



# Animal Welfare Institute

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May 16, 2019

Ms. Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway, Room 13705  
Silver Spring, MD 20910

*Sent via email to [NMFS.Pr1Comments@noaa.gov](mailto:NMFS.Pr1Comments@noaa.gov) and [Jolie.Harrison@noaa.gov](mailto:Jolie.Harrison@noaa.gov)*

Re: Comments re: NMFS notice/receipt of application—file no. 22686, 84 Fed. Reg. 10,044 (Mar. 19, 2019), 84 Fed. Reg. 15,595 (Apr. 16, 2019)

Dear Ms. Harrison:

On behalf of the Animal Welfare Institute (AWI), Cetacean Society International, In Defense of Animals, the International Marine Mammal Project of the Earth Island Institute, Oceanic Preservation Society, World Animal Protection, and Whale and Dolphin Conservation, we respectfully submit these comments in opposition to the application filed with the National Marine Fisheries Service (NMFS) by the Chicago Zoological Society (hereafter the Applicant) to import up to three common bottlenose dolphins currently held at Dolphin Quest Bermuda, for purposes of public display to either Brookfield Zoo (Brookfield, IL) or Coral World Ocean Park (St. Thomas, USVI) (hereafter Coral World).

## **I. Introduction**

With the 1972 passage of the U.S. Marine Mammal Protection Act (MMPA), 16 U.S.C. 1361 et seq., Congress created a strict moratorium on the taking and importation of all marine mammals, subject to a few narrow exemptions. 16 U.S.C. § 1371(a). While the MMPA allows for the import of marine mammals for purposes of public display, 16 U.S.C. § 1371(a)(1), § 1374(b)(2)(B) mandates that NMFS can only grant a take or import permit for purposes of public display if the manner of take and import will be humane. In addition, § 1374(b)(1) requires that any permit issued be consistent with the NMFS regulations implementing these sections of the MMPA. The NMFS regulations for these sections, as found in 50 C.F.R. § 216.34, require that an Applicant must demonstrate that a proposed activity (in this case, the proposed import) “does not present any unnecessary risks to the health and welfare of marine mammals;” and “any requested import or export will not likely result in the taking of marine mammals or marine mammal parts beyond those authorized by the permit.” The burden of proof for all of these

regulatory requirements rests with the Applicant. 16 U.S.C. § 1374(d)(3) and 50 C.F.R. § 216.34(a).

To the extent possible, we will attempt to first address our general concerns, followed by those concerns specific to Brookfield Zoo or Coral World—there may, however, be some overlap of discussion.

## II. Hearing Request

As an initial matter, based on the information we present below, we respectfully reiterate our previous request that NMFS hold at least one public hearing on this issue, and ideally three hearings—one in St. Thomas, one in Chicago, and one at NMFS headquarters in Silver Spring, MD, to give all concerned citizens and organizations the opportunity to weigh in on this import request and to hear each other out. If only one hearing is held, it should be in St. Thomas, to allow the greatest number of concerned citizens to attend. This issue is sufficiently controversial to warrant such a hearing in St. Thomas, as Coral World's dolphin enclosure is newly built and has been opposed by many on the island (as well as from the mainland and internationally) since it was first publicly proposed in 2012.

## III. General Concerns

### A. Vague Nature of the Application

As a general matter, we object to the vague nature of this application. While the Applicant has offered additional details in the revised application and supplemental documents published with NMFS's notice of extension of the comment period on April 16, 2019, at 84 Fed. Reg. 15,595, there are still details that need to be clarified.

The application now states that two of the dolphins, NOA0010213 (born 3/30/2015) and NOA0006620 (born 4/1/2010) will *tentatively* be going directly to Coral World, while the third dolphin, NOA0010155 (born 3/31/2014), could be going to *either* Brookfield Zoo *or* Coral World. It is inappropriate for the Applicant to ask the agency to consider placement of any of these dolphins at *either* Brookfield Zoo *or* Coral World, two facilities that could not be more different. Brookfield Zoo has a long-established tank enclosure for its dolphins, while Coral World has a brand-new sea pen located in a body of water that regularly fails water quality testing under the U.S. Clean Water Act (CWA), 33 U.S.C. § 1251 et seq., among other issues discussed below. Any import permit application should clearly state the actual destination(s) of all the animals under consideration. The concerns and legal issues raised in this instance by one facility are completely different from those raised by the other.

Demonstrating just how imprecise this application is with regard to the ultimate destination of these dolphins, on September 26, 2018, Brookfield Zoo submitted a letter to NMFS stating that dolphins NOA0010213, NOA0010155, and NOA0006620 were going to Brookfield Zoo; just two months later, on November 25, a letter from Coral World to NMFS stated the same dolphins were going to Coral World (see original Document 5 of the application file, pdf pages 29-30 of supplemental application documents). What seems to be missing from the file is additional documentation providing an update from the Applicant.

Now, after the April 2019 revision, the application states that “the tentative proposal is to transport two females to Coral World, with Brookfield Zoo as an alternative destination. The remaining animal may be transported either to Coral World or Brookfield Zoo in the future.” Of most concern to us is the possibility that the animals would be imported to Brookfield Zoo only to be transferred to Coral World at some near-future date (see Section IV below).

Despite these clarifications, the permit application is still vague regarding when the import will occur. The application states that the transport will occur any time within a 5-year timeframe, from 05/01/2019 to 04/30/2024, or “soon after issuance of the permit” (whenever that may be). This is unacceptable. While we oppose this import outright and do not mean to suggest in any way that a transport should occur sooner than later, it should be obvious that the more time that passes between the issuance of the permit and the transport, the more certain conditions (e.g., water quality, especially at Coral World; health of the dolphins either at Dolphin Quest Bermuda or at the destination facility; staff turnover) might shift in ways that could prove harmful to the dolphins or simply alter the original application conditions to the extent that the transport will occur under conditions on which the public did not actually have the opportunity to comment.

Furthermore, the application is still somewhat vague as to the destination of the first two dolphins and completely vague as to the destination of the third dolphin. All three dolphins are females, either currently of breeding age or achieving sexual maturity during the 5-year period requested in the permit application. The Applicant’s rationale for this vagueness is that there is a “long-range population sustainability strategy and breeding loans between entities.” Application at p. 2. This is meaningless to those participating in this public comment period without an understanding of that strategy, a description of which is not provided.

It is possible that the facilities have been deliberately vague because Coral World, currently holding four dolphins, is limited to six (under local permits) during the enclosure’s first year of operation (the application states that Coral World is planning on housing six dolphins, without mentioning this number restriction is lifted after the first year, with ten dolphins on a permanent basis and up to 18 dolphins on a temporary basis once captive breeding is underway). It may be that, if the import occurs next year or beyond, then all three dolphins will be sent to Coral World. If so, then the application should be clear about this plan.

As a result of the lack of specificity about the final destination, the application is also vague about which facility’s personnel will conduct the dolphin transfers. The application provides a list of people from each facility who would supervise the transport; one assumes exactly which personnel would be involved would depend on the dolphins’ actual final destination. Given the high level of risk involved with transporting dolphins (see below), a precise, detailed plan is critical and certain details will surely differ between a transport to a concrete, inland tank enclosure in Chicago and a coastal sea pen enclosure in St. Thomas.

At best, the application appears premature. It is still not clear precisely *where* the dolphins are going or which facility’s personnel will actually be involved in the transport. It is not clear *when* the transport will occur (and the application provides a very broad time period during which it may occur). Unless and until the Applicant is (more) certain about the details of this import, we believe strongly that NMFS should recommend the withdrawal of this application and its

resubmission only when the Applicant can provide more precision on the where, when and who of this proposed import.

*B. “Laundering”*

At a few points in the application, it is suggested or declared that Brookfield Zoo and Coral World are collaborating on this import. For example, the application states “Brookfield Zoo and Coral World will be dividing the cost of transportation between their respective institutions. Each entity has the funding available to do so.” (Application at p. 14.)

Document 4 of the application file (p. 104 of the Supplemental Application Documents) contains a “certifying statement” from Dolphin Quest Bermuda affirming that this import will not result in the taking of dolphins beyond those proposed and that no animals will be collected from the wild to replace those being exported from Bermuda. While this may be true, it is legally relevant from a humane perspective to consider the environment to which the dolphins will be imported, which will be discussed below. In addition, we note that this brief statement, which also references the Dolphin Quest Bermuda breeding agreement with Brookfield Zoo, is as detailed as the permit application documentation is regarding the “long-range population sustainability strategy” noted in the permit application. This is insufficient information on which to base any comments regarding the justification for this import.

Our primary concern, however, is that the lack of precision in this application—combined with the collaboration noted between the two facilities—points to what would essentially be (if in fact all of the dolphins go first to the “backup” facility, Brookfield Zoo) a dolphin laundering scheme. In other words, we suspect all three dolphins are in fact ultimately destined to go to Coral World, a highly controversial facility, after perhaps a brief period at Brookfield Zoo, a relatively non-controversial facility, at a minimum for the third dolphin.

