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Docket No. APHIS-2006-0085
Regulatory Analysis and Development
PPD, APHIS, Station 3A-03.8
4700 River Road, Unit 118
Riverdale, MD 20737-1238

May 4, 2016

**Re: Proposed Amendments to the Animal Welfare Act Regarding Mammals
in Captivity: Docket No. APHIS-2006-0085**

Dear Dr. Kohn,

The following comments are submitted on behalf of The Humane Society of the United States (“The HSUS”) and our members and constituents. We are pleased that the United States Department of Agriculture (“USDA”) Animal Plant Health Inspection Service (“APHIS” or the “agency”) is at long last undertaking efforts to amend the Animal Welfare Act (“AWA”) regulations to update the standards concerning the humane handling, care, treatment, and transportation of marine mammals in captivity. 81 Fed. Reg. 5629 (Feb. 3, 2016) (the “Proposed Rule”). We agree that facilities that display captive marine mammals, and especially those engaging in interactive programs (which have been operating in a regulatory void since such programs’ regulations were suspended in 1999, 64 Fed. Reg. 15920 (Apr. 2, 1999)), must be held to appropriate standards to ensure the humane care and handling of these highly intelligent and vulnerable animals. Indeed there are a number of changes outlined in the Proposed Rule that promise to improve conditions for marine mammals held in captivity. However, a number of the proposed standards will maintain an inadequately protective status quo, and still others appear to impermissibly weaken the minimum standards for the care and exhibition of these animals.

In 2002, the HSUS commented on the Advanced Notice of Proposed Rulemaking for this rule (67 Fed. Reg. 37731 (May 30, 2002)).¹ At that time, we suggested improvements to the minimum space requirements as well as improved standards for air, water and noise. In the ensuing fourteen years, additional scientific information has come to light that must be used as a basis for re-evaluating minimum standards for captive marine mammals. Some of this information appears to have informed certain aspects of the Proposed Rule, but

¹ HSUS’ 2002 comments have been attached at the end of this document, and are incorporated by reference herein.

in other cases the updated information does not appear to have been considered—or was even arbitrarily dismissed—in this process.

Additionally, APHIS improperly relies heavily on performance standards in the Proposed Rule. Performance standards are inherently subjective, and therefore difficult for both the regulated entity to comply with, and for APHIS to enforce. As with other areas of APHIS' AWA regulations, quantifiable standards against which both the regulated entity and USDA inspector can measure compliance are more enforceable.

While we continue to have serious reservations regarding the ability of captive facilities to humanely and safely display marine mammals, what follows are comments on aspects of the Proposed Rule that we believe would result in necessary improvements to the lives and conditions of these creatures. We focus on areas of the Proposed Rule that remain weak and require strengthening to ensure humane care and treatment of captive marine mammals, and particularly those used in interactive programs.

Positive Changes to the Regulations

There are many aspects of the Proposed Rule with which we agree. We applaud APHIS for these modifications of the existing AWA regulations.

Definitions (§ 1.1)

We agree with the proposed change in terminology from “swim with” to “interactive” programs, as this does indeed better reflect the diversity of programs that bring the public in direct contact with marine mammals. *See* Proposed Rule at 5632.

The change in definition of “interactive area” helps clarify how such areas will be defined, and thus is an important step to make the Proposed Rule more enforceable. *See id.* at 5631. Similarly, the definition of an “interactive session” is an important clarification. *See id.*

Indoor Facilities (§ 3.102)

APHIS' proposed provision for ventilation at indoor facilities (§ 3.102(b)) is a welcome change from the current performance-based criteria, as it provides quantitative and measurable ventilation rates that can readily be enforced. *Compare* 9 C.F.R. § 3.102(b) *with* Proposed Rule at 5649. We also agree with the proposed requirement in § 3.102(c) that indoor facilities must provide at least six hours of uninterrupted darkness during each 24-hour period. APHIS states that “[t]o the extent possible, [the facility] should approximate the lighting conditions encountered by the animal in its natural environment.” Proposed Rule at 5649. This latter clause is particularly important, as many facilities are open to the public—and thus are providing artificial light in hours that are not normally daylight in the natural environment. However, we are concerned that wording such as “to the extent possible” will make enforcement difficult since the “extent possible” is highly subjective.

Outdoor Facilities (§ 3.103)

The proposal to require minimal shade for animals is an improvement over the status quo, which contains no such specifications. *See* 9 C.F.R. § 3.103(b). Nonetheless, in many places APHIS maintains performance standards (e.g., the shaded areas must “cover sufficient area to afford all the animals within the enclosure protection from direct sunlight while not limiting their ability to move

or not be too close to another animal” (Proposed Rule at 5635)). We note that an exhaustive review of the design of captive display facilities by Couquiaud, acknowledged that in the wild most cetaceans have no ability to seek shade—but she also acknowledged that in the wild they can compensate by being submerged most of the time.² She continued “In captivity, however, animals tend to float at the surface more often and get sunburned. It is therefore important to provide them with shade, especially in tropical and equatorial regions where solar intensity is very high.”³ Further, as noted by the USDA’s Big Cat and Marine Mammal Specialist, Laurie J. Gage, a lack of shade contributes to serious eye disorders in captive pinnipeds.⁴

We support the requirement that facilities provide shaded areas for animals, but APHIS must adopt more quantitative and less subjective requirements for shade. Additionally, as discussed below, animals held in outdoor facilities must be provided with periods of uninterrupted darkness at night.

