

- (1) that the Region failed to consider or properly apply relevant factors under the CWA's Ocean Discharge Criteria;
- (2) that the Region's issuance of the Permit violates the Endangered Species Act; and
- (3) that the Region's issuance of the Permit violates the National Environmental Policy Act.

Petitioner, however, fails to demonstrate any clear error of fact or law that warrants review by the Board. The Region's issuance of the Permit is consistent with applicable law and reflects evidence-based decisionmaking supported by the permitting record. Moreover, Petitioner does not demonstrate that the Region's responses set forth in the Response to Comments ("RTC") are clearly erroneous. Petitioner has not demonstrated that the Region failed to properly consider and apply the Ocean Discharge Criteria, nor has Petitioner demonstrated that the Region failed to comply with the Endangered Species Act or the National Environmental Policy Act. Petitioner has failed to carry its burden to demonstrate that the Region's factual and legal conclusions are clearly erroneous. Accordingly, the Region respectfully submits that the Board should deny review of the Permit.

II. FACTUAL BACKGROUND

On October 27, 2018, the Region received a complete NPDES permit application from Ocean Era, Inc. for a "net pen" aquaculture facility. Attachment 3 (Complete Permit Application). Aquaculture facilities produce and discharge pollutants as noted above such as

fecal material and excess fish feed, and accordingly the Permittee sought authorization to discharge pollutants through an NPDES permit. *Id.* The construction and installation of the net pen and anchoring system on the sea floor also requires a U.S. Army Corps of Engineers ("USACE") permit under section 10 of the Rivers and Harbors Act ("RHA"), 33 U.S.C. § 403.¹ The Facility is a pilot-scale demonstration project. *See* Attachment 4 (Final Environmental Assessment or "EA"), at 9-10.²

Draft Permit and Comment Period

The Region provided public notice of the draft permit on August 30, 2019 and announced a 30-day public comment period. Attachment 6 (Draft Permit Public Notice). On December 12, 2019, responding to citizen requests for a hearing, the Region provided notice of a public hearing on January 28, 2020 and extended the comment period until February 4, 2020. Attachment 7 (Public Hearing Notice); Attachment 8 (Public Hearing Transcript).

Endangered Species Act Consultation

Pursuant to the Endangered Species Act ("ESA") section 7, 16 U.S.C. § 1536, the Region consulted with the National Marine Fisheries Service ("NMFS") and U.S. Fish and Wildlife Service ("USFWS") to ensure that discharges from the Permit are not likely to jeopardize federally listed species or adversely modify designated critical habitat. *See* Attachment 2 (Fact Sheet), at 8. The Region and the USACE jointly prepared a biological evaluation ("BE") for both the NPDES permit and RHA section 10 permit. The BE considered the potential direct, indirect, and cumulative effects that the proposed actions may have on listed and candidate species as

¹ The USACE completed a public comment period for the RHA permit in November but has not yet issued its permit.

² To illustrate the Facility's small size compared to a commercial operation, the Region has one pending commercial aquaculture proposal in the pre-application stage, the Manna Fish Farms ("Manna") facility. The Manna proposal contemplates annual production of 8,426,900 lbs of fish in years 4 and 5 of operations, approximately 100 times the one-time production volume of the Ocean Era Facility. *See* Attachment 5 (Manna Fish Farms Overview), at 19.

well as designated and proposed critical habitat. Attachment 9 (BE).

On August 13, 2019, EPA and the USACE provided the BE to the USFWS. Attachment 10 (Letter Transmitting BE to USFWS). The BE concluded that the discharges authorized by the NPDES permit will have "no effect" on any listed species or critical habitat under the jurisdiction of the USFWS and within the proposed action area. Attachment 9 (BE), at 28. On August 27, 2019, the USFWS provided notification that it had no comments on the agencies' finding. Attachment 11 (USFWS Email of August 27, 2019).

On August 13, 2019, EPA and the USACE also provided the BE to NMFS. Attachment 12 (Letter Transmitting BE to NMFS).³ Regarding listed species and critical habitat under NMFS' jurisdiction, EPA and the USACE determined that the project "may affect, but [is] not likely to adversely affect" ("NLAA") listed species within the proposed action area. On September 30, 2019, NMFS concurred with the determination, thereby concluding informal consultation. Attachment 13 (NMFS Concurrence Letter).

Magnuson Stevens Act/Essential Fish Habitat Assessment⁴

In accordance with the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 *et seq.*, the Region provided to NMFS for review an Essential Fish Habitat ("EFH") assessment jointly prepared by the Region and the USACE. Attachment 14 (EFH Assessment). 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 in any life history stage, either immediate or cumulative, in the

³ The record for this Permit includes a "Protected Species Monitoring Plan" prepared by the applicant in consultation with NMFS. That plan applies to species protected under the ESA as well as the Marine Mammal Protection Act ("MMPA"). *See* Attachment 9 (BE), at 7. Unlike the ESA, the MMPA does not require interagency consultations.

⁴ The Petitioner has not brought a Magnuson Stevens Act ("MSA") challenge but the Region did assess the effect of its action on essential fish habitat in accordance with MSA requirements, and that assessment informed the Region's decision-making.

proposed project area, and that the EPA and USACE permits will have conditions to mitigate any minor impacts that may occur. On March 12, 2019, NMFS provided written concurrence with the EFH Assessment's determinations, and on August 23, 2019, NMFS updated that concurrence after EPA made minor changes to its initial assessment.

Voluntary National Environmental Policy Act Review

Pursuant to CWA section 511(c)(1), 33 U.S.C. § 1371(c)(1), because the Permit is not for a "new source" (as explained below), it is not subject to the environmental review requirements of the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.* The Region, however, elected to voluntarily prepare an environmental assessment ("EA") of impacts and alternatives in accordance with its Policy for Voluntary Preparation of NEPA Documents, 63 Fed. Reg. 58,045 (Oct. 29, 1998) ("Voluntary NEPA Policy"), to better inform its permit decisionmaking. *See* Attachment 2 (Fact Sheet), at 10. In accordance with the Voluntary NEPA Policy, EPA prepared a draft Environmental Assessment ("Draft EA") and released it and the draft permit for public comment on August 30, 2019. Attachment 15 (Draft EA). The Draft EA indicated that no significant impacts were anticipated from the proposed project. *Id.* The final EA supported the USACE's RHA section 10 permit NEPA review, and the USACE participated in the preparation of the EA as a cooperating agency, as did NMFS due to its relevant expertise and review role. Attachment 4 (EA), at 1.

Final Permit Issuance

The Region received over 45,000 comments on the draft permit, the draft EA, and all supporting documents. On September 30, 2020, the Region issued the Permit and a Response to Comments ("RTC") specifying which provisions of the draft permit had changed and describing and responding to all significant comments on the draft permit. Attachment 1 (Permit);

Attachment 16 (RTC). With the Permit, EPA also issued its EA concluding that no significant environmental impacts were anticipated from the proposed action. Attachment 4 (EA). Accordingly, the Region made a Finding of No Significant Impact ("FONSI") which, under NEPA procedures, means that a more detailed environmental impact statement ("EIS") is not warranted. Attachment 17 (FONSI).

The Permit authorizes only those discharges at the Facility associated with a single production cycle⁵ over approximately 12 months. Attachment 1 (Permit), at 8.

The Petitioner filed the Petition on October 30, 2020.

III. STATUTORY AND REGULATORY BACKGROUND

The Petition alleges error in the Region's decisionmaking under several federal statutes. *Clean Water Act*

The CWA prohibits the discharge of pollutants into navigable waters unless authorized by another provision in the CWA. A principal means for complying with the Act is discharge authorization through an NPDES permit. *See* CWA §§ 301(a), 402(a); 33 U.S.C. §§ 1311(a), 1342(a). Individual NPDES permits apply the CWA's discharge control standards and monitoring and reporting requirements directly to specific facilities, such as the Velella Epsilon aquaculture Facility. CWA § 402(a); 33 U.S.C. § 1342(a).

