UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL APPEALS BOARD

In re:	)	
Ocean Era, Inc. – Velella Epsilon Facility	)	NPDES Appeal No. 20-09
NPDES Permit No. FL0A00001	)	

EPA REGION 4's RESPONSE TO PETITION FOR REVIEW

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I. INTRODUCTION

On October 30, 2020, the Center for Food Safety and eight other environmental or public interest organizations[1] (hereinafter "Petitioners") petitioned for Environmental Appeals Board ("Board") review of a Clean Water Act ("CWA" or "Act") 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 yellowtail tuna, 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

[1] The other organizations are Friends of the Earth, Recirculating Farms Coalition, Tampa Bay Waterkeeper, Suncoast Waterkeeper, Healthy Gulf, Sierra Club Florida, the Center for Biological Diversity, and Food and Water Watch.

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 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. Attachment 2 (Fact Sheet), at 2. State waters, for CWA purposes, extend seaward only to the three nautical mile boundary of coastal states. *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 four 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;
(3) that the Region's issuance of the Permit violates the Marine Mammal Protection Act; and
(4) that the Region's issuance of the Permit violates the National Environmental Policy Act.

Petitioners, however, fail to demonstrate any clear error of fact or law that warrants review by the Board. The Region's issuance of the Permit comports with applicable law and reflects evidence-based decisionmaking supported by the permitting record. Moreover, Petitioners ignore the Region's explanations in the Response to Comments regarding issues raised in the Petition and do not demonstrate that the Region's responses are clearly erroneous. Petitioners have not demonstrated that the Region failed to properly consider and apply the Ocean Discharge Criteria, nor have Petitioners demonstrated that the Region failed to comply with the Endangered Species Act, the Marine Mammal Protection Act or the National Environmental Policy Act. Petitioners have failed to carry their burden to demonstrate that the Region's factual and legal conclusions are clearly erroneous. Accordingly, the Region

respectfully submits that the Board 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 discharge pollutants as noted above such as fecal material and excess fish feed, and the Permittee sought NPDES permit authorization to discharge pollutants. *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.[2] The Facility is a pilot-scale demonstration project. *See* Attachment 4 (Final Environmental Assessment or "EA"), at 9-10.[3]

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

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

[3] 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.

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 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. 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).[4] 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" 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 Assessment[5]

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

[4] 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.

[5] Petitioners have not brought a Magnuson Stevens Act ("MSA") challenge. 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 decisionmaking.

("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 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 cycle[6] over approximately 12 months. Attachment 1 (Permit), at 8.

The Petitioners 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).

[6] 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.

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), (b)(2)(A), (b)(2)(E); 33 U.S.C. § 1311(b)(1)(A), (b)(2)(A), (b)(2)(E). Where technology-based effluent limits 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.[7] 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

[7] *National Wildlife Federation v. EPA*, 286 F.3d 554, 558 (D.C. Cir. 2002).

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 applicant. 40 C.F.R. § 125.3(c)(2).

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.[8] 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.[9] *Id.*; *Alaska Eskimo Whaling*

[8] 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.

[9] If insufficient information is available at the time of permit issuance, a permit also may be issued based on a

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 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

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.

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(b)(1), (c)-(l).

Marine Mammal Protection Act

Section 102(a) of the Marine Mammal Protection Act ("MMPA") prohibits the "take" of a marine mammal without Federal authorization. 16 U.S.C. § 1372(a). National Oceanic and Atmospheric Administration ("NOAA") regulations define "take," in relevant part, as "to harass, hunt, capture, collect, or kill, or attempt to harass, hunt, capture, collect, or kill any marine mammal." 50 C.F.R. § 216.3. The definition goes on to specifically includes certain actions, such as "the restraint or detention of a marine mammal, no matter how temporary," "the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal," and "feeding or attempting to feed a marine mammal in the wild." *Id.* Pursuant to section 101(a)(5) of the MMPA, NOAA may issue incidental take authorizations. 16 U.S.C. § 1371(a)(5). Unlike ESA section 7, the MMPA does not impose interagency consultation obligations for agency actions.

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.

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 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 (EAB 2012); *In re*

Beeland Group, 14 E.A.D. 189, 194-95 (EAB 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 (EAB 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 (EAB 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)); *see also In re Peabody Western Coal Co.*, 12 E.A.D. 22, 33 (EAB 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 (EAB 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 (EAB 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*, 14 E.A.D. 398, 411 (EAB 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 (EAB 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 (EAB 1998) (citing *In re Envotech, L.P.*, 6 E.A.D. 260, 284 (EAB 1996) ("[A]bsent compelling circumstances, the Board will defer to a Region's determination of issues that depend heavily upon the Region's technical expertise and experience.")) (other citations omitted).