Space Requirements (§ 3.104)

As we will discuss below, it is unfortunate that APHIS did not make more changes toward improving overall minimum space requirements; however, HSUS does support the addition of a requirement that “pool exit and entry areas be of a depth and grade that allows for easy access and exit for [marine mammals] of all ages and infirmities.” Proposed Rule at 5636-37. This requirement that intends to allow greater ingress, egress, and resting areas would allow pinnipeds and polar bears easier access to vital dry resting areas, and would provide safer resting areas for sea otters.

Concerns with the Proposed Rulemaking

APHIS has a duty under the AWA to insure that marine mammals used for exhibition are provided humane care and treatment. 7 U.S.C. § 2131(1). As time progresses and new science emerges, APHIS must update its AWA regulations to reflect current science and current understandings of what constitutes humane care and to incorporate best available science. *See* 75 Fed. Reg. 79710, 79715 (Dec. 20, 2010) (APHIS stating that its AWA regulations should be amended when “advances have been made and new information has been developed with regard to the housing and care of marine mammals.”). Yet the Proposed Rule leaves in place many standards that were established up to thirty years ago, and are no longer relevant. The Proposed Rule arbitrarily leaves in place standards that are inadequately protective of the welfare of marine mammals, and proposes other standards that would actually weaken protections. The following summarizes our concerns with the proposed rule.

General Concerns

APHIS states that it will base proposed standards on “current industry and scientific knowledge and expertise” (see Proposed Rule at 5629), but it cites few references to indicate source documents, let alone a range of published, objective information sources used by the agency to substantiate its decisions to maintain or weaken many of its standards. The agency does, however, accept

² Couquiaud, L. 2005. A survey of the environments of cetaceans in human care. *Aquatic Mammals* 31: 279-285. Available at:

http://www.aquaticmammalsjournal.org/attachments/article/448/Aquatic%20Mammals%2031_3.pdf at p. 339. This paper is attached at the end of these comments.

³ *Id.*

⁴ Gage, L. 2008. Captive Pinniped Eye Problems, We Can do Better! *Journal of Marine Mammals and their Ecology*. v.4. n. 2. 2011. At: http://www.oers.ca/journal/volume4/issue2/Gage_Galley.pdf.

unpublished industry assertions as the basis for some of its proposals.⁵ Using industry assertions for setting minimum standards is equivalent to the dubious notion of a scientific paper relying solely on “personal communications” rather than relying on empirical data and published literature as a basis for drawing scientific conclusions.

Notably, “an agency’s refusal to consider evidence bearing on the issue before it constitutes arbitrary agency action” that is unlawful and will be afforded no deference by the courts. *Butte County v. Hogen*, 613 F.3d 190, 194 (D.C. Cir. 2010). Although APHIS has cited recently published literature in some places in the Proposed Rule, the agency appears to have completely ignored a substantial body of literature, including a 2005 publication by Couquiaud that provided information on best practices globally for, among other things, lighting, noise, space and water temperatures and quality.⁶ This publication provides updated information on the morphology of marine mammals, habitat requirements and information on the conditions in which they are held in a variety of domestic and international settings. In many cases, the survey results of global industry practices indicate the need for, and practicality of instituting, improved minimum standards for holding captive marine mammals.

Concerns with Specific Sections of the Proposed Rule

Definitions (§ 1.1)

APHIS stipulates that regulations governing interactive programs will not apply to so-called petting pools where members of the public are not allowed to actually enter the enclosure but can touch and feed captive cetaceans. Proposed Rule at 5632. We strongly oppose this exclusion. In 2009 HSUS, along with five other conservation and animal welfare organizations, submitted to APHIS a petition for rulemaking to adequately address the dangers of petting pools.⁷ That petition contains detailed information about the necessity of regulating petting pools, and includes citations to many scientific studies that APHIS must consider before finalizing the Proposed Rule.

Moreover, although the entire body of the human interacting with cetaceans may not enter the water as with “swim with” programs, the public is allowed to touch and even feed the animals in these pools. This alone would seem to violate § 3.105(c), which specifies that food “must be given by an employee or attendant responsible to management who has the necessary knowledge to assure that each marine mammal receives an adequate quantity of food to maintain it in good health.” 9 C.F.R. § 3.105(c).

From a practical standpoint, petting pool programs allow a virtually unregulated exchange of possible pathogens between cetaceans and visitors.⁸ Moreover, holding food near an animal’s

⁵ For example, as we discuss further below, proposed changes to “average adult lengths,” that in turn determine tank sizes is based on information “compiled by the Alliance of Marine Mammal Parks and Aquariums (AMMPA) and the AZA.” Proposed Rule at 5636.