At this point, after the clarification that tentatively two of the dolphins will be going directly to Coral World, and it seems likely the third will end up there as well, the reasons for Brookfield Zoo’s involvement in the first place become questionable, its ownership of the animals notwithstanding. We suspect Brookfield Zoo’s involvement, and indeed, its taking the lead on the application, is a way to frame the import as less controversial than it actually is. Frankly, Brookfield Zoo appears to be the backup destination as a contingency should conditions at Coral World, such as water quality, prevent import (or for that matter long-term maintenance) there. An import is a permitted activity requiring a public process under the MMPA, while a domestic transfer is not. Knowing this, the Applicant appears to be leaving the ultimate destination of all dolphins, and the third dolphin in particular, uncertain. Given the revised application, this public comment period is now for the most part appropriately concentrated and focused on Coral World.

We strongly recommend that NMFS treat this permit application as if the final destination for *all three dolphins* will be Coral World. The agency should focus its attention on evaluating the transport details, the destination’s suitability for holding dolphins, and the requirements of the MMPA for an import, as if the Applicant clearly indicated the intended destination is Coral

World. Otherwise, the risk of the animals ending up, through a later domestic transfer, in a facility that is inappropriate for their maintenance is too great.

*C. This Action Does Not Qualify for a Categorical Exclusion Under NEPA*

“The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. 4321 et seq., as implemented by the Council on Environmental Quality (CEQ) Regulations (40 CFR [sic] Parts 1500 through 1508), requires that Federal agencies include in their decision-making processes appropriate and careful consideration of all environmental effects of proposed actions, analyze potential environmental effects of proposed actions and their alternatives, avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality to the extent practicable.”<sup>1</sup> As explained in the National Oceanic and Atmospheric Administration’s (NOAA) *Companion Manual for NOAA Administrative Order 216-6A*, categorical exclusions are:

*a category of actions that an agency has determined does not individually or cumulatively have a significant effect on the quality of the human environment. A CE is a form of NEPA compliance, without the detailed analysis that occurs in an EA or EIS. A CE may only be applied to a proposed action when:*

...

*b) the proposed action is not part of a larger action, and can therefore be reviewed independently from other actions under NEPA; and*

*c) there are no extraordinary circumstances that may require further analysis in an EA or EIS.<sup>2</sup>*

Public display permits typically qualify for categorical exclusions to NEPA.<sup>3</sup> However, for this permit, NMFS should invoke the exceptions as noted in b) and c) above.

Under exception b), a categorical exclusion may not be applied when the proposed action is part of a larger action, and therefore cannot be reviewed independently from other actions under NEPA, as is the case here. Under NEPA, this public display import permit application cannot be reviewed by NMFS independently of the rest of this project, including the construction of the Coral World dolphin enclosure and the operation of a dolphin-holding facility in a body of water that already routinely fails its CWA-mandated water quality testing (see Section IV below). Additional NEPA review is needed in the form of an environmental assessment (EA) (or supplemental environmental assessment), or better yet, an environmental impact statement (EIS), to fully consider the environmental impacts of this application.

According to exception c), a categorical exclusion may not be applied when there are extraordinary circumstances that may require further analysis in an EA or EIS. In this case, where Coral World is in violation of its own Territorial Pollution Discharge Elimination System (TPDES) permit (see Section IV below), where corals protected under the Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq., are being harmed, and where the water surrounding the

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<sup>1</sup> Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities – Companion Manual for NOAA Administrative Order 216-6A (January 13, 2017), <https://www.nepa.noaa.gov/docs/NOAA-NAO-216-6A-Companion-Manual-03012018.pdf>, at 1.

<sup>2</sup> *Id.* at 4.

<sup>3</sup> *Id.* at E-3.

dolphin enclosure frequently fails CWA-mandated testing, it is undeniable that extraordinary circumstances exist.

#### **IV. Coral World Ocean Park**

##### *A. History*

Coral World Ocean Park opened in 1978 in St. Thomas, U.S. Virgin Islands (USVI).<sup>4</sup> Known for its undersea observatory tower, Coral World also features swim-with sea lion and sea turtle encounters, scuba diving, and various guided tours. In April 2012, by an application and various documentation submitted to the St. Thomas Committee of the Virgin Islands Coastal Zone Management (CZM) Commission, Coral World began the process of seeking local/territorial and federal approvals to establish a dolphin enclosure that would host swim-with-dolphin encounters, and whereby the facility would attempt to breed dolphins. Exhibit 1: Additional Submittals, April 2012; Exhibit 2: Appendix, April 2012; Exhibit 3: Graphics.

On May 4, 2012, Coral World received a letter identifying several areas in which CZM deemed the application to be incomplete, particularly with regard to the lack of details in the design and representative drawings. On July 19, 2012, Coral World submitted detailed responses to questions raised, including a new drawing set, and in the fall of 2012, Coral World submitted to the CZM Commission a revised application, with additional documentation. Exhibit 4: Revised Environmental Assessment Report (EAR) submittal, October 2012.

We first became aware of this proposal in 2012 from concerned citizens and animal advocates on St. Thomas. On December 11, 2012, AWI, Humane Society International (HSI), and Whale and Dolphin Conservation (WDC) submitted comments to the CZM Commission strongly opposing Coral World's proposal. Exhibit 5: AWI HSI WDC Comments Dec. 2012. In these comments, the three organizations discussed the ways in which construction of new dolphinariums is regressive; how the argument that dolphinariums create jobs can be misleading, as many facilities give the highest paying jobs to non-locals with greater experience caring for captive cetaceans; that any expansion of the cetacean display industry through construction of new exhibits increases the demand for captures from the wild; the environmental impacts posed by the construction of this sea pen, particularly given the presence of corals and sea turtles listed under the ESA; the dangers to humans in swim-with-dolphin encounters; dolphin welfare and survivorship; and the educational value (or lack thereof) of these kinds of facilities.

Despite significant public opposition, the CZM permit was signed by Gertrude Prior, as General Manager of Coral World, on May 22, 2013; by the Chairman of the St. Thomas Committee of the Virgin Islands CZM Commission (Permitter) on June 4, 2013; approved by the Governor of the Virgin Islands on September 10, 2013; and approved by the Legislature of the Virgin Islands on October 24, 2013. Exhibit 6: CZM Permit. In addition to the CZM permit itself, Coral World received other feedback from the government of the USVI. Exhibit 7: Final Staff

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<sup>4</sup> Coral World Ocean Park – Education, <https://coralworldvi.com/education/> (last visited May 15, 2019).

Recommendation for the Request for Reconsideration of Special Conditions, Coral World, April 12, 2013.

The next step in the process was for Coral World to obtain permission from the U.S. Army Corps of Engineers (the Corps). On November 7, 2013, the Jacksonville District of the Corps, Antilles Permits Section, issued a public notice that it received an application from Gertrude J. Prior, Coral World (V.I.) Inc., permit applicant number SAJ-1976-89037 (SP-EWG), for a Department of the Army permit pursuant to Section 404 of the CWA, 33 U.S.C. § 1344, and Section 10 of the Rivers and Harbors Act (RHA) of 1899, 33 U.S.C. § 403, to construct a “nearshore dolphin exhibit enclosure and a land side support and visitor education center as an additional attraction to Coral World Ocean Park.” Such a permit was required because “[t]he project would affect waters of the United States associated with the Caribbean Sea. The project site is located on Water Bay on the north shore East End, St. Thomas.” Exhibit 8: Corps Public Notice re: SAJ-1976-89037.

In discussing the existing conditions, the notice stated:

*Water Bay was highly impacted by dredging activity which occurred in 1961, 1965 and again in 1968. There are still dense grass beds in the center of the bay in areas that were not dredge[d], there is a scattered cobble/rock shoreline community which fringes the southern side of the point and there is a hard rock bottom community surrounding the terminus of Coki Point. The hard substrate areas enjoy moderate coral colonization and there are large scattered coral heads and large soft corals. In most areas there is a band of sand between the shoreline areas of colonized bedrock and the offshore seagrass beds. There are Acropora palmata to the east of the pier just outside the project site. Both Montastrea annularis and Dendrogyra cylindrus, occur within the proposed enclosure and Montastrea annularis occurs within the footprint of the enclosure.*

On November 30, 2013, AWI submitted comments to the Corps in response to Coral World’s permit application. Exhibit 9: AWI Comments Nov. 2013. In those comments, AWI discussed several factors relevant to the Corps’ required analysis when evaluating an application for a permit under either Section 10 of the RHA or Section 404 of the CWA, such as conservation, economics, aesthetics, general environmental concerns, fish and wildlife values, shore erosion and accretion, recreation, water quality, and the needs and welfare of the people. AWI also discussed considerations under the ESA, NEPA, and the CWA 404(b)(1) Guidelines, and Executive Order 13089 (63 Fed. Reg. 32,701 (1998)) on Coral Reef Protection.