The Board has noted that it analyzes petitions for review guided by the caution in the preamble to the 40 C.F.R. 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 Consolidated Permit Regulations, 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)). This is consistent with EPA's policy favoring final adjudication of most permits "at the permit issuer's level." *Id.*

As explained below, Petitioners fail to demonstrate any clear error of fact or law. The challenged provisions comport with applicable law and represent rational determinations

supported by the permitting record. Moreover, Petitioners largely ignore the Region's explanations in the RTC relating to issues raised in the Petition and do not explain why the Region's responses are clearly erroneous or inadequate. Consequently, the Region respectfully submits that Petitioners have failed to carry their burden to demonstrate that review is warranted. The Board should deny review of the permit.

V. ARGUMENT

As previously noted, the Petition challenges the Permit on four 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 ESA;
(3) that the Region's issuance of the Permit violates the MMPA; and
(4) that the Region's issuance of the Permit violates NEPA.

Petitioners have failed to address the Region's RTC with respect to each substantive issue they raise and have not explained why the Region's responses are clearly erroneous. For that reason alone, the Board should deny review. Further, as shown below, each of these challenges lacks merit and does not warrant review.

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 ("ODC") as required under 40 C.F.R. § 125.122. Petition at 25-34. Specifically, Petitioners argue that the Region erred in finding that the discharge will not cause unreasonable degradation of the marine environment because it failed to adequately apply the criterion at 40 C.F.R. § 125.122(a)(6) requiring consideration of "the potential impact of the discharge on human health through direct and indirect pathways." Petitioners assert that the Region failed to evaluate the "threat to human health caused by the project's contribution to harmful algal blooms" and that the Region failed to evaluate "the threat to human health caused

by the project's contribution to antibiotic resistance." Petition at 25-29.

Petitioners further argue that the Region's Ocean Discharge Criteria Evaluation ("ODCE") failed to adequately consider all pollutants of concern, including copper, escaped fish, and pathogens/parasites. Petition at 30-32. In addition, Petitioners claim that the Permit violates the CWA because it authorizes discharges that will cause unreasonable degradation. Petition at 33. Petitioners also claim the Region erred in failing to include certain specific conditions in the Permit that Petitioners assert are required by 40 C.F.R. § 125.123(d). Petition at 33-34. Each of these claims is erroneous and fails to address the Region's comment responses, as well as the underlying ODC evaluation and other record information.

Petitioners contend that the Permit authorizes discharges that will result in unreasonable degradation. Petition at 32-33. But the Petition does not provide any new information to support this argument, instead merely restating in summary fashion the issues noted above. Petitioners do not support their claim that the discharges from the facility will cause unreasonable degradation with any facts or scientific analysis and do not address in any way the Region's responses on these issues in the RTC. Moreover, Petitioners' claims are inconsistent with the regulatory definition of "unreasonable degradation of the marine environment" at 40 C.F.R. § 125.121. As defined, unreasonable degradation involves a more significant harm than the minor and speculative impacts relied upon by Petitioners, which the Region reasonably found, based on a rigorous analysis, did not amount to unreasonable degradation. Petitioners have failed to demonstrate that the Region erred in finding that the authorized discharges will not cause unreasonable degradation of the marine environment, and the Petition should be denied.

As noted, the challenge to the Region's ODC determination is at odds with 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(e).

Petitioners seem to apply an "any degradation" standard rather than the regulatory definition of "unreasonable degradation," and in doing so they ignore information in the record reflecting the Region's robust consideration of, and Permit conditions that manage, the potential for adverse impacts.

Critically, Petitioners fail to link their argument to the regulatory definition of "unreasonable degradation." They have 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 have they identified a threat to human health through "direct exposure to pollutants or through consumption of exposed aquatic organisms." Finally, they have 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 following discussion makes clear, the permitting record includes extensive analysis of potential impacts from the Facility's discharge demonstrating that the Facility will have only minor impacts and supporting the Region's determination that there will not be unreasonable degradation as defined by the regulation.

It is also important to recognize that the Region made its affirmative determination based on the record before it that the discharge *will not cause* unreasonable degradation of the marine

environment—contrary to the Petition's implication that EPA 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 31.

1. The Region Reasonably Determined that Discharges from the Facility Would Not Significantly Contribute to Red Tide/Harmful Algal Blooms.