⁶ Couquiaud, *supra* note 2.

⁷ This petition is attached at the end of these comments and incorporated herein.

⁸ 60 Fed. Reg. at 4383. (Citing D. Wilkinson, NMFS, Report to Assistant Administrator for Fisheries, Program Review of the Marine Mammal Stranding Networks, Office of Protected Resources, 45-50, at www.nmfs.noaa.gov/pr/health/publications.htm). See also T.D. Hunt, et al. 2008. Health risks for marine mammal workers. *Diseases of Aquatic Organisms* 81:81-92.

mouth invites the very real possibility of injury, and a number of incidents have been documented in the media.⁹ SeaWorld has reportedly voluntarily limited or entirely abandoned this activity.¹⁰

Petting pools are inherently unsafe for both the animals and humans, and should be entirely prohibited in this rulemaking.¹¹

Variations (§ 3.100)

The concept of a variance is completely incompatible with the AWA, which sets bare minimum standards, and therefore the proposed § 3.100 is unlawful. Congress passed the AWA to, among other things, “insure that animals intended for . . . exhibition purposes . . . are provided humane care and treatment.” 7 U.S.C. § 2131(1). Congress found that it was “essential to regulate” the care, handling, and treatment of captive animals to this end. *Id.* § 2131. Thus, under the AWA, USDA is responsible for promulgating regulations that are consistent with Congress’ purpose—regulations that insure basic humane care and treatment. As APHIS’ AWA regulations represent its view of the minimum standards required for captive animals’ humane care and treatment, allowing variances from such standards would necessarily allow treatment that APHIS admits is inhumane, and would thus thwart Congress’ intentions in passing the AWA and defy USDA’s statutorily-granted authority.

The proposed § 3.100 would allow facilities housing captive marine mammals to bypass the necessary bare minimum standards of humane care and handling set out in § 3.104—bare minimums for space requirements, accessibility requirements for infirm and elderly animals, and similar necessary provisions. *See* Proposed Rule at 5648, 5650-55. Nowhere other than § 3.100 do the AWA or its implementing regulations allow a variance for minimum animal care standards. *See* 7 U.S.C. § 2131 et seq.; 9 C.F.R. § 1.1 et seq.¹² APHIS admits that such allowances would not provide any benefit to the captive animals, but rather would merely provide “more flexibility” for the regulated community. Proposed Rule at 5633, 5645.

In the Proposed Rule, APHIS acknowledges that variances for minimum space requirements are “no longer applicable,” since APHIS does not intend to increase the space requirements. Proposed Rule at 5632. The HSUS agrees that there should be no variances available for facilities to come into

⁹ See two examples with photographs: “Girl Bitten While Feeding Dolphin at Sea World.” CBS News 12/3/12. At: <http://www.cbsnews.com/news/girl-bitten-while-feeding-dolphin-at-seaworld/> and PETA Files Another Complaint Against SeaWorld San Antonio. San Antonio News 2/26/14. <http://www.mysanantonio.com/business/local/article/PETA-files-another-complaint-against-SeaWorld-San-5270032.php>.

¹⁰ SeaWorld Ends Public Dolphin Feedings. Orlando Sentinel. 2/23/15 At: <http://www.orlandosentinel.com/business/tourism/os-seaworld-dolphin-feeding-20150223-story.html>.

¹¹ See National Association of State Public Health Veterinarians, *Compendium of Measures to Prevent Disease Associated with Animals in Public Settings*, 2013, 243 JAVMA 1270 (2013), available at <http://nasphv.org/Documents/AnimalContactCompendium2013.pdf> (containing updated information on the dangers of programs allowing public contact with animals).

¹² APHIS’ regulations and guidance do allow for variances in certain contexts--but other than in § 3.100 those circumstances are never exemptions from minimum standards of care. For example, § 2.75(a)(2) allows for a “variance” from using a specific form. 9 C.F.R. § 2.75(a). APHIS guidance allows for a variance for a specific type of perimeter fencing, but only if the facility has sufficiently sturdy and effective barriers to meet the purposes of the regulatory requirement. *See* USDA, Animal Welfare Inspection Guide at A-39 (Sept. 2013), https://www.aphis.usda.gov/animal_welfare/downloads/Animal%20Care%20Inspection%20Guide.pdf. These variances do not directly impact the humane handling and care of the animals. These variances do not allow a facility to treat its animals inhumanely, as the proposed § 3.100 would.

compliance with thirty-year-old standards. But the proposed § 3.100 appears to allow for variances from all of § 3.104, including for minimum space requirements. *See id.* at 5648, 5650-55. Thus, APHIS' chosen regulatory language is arbitrary and capricious, as it is unsupported by its own conclusions.