Section 301 of the Act, 33 U.S.C. § 1311, requires that NPDES permits contain effluent limitations, *e.g.*, limits on the amount or concentration of pollutants that may be discharged. The Act applies two approaches to these limitations: technology-based and water quality-based. At a minimum, permits must require limitations based on the application of statutorily-prescribed levels of technology ("technology-based effluent limits" or "TBELs"). *See* CWA § 301(b)(1)(A),

⁵ A production cycle is defined in the Permit as the period of time that starts when fish are placed in the cage and ends when all fish are harvested. Attachment 1 (Permit), at 8.

(b)(2)(A), (b)(2)(E); 33 U.S.C. § 1311(b)(1)(A), (b)(2)(A), (b)(2)(E). Where TBELs are not sufficient to meet applicable state water quality standards, NPDES permits must include effluent limitations as stringent as necessary to ensure that applicable water quality standards are met ("water quality-based effluent limits" or "WQBELs"). CWA § 301(b)(1)(C); 33 U.S.C. § 1311(b)(1)(C).

EPA establishes nationally applicable TBELs in regulations known as effluent limitations guidelines ("ELGs"). CWA sections 301(b), 304(b), and 306 require EPA to establish ELGs to ensure that dischargers reduce pollutant discharges to the degree that can be achieved by identified technologies. 33 U.S.C. §§ 1311(b), 1314(b), 1316. Once established, however, dischargers may use any technology to meet those limitations.⁶ ELGs for point source direct discharges are given effect through "effluent limitations" that are incorporated under § 1311(b)(2) into permits. *See EPA v. Cal. ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 205 (1976).

In cases where no applicable ELG exists, permit issuers must use their "best professional judgment" or "BPJ" to establish appropriate TBELs on a case-by-case basis. *See In re Scituate Wastewater Treatment Plant*, 12 E.A.D. 708, 712 n.1 (EAB 2006) (citing CWA § 402(a)(1), 33 U.S.C. § 1342(a)(1); 40 C.F.R. §§ 122.44, 125.3). These site-specific TBELs reflect the BPJ of the permit writer under 40 C.F.R. 125.3(c)(2), taking into account the same statutory factors EPA would use in promulgating a national categorical rule, but considering unique factors relating to the applicant. Permits with technology limits that are developed on a case-by-case basis must consider: (1) the appropriate technology for the category of point sources for which the applicant is a member, based on all available information; and (2) any unique factors related to the

⁶ National Wildlife Federation v. EPA, 286 F.3d 554, 558 (D.C. Cir. 2002).

applicant. 40 C.F.R. § 125.3(c)(2). In developing an NPDES permit, the permit writer should carefully evaluate the design elements, pollution prevention practices, and operating methods that are proposed by the NPDES permit applicant.

EPA has established ELGs for concentrated aquatic animal production facilities ("CAAPs") at 40 C.F.R. part 451, including a New Source Performance Standard ("NSPS") at 40 C.F.R. § 451.24. Under 40 C.F.R. § 451.1, the ELGs, including the NSPS, however, do not apply to facilities that produce fewer than 100,000 pounds per year of aquatic animals. Accordingly, the Region established TBELs for the Permit using BPJ.

For discharges into the territorial seas, the contiguous zone, and the oceans, such as the discharges at issue here, section 403(c) of the Act requires that permits comply with ocean discharge criteria set forth in EPA's longstanding implementing regulations found at 40 C.F.R. part 125 subpart M ("Ocean Discharge Criteria"). *See* CWA § 403; 33 U.S.C. § 1343.⁷ The Ocean Discharge Criteria prohibit the issuance of an NPDES permit when EPA determines that the discharge will cause unreasonable degradation of the marine environment. 40 C.F.R. § 125.123. A permit may be issued, however, when EPA determines, on the basis of available information, that the discharge will not cause unreasonable degradation of the marine environment after application of conditions contained in the permit.⁸ *Id.*; *Alaska Eskimo Whaling Comm'n v. EPA*, 791 F.3d 1088, 1094 (9th Cir. 2015). There are ten specific factors that EPA is required to consider in determining whether a discharge will cause unreasonable degradation of

⁷ The statute directs only that NPDES permits "comply with the guidelines" promulgated under CWA section 403. The guidelines promulgated by EPA, including the decisional standards, identify the substantive evaluation criteria regarding how to determine the degree of degradation of the marine environment that will be caused by a proposed discharge.

⁸ If insufficient information is available at the time of permit issuance, a permit also may be issued based on a determination of no irreparable harm if there are no reasonable alternatives to on-site disposal. 40 C.F.R. § 125.123(c). In this matter, however, the application and permitting record provided sufficient information to make the determination of no unreasonable degradation.

the marine environment, which are set forth at 40 C.F.R. § 125.122(a).

NPDES permits have a fixed term not to exceed five years and generally contain discharge effluent limitations and/or conditions as well as related monitoring and reporting requirements. *See* CWA § 402(a)(1)-(2), (b); 33 U.S.C. § 1342(a)(1)-(2), (b); 40 C.F.R. §§ 122.45, .46(a), .48.

Endangered Species Act

ESA section 7(a)(2) requires all federal agencies to ensure, in consultation with the appropriate federal wildlife agency (e.g., USFWS and/or NMFS), that their actions are not likely to jeopardize the continued existence of federally listed species or result in the destruction or adverse modification of a species' designated critical habitat. 16 U.S.C. § 1536(a)(2).

The section 7 process begins with a determination whether a proposed action "may affect" listed species or designated critical habitat in a geographical area. 50 C.F.R. § 402.14(a). If the agency determines that the proposed action will have no effect on listed species or critical habitat in the action area, section 7 consultation is not required. *See id.* If, however, the agency determines the action "may affect" listed species or critical habitat, the agency may proceed to formal consultation or consider whether the action is "likely to have an adverse effect" on the listed species or critical habitat. *Id.* § 402.14(a), (b)(1).

If the agency determines, through a BE, that the action "is not likely to adversely affect," it may then request concurrence from the relevant wildlife agencies through informal consultation. *See* 50 C.F.R. § 402.13. If the wildlife agency concurs, the agency need not engage in formal consultation, which is more time-consuming and addresses take, jeopardy, and critical habitat risks not present where the action has no likely adverse effects. *See id.* § 402.14(c)-(1).

National Environmental Policy Act

NEPA requires all federal agencies, before taking "major Federal actions significantly affecting the quality of the human environment," to prepare a "detailed statement" discussing the environmental impacts of, and the alternatives to, the proposed actions. NEPA § 102(2)(C); 42 U.S.C. § 4332(2)(C). A federal agency need not prepare a detailed statement if it first prepares a concise environmental assessment ("EA") that makes a finding of no significant impact ("FONSI"). 40 C.F.R. §§ 1501.5, 1501.6. The EA shall "[b]riefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact," and "[b]riefly discuss the purpose and need for the proposed action . . . and the environmental impacts of the proposed action and alternatives." 40 C.F.R. § 1501.5(c).

CWA section 511(c)(1), however, explicitly provides that, with two limited exceptions, "no action of the [EPA] taken pursuant to this chapter shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of [NEPA]." 33 U.S.C. § 1371(c)(1); *accord In re Dos Republicas Res. Co.*, 6 E.A.D. 643, 647 (EAB 1996). One of the exceptions is for the issuance of an NPDES permit for "a new source as defined in section [306]." *Id.* A "new source" is further defined at 40 C.F.R. § 122.2 as a facility that (i) is subject to a New Source Performance Standard ("NSPS") promulgated pursuant to section 306 of the CWA, and (ii) commenced construction after promulgation of the applicable NSPS. *See also* 40 C.F.R. § 122.29. Other new facilities are "new dischargers" defined under EPA regulations at 40 C.F.R. § 122.2, and permits to these facilities are exempt from NEPA under CWA section 511(c).

It is EPA's policy to undertake voluntary NEPA reviews in circumstances where they can be particularly helpful for decisionmaking, notwithstanding the action being exempt from NEPA. EPA's Policy for Voluntary Preparation of NEPA Documents, 63 Fed. Reg. 58,045 (Oct. 29, 1998) ("Voluntary NEPA Policy"). The Voluntary NEPA Policy makes clear, however, that "[t]he voluntary preparation of [NEPA] documents in no way legally subjects the Agency to NEPA's requirements." *Id.* at 58,046.