The Petition argues that the Region did not adequately consider the impacts to human health posed by harmful algal blooms ("HABs") such as red tide. As the ODCE notes, HABs 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. Petitioners do not acknowledge or address the portions of the Region's RTC relating to HABs and red tide, and for this reason alone the Petition should be denied on this issue. 40 C.F.R. § 124.19(a)(4)(ii) ("[I]f the petition raises an issue that the Regional Administrator addressed in the response to comments . . . then petitioner must provide citation to the relevant comment and response and explain why the Regional Administrator's response to the comment was clearly erroneous or otherwise warrants review.").

In its RTC, the Region supported its determination that the Facility's discharge would not cause a significant threat to human health from HABs (such as red tide) that would represent an unreasonable degradation of the marine environment. The Region noted that not all algal blooms are harmful because many blooms are beneficial as 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, including nutrient discharges

that Petitioners argue could contribute to HABs, would not pose unreasonable degradation:

> 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 discussed the results of a NOAA study which looked generally[10] at measures to mitigate aquaculture's effects on the marine environment and the link between aquaculture and HABs and ultimately failed 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. 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 (footnote omitted). 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 strong 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 which is to be located in deep, well-flushed water and that would only

[10] This was a general study of the issue and not specific to the Facility.

operate for one production cycle. *Id*. at 16, 24.

> Regarding the small volume of the Facility's discharge, the RTC 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 for the Facility to contribute to HABs. Attachment 4 (EA), at 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.*

Modeling conducted to predict pollutant loading from the Facility further supports the Region's affirmative determination that there will be no unreasonable degradation associated with pollutant contributions to the development of HABs/red tide. 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 at double the estimated production of the Facility and based on the entire five-year Permit term even though the Permit limits the Facility to one production cycle during that term. *Id*. Petitioners' failure to acknowledge the additional modeling conducted after the comment period and discussed in the RTC further demonstrates Petitioners' failure to address the Region's RTC. Ample information in the Record supports 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.

2. The Region Reasonably Determined that the Facility's Discharges Would Not Result in Significant Increases of Antibiotic Resistance.

Petitioners argue that the Region did not adequately consider the threat to human health caused by the project's contribution to antibiotic resistance. Petition at 25-29. To the contrary, the OCDE specifically discusses potential impacts from antibiotics. Attachment 18 (ODCE), at 40-43. Further, the RTC addresses comments relating to antibiotic resistance. Attachment 16 (RTC), at 14-15, 34. As with the HAB/red tide issue, Petitioners ignore the RTC and have provided no information indicating that the Region's response is erroneous or inadequate. Because Petitioners have not met the threshold requirement to address the Region's comment responses regarding antibiotic use, the Petition should be denied with respect to this issue.

The ODCE's discussion of antibiotic use relies on a Food and Drug Administration ("FDA") report 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 gaffkaemia 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.

Moreover, as made clear in the RTC, the Facility's small size, its location among the strong Gulf currents, and Permit conditions make it even less likely 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.

Id. at 14. The RTC further notes that Permit conditions relating to use of antibiotics will require veterinary oversight as well as monitoring and reporting. *Id*. at 14-15, 34, 46. In these circumstances, the development of antibiotic resistance is not a significant concern, and the Region's determination that the Facility's discharge will not cause unreasonable degradation of the marine environment is reasonable and supported by the record.

3. The Region Adequately Considered All Pollutants of Concern, Including Pathogens, Copper, and Escaped Fish in Determining that the Discharge Will Not Cause Unreasonable Degradation of the Marine Environment.

The Petition further argues that, in evaluating the ODC, the Region failed to adequately consider all pollutants of concern, including pathogens, copper, and escaped fish. Petition at 30-32. These arguments again ignore the Regions' RTC and ODCE considering these questions and reasonably concluding that the discharge will not cause unreasonable degradation of the marine environment.

Pathogens

Petitioners' argument that the Region did not consider pathogen discharges in the ODCE ignores the fact that the ODCE *specifically* describes conditions in the Permit intended to minimize the impacts of pathogen discharges and ensure that unreasonable degradation of the marine environment does not occur:

> In accordance with 40 C.F.R. § 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 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. Attachment 16 (RTC), at 10.

The RTC explains the Region's analysis and management of risks posed by pathogens in response to public comments. Attachment 16 (RTC), at 19-20. The RTC explains how EPA assessed the risk of pathogen transmission due to aquaculture operations when EPA developed the ELG for aquaculture and determined the risk not to be serious, or low. *Id*. Nevertheless, EPA's ELG for CAAP facilities (40 C.F.R. part 451) includes measures to minimize that risk. *Id*. As noted above, the Region has, in its BPJ determination of TBELs in the Permit, imposed the same TBELs and conditions as would have been imposed if the Facility were 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.