If APHIS decides to move forward with allowing variances under § 3.100, we are additionally concerned that the agency has proposed allowing variances to be issued without setting time limits on them.¹³ To avoid a de facto permanent variance, variances should not be granted for the lifetime of an animal as stipulated in the proposed §3.100(d) but instead for a short time period necessary for making changes to enclosures. *See id.* at 5648-49. Further, APHIS should consult with the Marine Mammal Commission before considering granting any variance applications.

Indoor Facilities (§ 3.102)

With regard to § 3.102(a), APHIS states that, at the time of the negotiated rulemaking in 1995, all parties acknowledged “the importance of maintaining marine mammals within their optimum temperature range,” although at that time there was inadequate publicly available information on the topic. *Id.* at 5633. Twenty years have now passed and there *is* further information available that could have and should have been consulted and used in setting the new proposed standards. In the Proposed Rule, APHIS makes no substantive changes to air and water temperature standards, states it is “unaware of any definitive publications that combine the habitat ranges of marine mammals with the environmental temperature ranges in that habitat,” and requests comments thereon. *Id.* There are in fact publications providing this sort of information. For example, APHIS must consult the 2005 Couquiaud paper, which is well-referenced and has species-specific information on size and on temperature ranges in the wild that are appropriate for controlled settings.¹⁴ APHIS must incorporate the best available science and revise the proposed § 3.102 accordingly before finalizing the Proposed Rule.

Outdoor Facilities (§ 3.103)

(a) Temperatures

APHIS avers that it found no guidance for establishing appropriate temperature ranges, and states that it “will develop guidelines for appropriate temperature ranges for marine mammal species based on scientific and published data when, and if, it becomes available” and requests information on this topic. Proposed Rule at 5633. As we have previously pointed out, APHIS has ignored the information in the omnibus review undertaken by Couquiaud, which also provided guidance on appropriate temperature ranges. APHIS must establish appropriate temperature ranges based on those supplied in Table 2.3 of Couquiaud, as this constitutes the best available scientific information.¹⁵

¹³ Under the Proposed Rule, there is only a requirement that the facility provide the time period requested for a variance (§3.100(b)(4)), which appears to provide an open-ended continuation of otherwise non-compliant and unacceptable conditions with no apparent consequences.

¹⁴ Couquiaud, *supra* note 2, at Table 2.3 which, according to the authors “displays water temperature range in the wild as an indication of what the water temperature range should be in a controlled environment.”

¹⁵ *Id.*

(b) Shelter

As noted above, we agree with the proposal to require shaded areas. Our only concern is that APHIS continues to use performance standards that are subjective and unenforceable. *See* Proposed Rule at 5649.

(c) Lighting

As noted above, all facilities should be required to provide a reasonable period of uninterrupted light at night to better approximate natural lighting conditions. Facilities must also give special consideration for polar animals that would normally be exposed to greater seasonal variation in day length and they should be mandated to adjust lighting seasonally.

Unaddressed Standards for Outdoor Facilities

Although APHIS asked in its 2002 Advanced Notice of Proposed Rulemaking whether noise thresholds should be established for each species, (67 Fed. Reg. at 37732) and the HSUS provided comments supporting the need for these standards; we are concerned that APHIS has neglected in this Proposed Rule to address standards related to noise in and around outdoor facilities.

There is, in fact, information available indicating that loud noise causes both a stress response and behavioral abnormalities and should be addressed.¹⁶ Couquiaud found in the case of captive marine animals that “[t]he quality of their acoustical environment in human care is critical and often has been neglected. It is important to suppress human-made background noise, and to design a habitat that reduces sound reverberation,” and the author provided recommendations to address some aspects of sound mitigation.¹⁷ Couquiaud did not provide suggestions for specific means of mitigation of loud noises common to the operation of the programs and facilities in large multi-purpose entertainment parks or fair grounds where music, amusement park rides, fireworks, crowd noise and other disruptions occur near or overhead of pools in which animals reside, other than recommending that there be a quiet aerial environment. APHIS must provide species-specific standards for noise levels and mitigation of noise as suggested in Couquiaud.

Space Requirements (§ 3.104)

We have a number of concerns with this section; not only with some changes that were made but, more importantly, with changes that were *not* made. APHIS states that it is “not proposing changes to the minimum space requirements (i.e., minimum horizontal dimension (MHD), depth, volume, and surface area) at this time.” Proposed Rule at 5635. This statement is made shortly after pointing out that some industry commenters in 2002 stated that it would be financially unfeasible to retrofit facilities that did not meet improved standards. *Id.* It appears that the decision not to require improved and more humane minimum space requirements was based largely on the perceived cost to licensees to retrofit or expand marine mammal enclosures. This is an improper and unacceptable rationale for failing to require improved standards for size, depth, volume or

¹⁶ Couquiaud, *supra* note 2, at p. 295 stating “Acoustical interference, which cetaceans cannot escape in captivity, can cause endocrine changes, increased aggression, decreased appetite, and irreversible hearing loss” citing Stoskopf & Gibbons, 1994. (Stoskopf, M. K., & Gibbons, E. F. (1994). Quantitative evaluation of the effects of environmental parameters on the physiology, behavior, and health of animals in naturalistic captive environments. In E. F. Gibbons, E. J. Wyers, E. Waters, & E. W. Menzel (Eds.) Naturalistic environments in captivity for animal behavior research (pp. 140-160). Albany: State University of New York Press

¹⁷ *Id.*

surface area of enclosures. Most facilities already meet or exceed these standards and, with regard to humane standards for animals, it is inappropriate to regulate for the lowest common denominator. Decades after these standards were originally set, APHIS must set a new bar to insure animal welfare, not decrease protections.