IV. PRINCIPLES GOVERNING BOARD REVIEW

Under 40 C.F.R. § 124.19, a petitioner must meet procedural and substantive thresholds before the Board will review the permit. The Board has described the procedural thresholds as to include, "timeliness, standing, issue preservation, and compliance with the standard of specificity for review." *In re MHA Nation Clean Fuels Refinery*, 15 E.A.D. 648, 652 (2012); *In re Beeland Group*, 14 E.A.D. 189, 194-95 (2008). If the petitioner meets the procedural requirements, the Board will review the contested permit decision to determine whether the challenged aspects of the permit decision are based on "a clearly erroneous finding of fact or conclusion of law." 40 C.F.R. § 124.19(a)(4); *In re Stonehaven Energy Management*, 15 E.A.D. 817, 823 (2013).

A petitioner must do more than restate comments made during the public comment period for a permit – a petitioner is also obligated to address the Agency's comment responses and explain why they are erroneous or justify further review. "The Board has consistently denied review of petitions which merely cite, attach, incorporate, or reiterate comments previously submitted on the draft permit." *In re Peabody Western Coal Co.*, 15 E.A.D. 406, 411-12 (2011) (citing *In re City of Pittsfield*, NPDES Appeal No. 08-19 (EAB Mar. 4, 2009) (Order Denying Review), *aff'd*, 614 F.3d 7, 11-13 (1st Cir. 2010); *In re Peabody Western Coal Co.*, 12 E.A.D. 22, 33 (2005) ("[P]etitioner may not simply reiterate comments made during the public comment period, but must substantively confront the permit issuer's subsequent explanations.").

For each issue for which it seeks review, the petitioner bears the burden of demonstrating

clear error. 40 C.F.R. § 124.19(a)(4). To do so, the petitioner "must specifically state its objections to the permit and explain why the permit issuer's previous response to those objections is clearly erroneous, an abuse of discretion, or otherwise warrants review." *MHA Nation*, 15 E.A.D. at 653; *see also In re Guam Waterworks Auth.*, 15 E.A.D. 437, 449-50 (2011).

When a petitioner seeks review of issues that are primarily technical in nature, the Board gives substantial deference to the permit issuer. MHA Nation, 15 E.A.D. at 653. This may occur, however, only after the Board reviews the administrative record to determine whether "the permit issuer made a reasoned decision and exercised his or her 'considered judgment." Id. (citing In re Ash Grove Cement Co., 7 E.A.D. 387, 417-18 (1997)). In its review of the record, "the Board looks to determine whether the record demonstrates that the permit issuer duly considered the issues raised in the comments and whether the approach ultimately adopted by the permit issuer is rational in light of all the information in the record." In re City of Attleboro, MA Wastewater Treatment Plant, 4 E.A.D. 398, 411 (2009). "If the Board is satisfied that the permit issuer gave due consideration to comments received and adopted an approach in the final permit decision that is rational and supportable, the Board typically will defer to the permit issuer." In re Upper Blackstone Water Pollution Abatement District, 14 E.A.D. 577, 608 (2010). "[W]here the views of the Region and the petitioner indicate bona fide differences of expert opinion or judgment on a technical issue, the Board will typically defer to the Region." In re NE Hub Partners, 7 E.A.D. 561, 568 (1998) (citing In re Envotech, L.P., 6 E.A.D. 260, 284, n. 6 (1996) ("absent compelling circumstances, the Board will defer to a Region's determination of issues that depend heavily upon the Region's technical experience and judgment") (other citations omitted).

The Board has noted that it analyzes petitions for review guided by the caution in the

preamble to the part 124 permitting regulations that the Board's power of review "should be only sparingly exercised." *MHA Nation*, 15 E.A.D. at 652, quoting from Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980). This is consistent with EPA's policy that favors final adjudication of most permits at the permit issuer's level. *Id*.

As explained below, Petitioner fails to demonstrate any clear error of fact or law. Instead, the challenged provisions comport with applicable law and represent rational determinations supported by the permitting record. Moreover, Petitioner does not demonstrate that the Region's responses are clearly erroneous or inadequate. Consequently, the Region respectfully submits that Petitioner has failed to carry its burden to demonstrate that review is warranted. Review of the permit should be denied.

V. ARGUMENT

As previously noted, the Petition challenges the Permit on three broad grounds:

- (1) that the Region failed to consider or properly apply relevant factors under the CWA's Ocean Discharge Criteria;
- (2) that the Region's issuance of the Permit violates the Endangered Species Act; and
- (3) that the Region's issuance of the Permit violates the National Environmental Policy Act.

As explained below, each of these grounds is without merit and does not warrant review of the Permit. In addition, the Petitioner has not adequately explained why the Region's responses in the RTC are erroneous. Accordingly, the Petition for Review should be denied.

A. The Region Properly Applied and Considered the Ocean Discharge Criteria, and Its Conclusions Are Supported by the Record.

The Petition alleges that the Region did not properly consider and apply the Ocean

Discharge Criteria as required under the implementing regulations at 40 C.F.R. § 125.122.

Petition at 11-18. Specifically, Petitioner argues that, in applying the Ocean Discharge Criteria,

the Region's permit failed to include a sufficiently expansive downstream monitoring program.

Petition at 12-13. The Petition also argues that, in evaluating the Ocean Discharge Criteria, the Region failed to adequately consider escaped fish as pollutants of concern, (Petition at 13-14), and failed to adequately consider the possibility of pathogen and parasite transfer as well as antibiotic resistance. *Id.* In addition, Petitioner asserts that the Region failed to adequately consider the threat to human health and biological communities caused by the project's contribution to harmful algal blooms. Petition at 15-18. Finally, the Petitioner claims that the Region should have included in the Permit a requirement to conduct phytoplankton monitoring. Each of these claims is erroneous and fails to address the underlying ODC evaluation and other information in the permitting record, including the RTC.

The challenge to the Region's ODC determination ignores the actual text of the regulation defining "unreasonable degradation of the marine environment," as:

(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 esthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

40 C.F.R. § 125.121.

Petitioner seems to apply an "any degradation" standard rather than the required regulatory standard of 'unreasonable degradation," and in doing so it ignores information in the record reflecting the Region's robust consideration of, and Permit conditions that manage, the potential for adverse impacts. Petitioner has not linked its argument to the above definition of "unreasonable degradation." Petitioner has not demonstrated that there will be "significant adverse changes" to ecosystem diversity, productivity and stability of the biological community in or near the area of the discharge. Nor has Petitioner identified a threat to human health through

"direct exposure to pollutants or through consumption of exposed aquatic organisms." Finally, Petitioner has not identified how the Facility will result in a "loss of esthetic, recreational, or scientific or economic values which is unreasonable in relation to the benefit derived." As the discussion below makes clear, the permitting record contains extensive analysis of potential impacts from the Facility's discharge which demonstrates that the Facility will have only minor impacts and supports the Region's determination that there will not be unreasonable degradation. Petitioner has failed to demonstrate that the Region erred in finding that the authorized discharges will not cause unreasonable degradation of the marine environment, and the Board should deny the Petition for Review.

As a threshold matter, it is also important to recognize that the Region affirmatively determined that the discharge will not cause unreasonable degradation of the marine environment based on sufficient information – contrary to the Petition's implication that the Region lacked sufficient information to determine the degree of degradation, and thus was required to deny the permit application under the statute and regulations. Petition at 16-17.

1. The Permit Contains an Appropriate Monitoring Program

Petitioner claims that the Region erred in not requiring more expansive monitoring downcurrent from the Facility in light of high current flows at the project area. Petition at 12-13. The Petitioner complains that the Permit's requirement to monitor for pollutants five meters downcurrent from the edge of the cage is not sufficient to document the impact of the discharge, as required in the Ocean Discharge Criteria. *Id*.