The Corps prepared a Biological Assessment for this project, which noted that:

*On December 7, 2013, seven additional coral species were nominated to the Federal Endangered Species List. These species include: Agaricia lamarcki, Dendrogyra cylindrus, Montastrea annularis, Montastrea faveolata, Montastrea franksi, Dichocoenia stokesi and Mycetophyllia ferox. Both Montastrea annularis and Dendrogyra cylindrus occur within the proposed enclosure and Montastrea annularis occurs within the footprint of the enclosure and will require relocation. Based on the layout of the docks and the enclosure, approximately 75 Montastrea annularis will require relocation. The Montastrea annularis and Dendrogyra*

*cylindrus within the enclosure should not be negatively impacted by construction and should not require relocation.* Exhibit 10: Biological Assessment at 10.

On March 31, 2014, AWI submitted an unsolicited letter to the Governor of the Virgin Islands, President of the Legislature of the Virgin Islands, and Chairman of the CZM Commission regarding premature land construction being undertaken by Coral World prior to the issuance of all necessary permits. Exhibit 11: AWI Letter Mar. 2014. Coral World had initiated land side work prior to obtaining all permits required for the proposed project, in clear violation of the explicit terms of Major Coastal Zone Management Permit No. CZT-2-12 (L&W) (CZM Permit). AWI did not receive a response. On April 1, 2014, AWI submitted a letter to the Corps, reminding the agency of its ESA Section 7(a)(4) conference obligations with respect to two species of coral, the boulder star coral (*Montastrea annularis*) and the pillar coral (*Dendrogyra cylindrus*), which had been proposed for listing as endangered. Exhibit 12: AWI Letter April 2014. See full history of coral ESA listings, including corals found in the USVI, at 79 Fed. Reg. 53,851 (Oct. 10, 2014).

A public meeting was held in St. Thomas on the issue on September 25, 2014. AWI, along with other environmental and animal advocacy organizations and many concerned citizens, provided testimony, voicing concerns about environmental impacts, most notably to threatened and endangered corals and sea turtle habitat, including sea grasses, as well as water quality issues, the importance of full government transparency, the inclusion of public input in the decision-making process, and the downward economic trends associated with the public display industry. Exhibit 13: Coral World Public Meeting Transcript.

Despite public opposition and evidence presented against the advisability of allowing the project to proceed, the Corps issued the RHA Sec. 10 Permit for the project in October 2016 (see Exhibit 14: Signed Permit Instrument Transmittal Letter; Exhibit 15: Signed Permit Instrument (with separate attachments)). The permit had 10 attachments, including NMFS's Biological Opinion, Sea Turtle–Sawfish Conditions, an Environmental and Water Quality Monitoring Plan, an Acoustic Mitigation Plan, a Habitat Lighting Plan, and a Coral Transplant and Benthic Mitigation Plan.

Because construction of the sea pen would disturb or potentially disturb threatened and/or endangered corals and sea turtles, the Corps was required, under Section 7 of the ESA, to consult with NMFS. On June 1, 2016, NMFS signed off on its Biological Opinion (BiOp) and Incidental Take Statement (ITS). Exhibit 16: BiOp—Attachment 4 to Corps permit, NMFS FOIA production document 0.7.805.5172 (includes appendices). NMFS's BiOp considered the effects of the construction and operation of the proposed dolphin enclosure at Coral World on the following listed species and/or critical habitat: elkhorn (*Acropora palmata*), pillar (*Dendrogyra cylindrus*), lobed star (*Orbicella annularis*), boulder star (*Orbicella franksi*), and mountainous star (*Orbicella faveolata*) corals; and elkhorn and staghorn (*Acropora cervicornis*) coral critical habitat. NMFS concluded that the proposed action was not likely to adversely affect the South Atlantic Distinct Population Segment of green sea turtles (*Chelonia mydas*); hawksbill (*Eretmochelys imbricata*) and leatherback (*Dermochelys coriacea*) sea turtles; and staghorn and rough cactus (*Mycetophyllia ferox*) corals. NMFS also concluded that the proposed action was



likely to adversely affect but not likely to jeopardize the continued existence of elkhorn, pillar, lobed star, mountainous star, and boulder star corals or result in the destruction or adverse modification of designated critical habitat for elkhorn and staghorn corals.

In its ITS, NMFS anticipated and allowed for:

- *the lethal take of eight lobed star coral colonies and the nonlethal take of 67 lobed star coral colonies that would be transplanted from the in-water construction footprint to the Coral World underwater observatory in Coki Bay.*
- *the lethal take of 60 lobed star, 79 mountainous star, and 11 boulder star corals from declines in water quality associated with project operation.*
- *the take of 50 future elkhorn coral recruits from impacts to the essential feature of elkhorn and staghorn coral critical habitat associated with declines in water quality associated with project operation.*
- *the lethal take of one pillar star coral colony that would be transplanted from the in-water construction footprint to the Coral World underwater observatory in Coki Bay.*

Exhibit 16, BiOp at 75. NMFS determined that this level of anticipated take was not likely to jeopardize the continued existence of these species. NMFS established several nondiscretionary terms and conditions (known as Reasonable and Prudent Measures or RPMs) with which the Corps or Coral World, as applicable, were obligated to comply, including (but not limited to) the preparation of an Environmental and Water Quality Monitoring Plan (Appendix D to the Corps permit) to be finalized in coordination with NMFS and the Corps,

- to include determinations of the effectiveness of in-water sediment controls (during construction) and water quality controls (during operation) of the enclosure with dolphins;
- a sampling plan that increased the number of samples, sampling locations, and sampling frequency commensurate with an increase in the number of occupying dolphins to ensure that a degradation in water quality would be readily observed and quickly mitigated.

(RPM No. 1). Ex. 16: BiOp at 75-76. NMFS noted that “[t]hese conditions would be likely to provide the protection necessary to ensure the increase in the number of animals does not lead to increased impacts to ESA-listed corals and elkhorn and staghorn coral critical habitat due to declines in water quality. If measures are found to be ineffective at minimizing impacts to ESA-listed corals and coral critical habitat, additional measures and contingency plans shall be developed in coordination with NMFS and [the Corps] for the continued operation of the dolphin enclosure in conjunction with the continued protection of ESA-listed coral species and designated acroporid critical habitat. (RPM No. 1).” Exhibit 16: BiOp at 76.

RPM No. 2 required preparation of mitigation plans for the impacts to ESA-listed corals and coral critical habitat, and RPM No. 3 required provision by the Corps to NMFS of all data

collected as part of additional preconstruction benthic surveys and the implementation of monitoring plans. NMFS explained that the “[reasonable and prudent measures], with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the RPMs provided. The [Corps] must immediately provide an explanation of the causes of the taking and review with NMFS the need for possible modification of the RPMs.” Exhibit 16: BiOp at 77.

In sum, just because construction has finished on this enclosure and it is now operational does not mean NMFS considers the nearby endangered species adequately protected by whatever mitigation actions Coral World undertook during the enclosure’s construction. During the 2018 construction, Coral World provided reports to NMFS and the Corps. See, e.g., Exhibit 17: Report 3 Mitigation Plan for the Installment of the Coral World Dolphin Enclosure: Transplanted Coral Monitoring, Monitoring Report: Post Hurricanes – Completed for Coral World Ocean Park by BioImpact, Inc. (Jan. 2018) (NMFS FOIA production doc. 0.7.805.5133) at p. 3, 137. This report stated “[a]pproximately 250 corals required relocation, including coral species *Orbicella annularis*, *Siderastrea siderea*, *Diploria strigosa*, *Porites astreoides*, *Porites porites* and *Pseudopterogorgia americana*,” and described how “[a]lmost all of corals within the area of impact were not attached to bedrock, and it was possible to relocate these corals attached to their substrates.” The report further stated that “[o]nly those corals attached to the nearshore hard bottom required removal from their substrate with a hammer and chisel. Where possible, colonized corals were removed with a portion of the rock on which the coral colonized to reduce stress.” The report then described the vast devastation Hurricanes Irma and Maria caused to the island and marine environs surrounding St. Thomas, including extensive damage to both transported and non-transplanted corals, such that “[o]f the ESA corals on the pen side of Coki Point only 112 of the 243 tagged corals were found.” See also Exhibit 18: Coral Transplant and Benthic Mitigation Program for the Construction of the Dolphin Facility at Coral World (NMFS FOIA production doc. 0.7.805.5135). This plan discussed the reasons for the needed mitigation measures and objectives, including a general description of the area to be affected, and then outlined the mitigation plans for corals and sea grasses, including compensatory mitigation, a maintenance program, a monitoring program, and success criteria, wherein Coral World stated an intent to obtain a minimum of 80% survival of the transplanted corals and sea grass.