The HSUS believes that it is exceedingly difficult to meet the specialized needs of exotic animals in captivity, and this is especially true for marine mammals, as captivity in a confining tank cannot provide the stimulation, the needed healthful exercise or the optimal social environment for animals. However, because we wish to assure the most humane conditions possible for animals that are being held in captivity, we offer critique and a means to address deficiencies in the minimal standards for special requirements.

In our comments from 2002, the HSUS pointed out that the United Kingdom, Brazil, and Italy all had larger minimum standards for space. More than a decade later, this is still true and the U.S. is far from being a leader in establishing minimum standards for special requirements for captive marine mammals. This is a situation APHIS should be eager to remedy. Instead, the agency has proposed to retain standards that are based on available information at the time the regulations were promulgated in 1979, and amended in 1984. After stating that APHIS does “not have sufficient scientific or other supporting data to propose space requirements changes at this time,” the agency requests citation of published literature that would support changes in space requirements. *Id.* at 5635.

Much has been learned about husbandry and space requirements in the past thirty or more years. In 2005, Couquiaud provided a summary of spatial dimensions of tanks in facilities around the world.¹⁸ The minimum surface area per cetacean found globally was 14 square meters (the median surface area per cetacean was 90.5 square meters with a minimum of 14 square meters and a maximum = 195 square meters).¹⁹ Even these global minimums require more space than in APHIS’ Proposed Rule, and thus the current standard in the U.S. does not reflect current best practices, even though the agency has indicated that best practices should, and will, be the basis of its proposals. The U.S. should raise its standard of care to be in line with minimum standards globally.

Simple analogies paint a grim portrait of the result of adhering to the inadequate, outdated minimum standards. Current regulations require a minimum of 37 square meters as the dimensions for a dry resting and social activity area for up to two polar bears which is equivalent to approximately 400 square feet. This is the size of the average living room in a large house in the U.S.²⁰ It is difficult to imagine two polar bears—weighing 500-1000 pounds each²¹—resting and engaging in meaningful social activity in an area the size of a living room for years on end. For the times when they are in the water, the minimum horizontal dimension of a pool for two polar bears is proposed to be 8 feet and the minimum depth of a pool for polar bears is 5 feet, which is barely longer than the length of a single adult male polar bear and shallower than the height of a large standing polar bear. Such confined spaces would severely limit mobility of the animals.

¹⁸ Couquiaud, *supra* note 2, at pp. 315-19.

¹⁹ *Id.* At 315-316

²⁰ In the U.S., the average Living room dimension is 16 x 16 feet. Luxury homes are said to be more on the order of 20 x 20 feet—the same sized area as the dry resting area for two adult polar bears. See: Average Living Room Dimensions at: <http://www.dimensionsinfo.com/average-living-room-dimensions/>

²¹ Adult male polar bears generally weigh 772–1,543 lb and measure 7 ft 10 –9 ft 10 in total length. Adult females are roughly half the size of males and normally weigh 331–551 lb, measuring 5 ft 11 –7 ft 10 in length. In Hemstock, Annie (1999). *The Polar Bear*. Manakato, MN: Capstone Press. Page 4 et seq.

The concerns we have regarding the stipulated “average sizes” used by APHIS extend as well to concerns for the resulting minimum dimensions for all species. For example, based on information provided in Table 1 for Species Group I animals, in the case of bottlenose dolphins (among the most commonly exhibited marine mammals), minimum dimensions, based on a “average adult size” would appear to accept a circular tank with a diameter of 7.3 meters and a depth of 1.8 meters. Proposed Rule at 5651. APHIS acknowledges that dimensions were largely based on circular pools which were the norm 30 year ago but are no longer as prevalent. *Id.* at 5635. We note that the minimum depth requirement for bottlenose dolphins of 1.8 meters would not even allow an animal to orient itself vertically and still remain submerged. As is stipulated in Table 1, the “average adult length” for this species is 2.74 meters. *Id.* at Table 1. Further, it appears that a pool of this size would be expected to accommodate more than one bottlenose dolphin. This is entirely unacceptable. Table 1 should be revised to reflect the size ranges from Couquiaud, not assertions of the regulated party.

With regard to minimum horizontal dimensions, APHIS proposes to add new performance-based language in § 3.104(a)(2), authorizing itself to “determine if partial obstructions in a horizontal dimension compromise the intent of the regulations and/or significantly restrict the freedom of movement of the animal(s) in the enclosure.” *Id.* at 5635. However, the plain English definition of the word “obstruction” would result in a situation in which the freedom of movement *is* of necessity restricted.²² The definition must be refined such that the “minimum horizontal dimension” is the minimum distance in the horizontal plane that an animal can move without full or partial restriction. To do otherwise undermines the intent and leaves enforcement subjective.