The scope of the Permit's monitoring program is well-justified in the permitting record. For example, as stated in the Ocean Discharge Criteria Evaluation ("ODCE"), the Region's affirmative determination that there will be no unreasonable degradation is supported by

modeling that was conducted to predict pollutant loading from the Facility. See Attachment 18 (ODCE), at 43-44. Modeling results indicated that, even very close to the Facility, waste volumes would be extremely low and barely discernable. Id. Modeling predicted these minimal impacts even when conducted at double the estimated production of the Facility for five years of the Permit term, even though the Permit specifically limits the Facility to one production cycle during that term. Id. Information in the permit record contradicts Petitioner's claim that the high currents at the project location will threaten to deliver pollutants at larger distances from the Facility. The record shows that these currents will actually dilute the pollutant loads from this small pilot-scale Facility to a degree that the impact will be inconsequential. See, e.g., Attachment 16 (RTC), at 23; Attachment 9 (BE), at 24 ("The facility's effluent is expected to undergo rapid dilution from the prevailing current; constituents will be difficult to detect within short distances from the cage."). Moreover, the monitoring requirements include an obligation to also monitor 500 meters up-current from the cage so that the minor impact to water quality will be measurable and confirmable by comparing the down-current and up-current results. Attachment 1 (Permit), at 15. Petitioner has failed to demonstrate that the Region's decisions regarding the scope of the monitoring program were clearly erroneous.

2. The Region Adequately Considered the Possibility of Escaped Fish In Determining that the Discharge Will Not Cause Unreasonable Degradation to the Marine Environment.

The Petition asserts that the Region did not adequately assess the potential for fish escape in the ODCE. Petition at 13. Petitioner notes that it commented that escaped fish increase competition with local fish and spread disease to wild stocks. *Id*. The RTC and other portions of the Record, however, make clear that the potential for fish escapes will not cause unreasonable degradation of the marine environment.

The RTC specifically addresses the concerns relating to fish escapes raised by Petitioner and other commenters, including risks of genetic impact to wild fish, and competition for food, habitat and spawning areas. Attachment 16 (RTC), at 17. With respect to a risk of adverse genetic impact to native species, the RTC notes that the fingerlings for the Facility will be sourced from brood stock that are located at Mote Marine Aquaculture Research Park and were caught in the Gulf near Madeira Beach, Florida. Thus, the species is native to the receiving waters and will be genetically identical to wild fish of the same breed. Id. With respect to the risk of competition for food, habitat or spawning area, the RTC notes that the construction of the pen with a copper mesh that is designed to survive storm events will result in a low probability of fish escapes. Id. Further, the RTC explains that the Facility's small size makes it a poor choice for comparison with commercial scale facilities, described by commenters, at other locations globally where large fish escape events have occurred. Id. at 16. As stated at page 17 of the RTC (Attachment 16), the magnitude of a potential release is a significant component of a risk analysis. The Facility authorized in the Permit is a relatively small, pilot scale facility, and therefore does not pose similar risks for impacts from fish escape. See also Attachment 4 (EA), at 37.

In addition, the Permit includes a condition requiring the Permittee to develop and implement a Facility Damage Control and Prevention (FDCP) plan that further reduces the risk of fish escaping. *See* Attachment 2 (Fact Sheet), at 4 ("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 aquatic life containment and transfer,

disaster prevention practices, and disaster cleanup.").

For the foregoing reasons, the Region reasonably considered and managed the potential for fish escapes in determining that the discharge will not result in unreasonable degradation to the marine environment. The Petitioner does not present any analysis explaining how fish escapes would result in unreasonable degradation except to baldly repeat that they commented "that fish escapes present several dangers, including competition with local fish and spread of disease to wild stocks." This is insufficient as a basis for review of the Permit decision.

The Region adequately addressed the risks to the marine environment posed by fish escapes in the permitting record, including the RTC, and the Petitioner has failed to explain why the Region's analysis is clearly erroneous. Accordingly, the Petition for Review should be denied with respect to this issue.

3. The Region Adequately Considered the Potential for Pathogen and Parasite Transfer and Antibiotic Resistance in Determining that the Discharge Will Not Cause Unreasonable Degradation of the Marine Environment.

Pathogens and Parasite Transfer

Petitioner's argument that the Region did not consider the discharge of pathogens or parasite transfer in the ODCE ignores the fact that the ODCE *specifically* describes conditions in the Permit that are intended to minimize the impacts of pathogen⁹ discharges and ensure that unreasonable degradation of the marine environment does not occur as a result of pathogen discharge:

In accordance with 40 CFR § 125.123(d)(3) the NPDES permit must include two conditions related to fish health management and the indirect discharge of pathogens: a. a requirement that all stocking of live aquatic organisms, regardless of life stage, must be accompanied by an Official Certificate of Veterinary Inspection signed by a licensed and accredited veterinarian attesting to the health of the organisms to be stocked; and b. the BMP plan shall include conditions to control or minimize the transfer of pathogens

⁹ A parasite is a type of pathogen so references to pathogens include parasites.

to wild fish.

Attachment 18 (ODCE), at 47-48. Though the Region had not included these conditions in the draft permit, the provisions were specifically added to the permit to respond to concerns raised by commenters regarding risks posed by pathogens. *See* Attachment 16 (RTC), at 10. In addition, the RTC further explains the Region's analysis and management of risks posed by pathogens in response to pathogen-related comments submitted during the public comment period. Attachment 16 (RTC), at 19-20. Petitioner criticizes the Region's RTC related to pathogens by disagreeing with the Region's conclusion that the risk is low. Petition at 14. However, as noted above, Petitioner fails to even acknowledge that permit conditions were added to address the risk of pathogen transfer.

The RTC explains how EPA assessed the risk of pathogen transmission due to aquaculture operations when EPA developed the ELG for aquaculture and EPA determined that the risk was not serious, or low. *Id.* Nevertheless, EPA's ELG for larger aquaculture facilities that meet the definition of CAAPs (40 CFR part 451) included measures to minimize that risk. *Id.* The Region has, through a BPJ determination of TBELs in the Permit, imposed the same TBELs and conditions as would have been imposed if the Facility were directly subject to the ELG, including the requirement to develop BMP (best management practices) plans to minimize discharges. The permit includes conditions requiring the Permittee to create fish health management measures to minimize pathogen transfer as part of developing a facility-specific BMP plan. *Id.* at 20.

Petitioner has failed to address the portion of the Region's RTC explaining that permit conditions were added to address the risk of pathogens even though the Region actually changed the Permit to address those precise comments. These changes ensure that the Permit provides

heightened protection against unreasonable degradation of the marine environment due to the Facility's discharge of pathogens. The Region has reasonably determined that discharges of pathogens from the Facility will not cause, including after application of pathogen-related conditions in the Permit, unreasonable degradation of the marine environment. Petitioner has failed to demonstrate that the Region's determination is clearly erroneous, and the Board should deny the Petition.

Antibiotic Resistance

Petitioner argues that the Region did not adequately consider the potential that use of antibiotics at the Facility would create a risk that pathogens would develop antibiotic resistance. Petition at 14. In fact, the ODCE has a specific discussion of potential impacts from antibiotics. Attachment 18 (ODCE), at 40-43. Further, the Region addressed comments relating to antibiotic resistance in the RTC. Attachment 16 (RTC), at 14-15, 34. Petitioner has also failed to demonstrate that the Region's response on this issue is erroneous or inadequate.

The discussion of antibiotic use in the ODCE relies in part on a report published by the Food and Drug Administration (FDA) regarding aquaculture use of antibiotics indicating that "concentrations of drugs reaching the environment are very small." Attachment 18 (ODCE), at 40. Another FDA study relating to antibiotic use in lobster farms found that "there should be no build-up of antibiotic resistant population of microorganisms from the use of Oxytetracycline in treating gaffkemia in lobsters. *Id.* at 41. While the ODCE recognizes that other studies have noted the potential for development of antibiotic resistance from use at fish farms, especially at facilities with a practice of heavy antibiotic use or in laboratory studies that did not mimic environmental conditions, the ODCE further indicates that the potential for resistance to develop appears to depend on the nature of the practices at a facility and the environmental conditions. *Id.*

at 41-43. Ultimately, based on the analysis in the ODCE, the transfer of drug resistance from fish to human pathogenic bacteria appears unlikely. *Id.* at 42-43.