In July 2017, Coral World submitted a permit modification request to the Corps, describing updated design (a reduction in the total pile count) and construction methods (eliminating the need for an impact hammer and thus reducing acoustic impacts). Exhibit 19: 20170727 Permit Modification Request. The Corps and NMFS considered, but did not require, reinitiation of ESA Section 7 consultation. CZM did not require modification of its approval, either. Exhibit 20: 20180117 USVI-DPNR Letter – No CZM Mod Required. On February 8, 2018, the Corps notified Coral World that it was granting the modification request, allowing for the revised project description and drawings. Exhibit 21: 20190208 Permit Modification. In granting the request, the Corps explained it had reviewed the impact of the proposal on navigation and the environment and determined it to be insignificant.

We are very disappointed that, with the exception of NMFS documentation, all of the above-referenced territorial and federal agency documentation was not proactively made available to the public, as it should have been under FOIA's affirmative disclosure requirement that agencies post online copies of all records "that have been requested 3 or more times" or "have become or are likely to become the subject of subsequent requests for substantially the same records" (5 U.S.C. § 552(a)(2)(D); *accord* 15 C.F.R. § 4.2(c)).<sup>5</sup> AWI—and other interested parties—had to obtain all Corps documentation through FOIA, which led to a substantial delay between when the key decision-making occurred and when the information was obtained, at which point much of the on-the-ground activity had already occurred. This lack of transparency is unacceptable for territorial and federal processes that impact the natural environment, as it effectively renders critical public input impotent. It is an additional reason why both a public hearing should be granted and a categorical exclusion is not warranted for this action.

### *B. Health and Welfare Concerns*

#### 1. Enclosure depth and lack of shade

The Coral World dolphin enclosure is no more than 20 feet in depth (and much shallower throughout a large proportion of its footprint), according to the descriptions found in the permit documentation. The entire complex has no shade, other than that found under the boardwalks surrounding each pen. As a result, the dolphins will be exposed to UV radiation to an excessive and potentially dangerous degree.<sup>6</sup>

It is possible that UV exposure at Coral World is similar to that found at Dolphin Quest Bermuda, but this does not mean it is a safe level of exposure. While the Animal Welfare Act regulations for marine mammals, 9 C.F.R. §§ 3.100-3.118, do not presently require shade, the Animal and Plant Health Inspection Service (APHIS) was considering including such a requirement in its 2016 proposal to update the marine mammal care and handling regulations (81 Fed. Reg. 5,629 (Feb. 3, 2016)), given the updated state of understanding of the concerns related to this aspect of captive conditions. Any dolphins held in the Coral World enclosure, given its relatively shallow depth and lack of shade structures, will be exposed to an unhealthy level of UV radiation as long as they are held within this sea pen complex.

#### 2. Water quality

As noted by AWI and other animal advocates for years, the water quality of Water Bay has always been a primary concern with regard to this project. During the September 2014 public meeting on the proposed project, many of those individuals that provided testimony spoke with regard to water quality concerns. One individual stated "existing Water Bay quality may not at all times meet high standards required for health and welfare of dolphins to be held in the enclosure. The need to achieve and maintain year-round higher water quality standards will

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<sup>5</sup> AWI is aware of multiple FOIA requests (in addition to its own requests) for information concerning Coral World's dolphin enclosure, triggering the agency's duty under the affirmative disclosure mandate.

<sup>6</sup> Gage, L.J. and Frances-Floyd, R. 2018. Environmental considerations. In F.M.D. Gulland, L.A. Dierauf, and K.L. Whitman (eds.), *CRC Handbook of Marine Mammal Medicine*, 3<sup>rd</sup> edition. (New York, New York: CRC Press), pp. 757–765.

likely require improvements in storm water infrastructure within the Water Bay Watershed. This would provide improved water quality for recreational use of the waters and beaches of Water Bay as a significant indirect benefit of the Project.” Exhibit 13: Public Meeting Transcript at 31. Yet to our knowledge, none of these hoped-for improvements have occurred to date, and the state of Water Bay and nearby Coki Point remains poor. That same speaker summarized his testimony by claiming “the resident dolphins may actually help us save the water quality of the bay for the benefits of not only themselves but other residents of the... community as well as transient visitors... both human and nonhuman.” We cannot stress enough that under all applicable laws—MMPA, CWA, NEPA, AWA—this is *not* how it is supposed to work (and indeed, it is not working this way regardless). We have learned that, based on the USVI Department of Planning and Natural Resources (DPNR) Water Quality Monitoring Program Weekly Beach Advisory Reports in 2018, Water Bay was unfit for human swimming 40% of that year (see <https://dpr.vi.gov/home/weekly-beach-advisory/> and also Table 1).

The regulation for water quality in marine mammal exhibits states that a “primary enclosure shall not contain water which would be detrimental to the health of the marine mammal contained therein.” 9 C.F.R. § 3.106 (2016). APHIS requires that:

*The coliform bacteria count of the primary enclosure pool shall not exceed 1,000 MPN (most probable number) per 100 ml. of water. Should a coliform bacterial count exceed 1,000 MPN, two subsequent samples may be taken at 48-hour intervals and averaged with the first sample. If such average count does not fall below 1,000 MPN, then the water in the pool shall be deemed unsatisfactory, and the condition must be corrected immediately.*

While we note from Document 3 of the original application file (p. 16-17 of the Supplemental Application Documents) that APHIS inspected Coral World on February 14, 2019 and did not note any non-compliant items, it is not clear whether water quality samples were taken from within the dolphin enclosure; indeed, it is not clear that the dolphin enclosure was inspected at all. If it was, however, the inspector would have probably only reviewed water quality results from some period or dates before the inspection, which would not be sufficient to determine whether the water in the dolphin enclosure met standards at the time of the inspection or when dolphins from Arizona arrived a few days later, or indeed since. Water Bay is tested weekly (at a different permanent location within the bay), as is Coki Point (a geographic feature closer to the enclosure than the Water Bay testing site). Given that Water Bay failed 40% of these tests in 2018, and over 35% of them from January 2018 through the second week of May 2019 (and Coki Point fails frequently as well—see Table 1 (and Exhibit 22: Compilation of Beach Advisories and Exhibit 23: Compilation of Water Quality Data), where it failed over 40% of the period between January 2018 and May 2019), a spot check inspection by APHIS is *not sufficient* to determine if the water is *routinely* safe for dolphins or, for that matter, for Coral World’s customers.

There is also very little Coral World can do to correct the water quality inside the dolphin enclosure, should it fail an APHIS inspection for this parameter, other than to wait for time to pass. It is, in essence, a *certainty* that Coral World *will* fail its water quality testing—the CWA standard for human safety quite often or the AWA standard for dolphin welfare and sometimes

both on the same testing date—at least occasionally (see, e.g., September 7, 2018 in Table 1) and possibly frequently, especially with the addition of six dolphins in the enclosure.

On the APHIS inspection date, dolphins were not yet present, and the only species inspected, according to the inspection report, were the facility’s South American sea lions. In contrast, in September 2015, APHIS clearly indicated a “focused inspection” of Brookfield Zoo’s dolphin exhibit. Exhibit 24: APHIS inspection report of Brookfield Zoo dolphins 9-25-2015. NMFS must confirm that 1) APHIS did in fact inspect and test the water of the dolphin enclosure in February and 2) that the water quality in the dolphin enclosure is *routinely* in compliance not just with the AWA standards but the DPNR standards as well. Given that neither Water Bay’s nor Coki Point’s testing locations are in the exact location of the dolphin enclosure (a point Coral World itself frequently mentions), NMFS must determine the *typical* water quality of the dolphin enclosure specifically, before issuing an import permit.

Enterococci and coliform bacteria are typical gastrointestinal bacteria that, when found above certain levels in the environment, suggest sewage contamination problems. Just three weeks after APHIS’s February 14, 2019 visit to Coral World, DPNR issued an advisory for Water Bay, because levels of enterococci bacteria exceeded water quality standards mandated by the CWA (see Table 1—that week, Water Bay tested at well over twice the level for enterococci bacteria acceptable for human swimming).<sup>7</sup>

The Environmental Protection Agency (EPA) recommends enterococci bacteria as the best indicator of human health risk in marine (salt) water used for recreation.<sup>8</sup> However, the current APHIS standards for marine mammals, which date back to 1984, require testing only for coliform bacteria and tolerate very high levels at that. 9 C.F.R. 3.113 (2016). Testing for enterococci bacteria was proposed for inclusion in APHIS’s proposed update to the marine mammal regulations in 2016. There is therefore a problematic disconnect between the way the USVI government is required to test water quality for human safety and the way APHIS is required to monitor water quality for dolphin welfare. (And given the Coral World dolphin exhibit is meant to be a swim-with encounter, these water quality issues are relevant to NMFS’s final decision, despite the weaker APHIS standards—if people should not be swimming with these dolphins 40% of the time, NMFS must consider whether the educational requirement for public display, 16 U.S.C. § (c)(2)(A), can be met by this facility, let alone whether allowing the import of dolphins to this enclosure would be humane.) Nonetheless, it is evident that on an occasional-to-regular basis, Water Bay and Coki Point are contaminated by sewage to a degree

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<sup>7</sup> See, e.g., Exhibit 25: *Beach Advisory for March 4-8*, The St. Thomas Source (Mar. 1, 2019) <https://stthomassource.com/content/2019/03/08/beach-advisory-for-march-4-8/>; Exhibit 26: John McCarthy, *DPNR Beach Advisory: Two Beaches to Avoid This Weekend*, VI Free Press (Mar. 1, 2019), <http://vifreepress.com/2019/03/dpnr-beach-advisory-two-beaches-to-avoid-this-weekend/>.