As previously stated, we take issue with information in Table 1 in this section that provides average adult length and corresponding minimum size for enclosures. APHIS states that, based on information on size provided by the Alliance of Marine Mammal Parks and Aquariums (“AMMPA”) and the Association of Zoos and Aquariums (“AZA”), the “proposed update would reflect the average adult lengths based on the actual sizes of certain species of marine mammals in exhibition facilities.” Proposed Rule at 5636. This industry proposal for “average adult lengths” does not comport with more appropriate published literature which provides estimates of larger size averages and is contrary to advice of another federal agency. The Proposed Rule acknowledges, but then ignores, the advice of the National Oceanic and Atmospheric Administration (“NOAA”), which advised that “these [industry] figures do not take into account animals potentially added from the wild (stranded or taken by AMMPA permit), nor does it provide information on morphometrics that may have been published more recently.” *Id.* APHIS should heed the advice of NOAA. Any revision to requirements that results in *decreased* space requirements for orcas, belugas, and bottlenose dolphins as suggested by the industry does not reflect the best available science, and would thus be arbitrary.

Current APHIS regulations state that the average adult body length for bottlenose dolphins is 2.7 meters. *See* 9 C.F.R. § 3.104, Table III. The size of the animal on which space requirements are based should be chosen so as to result in sufficient space to accommodate animals at or near maximum size rather than average size, since sizes will vary among individuals and, as NOAA has advised, non-releasable animals may be taken in from the wild via stranded rescue. There is more recent guidance on animal sizes and space needs than APHIS has used. Couquiaud recommends “bas[ing] pool and enclosure dimensions on the maximum known adult body length, or Maximum Adult

²² Obstruction is defined in the Oxford dictionary as “A thing that impedes or prevents passage or progress.” See: 1.1 at: http://www.oxforddictionaries.com/us/definition/american_english/obstruction

Length (MAL). This would ensure that animals are given ample space to display natural behaviors,” stating, “I suggest that the MAL of the largest sex of the largest species housed in a pool be used to estimate the appropriate dimensions.”²³ As an example, Couquiaud provides 3.81 and 3.67 meters as maximum lengths for male and female bottlenose dolphins, respectively.²⁴

To underscore the importance of using mean versus maximum lengths, we offer an analogy based on human experience. The average adult male human is 69 inches in height and average females are 64 inches tall.²⁵ However, heights of individuals clearly vary from much shorter to much taller in order to produce such an average, and most of us know a number of people who are quite a bit taller than average. When buying cars, both comfort and safety are important to drivers—including taller than average drivers. Auto makers do not simply provide headroom and legroom sufficient to accommodate the comfort and safety needs of “average sized” men and women, but instead provide extra head and leg room as a means of acknowledging that averages provide for neither comfort nor safety of passengers who are larger than the average. Just as we design cars for persons sized larger than average, we must provide space for animals that accommodates individuals at or closer to maximum sizes rather than mean size. In the case of animals in captivity, we are not simply providing for their comfort for a few hours—as is the case for automobiles—but rather are defining the minimum space in which they may have to spend their entire lives.

At the very least, APHIS should heed the advice of NOAA to use more precautionary and protective sizes for captive animals and it should better consult the minimum standards used in other countries. It is not clear from reading the Proposed Rule that this was done. APHIS must also use the maximum animal sizes as suggested in Couquiaud.

Water Quality (§ 3.106)

APHIS states that it has proposed “some changes to the regulations concerning water quality in facilities. These changes would implement the results of our review of recent studies of water quality and waterborne pathogens affecting marine mammals.” Proposed Rule at 5629. As we have noted earlier, APHIS has overlooked a major source of information regarding best practices for captive marine mammals.

Chapter 6 in Couquiaud’s review includes a lengthy discussion of “Life Support Systems” and includes a summary table (Table 6.2) that provides information on acceptable standards for a variety of factors related to water quality and the recommended frequency of monitoring.²⁶ Among the factors for which recommendation are made are: water temperature, salinity, pH, turbidity, dissolved oxygen, coliform bacteria, total bacteria and other key factors key to assuring good water quality. The recommendations include acceptable ranges for many of these factors. This publication and its literature review was apparently ignored in APHIS’ review of studies and standards. The standards provided in Couquiaud’s Table 6.2 should be adopted since they reflect the best available science and provide citations to published literature on standards for water quality.

²³ Couquiaud, *supra* note 2, at p. 297.

²⁴ *Id.* at p. 299, Table 2.3.

²⁵ Body Measurements, U.S. Center for Disease Control. At : <http://www.cdc.gov/nchs/fastats/body-measurements.htm>.

²⁶ Couquiaud, *supra* note 2, at p. 355.