The Petitioner faults the Region for relying on studies that found little risk of antibiotic resistance while discounting studies that found a risk of antibiotic resistance when studies in both categories involved environmental conditions that differ substantially from the proposed Facility. Petition at 14-15. However, none of the studies cited involve a comparable small and short duration pilot-scale project operating in the heavy current environment of the Gulf. Thus, a study indicating that even a large, long-term facility presents low risk is relevant, while another study indicating a greater risk for a large, long-term facility is distinguishable. For example, as made clear in the RTC, the small size of the facility, its location among the strong currents of the Gulf, and conditions of the Permit make it unlikely that antibiotic use will lead to any development of antibiotic resistance that could harm human health. Attachment 16 (RTC), at 14-15, 34, 46. Specifically, the RTC notes:

The need for drugs is minimized at the proposed facility by the strong currents in the open ocean, the low fish culture density, the cage material being used, and the constant movement of the cage. The applicant has indicated that FDA-approved antibiotics or other therapeutants will likely not be used ... during the proposed project.

Attachment 16 (RTC), at 14. The RTC further notes that permit conditions relating to use of antibiotics will require veterinary oversight, and monitoring and reporting. Attachment 16 (RTC), at 14-15, 34, 46. In these circumstances, the development of antibiotic resistance is not a significant concern and the Region's determination that it will not result in unreasonable degradation of the marine environment is reasonable and supported by the record. Petitioner has not demonstrated that the Region's determination is clearly erroneous and the Board should deny the Petition.

4. The Region Reasonably Determined that Discharges From the Facility

Would not Significantly Contribute to Red Tide/Harmful Algal Blooms, and Phytoplankton Monitoring is Not Necessary.

Petitioner argues that the Region did not adequately consider the impacts to human health and biological communities posed by harmful algal blooms ("HABs") such as red tide. Petition at 15-18. As the ODCE notes, HABs such as red tide are an issue to consider because they "are on the rise in frequency, duration, and intensity in the Gulf." Attachment 18 (ODCE), at 34. Many commenters raised concerns about HABs and red tide during the public comment period, and accordingly, the Region devoted considerable attention to this issue in its RTC. Attachment 16 (RTC), at 22-27.

In its RTC, the Region provided support for its determination that the Facility's discharge would not cause a significant threat to human health from HABs that would amount to unreasonable degradation of the marine environment. For example, the Region noted that not all algal blooms are harmful—many blooms are beneficial because the tiny plants are a major food source for animals in the ocean, and only a small percentage of algae produces powerful toxins that can kill marine species, and may directly or indirectly cause illness in people. Attachment 16 (RTC), at 22. The RTC further explained that the nature and magnitude of expected discharges, and the potential impact of such discharges on HABs, would not cause unreasonable degradation:

EPA evaluated whether the proposed project would cause "unreasonable degradation" of the marine environment in the ODC Evaluation. The analysis included water quality impacts related to HABs such as nutrients, organic enrichment impacts to the seafloor sediments and benthic communities, estimated water current magnitude and direction, dilution availability, and solid and dissolved waste impacts. Due to the relatively small fish biomass production estimated for this demonstration and the limited discharges other than fish food and fecal matter, the volume and constituents of the discharged material are not considered sufficient to pose a significant environmental threat. EPA has found that no "unreasonable degradation" will likely occur as a result of the discharges from this project based on the available scientific information concerning open ocean fish farming, the results predicted by deposition and dilution modeling, and the conditions within the NPDES permit.

Attachment 16 (RTC), at 23.

The RTC also discusses the results of a National Oceanic and Atmospheric

Administration study. The study looked generally at measures to mitigate aquaculture's effects

on the marine environment and the link between aquaculture and HABs, ultimately failing to

document a clear effect:

NOAA comprehensively reviewed the available scientific literature related to the impacts from marine aquaculture on primary production and HABs around the world.[footnote omitted] NOAA found that only a few studies indicate that effluents from aquaculture may contribute to an occurrence of HABs in the marine environment. NOAA concluded that "there is evidence that effluent from fish farms may result in increased primary productivity, but most studies have failed to demonstrate a clear effect. When effects are found, hydrological conditions or farm management practices may contribute. Siting farms in deep, well flushed waters will help disperse dissolved nutrients, and siting projects away from areas where effluent will be washed onshore will also help avoid eutrophication.

Attachment 16 (RTC), at 23. The location of the facility 45 miles from the shore, in waters of a depth of approximately 130 feet, at a location that will be well-flushed by currents, all support the Region's conclusion that there will not be unreasonable degradation due to a contribution to HABs from the Facility's discharge. The Region noted in its RTC that it was not reasonable to compare, as some commenters did, the impacts from much larger and nearer-to-shore salmon farm operations with impacts from the small, pilot-scale Facility at issue here, one to be located in deep, well-flushed water and that would only operate for one production cycle. *Id.*, at 16, 24.

With respect to the small volume of the Facility's discharge, the Response to Comments notes:

The nutrient loading from the pilot-scale facility into the Gulf is extremely low. ... TN and TP may not be measurable in the effluent or down-current due to the high current flows and low fish biomass at the facility.

Attachment 16 (RTC), at 26. See also RTC at 46 ("The facility is approximately 45 miles

offshore and it is not expected that this pilot scale facility would substantially increase the bacteria count or incident rate of red tide near the facility or in coastal waters."). The EA makes similar findings in its discussion of the potential that the Facility will contribute to HABs. Attachment 4 (EA), 15. While acknowledging that, as a general matter, nutrient discharges can contribute to HABs, the Permit will include "conditions to monitor the discharge and protect water quality" and "[t]he overall pollutant loading of the project should be minimal given the small production levels. Additionally, it is not expected that aquaculture-related pollutants will be measured in the water within 5-10 meters from the project." *Id*.

This Region's determination that the Facility's discharge will not result in unreasonable degradation associated with HABs justifies the Region's decision not to require phytoplankton monitoring in the Permit. Moreover, as noted in the RTC (Attachment 16), at page 26, the Permit does require monitoring for chlorophyll-a (CHLA) as an indicator pollutant. CHLA is considered the principal variable to use as a trophic state indicator and there is generally good agreement between plankton primary production and algal biomass. Also, CHLA is relatively easy to measure in comparison to *K. brevis*, the organism responsible for red tides. *Id.* The RTC further justifies the decision not to require additional phytoplankton monitoring with the fact that the nutrient loading from the pilot-scale facility into the Gulf is extremely low, and may not be measurable in the effluent or down-current due to the high current flows and low fish biomass at the facility. *Id.*

The Region's affirmative determination that there will be no unreasonable degradation associated with pollutant contributions to the development of HABs/red tide is further supported by modeling that was conducted to predict pollutant loading from the Facility. *See* Attachment 18 (ODCE), at 43-44. Modeling results indicated that, even very close to the Facility, waste

volumes would be extremely low and barely discernable. *Id*. These minimal impacts were predicted even though modeling runs were conducted at double the estimated production of the Facility and based on the entire five years of a permit term even though the Permit limits the Facility to one production cycle during that term. *Id*. There is ample information in the Record to support the Region's determination that the Facility's discharge will not result in unreasonable degradation of the marine environment as a result of human health impacts from HABs, including red tide. Petitioner has failed to show that this determination is clearly erroneous and the Petition should be denied.

B. EPA Fully Complied with the Endangered Species Act

The Region fulfilled its obligations under the ESA by preparing a BE and engaging in interagency consultation and coordination with the NMFS and the USFWS. *See supra* pages 3-4. NMFS concurred in the Region's determination that the project will not affect or is not likely to adversely affect listed species or designated critical habitat in the proposed action area, and USFWS raised no concerns with the Region's "no effect" determination. Accordingly, the Region was not required to engage in formal consultation and obtain a Biological Opinion from USFWS or NMFS. 50 C.F.R. § 402.14(b)(1). These actions satisfied EPA's consultation duties under the ESA, and Petitioner's request that the Permit be reviewed on this ground must be denied unless Petitioner can show that the Region clearly erred in fulfilling its obligation to comply with the ESA. *See In re Ariz. Public Service Co.*, 18 E.A.D. 245, 316-20 (2020); *In Re Peabody Western Coal Company*, 15 E.A.D. 406, 431-33 (2011).