As with the issues of HABs/red tide and antibiotic resistance, Petitioners have failed to mention or address the Region's comment response relating to pathogens. Petitioners' failure is notable given that the Region actually modified the Permit to address those precise comments and to ensure that the Facility's pathogen discharge would not result in unreasonable degradation of the marine environment. Given Petitioners' failure to address the Region's comment

responses or explain why they are erroneous or justify further review, the Petition should be denied with respect to this issue. 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.

Copper

The Petition also alleges that the Region failed to evaluate the discharge of copper in its ODCE. Petition at 31-32. Petitioners' comments on the draft permit lack the required specificity for Board review, providing no information indicating why copper is a pollutant of concern that warrants scrutiny in the ODCE. In contrast, the permitting record contains descriptions of the benefits of using copper to address other concerns raised by Petitioners and other commenters. For example, the EA notes that the rigid copper mesh used for the net pen will minimize the risk of entanglement. Attachment 4 (EA), at 37, 39-40, 42 ("[T]he pen will use a rigid copper alloy mesh, which presents no entanglement hazard."). The copper mesh also provides an impact-resistant structure that is designed to survive storm events, reducing the risk of fish escape from storm damage. *Id*. at 37. The BE also notes the benefits of copper material because it resists fouling, reducing or eliminating the need for cage cleaning, which can generate pollutant discharges. Attachment 9 (BE), at 20. Petitioners do not explain why copper poses any heightened threat of unreasonable degradation. Their sole basis for asserting that the ODCE is deficient for not evaluating the potential for unreasonable degradation from copper seems to be the fact that the Permit requires copper monitoring. Petition at 31-32.

In the RTC, the Region noted that "[c]opper is not expected to be at a measurable concentration in the facility effluent; however, given the unique nature of this project and limited water quality data regarding the use of copper in marine aquaculture operations, EPA has elected

to include water quality monitoring for copper in the permit at multiple locations in the water column." Attachment 16 (RTC), at 15. Thus, it is clear that Petitioners, as with their other claims, ignore the administrative record, including the Region's comment response, regarding the lack of risk posed by use of copper for the net pen material, and the Petition should be denied for that reason. Petitioners do not in any way counter the Region's conclusion that copper should not be present at a measurable concentration, and instead seize on the Region's conservative decision to monitor for copper to ensure that is not released at levels of concern as a basis to attack the ODCE and the Permit. The Region has reasonably determined that discharges of copper from the Facility will not cause unreasonable degradation of the marine environment, Petitioners have not addressed the RTC on this issue, and accordingly the Petition in relation to copper discharge should be denied.

Escaped Fish

Petitioners argue that the Region did not adequately assess the potential for fish escape in the ODCE. Petition at 32. Petitioners note that they commented that escaped fish increase competition with wild stocks for food, habitat, and spawning areas. *Id*. As with all issues raised in the Petition, Petitioners have not acknowledged or addressed the Region's comment response on this issue, and for that reason alone the Petition should be denied. The RTC and other portions of the Record 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, including risks of genetic impact to wild fish and competition for food, habitat, and spawning areas. Attachment 16 (RTC), at 17. Regarding risk of adverse genetic impact to native species, the RTC notes that the Facility will source fingerlings from brood stock that are located at Mote Marine Aquaculture

Research Park and are 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*. Regarding 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 here 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. Attachment 2 (Fact Sheet), at 4. The FDCP plan prescribes facility-specific procedures for dealing with aquatic life containment and transfer, disaster prevention practices, and disaster cleanup. *Id*.

The foregoing demonstrates that the Region reasonably considered and managed the potential for fish escapes in determining that the discharge will not cause unreasonable degradation of the marine environment. Petitioners do not present any analysis explaining how fish escapes would result in unreasonable degradation except baldly repeating that they commented "that escaped fish increase competition with wild stocks for food, habitat, and spawning areas." 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 and the RTC, and the Petitioner has failed to explain why the Region's analysis is erroneous or inadequate.

4. The ODC Regulations Do Not Require the Region to Include Certain Specific Permit Conditions as Asserted by Petitioners.

As noted above, Petitioners assert that the Region omitted from the Permit certain "mandatory" permit conditions, including a revocation/modification clause. Petition at 33-34. No basis exists for this contention. Such a permit term is not required because EPA has independent authority under the NPDES regulations to modify or suspend the Permit during its term based on monitoring results. 40 C.F.R. § 122.62.