Interactive Programs (§ 3.111)

As an initial matter, HSUS opposes programs that allow interaction between members of the public and dangerous exotic animals.²⁷ There is potential danger inherent in interactions with marine mammals. Although we are pleased that APHIS is seeking to impose enforceable standards on interactive programs with marine mammals, many of the proposed regulatory requirements, actually appear to weaken the standards that the agency attempted to put in place two decades ago. APHIS has recently taken action to strictly scrutinize public contact with other dangerous animals²⁸ and APHIS should continue to limit public contact with marine mammals and other dangerous animals for the wellbeing of both the animals and the public.²⁹

Should APHIS continue to allow interactive programs, it must adjust the Proposed Rule to strengthen protections. APHIS states that “proposed changes to 3.111 are intended to address the need to monitor interactive programs, while giving consideration to program histories.” Proposed Rule at 5640. And, with regard to this statement, it asserts in footnotes 2 and 24 of the Proposed Rule that “interactive programs have been operating for over 20 years without any indications of health problems or incidents of aggression in marine mammals, as evidenced by medical records maintained by licensed facilities and observations by experienced APHIS inspectors.” *Id.* at 5632, 5640. This is either disingenuous or demonstrative of a lack of rigor in seeking or evaluating evidence to the contrary. We do, however, point out that one of the references cited by APHIS does in fact document just such incidents, though it is just over twenty years old.³⁰ That said, if facilities have not documented incidents of aggression and inspectors have not witnessed them in the past twenty years, these sorts of incidents *have* been documented in the media and other public fora and should have been considered.³¹

(a) Space Requirements

The requirements in this proposed section are performance-based and subjective, and to some extent rely on the regulated entity to determine what degree of “free and unrestricted access” is available to animals. *See* Proposed Rule at 5656. It is improper that the facility and inspector only

²⁷ *See* 78 Fed. Reg. 47215 (Aug. 5, 2013) (HSUS and other organizations petitioned USDA for amendments to the animal handling regulations to prohibit public contact with big cats, bears, and nonhuman primates of any age; petition hereby incorporated by reference).

²⁸ APHIS, Handling and Husbandry of Neonatal Nondomestic Cats (March 2016), https://www.aphis.usda.gov/publications/animal_welfare/2016/tech-neonatal-nondomestic-cats.pdf.

²⁹ *See* National Association of State Public Health Veterinarians, *supra* note 10.

³⁰ Samuels, A. and T.R. Spradlin. 1994. Quantitative behavioral study of bottlenose dolphins in Swim-With-The-Dolphin programs in the United States. Final Report to the National Marine Fisheries Service, Office of Protected Resources. 25 April 1994. 57 pp. Samuels, A. and T.R. Spradlin. 1995. Quantitative behavioral study of bottlenose dolphins in Swim-With-Dolphin programs in the United States. *Marine Mammal Science*, 11(4): 520-544.

³¹ *See*, as a few examples: “Dolphin Bites Girl,” ABC News 3/2012 (also noting that there were two prior incidents at the same facility) at: <https://search.yahoo.com/yhs/search?p=dolphin+bites+you+tube&ei=UTF-8&hsparm=mozilla&hsimp=yhs-003>; “Seaworld Dolphin Bites nine-year-old girl during visit to Texas Park”, Daily Mail 2/2014 at: <http://www.dailymail.co.uk/news/article-2569898/SeaWorld-dolphin-bites-nine-year-old-girl-family-visit-Texas-park.html>; “Dolphin ‘humping’ a Tourist. National Geographic Wild 9/2012 at: <https://www.youtube.com/watch?v=UWNmqYRI7MY>. Further, a discussion of literature on the subject of aggression is found in Curtain, S. and Wilkes, K. 2007 Swimming with Captive Dolphins: Current Debates and Post-Experience Dissonance. *Int. J. Tourism Res.* 9, 131–146 (2007) at: http://www.academia.edu/364333/Swimming_with_Captive_Dolphins_Current_Debates_and_Post-Experience_Dissonance (citing studies by Frohoff, 2004, Oram 1997, Whale and Dolphin Conservation Society 2005 and 2006).

assess this “during non-interactive periods,” which would not provide a true and meaningful picture of what animals can or cannot do with swimmers in the water. *See id.*

(b) Water Clarity

Simply requiring that “sufficient water clarity be maintained so that attendants are able to observe cetaceans and humans at all times,” is subjective and thus in the eye of the beholder. *See id.* This is not an enforceable standard and is thus improper.

(c) Employees

This section of the current regulations has objective qualifications, including that the manager and head trainer have at least six years of experience with captive cetaceans, and requiring one full-time staff member with at least three years of experience as well as a consulting veterinarian with specified experience with marine mammals. 9 C.F.R. § 3.111(c). However, in its proposed revisions, APHIS states it would amend this section as it believes “absolute [minimum] years of experience and training” are not necessary to specify and facilities require greater flexibility in hiring. Proposed Rule at 5641. As a result, the performance standards under this subsection are subjective and, once again, difficult to enforce.