<sup>8</sup> See EPA, Nationwide Bacteria Standards Protect Swimmers at Beaches, <https://www.epa.gov/beach-tech/nationwide-bacteria-standards-protect-swimmers-beaches> (last visited Apr. 25, 2019), noting that public health studies conducted in the 1970s and early 1980s showed that enterococci were a very good predictor of illness in all waters, and *E. coli* was a very good predictor in fresh waters, and as a result, the agency in 1986 recommended the use of *E. coli* for fresh recreational waters (criteria set at 126/100mL) and enterococci for fresh and marine recreational waters (criteria set at 33/100mL in freshwater and 35/100mL in marine water), replacing previously recommended bacteria criteria for fecal coliform of 200/100mL.

that is a hazard to humans when swimming.<sup>9</sup> It seems highly likely that such water would be hazardous to dolphin health when living in it all day, every day. The trainers and participants in swim-with encounters at Coral World are being or will be exposed to polluted water on a regular basis, while the dolphins will be exposed to it far more often, with potential health impacts already occurring or soon to follow. (For the animals who have already been exposed to questionable conditions at Dolphinaris and may be immunocompromised as a result, this is all the more concerning.)

The revised application published by NMFS in April include baseline water quality data as well as data for the first month of operations as part of the Environment and Water Quality Monitoring Plan (EWQMP) (see Supplemental Application Documents at p. 96-103). For baseline conditions, the EWQMP stated “Enterococci has not exceeded 104 and fecal coliform has been higher than 70 colonies/100ml three times at the west control and once at monitoring station CW-1. The highest bacterial count encountered was at the west control and 593 fecal coliform were found in 100ml. Only once at a sampling point adjacent to the pen did the fecal coliform surpass the 70 fecal coliform colonies/100ml.”

While these baseline coliform measurements may be acceptable under the APHIS standard during this snapshot in time, this is not indicative of future acceptable conditions, and presents far from ideal conditions for human swimming, let alone dolphin habitat.

The report went on to state:

*The first month of water quality monitoring post dolphin arrival shows mixed water quality results similar to baseline monitoring results. Dissolved oxygen was often low at the west control, which is closest to the drainage discharge near Margaritaville Beach. Turbidity levels were often higher at the west control than other sample locations as well...*

*Bacterial analysis results varied from week to week. The first two weeks post dolphin arrival, levels of enterococci were < 10 MPN/100 ml for all sites except CW- 1 on 3/08/19 where 97/100 ml was found. This is still below the safe swimming level of 104/100ml.<sup>10</sup> On March 25, 2019 the enterococci exceeded EPA’s safe swimming level of 104/100ml at the west control adjacent to the Margaritaville beach and well down current from the dolphin enclosure ....*

*While enterococci is the parameter utilized for testing ambient water by both EPA and DPNR, Coral World is also testing for E. coli [sic] bacteria. The E. coli [sic] test were being run as*

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<sup>9</sup> Media coverage of the dolphin transfer from Dolphinaris Arizona to Coral World noted “[w]eekly reports since late September show that seven out of the 19 times that water at Water Bay was analyzed, the sample was found to have levels of bacteria that made it unsafe for swimming or fishing.” Lorraine Longhi, Dolphinaris Arizona gets out of the dolphin business, moves all 4 dolphins to the Virgin Islands, *Arizona Republic*, Feb. 20, 2019, available at <https://www.azcentral.com/story/news/local/scottsdale/2019/02/20/dolphins-dolphinaris-arizona-moved-sea-sanctuary-virgin-islands/2924741002/>.

<sup>10</sup> The DPNR enterococci standard for beach closures is 70/100mL, and it is our understanding that this is the governing water quality standard for this project. According to EPA, suitable levels for enterococci in marine waters are 35 cfu/100mL for a 30 day mean, but 104–501 cfu/100mL for a single sample, which is apparently the reason Coral World referred to 104 colonies as a “safe swimming level.” See EPA, *E. coli* and enterococci, <https://www.epa.gov/sites/production/files/2015-09/documents/ecoli.pdf> (last visited Apr. 25, 2019).

*Presence/Absence the first 3 weeks due to issues with a shipment of Colilert from IDEXX which arrived late and the unanticipated arrival of dolphins. During these first two weeks E. coli was only found to be present at the west control and at CW- 2. However, the third and fourth week of sampling (3/11/19 and 3/18/19) indicated the presence of e. coli bacteria in all sample sites. There were high winds, swell, and some rain during this time which may have affected these results. All sample sites including both controls, and an additional sample site close to Coki Beach all tested positive for E. coli, which further points to the explanation of the E. coli presence being affected by environmental processes and not related to the dolphins....*

It appears this testing was conducted by Coral World for four weeks after the arrival of the Dolphinaris Arizona dolphins. Yet Water Bay and Coki Point may go many weeks without failing these water tests. One month of results is therefore completely uninformative.

Moreover, it is wholly inappropriate, and goes against the CWA and its implementing regulations, to discount any level of water quality testing failure by blaming surrounding environmental conditions for those results. This is precisely the point we, and other opponents to this project, have been emphasizing *for years*. Environmental conditions in the waters adjacent to Coral World and surrounding the new dolphin enclosure are often poor and largely beyond the facility's control and can affect bacterial levels to a dangerous degree. Pointing out periodic water quality failures in monitoring reports does not excuse anyone (we understand Coral World is trying to suggest that the dolphins are not adding to the problem—inadequately, we might add—but that is not the sole, relevant point here), nor does it constitute compliance with territorial and federal permits. NMFS should deny the requested permit based on this recent water quality reporting alone. At a minimum, NMFS should not grant permission to add any more dolphins to this enclosure until a much broader set of EWQMP data is available.

Under the 2016 Corps permit, Coral World is allowed to display “up to 10 dolphins on a permanent basis and up to 18 animals on a temporary basis once operations (including a captive breeding program) are fully underway,” while the 2013 CZM permit states that “a maximum of 15 dolphins, 12 of which may be part of the inter-active program,” will be allowed, “while an additional three are allowed during times of birth.”<sup>11</sup> The EWQMP for this project did contemplate the fact that the dolphins in this enclosure will contribute to the water pollution in Water Bay:

*Initially Coral World is proposing to develop an interactive program that will commence with six breeding age Atlantic Bottlenose dolphins and expand to ten-twelve dolphins through acquisition and breeding. To increase the number of dolphins from the initial six, Coral World, pursuant to a Special Condition in its CZM Permit, “must provide CZM with water quality monitoring results for a twelve-month consecutive period. Parameters monitored shall be consistent with Virgin Islands Class B Water Quality Standards as set forth by the Division of Environmental*

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<sup>11</sup> The “Month 1” report provided with the April 2019 Supplemental Application Documents states “as modeled, 6 to 18 dolphins are not reasonably anticipated to result in elevated levels of fecal coliform or nutrients in the pen areas or to the outlying bay.” However, the report does not include any description of the model used or its results, so this claim has little meaning. NMFS should insist on seeing the type of model used to predict the impact of 6 to 18 dolphins on the coliform levels in the pen areas and outlying bay and its results—indeed, the application should have included the model and its results so the public could comment on them.

*Protection.”<sup>12</sup> These animals will feed and will defecate within the pen and therefore will have an impact on water quality. The dolphins will have an impact on water quality and will locally increase total coliform and fecal coliform bacteria in the water column when they defecate. Fecal coliform bacteria has a life span of 30 minutes to several days in seawater depending on light exposure (Fujioka & Roger, 1981).*

Exhibit 27: 20150311 SAJ-1976-89037 EWQMP at 1-2. See EWQMP also at Ex. 16: BiOp at Appendix D. While it is unclear how effective the EWQMP’s proposed monitoring will be for assessing, let alone addressing, water quality problems within the enclosure, we have no confidence Coral World will diligently comply with the requested monitoring or even accurately report the results, given the company’s history of violating its TPDES permits (see below).