Petitioners rely on a provision in the ODC at 40 C.F.R. § 125.123(d), which requires that "[a]ll permits which authorize the discharge of pollutants pursuant to paragraph (c) of this section shall" include certain specific permit conditions. Paragraph (c) of 40 C.F.R. § 125.123 authorizes EPA to issue permits for ocean discharges even when it "has insufficient information to determine prior to permit issuance that there will be no unreasonable degradation of the marine environment," provided that the permitting authority is able to make certain additional findings and impose certain specified permit conditions. Paragraph (c) of 40 C.F.R. § 125.123, however, does not apply to this Permit. Here, the Region had sufficient information to determine affirmatively that the authorized discharges, after application of conditions in the Permit, will not cause unreasonable degradation of the marine environment, and made such a finding. Thus, the requirements of 40 C.F.R. § 125.123(d)[11] cited by Petitioners do not apply.

[11] The Permit does include certain conditions contemplated by paragraph (d) of 40 C.F.R. § 125.123, as authorized under 40 C.F.R. § 125.123(a) when the conditions are necessary to support a determination that a discharge will not cause unreasonable degradation. This is distinct from the requirement in 40 C.F.R. § 125.123(d) to impose specific conditions when there is insufficient information to support a "no unreasonable degradation" determination. The Region's use of discretion to include additional permit terms listed in paragraph (d) does not mean that EPA is required to include all conditions listed in paragraph (d).

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* pp. 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. *See* 50 C.F.R. § 402.14(b)(1). These actions satisfied EPA's consultation duties under the ESA, and Petitioners' request that the Permit be reviewed on this ground must be denied unless Petitioners 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 (EAB 2020); *In Re Peabody Western Coal Company*, 15 E.A.D. 406, 431-33 (EAB 2011).

Petitioners contend that the Region failed to consider certain impacts to listed species, including effects from releasing excess feed in the net pen, light pollution, and escaped fish. Petition at 50-52. Petitioners further argue that the Region erred in not considering these impacts in light of the designation of a portion of the Gulf as an Aquaculture Opportunity Area and the Permittee's ability to renew the Permit. *Id*. at 50. These claims are addressed in turn below.

Release of Excess Feed

Petitioners assert that the Region "failed to evaluate excess feed as a food source for listed species" and express concern that "the release of excess feed . . . could attract endangered species, [thereby] increasing the risk of entanglements and vessel strikes." Petition at 51. Yet, the Region did evaluate and manage for potential effects from excess feed. The Permit contains BMP requirements for "efficient feed management and feeding strategies . . . in order to

minimize potential discharges of uneaten food." Attachment 1 (Permit), at 12.

In addition, the BE *does* address potential effects that Petitioners are concerned about—entanglements and vessel strikes to species attracted by the release of feed—and supports the Region's reasonable determination that such effects are discountable and insignificant. *See, e.g.*, BE at 27-28; RTC at 37-38. For example, the BE notes that entanglement risks to ESA-listed species at any aquaculture operation are mitigated by using rigid and durable cage materials and by keeping all facility lines taut, as slack lines are the primary source of entanglements. Attachment 9 (BE), at 17. The BE describes the risk of entanglements for various species as ranging from unlikely to highly unlikely to discountable because listed species are not likely to be found in the area of the Facility and the materials and construction of the net-pen minimize the risk of entanglement. *See generally* Attachment 9 (BE), at 21-26; Attachment 16 (RTC), at 36-37. The BE also found that vessel strikes involving listed species are unlikely to occur 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; *see also* Attachment 13 (NMFS Concurrence Letter), at 6. Petitioners have not explained why the BE's findings regarding entanglement and vessel strikes are clearly erroneous.

Light Pollution

Regarding light pollution, Petitioners simply repeat—verbatim—the objection made in their comment letter and fail to address the Region's response or explain why it is clearly erroneous or otherwise warrants review. *Compare* Petitioners' Comments (Exhibit A to Petition), at 13, *with* Petition at 50; *see also* Attachment 16 (RTC), at 38. Petitioners do not address the Region's RTC, which stated that "light disturbance is not expected to be a relevant

environmental stressor" because the Facility will not be using lights at night and the navigational light from the mooring vessel or buoys are not anticipated to be significant or provide increased light exposures in comparison to other industries in the Gulf. Attachment 16 (RTC), at 38. Petitioners have thus failed to satisfy the threshold requirements for Board review under 40 C.F.R. § 124.19(a)(4)(ii).

Nonetheless, the BE appropriately focused on "the most likely stressors, directly and indirectly, that were considered to potentially impact the species near the proposed facility." Attachment 9 (BE), at 17. The Region had no obligation to conduct a detailed evaluation of every conceivable impact, however slight. Moreover, Petitioners have presented no information showing that light pollution will be a significant concern for listed species. The fact that the wildlife agencies have reviewed and not objected to the Region's BE further supports the Region's selection of stressors evaluated in the BE.