1. The Region Appropriately Considered Impacts Related to the Facility Functioning as a Fish Aggregating Device ("FAD")

Petitioner contends that the Region failed to quantify the actual impact of the Facility on threatened and endangered species. In particular, Petitioner argues the Region failed to fully

consider the threats of the Facility that may occur because it will function as a fish aggregating device ("FAD"). According to Petitioner, this will result in adverse impacts such as entanglements, impacts from increased maritime traffic, and impacts from increased fishing in the area, particularly on sharks, sea turtles, and marine mammals. Petition at 18-30.

In criticizing the Region for its failure to consider the Facility as a FAD, Petitioner cites a portion of the RTC where the Region noted that the Facility's status as a FAD "is outside the scope of the NPDES . . . permitting action." Petition at 19, citing to the RTC (Attachment 16), at 35. Petitioner misreads the Region's response—the Region was simply noting that an NPDES permit authorizes a discharge of pollutants, and the NPDES review accordingly focuses on impacts from the discharge of pollutants. Petitioner ignores the fact that other portions of the RTC and permitting record, such as the EA and BE, *do* consider indirect and cumulative impacts such as those raised with respect to the Facility functioning as a FAD.

Both the BE and RTC discuss the Facility attracting listed species and creating a risk of entanglements. Attachment 9 (BE), at 21-26; Attachment 16 (RTC), at 36-37. NMFS, in its letter concurring with the Region's BE, stated: "because of the proposed project operations and duration, we expect that the effects of possible entanglement to be discountable." Attachment 13 (NMFS Concurrence Letter), at 7. This conclusion was based on the rigid and durable nature of the net pen materials, the tautness of mooring lines, and the short duration of net pen deployment. *Id*.

The other risks associated with the Facility functioning as a FAD are also not significant. For example, the BE and NMFS concurrence letter did not find a significant risk of vessel strike to listed species from Facility operations, largely due to the small number of vessels involved in operations, the slow speeds at which they would operate, and the absence of evidence that traffic

in the location of the Facility would significantly increase. *See* Attachment 9 (BE), at 25; Attachment 13 (NMFS Concurrence Letter), at 6. The NMFS Concurrence letter observes: "it would require a moderately-sized marina project (e.g., ~200 new vessels introduced to an area) to potentially result in a sea turtle take in any single year Given the limited vessel activity and duration of the project, a vessel strike is extremely unlikely." Attachment 13 (NMFS Concurrence Letter), at 6. Petitioner disagrees with the Region's conclusion in the BE that strikes from vessels not associated with the Facility are unlikely due to the proximity [i.e., distance] to shore (45 miles). Petition at 21. However, Petitioner's claim that substantial numbers of recreational and charter fishing vessels will travel 45 miles from shore to access fish attracted to the Facility is not a reasonable assertion, as this distance (and the time and fuel costs involved) would not be reasonable for most private fishing trips.

Petitioner also contends that the Region failed to adequately consider how the Facility's functioning as a FAD would result in impacts to listed fish species such as oceanic white tip sharks and manta rays, which could be caught by recreational fishermen as incidental bycatch. Petition at 23-24. The BE did not find a significant risk that listed fish species would be disturbed by the Facility:

The oceanic whitetip shark is not likely to occur near the proposed project given its preference for deeper waters. The action agencies believe that the Nassau grouper will not be present given that it is absent from the Gulf outside of the Florida Keys. Interactions with smalltooth sawfish with the proposed project is extremely unlikely because they primarily occur in the Gulf off peninsular Florida and are most common off Southwest Florida. The giant manta ray may encounter the facility given its migratory patterns; however, disturbance is not expected because the facility is small and will have a short deployment period of approximately 18 months.

Attachment 9 (BE), at 22. NMFS concurred with these determinations and specifically downgraded the Nassau grouper determination from NLAA to "no effect" based on the absence of this species in the area. Attachment 13 (NMFS Concurrence Letter), at 4-5. The Petition argues that oceanic white tip shark is threatened by the Facility because the BE acknowledges that they "can be found in waters as shallow as 37 meters." Petition at 24. However, Petitioner does not demonstrate clear error in the BE's determination that the "oceanic whitetip shark is not likely to occur near the proposed project given its preference for deeper waters." Attachment 9 (BE), at 22. Elsewhere the BE notes that oceanic white tip shark is "usually" found "in deep water greater than 184 meters." *Id.* at 11. The "occasional" discovery of this species in waters as shallow as 37 meters (when the Facility will be at 40 meters depth) is not sufficient to warrant formal consultation and does not demonstrate that the BE's NLAA determination, in which NMFS concurred, is clearly erroneous.

Petitioner also argues that the Region failed to adequately consider how the Facility's functioning as a FAD would result in impacts to listed sea turtles, such as green, hawksbill, leatherback, kemp's ridley, and loggerhead sea turtles. Petition at 24-27. However, the BE addresses these risks and found them discountable for a variety of reasons, including vessel strike avoidance measures to be followed by vessel operators, absence of prior observations of sea turtle interactions with aquaculture facilities, reduction in entanglement risk due to construction materials and methods for the Facility, the low number of vessels associated with the Facility operations, the fact that any fishermen attracted to the Facility would be displaced from other locations rather than adding to the number of vessels that might interact with sea turtles, and the minimal nature of water quality impacts. Attachment 9 (BE), at 24-25. Petitioners have failed to demonstrate that these findings are clearly erroneous. In addition, it should be noted that the site selection process led to avoidance of biologically productive areas by avoiding coral reefs, submerged aquatic vegetation, hard bottom habitats, marine protected areas, marine reserves and habitats of particular concern. *See* Attachment 13 (NMFS Concurrence Letter), at 2.

The Permit includes a condition requiring that the Facility be at least 500 meters from any hard bottom habitat. Attachment 1 (Final Permit), at 8; Attachment 14 (Essential Fish Habitat Assessment), at 16. Thus, the Facility will avoid the types of areas in which sea turtles and other listed species might typically be found.

2. EPA's Determination that the Facility is Not Likely to Jeopardize or Adversely Affect ESA-Listed Marine Mammals Is Reasonable and Supported by the Record

Petitioner argues that the Region's NLAA determination with respect to marine mammals is clearly erroneous. However, this determination is well supported by the record. The BE addresses impacts to five marine mammal species: Blue, Fin, Sei, Sperm, and Bryde's whales. None of these whales are likely to be encountered in the project area due to their preferences for deeper waters. *See* Attachment 9 (BE), at 12-14; Attachment 13 (NMFS Concurrence Letter), at 5 ("We do not believe any of these species will occur in the action area for this project or close enough for there to be any potential routes of effects to these species."). In concurring, NMFS downgraded the Region's finding from NLAA to one of "no effect." *Id.* at 4-5. Petitioner fails to demonstrate that the Region's (or NMFS') determination is clearly erroneous.

3. The Region Considered Baseline Conditions in Preparing Its Biological Evaluation

Petitioner asserts that the Region erred in its BE by failing to adequately consider degraded baseline conditions in its analysis. Petition at 30-32. In raising the issue of degraded baseline conditions, Petitioner focuses on the impacts associated with the Deepwater Horizon oil spill/blowout and otherwise does not specify the elements of the degraded baseline that it faults the Region for not considering. *Id*. The Region did discuss the Deepwater Horizon spill in the EA and determined that the minor incremental impact of the proposed action would have little cumulative impact to the Gulf. Attachment 4 (EA), at 50. The EA also notes that the Deepwater

Horizon spill originated 300 miles from the location of the proposed Facility. *Id.* at 14. The EA also discusses the issue of cumulative impacts in connection with other activities in the Gulf. *Id.* at 50-62. Extensive information and analysis described throughout this brief demonstrates that the impacts of the Facility will not be significant, as the Permit authorizes discharges from a small, pilot-scale Facility that will produce fish for only approximately 12 months. Thus, the Region's determinations in the BE are well-supported and are not undermined by any failure to consider cumulative impacts associated with the Deepwater Horizon spill or other preexisting impacts in the Gulf.