The EWQMP goes on to note:

*This monitoring plan includes monitoring to ensure that fecal coliform levels and nutrient levels do not become elevated above the allowable limits. If levels increase above allowable limits steps will be taken to address the issue. The dolphins will be removed from the water [sic] the dolphin staff will mobilize a pool liner into one or both of the smaller pools. These liners as designed by the US Navy to protect their dolphins are a simple system that isolates the dolphin’s water from the polluted water. The dolphins’ water will be filtered by cartridge filter and treated with ozone. The Skid mounted filtration system is similar to the off the shelf system developed by Coral World vendor Emperor Aquatics but will be custom designed to use ozone for the disinfectant produced by Del ozone generators and will have cartridge filters to eliminate backwash discharge into the ecosystem. There will not be a backwash discharge into the environment. Chlorine will not be used as a disinfectant. These small pools developed for the US Navy marine mammal program are capable of supporting dolphins for several weeks in emergency situations. Once the dolphins are removed it can be determined whether or not the dolphins are responsible for the elevated readings. Based on existing data 5 to 10 dolphins should not result in significantly elevated readings, if it is determined that the dolphins are responsible for negatively impacting the water quality, overfeeding or other contributing issues will have to be evaluated and corrected. DPNR, COE and NMFS will be informed and involved in the solution.*

Exhibit 27: EWQMP at 2. While perhaps logistically doable, this process as described seems elaborate and laborious. It is certainly *not* a long-term option if the dolphins’ welfare is to be

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<sup>12</sup> The USVI Water Quality Standards, Rules and Regulations, numerical water quality criteria, set standards for Class B waters (which includes the waters surrounding St. Thomas) at:

...

(ii) Dissolved oxygen: Not less than 5.5 mg/l except when due to natural causes.

(iii) pH: Normal range of pH must not be extended at any location by more than  $\pm 0.1$  pH unit. At no time shall the pH be less than 7.0 or greater than 8.3.

...

(v) Bacteria: the 30 day geometric mean for enterococci shall not exceed 30 CFU/100 mL and no more than 10 percent of the samples collected in the same 30 days shall exceed 110 CFU/100mL.

(vi) Phosphorus: Phosphorus as total P shall not exceed 50  $\mu\text{g/l}$  in marine and coastal waters.

12 V.I.C. § 186-4 (c)(2)(B), available at <https://www.epa.gov/sites/production/files/2014-12/documents/viwqs.pdf> at p. 23.



protected (despite the reference to the US Navy program using small pools for “several weeks,” such longer-term maintenance would still be stressful and is arguably not acceptable for commercial entertainment versus military use in the name of national security). Meanwhile, the projected impacts outside the enclosure are not promising in the least:

*The placement of both the double row of fencing and the wave barrier will have significant impacts on water circulation around the facility itself. The fencing will reduce currents by as much as 25% and the wave barrier, since it is alternating boards, will create an area of still water downstream of the current direction. This will reduce the flushing of the area. This will have less of an impact to the east, because surface currents in the area are usually to the west, there is a current to the east at depth but this will only be partially blocked since the wave barrier will have between 3 ft. and 5 ft. of clearance below it. The stilling of the current behind the wave barrier could result in slightly higher temperatures and buildup of nutrients and bacteria. The water quality monitoring will include testing both in and outside of the pens to ensure that negative impacts are not occurring.*

Exhibit 27: EWQMP at 2. Yet the Corps approved this project, disregarding the obvious water quality concerns, without so much as a public comment period on its own environmental assessment of this project, something that raises NEPA concerns in and of itself.

Additionally, Coral World is the holder of TPDES Permit No. VI0040291. Exhibit 28: TPDES Permit exp Nov 2018. Coral World’s TPDES permit authorizes discharges into Coki Point and Water Bay (as well as into its own irrigation system and turtle pool), in accordance with effluent limitations and monitoring requirements and other conditions set forth in the permit, including the collection system’s internal outfalls. Coral World is in fact contributing to the pollution in Water Bay, and the inclusion of dolphins in a sea pen in this bay will only make water quality matters worse.

In July 2016, NMFS and the DPNR agreed with Coral World/BioImpact that Coral World’s existing TPDES permit should be modified to incorporate the dolphin facility, and include water quality and environmental monitoring. The DPNR stated “[t]his activity certainly falls under the definition of a point source under TPDES regulation and it’s important to provide protection of this particular water body.” Exhibit 29: B. Keularts, DPNR to L. Carrubba, NOAA and A. Dempsey, BioImpact (July 12, 2016) (NMFS FOIA production doc. 0.7.805.5064). In September 2016, the DPNR sent a letter requiring that Coral World, within 180 days of completion of the dolphin enclosure, submit a modification for Coral World’s TPDES Permit to include discharge from this enclosure. Exhibit 30: USVI DPNR DEP to Trudie Prior, Coral World, re: Proposed Dolphin Enclosure Project – TPDES Permit Requirements, Sept. 12, 2016 (NMFS FOIA production doc. 0.7.805.5065-000001.pdf).

While the TPDES permit expired in November 2018, it has reportedly been renewed (Exhibit 31: Renewed TPDES permit (FOIA request pending), despite numerous violations in the past by Coral World. Exhibit 32: Results for Coral World from the EPA ECHO database, identifying the facility as currently Significant/Category 1 Noncompliant. NMFS absolutely must not allow a transport of dolphins to Coral World—as an import now or as a domestic transfer in the future—as long as Coral World is *routinely* non-compliant with its TPDES permit. Only and until Coral

World is removed from the Significant/Category 1 Noncompliant category for its discharges into Water Bay and Coki Point can any transfer of dolphins under NMFS jurisdiction be contemplated, let alone allowed.

### 3. Conflicts with Water Bay tourism

Since the transfer of four dolphins from Dolphinaris Arizona to Coral World in February 2019, local contacts on St. Thomas have reported to AWI that boats and jet skis have been operating in very close proximity to the sea pen (some tourism operators appear to be located directly adjacent to the dolphin enclosure). In one instance caught on video by a drone,<sup>13</sup> a speed boat passed the sea pen at high speed and then abruptly slowed down and stopped. Particularly for dolphins who were born, grew up, and have lived only in tanks (the Dolphinaris dolphins), this sort of boating behavior would likely be very disturbing. Abrupt changes in speed and noise output are known to be disturbing to wild dolphins<sup>14</sup> and are always discouraged (guidelines) or prohibited (regulations) when there are rules in an area with whale watching.<sup>15</sup> Speed changes (and thus noise output from the engine) should always be gradual and boats should not slow down or be brought up to speed closer than 100 yards from the animals. The vessel operators near Coral World's new dolphin enclosure should either be instructed to observe these guidelines or simply be relocated altogether. Of course, siting the dolphin enclosure in such close proximity to vessel operators of this type was ill-advised from the outset.

If NMFS is to allow this dolphin import, it should place conditions into the permit requiring a slow wake zone and a navigational buffer of 50-100 yards around the dolphin enclosure.

### 4. Dolphins already present at Coral World

In April 2019, AWI obtained documentation through FOIA that detailed the process by which NMFS authorized the transfer of dolphins from Dolphinaris Arizona to Coral World in mid-February 2019. In short, Dolphinaris requested an emergency waiver of the 15-day notification requirement for the transport of its two dolphins, which NMFS approved in consultation with APHIS. Additionally, Dolphin Quest had submitted a 15-day transport notification for its two dolphins that were on loan to Dolphinaris. In an internal email, NMFS stated, “[p]ending APHIS approval, all 4 dolphins will be transported to Coral World in the very near future.” Exhibit 33: Email chain re: Waiver for Dolphinaris AZ to Coral World Transfer/Transport (Feb. 12, 2019) (NMFS FOIA production doc. 2019-000755\_UR8).<sup>16</sup>

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<sup>13</sup> See <https://youtu.be/CataGhcXGN4> (last visited May 15, 2015).

<sup>14</sup> See, for example, Nowacek, S. M., Wells, R. S. and Solow, A. R. 2001. Short-term effects of boat traffic on bottlenose dolphins, *Tursiops truncatus*, in Sarasota Bay, Florida *Mar. Mamm. Sci.* 17: 673-688, available at <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1748-7692.2001.tb01292.x>.

<sup>15</sup> See, for example, <https://wwhandbook.iwc.int/en/responsible-management/benefits-and-impacts-of-whale-watching> and <https://iwc.int/wwguidelines#manage>

<sup>16</sup> In a letter dated February 6, 2019, “[g]iven the abnormal series of four bottlenose dolphin deaths, including that of Dolphin Quest animal NOA0006062, since September 2017,” NMFS granted the request for a waiver of the 15-day notification and authorized transport to occur upon receipt of the letter. NMFS stated that “there appears to be valid medical concerns necessitating that the transport occur immediately.” Exhibit 34: J. Harrison, NMFS to M. Campbell, Dolphin Quest (Feb. 6, 2019), NMFS FOIA production doc. 2019-000755\_UR14. On February 11, the

On the night of February 19, 2019, four dolphins were transferred from Dolphinaris Arizona to Coral World. We understand there was an urgent need to remove the dolphins from Dolphinaris after the facility experienced four deaths within a 16-month period. However, we believe these dolphins should have been returned to their facilities of origin (Dolphin Quest Hawaii and Six Flags Discovery Kingdom), and we are very concerned about the placement of these dolphins into Water Bay.