Escaped Fish

The Petition provides little detail explaining Petitioners' concerns regarding escaped fish on listed species. Petition at 51-52. In the RTC, the Region had interpreted the concern as that of cultured fish interbreeding with wild fish and impacting the genetic makeup of wild fish. Attachment 16 (RTC), at 38. The Region noted that potential impacts to listed species from escaped fish are not expected because the cultured fish are genetically the same as wild fish:

> Genetic impacts to wild fish from fish escaping at the proposed operation were not evaluated for several reasons. First, the mixing of genetics between cultured fish and wild fish is not a concern for this proposed operation because the fish to be cultured are the first generation of wild stock caught in the Gulf. Any fish that escape from the proposed operation would be genetically the same to any wild almaco jack[12] [kampachi] within the Gulf. Second, almaco jack are not considered endangered or threatened by the ESA; therefore, an evaluation of genetic impacts to almaco jack are not required under ESA § 7. Finally, the permittee will be required to create BMPs to ensure the facility is being properly operated and maintained at all times, and implement a FDPC plan to mitigate

[12] Almaco Jack is an alternate name for the Kampachi species that will be raised in the Facility.

environmental impacts during any disaster and prevent the release of aquatic animals. Attachment 15 (RTC), at 38.

Petitioners attack the Region's response on the ground that the mitigative measure of using first generation from wild stock is not a permit requirement. Petition at 52. The Permit, however, only authorizes discharges that are contemplated in the permit application. The Permittee has not disclosed any plan to use genetically non-native fish, and the Permit would not authorize their release from the Facility if such species were used and escaped. *Piney Run Preservation Ass'n v. County Commissioners of Carroll County, Maryland*, 268 F.3d 255 (4th Cir. 2001) (permit authorization only extends to pollutants disclosed during the application process).

Petitioners also claim that the Region failed to consider the potential impact of "competition" from escaped fish to listed species such as the giant manta ray, Nassau grouper, smalltooth sawfish, and oceanic whitetip shark. Petition at 52. The lack of specificity regarding what form the competition between escaped *kampachi* and listed species would take makes it difficult to respond, and greater specificity is required to justify Board review. *See In re Beeland Group, LLC*, 14 E.A.D. 189, 200 (EAB 2008) ("General statements, rather than specific arguments as to why the Region's responses are erroneous or an abuse of discretion, do not meet the prerequisites for review."). In any case, there is no explanation of how these species seek the same habitats, food sources, or spawning grounds as the *kampachi* species that would be reared at the Facility, or how the single production cycle at a pilot-scale project would result in harmful competition for those resources in the area of the Facility.[13]

[13] Notably, the Permit includes a condition requiring that the Facility be at least 500 meters from any hard bottom habitat. Attachment 1 (Permit), at 8; Attachment 14 (Essential Fish Habitat Assessment), at 16. Thus, the Facility will avoid the types of areas at which protected species might typically be found.

Duration of Impact and Future Growth of Aquaculture

Petitioners' claim that the Region improperly focused its review on the 12- to 18-month operation period for the Facility, rather than considering a full five-year permit term or multiple permit terms, and rather than considering the potential for numerous commercial-scale aquaculture operations to be sited in the Gulf, is fully addressed below in the NEPA discussion, at pages 34-36. Nothing in the ESA requires the Region to ignore the Permit's restriction to one production cycle, or to consider impacts based on speculation about future projects that are as yet unidentified and may not be near the Facility. These speculative harms are not within the scope of the "agency action" under review.

The Region has faithfully met its obligations under the ESA, and Petitioners have 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 Region's Issuance of the Permit Complies with the Marine Mammal Protection Act.

Petitioners contend that the issuance of the Permit will result in unlawful "takes" under the Marine Mammal Protection Act ("MMPA"), 33 U.S.C. § 1361 *et seq*. Based on this claim, Petitioners assert that the Region must obtain proper authorization from NMFS for such takes pursuant to 16 U.S.C. § 1371(a)(5). This claim is not cognizable in an NPDES permit appeal. First, the potential for takes that Petitioners allege might occur is a potential liability for the Permittee, and not the Region. The issuance of the Permit does not result in a take, and if there is a potential for future takes, due to Facility operations, the Permittee may seek authorization under 33 U.S.C. § 1371(a)(5) or face the potential for liability if a take does occur. The Permit does not authorize any take, and EPA takes no action that would itself "take" (harass, hunt,

capture or kill) a marine mammal. There is no regulatory or statutory provision that requires EPA to obtain such authorization on behalf of a permittee prior to issuing an NPDES permit, and Petitioners have not cited any such requirement.[14] The MMPA does not impose any enforcement, permitting, or review obligations on EPA, and unlike ESA section 7, the MMPA does not include interagency consultation provisions for agency actions, like issuance of a Federal permit. Petitioners have not explained how their MMPA claim is cognizable in an NPDES permit appeal under any statutory or regulatory provision.