NMFS stated in its concurrence letter (Attachment 13), at 7, "Because all potential project effects to listed species were found to be discountable, insignificant, or beneficial, we conclude that the proposed action is not likely to adversely affect listed species under NMFS's purview." Petitioner offers no basis for concluding that the Region's determination, or NMFS' concurrence, is clearly erroneous.

4. The Region Considered the Potential Contribution of the Facility's Discharges to HABs that Could Impact Listed Species

Petitioner argues the Region failed to consider the Facility's impact on harmful algal blooms ("HABs") and the resulting impacts to listed species. Petition at 32-34. Yet the Region devoted considerable analysis to the potential for the Facility's discharges to contribute to HABs and found that the nutrient discharge would not have a significant impact. The Region's analysis relating to HABs is addressed in the discussion of the ODCE, above, at pages 21-25. There is no need to repeat that analysis here, as it is equally salient in connection with Petitioner's ESA arguments. As summarized by NMFS in its concurrence letter:

The discharge of wastewater from the proposed project are expected to have a minor impact on water quality due to factors concerning the low fish biomass produced; the relatively small amounts of pollutants discharged; depth of the sea floor; and current velocities at the proposed action area. The EPA anticipates that the proposed activity would add relatively small amounts of nutrient wastes (nitrogen, phosphorus, particulate organic carbon, and solids) to the ocean in the immediate vicinity of the proposed action area. The facility's effluent is expected to undergo rapid dilution from the prevailing current; constituents will be difficult to detect within short distances from the cage. Per EPA's analysis, (1) water quality effects are not expected to occur more than 30 m (0.02 mi) away from the cage site due to the small size of the facility, and (2) sedimentation from the Velella Epsilon facility is not expected to go more than 1,000 m (0.62 mi) from the cage, and impacts resulting from the proposed facility are likely limited to within 300 to 500 m (0.12 to 0.31 mi) from the cage. The discharges authorized by the proposed NPDES permit represent a small incremental contribution of pollutants and will have an insignificant affect any on the ESA-listed fish or sea turtles in the action area.

Attachment 13 (NMFS Concurrence Letter), at 7. Petitioner has not demonstrated that the Region's determinations relating to HAB impacts from the Facility on listed species are clearly erroneous.

The Region has faithfully met its obligations under the ESA, and Petitioner has failed to demonstrate that the Region's determination that a Biological Opinion was unnecessary was clearly erroneous or otherwise warrants review. Accordingly, the Petition on ESA grounds should be denied.

C. The CWA Exempts this Permit from the Requirements of NEPA

Petitioners contend that the Region's issuance of the Permit violated NEPA, 42 U.S.C. § 4321 *et seq.* This claim is not cognizable because EPA's Permit issuance is exempt from NEPA as a matter of law. The Region, however, voluntarily undertook a review of the impacts of the proposed project and alternatives following NEPA procedures in order to inform its decisionmaking with respect to the permit. Because NEPA does not apply here, the Board should deny the Petitioners' claims.

1. NEPA Is Not Applicable.

CWA Section 511(c)(1), 33 U.S.C. §1371(c)(1), provides:

(c)Action of the Administrator deemed major Federal action; construction of the

National Environmental Policy Act of 1969

(1)Except for the provision of Federal financial assistance for the purpose of assisting the construction of publicly owned treatment works as authorized by section 1281 of this title, and the issuance of a permit under section 1342 of this title for the discharge of any pollutant by a new source as defined in section 1316 of this title, no action of the Administrator taken pursuant to this chapter shall be deemed a major Federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act ...

This expressly exempts the NPDES permit issuance from NEPA requirements unless the permit is for a "new source" as defined under CWA Section 306, 33 U.S. C. §1316. The Facility is not a "new source" because a "new source" is defined under the 40 C.F.R. § 122.2 as a facility that (i) is subject to a New Source Performance Standard ("NSPS") promulgated pursuant to Section 306 of the CWA, and (ii) commenced construction after promulgation of the applicable NSPS. See 40 C.F.R. §122.29, and 40 C.F.R. §122.2.¹⁰ There is no NSPS applicable to the Facility because the volume of production proposed by the Facility (a single cohort of 80,000 lbs) does not meet the minimum threshold (100,000 lbs annual production) for triggering applicability of the ELGs for CAAPs at 40 C.F.R. part 451, including the NSPS at 40 C.F.R. § 451.24. NEPA simply does not apply to the issuance of this Permit by the Region, and for that reason the Petition's NEPA claims for Review must be denied.

2. The Region Voluntarily Evaluated the Permit Consistent With NEPA

As noted above at page 5, the Region undertook a voluntary review of impacts and alternatives for the Permit pursuant to EPA's Voluntary NEPA Policy. The Region elected to undertake this review to better inform its decision-making because the Facility under review would be the first aquaculture facility to operate in the Eastern Gulf. Accordingly, the Region sought to thoroughly assess the potential impacts of such a facility. *See* Attachment 2, (Fact

¹⁰ The Facility is a "new discharger," as that term is defined at 40 C.F.R. §122.2.

Sheet), at 10; Attachment 4 (EA), at 1. The Petitioners are using the hook of the Region's voluntary NEPA review as a basis to challenge the permit. But the Region's action in voluntarily preparing documents does not convert its action into one reviewable by the Board. The Region's voluntary action does not impose an otherwise inapplicable legal duty on it. *See Kandra v. United States*, 145 F. Supp. 2d 1192, 1203 n.4 (D. Or. 2001) (rejecting the contention that agency, by issuing an EA, had admitted NEPA's applicability) (citing 40 C.F.R. § 1501.3(b)); Voluntary NEPA Policy ("[t]he voluntary preparation of [NEPA] documents in no way legally subjects the Agency to NEPA's requirements."), 63 Federal Register at 58046.

While EPA's voluntary compliance with NEPA provides no basis for review here and consequently, the Region need not address the Petition's argument, the Region has chosen to respond for two reasons: first, to demonstrate how meritless the Petition's claims are, and second, to provide the Board with additional information that illustrates how thoroughly the Region evaluated the impacts of the proposed permitting action.

In this case, the Region prepared a voluntary EA even though NEPA was inapplicable, and the EA reflects a rigorous review of potential impacts from the Facility. *See generally* Attachment 4 (EA). The EA indicated that the issuance of the Permit would not result in significant impacts to the environment, and the Region appropriately issued a FONSI. *See* Attachment 17 (FONSI). Accordingly, preparation of a more detailed EIS was not warranted under NEPA's procedures. *See* 40 C.F.R. § 1501.6. Petitioners have failed to show that the voluntarily prepared FONSI was clearly erroneous, and their Petition on this ground must therefore be denied.

Petitioner contends that the Region erred in finding that the project would not result in significant impact. Petition at 35. Petitioner argues that the Region failed to give a hard look to

cumulative impacts, that the Region failed to give a hard look to the possibility that the Facility would contribute to HABs, and that the Region failed to take a hard look at the use and impact of pharmaceuticals. Petition at 35-39. As explained below, in determining that there would be no significant impact, the Region's voluntary effort did appropriately consider cumulative impacts the potential that the Facility's discharges would contribute to HABs, and the potential impacts from pharmaceutical use.

a. While Undertaken as a Voluntary Matter, the Region Appropriately Assessed Cumulative Impacts

Petitioner contends that the Region's cumulative impacts analysis did not adequately consider the impact of the Facility on the expansion of the aquaculture industry in the Gulf of Mexico, as well as the cumulative impacts of the aquaculture industry. Petition at 35.

The EA prepared as part of the Region's voluntary NEPA review contains an appropriate cumulative impacts analysis. Attachment 4 (EA), at pages 50-62. The EA, in analyzing cumulative impacts, notes that the Facility is expected to operate for only one production cycle, which will take no-longer than 18-months, therefore significantly shortening the time in which other offshore aquaculture projects or other actions may have an incremental impact. *Id.*, at 50. The Permit specifically limits the Facility to one production cycle. Attachment 1 (Permit), at 8. While the EA notes that more and larger aquaculture projects are likely to operate in the Gulf in the future, it further notes that, because no other NPDES applications for aquaculture facilities in the Gulf are pending, future aquaculture operations are unlikely to be permitted and operational during the Facility's period of operation, rendering cumulative impacts from other aquaculture operations unlikely and speculative.¹¹ Attachment 4 (EA), at 51.