Despite the “valid medical concerns” noted by NMFS, the public display import application for these three additional dolphins states “[q]uarantine is not necessary, due to... the known health of the involved dolphin populations.” This is not logical; either there are valid medical concerns, making quarantine vital, or quarantine is not necessary because there *are* no medical concerns. These conclusions are mutually exclusive. NMFS must clarify the quarantine situation before any decision is made on this permit application. (We are concerned that free-ranging dolphins who are occasionally seen passing Coki Point would be at risk from pathogens these dolphins may have carried from Arizona. However, more relevant to this import permit application, we are concerned that the dolphins from Bermuda may be exposed to these pathogens as well. This import may thus pose an “unnecessary risk” to the health and welfare of the dolphins being imported (see 50 C.F.R. § 216.34), given the unintended presence of the Dolphinaris Arizona dolphins at Coral World, as well as the exposure of the dolphins from Bermuda to the sewage contamination that appears to be routine in Water Bay.)<sup>17</sup>

Additionally, the application does not clearly contemplate how many dolphins will already be present at Coral World, in one place stating that “[o]ne or more of [the six dolphins allowed in the first year of operation by local permits] may be at the facility prior to the import.” The application, original and revised, does not specifically reflect the transfer of the four dolphins from Dolphinaris, but NMFS must absolutely consider their presence when assessing the impact of this proposed import on the three Bermuda dolphins.

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general manager of Dolphinaris Arizona wrote to NMFS requesting emergency transfer waiver approval for two dolphins, Ping and Sonny, from Dolphinaris Arizona to Coral World “because we feel it will be best for these two animals to be transferred with the other two tank mates (Liko and Noelani) who are also going to Coral World due to the high mortality rates at this facility.” Exhibit 35: Email chain re: Transfer/Transport Dolphinaris Coral World (Feb. 11, 2019), 2019-000755\_UR6.

<sup>17</sup> The addition in the Supplemental Application Documents of the April 15, 2019 Chicago Zoological Society’s (CZS) Veterinary Letter to NMFS does not change our views on this. The letter notes that CZS-Brookfield Zoo has reviewed the complete medical records of the Dolphinaris dolphins now living at Coral World (said records should also be made available to the public), as well as “all publically available materials related to the death of four dolphins at the Dolphinaris Arizona facility.” (We note this language suggests CZS-Brookfield Zoo did *not* review the full medical and necropsy records of the animals who died at Dolphinaris, a significant omission.) CZS stated it did not “see evidence of a common cause of death among the Arizona dolphins,” that “the animals at Coral World *appear* in good health” (emphasis added) and it concluded there is no perceived risk of infectious disease. However, without more publicly available evidence, these are not convincing arguments that there is no risk to the dolphins in Bermuda. A common cause of death is not necessary for there to be a problem in exposed survivors, such as a communicable disease. Moreover, we are troubled by Dr. Adkesson’s declaration that the dolphins “appear” to be in good health, given he was able to review the surviving animals’ complete medical records—apparently absent his own veterinary examination, he would not commit himself further than this.

## V. Brookfield Zoo

Brookfield Zoo, established in 1934 by the CZS, opened the first inland dolphinarium in the country in 1961.<sup>18</sup> A 1975 description of that tank stated it was 100 feet long, 25 feet wide and ranging from 6 to 18 feet deep, with a capacity of 190,000 gallons of water.<sup>19</sup> A redesigned exhibit opened in June 1987 as four pools, the largest being a 50,000 square foot pool that is 25 feet deep, with three smaller pools (a semi-circular medical pool and two circular holding pools, each 14 feet deep) interconnecting to it via gates.

During the 1972 Senate hearings that led to passage of the MMPA, public display industry testimony in opposition to the anticipated Harris Bill, S. 1315, and other proposed marine animal legislation, noted “a total of 182 porpoises (dolphins) have been dealt with... since [this series of] captures were made in May 1955” and in 1961, six dolphins were sent to Brookfield Zoo.<sup>20</sup>

During this era, like other U.S. facilities, Brookfield Zoo engaged in captures of wild dolphins from waters off the coast of the United States, as permitted under the MMPA by NMFS. See, e.g. Exhibit 37: 40 Fed. Reg. 20,332 (May 9, 1975); Exhibit 38: 40 Fed. Reg. 50,298 (Oct. 29, 1975); Exhibit 39: 41 Fed. Reg. 2,841 (Jan. 20, 1976). In 1989, the public display industry established a voluntary moratorium on the capture of bottlenose dolphins from the Gulf of Mexico and Atlantic waters due to a lack of information about stock structure and poor population estimates in some areas.<sup>21</sup> By the early 1990s, Brookfield Zoo transitioned to obtaining its dolphins from already captive populations. See, e.g., 56 Fed. Reg. 7,835 (Feb. 26, 1991); 56 Fed. Reg. 30,736 (July 5, 1991).

Brookfield Zoo has a breeding loan agreement with Dolphin Quest Bermuda—several of its dolphins are held there and all three of the dolphins proposed for import were born at Dolphin Quest but belong to the CZS (interestingly, Table 1 in the application notes that one of the dolphins, NOA0010155, belongs to Dolphin Quest, yet the two letters in Document 5 in the application file state that all three dolphins belong to the CZS), as they are progeny of mothers born at Dolphin Connection in Florida, a Brookfield Zoo satellite facility. In 2010, NMFS issued a permit to Brookfield Zoo to import two captive-born bottlenose dolphins (we presume progeny resulting from the breeding loan), one male and one female, from Dolphin Quest Bermuda. See File No. 15498, 75 Fed. Reg. 42,689 (July 22, 2010).

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<sup>18</sup> Steve Dale, Zoo pool design is big splash with dolphins, *Chicago Tribune*, June 14, 1987, available at <http://www.chicagotribune.com/news/ct-xpm-1987-06-14-8702140410-story.html#share=email~story>.

<sup>19</sup> See *id.*; see also 40 Fed. Reg. 50,298.

<sup>20</sup> Exhibit 36: Hearings before the Subcommittee on Oceans and Atmosphere of the Committee on Commerce, U.S. Senate, 92nd Congress 2nd Session on S. 685, 1315, 2579, 2639, 2871, 3112, 3161 and amendment 1048, ocean mammal legislation, at 659 (1972), and in 2 Legislative History of the Marine Mammal Protection Act of 1972: P.L. 92-522: 86 Stat. 1027: October 21, 1972 I (1972) (statement of Burton Clark, Vice President and General Manager of Miami Seaquarium).

<sup>21</sup> Hayes, S.A., Josephson, E., Maze-Foley, K., Rosel, P.E. 2017. *US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments—2016*. NOAA Technical Memorandum NMFS-NE-241 (Woods Hole, Massachusetts: Northeast Fisheries Science Center).

The application does not clearly state how many dolphins are currently present at Brookfield Zoo. Yet the website Cetabase (along with other media sources) reports that there are currently seven bottlenose dolphins there, five female and two male; four of the current seven were born at Brookfield Zoo.<sup>22</sup> Over the past five years, the facility has experienced four bottlenose dolphin deaths, including one female, Maxine, who lived to only 3.5 years of age, and reportedly died of a bacterial infection.<sup>23</sup> “Two dolphin calves died not long after being born at the zoo in late 2014, losses attributed to the species’ high infant mortality rate. In 2011 a 4-year-old died after apparently colliding with another dolphin shortly before a show and suffering a skull fracture in what was termed a freak accident.”<sup>24</sup> After what is now almost five decades of holding dolphins for display, Brookfield Zoo is still experiencing dolphin deaths and accidents that are alarming.

## VI. Transport Concerns

Even when conducted by experienced personnel using established practices, the transport and handling of dolphins is stressful and increases the dolphins’ risk of death.<sup>25</sup> However, the Applicant claims that dolphins experience “little to no effect in transport.” Application at p. 13. This claim is false and their only support for it is an outdated edition of *The CRC Handbook of Marine Mammal Medicine*, from 2001. However, the latest edition of this reference, from 2018, states that “Marine mammal stress research has advanced considerably in recent years.”<sup>26</sup> Given this, citing a reference that is 18 years old is inappropriate. A number of papers,<sup>27</sup> all published after the application’s single reference, note that cetaceans are in fact subject to stress during handling and transport, stress that can lead to social and/or physiological impacts (including immune suppression) that may have negative welfare consequences. The application’s glib

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<sup>22</sup> Cetabase: Brookfield Zoo, Living: <http://www.cetabase.org/captive/cetacean/brookfield-zoo/> (last visited April 30, 2019).