The Fact Sheet for the Permit describes the efforts of the Permittee to ensure that its operations do not harm Marine Mammals. Attachment 2 (Fact Sheet), at 11:

> The permittee partnered with NMFS to develop a protected species monitoring plan (PSMP) to monitor marine mammals and collect valuable information about potential interactions between aquaculture operations and protected species. The data collected under the PSMP will help NMFS understand interactions between marine mammals and aquaculture facilities and will inform future risk assessments for projects of this nature. 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.

See also Attachment 18 (ODCE), at 6-7 (describing mitigation requirements included in the PSMP to minimize the potential for impacts to protected species).

Petitioners have failed to demonstrate that the Region's issuance of the Permit has violated the MMPA, and the Petition on this ground should be denied.

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

[14] Notably, NOAA does implement an incidental take authorization program for commercial fishing operations, including aquaculture. *See Marine Mammal Authorization Plan*, NOAA, https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-authorization-program (last updated Apr. 15, 2020). That program requires advance authorization for operators in "Category 1 and 2" fisheries, but not "Category 3" fisheries. Aquaculture operations in the Gulf are considered to be Category 3 fisheries. *See MMPA List of Fisheries for 2020*, NOAA, https://www.fisheries.noaa.gov/action/mmpa-list-fisheries-2020 (last updated Apr. 16, 2020). Category 3 fisheries are characterized as "remote likelihood of/ no known interactions." *List of Fisheries Summary Tables*, NOAA, https://www.fisheries.noaa.gov/national/marine-mammal-protection/list-fisheries-summary-tables (last updated Sept. 1, 2020). *See also* Final Rule, 85 Fed. Reg. 21,079 (Apr. 16, 2020).

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' NEPA 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 provision expressly exempts 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 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, 122.2.[15] 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

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

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 at page 5, above, 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 decisionmaking 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 Sheet), at 10; Attachment 4 (EA), at 1. Petitioners use 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. Indeed, the Region's voluntary compliance 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); *see also* Voluntary NEPA Policy, 63 Fed. Reg. at 58,046 ("The voluntary preparation of [NEPA] documents in no way legally subjects the Agency to NEPA's requirements.").

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.

The Petition asserts that the Region failed to take a "hard look" at the direct, indirect and cumulative impacts of the Facility. Petition at 35-36. Petitioners specifically fault the Region for failing to adequately consider cumulative effects, such as the potential for more offshore aquaculture projects in the future or the cumulative effects on the fish feed industry in the Gulf. *Id.* at 36-39, 41-42. Petitioners also argue that the Region improperly relied on mitigation measures without explaining how they would be effective. *Id.* at 42-43. The Petition also raises many of the same specific issues raised in its argument related to the ODCE: that the Region failed to consider the impacts of a full five-year permit term, Petition at 39-41, and that the Region failed to adequately consider impacts from pathogens, antibiotic use, and fish escapes, Petition at 43-44. In addition, the Petition argues that the Region failed to take a "hard look" at the potential effects of adverse weather on the facility, Petition at 46, or the effects of the Facility on sensitive marine species, Petition at 47. Finally, the Petition argues that the Region failed to adequately assess reasonable alternatives. Petition at 47. Based on these various NEPA arguments, Petitioners argue that the Region was required to prepare an EIS. *Id.* at 48.

The EA contains an in-depth examination of direct, indirect, and cumulative impacts. (Chapter 4 of the EA discusses Environmental Consequences, at pages 31-50, and Chapter 5 discusses Cumulative Impacts, at pages 50-62). Moreover, the Region responded to issues

raised by Petitioners in its RTC, and Petitioner fails to explain why the responses provided are erroneous or inadequate. Even if the EA were reviewable, Petitioners' failure to address the Region's responses would dictate denial of review on this issue.

The EA's cumulative impacts analysis prepared as part of EPA's voluntary NEPA review is fully consistent with NEPA's procedures. Attachment 4 (EA), at 50-62. The EA notes that the Facility is expected to operate for only one production cycle, which will involve 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. Though more and larger aquaculture projects may operate in the Gulf in the future, no NPDES applications for aquaculture facilities in the Gulf are pending, and thus other aquaculture operations are unlikely to be permitted and operational during the Facility's operation period, rendering cumulative impacts from other aquaculture operations unlikely and speculative.[16] Attachment 4 (EA), at 51.