¹¹ To illustrate the speculative nature of future aquaculture operations, the Region notes that there are no other NPDES-permitted aquaculture facilities operating in the Eastern Gulf. Another proposed commercial scale facility,

The record for the Region's review supports its finding of an absence of cumulative effects from permitting the Facility, given the relevant circumstances. The Facility is a small pilot-scale operation at one location in the Gulf, likely to discontinue operations prior to the operation of any larger, commercial scale facilities in the Gulf. Furthermore, the locations of any future aquaculture operations that might occur are presently unknown and may not be close to the Facility.¹²

The Petitioner relies heavily on what it views as the impact of Executive Order 13921 to promote the initiation of aquaculture operations in the Gulf and the designation by NOAA of a portion of the Gulf as an Aquaculture Opportunity Area (AOA). Petition at 36. However, these developments do not change that fact that, at present, there are no proposed aquaculture operations that are likely to commence operation anywhere near the Velella Epsilon Facility while the Facility is in operation. Petitioner would have the Region conduct a cumulative impacts analysis for its voluntary NEPA review that is so unlimited in temporal and geographic scope that it would be unwieldy, unreasonable, and not informative in relation to the small and short-duration operations of the Facility at issue here. *See Selkirk Conservation Alliance v. Forsgren*, 336 F.3d 944 (9th Cir. 2003) (approving reasonable limitations on geographic and temporal scope of cumulative impacts analysis).

In addition to the EA, the Region addressed the cumulative impacts from aquaculture operations issue in the RTC. Attachment 16 (RTC), at 29-30. The Response to Comments

the BioMarine facility, was issued an NPDES permit in 2013, but that permit expired in 2018 and the facility never commenced operation and was never constructed. *See* Attachment 19 (BioMarine NPDES Permit Issued March 2013).

¹² As described in footnote 2, *supra*, the Region has only one pending commercial aquaculture project and it is in the pre-application stage, the Manna facility. The Manna project, which may or may not ever be permitted, is presently proposed for a location off of Pensacola, more than 300 miles from the Ocean Era facility. *See* Attachent 5 (Manna Fish Farms Project Overview).

analysis is similar to the analysis quoted above from the EA. In any event, the Petitioner has not explained why the Region's analysis of this issue in the RTC is clearly erroneous, and its failure to do so is a procedural defect that requires denial of it petition, even were the Region's voluntary action cognizable by the Board.

b. While Undertaken as a Voluntary Matter, the Region Evaluated Potential Impacts from the Possibility of Harmful Algal Blooms and Reasonably Concluded that Impacts Would Not Be Significant

Petitioner argues the Region failed to give a hard look at the possibility of harmful algal blooms caused by excess nitrogen and phosphorus. Petition at 36-38. EPA did properly assess the potential impacts of harmful algal blooms from excess nitrogen and phosphorus. This issue has been thoroughly addressed above in connection with Petitioner's arguments relating to the ODCE (at pages 21-25, above) and ESA arguments (page 30-31, above. There is no need to repeat that discussion here. *See also* Attachment 16 (RTC), at 22-27. As explained in the RTC, the nutrient loading from the pilot-scale facility into the Gulf is extremely low. *Id.*, at 26. The Region conducted modeling to assess the significance of nutrient discharges from the Facility and found that pollutant impacts were not likely to be discernible a short distance from the Facility. Attachment 4 (EA), at 15, 34. Once again, Petitioner has failed to demonstrate that the Region's finding that the nutrient discharges will not have a significant impact on the occurrence of HABs is clearly erroneous. Accordingly, the Petition for Review on this ground should be denied.

c. The Region's Voluntary Assessment of Impacts From Antibiotic Use Reasonably Concluded that Impacts Would Not Be Significant

Petitioner also argues that the Region failed to give a hard look at the possibility that antibiotic resistance would be caused by use of pharmaceuticals at the Facility. However, this issue has been properly addressed in the permitting record. For example, the OCDE has a specific discussion of potential impacts from antibiotics. Attachment 18 (OCDE), at 40-43. Further, the Region addressed comments relating to antibiotic resistance in the RTC. Attachment 16 (RTC), at 14-15, 34. 46. As made clear in the RTC, the small size of the facility, its location among the strong currents of the Gulf, and conditions of the Permit make it unlikely that antibiotic use will lead to any development of antibiotic resistance that could harm human health.

Id. Specifically, the RTC notes:

The need for drugs is minimized at the proposed facility by the strong currents in the open ocean, the low fish culture density, the cage material being used, and the constant movement of the cage. The applicant has indicated that FDA-approved antibiotics or other therapeutants will likely not be used ... during the proposed project.

Id., at 14. The RTC further notes that permit conditions relating to use of antibiotics will require veterinary oversight, and monitoring and reporting. Attachment 16 (RTC), at 14-15, 34, 46. In these circumstances, the record supports the Region's conclusion that the development of antibiotic resistance is not a significant concern that it will not have a significant impact.

d. The Record for the Voluntary NEPA Review Supports the Region's FONSI and Decision Not to Develop an EIS

As the foregoing discussion demonstrates, the Region's finding of no significant impact after its voluntary NEPA review followed a rigorous assessment of potential impacts and an appropriate consideration of alternatives. The record supports the finding and an EIS is warranted. While NEPA is not even applicable to the Permit issuance, as a matter of law, the Region's voluntary conduct of a NEPA review, followed all of the relevant NEPA procedures in conformance with EPA's Voluntary NEPA Policy. Petitioner has failed to show that the no significant impact finding was clearly erroneous. Thus, even were the Region's voluntary actions cognizable by the Board, the Petitioners' failure to make the necessary showing for review would dictate denial of the Petition on this ground..

D. Stay

The Region notes that the Petition challenging the issuance of the Permit to a new discharger has the automatic effect of staying the effectiveness of the authorization to discharge pending resolution of the Petition by EPA. 40 C.F.R. §124.16(a)(1).

E. Oral Argument

The Region does not agree with Petition's request for oral argument before the EAB on

this Petition because the Region believes that the issues are capable of resolution upon review of

the briefs and cited portions of the record so that oral argument is not necessary.

VI. CONCLUSION

For the foregoing reasons, the Petition for Review should be denied.

Respectfully submitted.

Paul Schwartz Counsel for EPA Region 4 Office of Regional Counsel EPA Region 4 61 Forsyth St., SW Atlanta, GA 30303 <u>Schwartz.paul@epa.gov</u> 404-562-9576 (phone) 404-562-9486 (fax)

Of Counsel:

Elise M. O'Dea Tracy L. Sheppard Stephen J. Sweeney Richard T. Witt Office of General Counsel U.S. Environmental Protection Agency Washington, D.C. 20004

STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I, Paul Schwartz, certify that, in accordance with 40 C.F.R. § 124.19(d)(3), this Response

to Petition for Review does not exceed 14,000 words in length.

Paul Schwartz Associate Regional Counsel EPA Region 4 61 Forsyth St., SW Atlanta, GA 30303 404-562-9576 Email: schwartz.paul@epa.gov

CERTIFICATE OF SERVICE

I, Paul Schwartz, hereby certify that on December 18, 2020, I caused to be served a true and correct copy of the foregoing Response to Petition for Review, together with a copy of the certified Administrative Record Index, via the EAB's electronic filing system, and by sending a true and correct copy, via e-mail, to the following:

> Jennifer Best Assistant Director, Wildlife Law Program Friends of Animals 7500 E. Arapahoe Rd., Ste. 385 Centennial, CO 80112 jennifer@friendsofanimals.org

Adam Kreger Staff Attorney Friends of Animals 7500 E. Arapahoe Rd., Ste. 385 Centennial, CO 80112 adam.kreger@friendsofanimals.org

> Paul Schwartz Counsel for EPA Region 4 Office of Regional Counsel EPA Region 4 61 Forsyth St., SW Atlanta, GA 30303 <u>Schwartz.paul@epa.gov</u> 404-562-9576 (phone)