<sup>23</sup> *Id.* at Dead; Steve Johnson, Young Brookfield Zoo dolphin dies unexpectedly, *Chicago Tribune*, June 12, 2018, available at <https://www.chicagotribune.com/news/local/breaking/ct-ent-brookfield-zoo-dolphin-dies-20180612-story.html>.

<sup>24</sup> *Id.* at Steve Johnson (2018).

<sup>25</sup> Noda, K., Akiyoshi, H., Aoki, M., Shimada, T., and Ohashi, F. 2007. Relationship between transportation stress and polymorphonuclear cell functions of bottlenose dolphins, *Tursiops truncatus*. *J. Vet. Med. Sci.* 69: 379–383; Spoon, T.R. and Romano, T.A. 2012. Neuroimmunological response of beluga whales (*Delphinapterus leucas*) to translocation and a novel social environment. *Brain Behav. Immun.* 26: 122–131; Small, R.J. and DeMaster, D.P. 1995. Acclimation to captivity: A quantitative estimate based on survival of bottlenose dolphins and California sea lions. *Mar. Mamm. Sci.* 11: 510–519.

<sup>26</sup> Atkinson, S. and Dierauf, L.A. 2018. Stress and marine mammals. In F.M.D. Gulland, L. Dierauf, and K. Whitman (eds.), *CRC Handbook of Marine Mammal Medicine*, 3rd edition (New York, New York: CRC Press), at 163.

<sup>27</sup> See, for example, Romano, T., Keogh, M., and Danil, K. 2002. *Investigation of the Effects of Repeated Chase and Encirclement on the Immune System of Spotted Dolphins (Stenella attenuata) in the Eastern Tropical Pacific*. Administrative Report LJ-02-35C (La Jolla, California: Southwest Fisheries Science Center); Desportes, G., Buholzer, L., Anderson-Hansen, K., Blanchet, M-A., Acquarone, M., Shephard, G., Brando, S., Vossen, A., and Siebert, U. 2007. Decrease stress, train your animals: The effect of handling methods on cortisol levels in harbour porpoises (*Phocoena phocoena*) under human care. *Aq. Mamm.* 33: 286–292; *id.* at Noda *et al.* (2007); Morisaka, T., Kohshima, S., Yoshioka, M., Suzuki, M., and Nakahara, F. 2010. Recent studies on captive cetaceans in Japan: Working in tandem with studies on cetaceans in the wild. *Intl. J. Comp. Psych.* 23: 644–663; and *id.* at Spoon and Romano (2012).

dismissal of any risks associated with cetacean transport is unwarranted and raises questions about the objectivity of the Applicant.

## **VII. Conclusion**

We strongly feel this permit application is premature. It is vague and imprecise about when the transport will occur, which facility will receive the dolphins (particularly the third dolphin), and therefore which personnel will be involved. It is difficult not to conclude that this transfer is an attempt to “launder” these dolphins by involving a relatively non-controversial facility (Brookfield Zoo) when all along the intended destination is a highly controversial one (Coral World). If NMFS does not request the withdrawal of this permit application until the Applicant is better prepared to offer concrete details of the transport plans, at the least it should handle this application as if the final destination for all three dolphins is Coral World. The concerns related to Coral World are significant and diverse and completely different from the concerns related to Brookfield Zoo. If NMFS concludes a transfer to Coral World should be denied, the entire import permit application should be denied, as the risk of the dolphins “passing through” Brookfield—held there for some period of time before being sent to Coral World as a domestic transfer without public input—is too great.

Very truly yours,



Georgia Hancock  
Of Counsel



Naomi A. Rose, Ph.D.  
Marine Mammal Scientist

Cc: Dr. Peter Thomas, Executive Director, Marine Mammal Commission  
Hon. Jesus G. Garcia  
Hon. Richard J. Durbin  
Hon. Tammy Duckworth  
Dr. Barbara Kohn, USDA APHIS

Table 1. Water tests for Water Bay and Coki Point from Jan 4, 2018 until April 26, 2019. Weeks with a beach advisory that it was unsafe for human swimming noted with an 'X' and pink highlight (i.e., failed its Clean Water Act-mandated water quality test, with a reading greater than 70 colonies of enterococci per 100 ml of water—each beach advisory indicates conditions for the previous week). Weeks when reading was close to or in excess of USDA acceptable levels for captive marine mammals (for coliforms, 1000 most probable number) in red highlight.

Data obtained from: <https://dpr.vi.gov/home/weekly-beach-advisory/>

NV = not verified; NS = not sampled; NA = not available (exact value not online, but test failure noted) \

	BEACH ADVISORY	WATER QUALITY DATA	BEACH ADVISORY	WATER QUALITY DATA
	Water Bay	Enterococci colonies in #100ml	Coki Point	Enterococci colonies in #100ml
May 10, 2019 Beach Advisory	X	450		3
May 2, 2019 Beach Advisory		<10		<10
April 26, 2019 Beach Advisory	X	87	X	73
April 12, 2019 Beach Advisory		5		15
April 5, 2019 Beach Advisory		62	X	130
March 7, 2019 Beach Advisory	X	180		16
March 1, 2019 Beach Advisory		36	X	230
February 22, 2019 Beach Advisory		22	X	400
February 15, 2019 Beach Advisory		31		20
February 8, 2019 Beach Advisory		34		62
February 1, 2019 Beach Advisory	NV	53	NV	5
January 25, 2019 Beach Advisory	NS		NS	
January 18, 2019 Beach Advisory		63		2
January 11, 2019 Beach Advisory		27		60
January 4, 2019 Beach Advisory	NS		NS	
December 30, 2018 Beach Advisory	NS		NS	
December 21, 2018 Beach Advisory		17		22

December 13, 2018 Beach Advisory		63	X	860
December 7, 2018 Beach Advisory	X	71		27
November 30, 2018 Beach Advisory	X	>600		3
November 21, 2018 Beach Advisory		5	X	650
November 15, 2018 Beach Advisory*		9		<1
November 9, 2018 Beach Advisory*	X	400	X	140
November 2, 2018 Beach Advisory	X	490		6
October 26, 2018 Beach Advisory		40	X	450
October 19, 2018 Beach Advisory		38		6
October 12, 2018 Beach Advisory	X	140		5
October 4, 2018 Beach Advisory		30		54
September 27, 2018 Beach Advisory		28	X	126
September 21, 2018 Beach Advisory	X	120	X	40
September 14, 2018 Beach Advisory		25		37
September 7, 2018 Beach Advisory		52	X	1550
August 31, 2018 Beach Advisory		10		31
August 24, 2018 Beach Advisory		12		17
August 17, 2018 Beach Advisory	X	140		18
August 10, 2018 Beach Advisory	X	370		43
August 3, 2018 Beach Advisory	X	70	X	260
July 27, 2018 Beach Advisory	NS		NS	
July 20, 2018 Beach Advisory	X	100	X	70
July 13, 2018 Beach Advisory		20		31
July 6, 2018 Beach Advisory	NS		NS	
June 28, 2018 Beach Advisory	X	256	X	288
June 22, 2018 Beach Advisory		31	X	97
June 15, 2018 Beach Advisory	X	73	X	109
June 8, 2018 Beach Advisory	X		X	
June 1, 2018 Beach Advisory	X	529	X	441



May 25, 2018 Beach Advisory			X	
May 18, 2018 Beach Advisory		10	X	211
May 10, 2018 Beach Advisory	X	NA		NA
May 4, 2018 Beach Advisory		<10		52
April 20, 2018 Beach Advisory		10	X	98
April 13, 2018 Beach Advisory		NA		NA
April 6, 2018 Beach Advisory	NS		NS	
March 28, 2018 Beach Advisory		36		44
March 23, 2018 Beach Advisory		5	X	240
March 16, 2018 Beach Advisory		10		8
March 9, 2018 Beach Advisory		10		20
March 2, 2018 Beach Advisory		40		28
February 23, 2018 Beach Advisory		30	X	290
February 16, 2018 Beach Advisory	X	200	X	210
February 9, 2018 Beach Advisory	X	129		52
February 2, 2018 Beach Advisory		36		21
January 26, 2018 Beach Advisory		70		1
January 19, 2018 Beach Advisory	X	NA		NA
January 12, 2018 Beach Advisory		23		6
January 4, 2018 Beach Advisory		45		40
	<b>Water Bay</b>		<b>Coki Point</b>	
<b>TOTAL WEEKS FAILED</b>	21		24	
<b>TOTAL WEEKS TESTED</b>	59		59	
<b>TOTAL PERCENTAGE FAILURE</b>	35.6%		40.7%	