Petitioners would have the Region conduct a cumulative impacts analysis for its voluntary effort 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). The Region also addressed the issue of cumulative impacts from aquaculture operations in the RTC, which essentially repeats the analysis from the EA. Attachment 16

[16] 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 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).

(RTC), at 29-30.

An analysis of cumulative impacts that focuses on the 12- to 18-month period when active fish rearing and net-pen deployment will occur was reasonable for this effort. The Region considered the entire permit term and also considered the fact that fish rearing and net-pen deployment would only occur during a 12- to 18-month portion of the term. Petitioners further argue that the Region should have based its analysis on impacts over a five-year permit term **and** subsequent renewals, noting that the Permit "may be renewed without additional NEPA analysis." Petition at 39. However, EPA has not received any NPDES permit application or modification request for such a proposal. For these reasons, focusing on the 12- to 18-month period for fish rearing and net-pen deployment in the cumulative impacts analysis was appropriate, and certainly not clear error.

In addressing fish feed impacts in the RTC, the Region focused on the impacts on water quality from the discharge of excess fish feed as a pollutant. *See* Attachment 16 (RTC), at 57. Regarding impacts on the fish feed industry, the Region noted that such comments were focused broadly on the aquaculture industry rather than the Facility. *Id*. Such concerns are speculative in nature, and EPA need not consider speculative effects. The Council on Environmental Quality regulations require consideration only of "reasonably foreseeable" cumulative effects. 40 C.F.R. §§ 1508.7, 1508.8.

Petitioners make the same arguments about the failure to consider impacts from pathogens, antibiotics, and fish escapes in connection with the EA and FONSI as they do in their claims relating to the ODCE. EPA did properly assess the potential impacts from pathogens, antibiotics, and fish escapes. *See* discussion *supra* pp. 20-25. *See also* Attachment 4 (EA), at 15-16, 31, 37-43, 47-48.

The permitting record describes a number of mitigation measures that the Region adopted and reasonably concluded would minimize impacts. For example, the Region has described in detail Permit requirements intended to limit damage to the Facility during adverse weather events that could lead to fish escapes and pollutant discharges. Attachment 16 (RTC), at 18, 32. The Region also described Permit measures to reduce impacts from pathogens and antibiotic usage. *Id.* at 10, 14-16, 19-20, 39. The Region further explained how the use of a rigid copper mesh will minimize the risk of marine animal entanglements. Attachment 4 (EA), at 37, 39-43. These mitigation measures are reasonably designed to be effective in reducing the targeted risks. In addition, the small size and duration of Facility operations tend to further ensure that environmental impacts will be of low significance.

The two alternatives considered by the Region in its voluntary review were appropriate given the project purpose and circumstances. The purpose of the project as identified in the EA is for a "demonstration project for open ocean aquaculture of marine finfish in federal waters of the Gulf." Attachment 4 (EA), at 7. The Region's alternatives screening process is set out in the EA. *Id*. at 11-12. The consideration of only two alternatives, including the selected alternative and a "no action" alternative, is not unusual or suggestive of any inadequacy in the evaluation when justified, as here, by the circumstances and appropriate here where review was voluntary. *See N. Idaho Cmty. Action Network v. U.S. Dep't of Transp.*, 545 F.3d 1147, 1154 (9th Cir. 2008) (an EA need only include a "no-action" alternative and one action alternative). The statutory and regulatory procedures regarding consideration of "appropriate" and "reasonable" alternatives do not dictate the minimum number of alternatives that an agency should consider. *See N. Buckhead Civic Ass'n v. Skinner*, 903 F.2d 1533, 1541-43 (11th Cir. 1990) (finding that an EIS with only two alternatives studied in detail was sufficient). In addition, the EA notes that multiple alternate

sites were considered but screened out as not meeting relevant project criteria and so were not carried forward for analysis in the EA. Attachment 4 (EA), at 11.

E. 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).

F. Oral Argument

The Region does not believe that oral argument is necessary in this case.

VI. CONCLUSION

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

Respectfully submitted.

PAUL SCHWARTZ
Digitally signed by PAUL SCHWARTZ
Date: 2020.12.18 17:31:12 -05'00'

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

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 Digitally signed by PAUL SCHWARTZ Date: 2020.12.18 17:31:59 -05'00'

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

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:

Meredith Stevenson
Sylvia Shih-Yau Wu
Center for Food Safety
303 Sacramento Street, 2nd Floor
San Francisco, CA 94111
Phone: (415) 826-2770
Emails: mstevenson@centerforfoodsafety.org
swu@centerforfoodsafety.org

PAUL SCHWARTZ Digitally signed by PAUL SCHWARTZ Date: 2020.12.18 17:32:38 -05'00'

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