For trainers and attendants, the regulation is amended to simply require that head trainers have “demonstrable in-depth knowledge of the husbandry and care requirements of the family and species of marine mammals being exhibited, demonstrable knowledge of and skill in current accepted professional standards and techniques in animal training and handling, and the ability to recognize normal and abnormal behavior and signs of behavioral stress in the animal families and species being exhibited.” *Id.* at 5656. Further, that trainers and attendants must merely have “knowledge and skill level sufficient to safely conduct and monitor an interactive session.” *Id.* The words “sufficient” skill and “demonstrable” knowledge are left up to individual facilities to define. As a result, the interpretation of what constitutes “sufficient” skill would likely vary among facilities from a high standard to a far lower one. Standards should be uniform across the industry. While the regulated entity may appreciate the “flexibility” APHIS wishes to offer, the proposed change in standards will result in a decrease in standards and protections for captive marine mammals. We are opposed to APHIS amending “current regulations, which focus on the person having a specific number of years of appropriate experience” and replacing it with a subjective guideline for flexible minimal qualifications. *See id.* at 5641.

With regard to veterinarians, the current requirement is for “the equivalent of 2 years full-time experience with cetacean medicine within the past 10 years, and who is licensed to practice veterinary medicine.” 9 C.F.R. § 3.111(c)(5). But APHIS now states that “current requirements in § 2.40 and § 3.110 provide sufficient oversight and guidance on this subject,” and removes the requirements of an attending veterinarian from § 3.111(c) altogether. Proposed Rule at 5641. 5656. However, § 2.40 and § 3.110 contain merely generic requirements, not necessarily germane to a veterinarian who is working specifically with marine mammals. The AWA regulations’ general definition of an “attending veterinarian” simply states that he or she be certified by American Veterinary Medical Association (AVMA) and have “training and/or experience in the care and management of the species being attended.” 9 C.F.R. § 1.1. Given the very specialized needs and biology of different species of marine mammals, it is necessary to retain the current specifications in § 3.111(c) rather than reducing these specifications to performance standards.

(d) Handling

With regard to animals eligible to participate in “swim with” programs, APHIS proposes to remove the “provision that limits program animals to cetaceans.” Proposed Rule at 5641. This appears to

allow interactive programs to permit in-water interactions with a broader range of species; but as noted above, public contact with exotic animals generally undermines animal welfare and APHIS should ensure a narrow tailoring of any rule authorizing such contact. For example, APHIS must make clear that public contact with polar bears – an inherently dangerous species– is prohibited. The following incidents illustrate the need to prohibit public contact or proximity.

On March 28, 1990, in Cincinnati, Ohio, a keeper at the Cincinnati Zoo had her right forearm bitten off by a polar bear as she was feeding the animal. A jury later awarded the keeper nearly \$3.5 million. The keeper charged that the zoo had made the 800-pound bear hostile by keeping him in a 10-foot cage where he had no lighting, recreation, or ventilation.^{32,33} On July 30, 1994, in Anchorage, Alaska: a polar bear at the Alaska Zoo badly mauled a woman who got too close to his cage to take photos.³⁴ On September 12, 1994, in Anchorage, Alaska, a polar bear at the Alaska Zoo mauled a teenager who got too close to his cage. The 19-year-old was hospitalized in serious condition with leg injuries. This is the same bear who mauled a woman in July.³⁵

To the extent interactive programs continue, the HSUS does support the change in proposed § 3.111(d)(4) that would require that there be at least one attendant per marine mammal in an interactive session.

(d)(1) Interactive Time

This section of the regulations would be newly designated as § 3.111(d)(1), but was previously designated as § 3.111(e)(1). *See* 9 C.F.R. § 3.111(e)(1); Proposed Rule at 5656. The proposed change would result in a substantial change in the amount of time animals can be subjected to interactions with humans. APHIS states that “information provided by licensees with long-standing interactive programs . . . suggested that the marine mammals would not be harmed by a modest increase in interactive time per day.” *Id.* Therefore, at the behest of licensees, APHIS proposes to increase the amount of interaction time from two hours per day to three hours per day. *Id.* This is a 50% increase in interaction time. Neither the general public nor a mathematician would describe a 50% increase in *anything* as “modest;” an increase of this magnitude might more accurately be described as a “significant increase.”

The motivating factor behind making this change appears to be less a concern for the welfare of animals – which is what APHIS is statutorily mandated to regulate – than for the proverbial bottom line of licensees. As revealed in Table 1, APHIS calculates that that the proposed increase in interaction time is anticipated to generate *additional annual revenue of about “\$23 million to about \$24 million dollars”* for the industry. *Id.* at 5646 (emphasis added). We adamantly oppose this change. APHIS should be eliminating, or at the very least decreasing, the time marine mammals are exposed to members of the public—not increasing this time to the animals’ likely detriment.

(d)(4) Session Attendants

This section will be newly designated § 3.111(d)(4), but was previously designated as § 3.111(e)(4). *See* 9 C.F.R. § 3.111(e)(4); Proposed Rule at 5657. Regulations currently limit the ratio of swimmers to staff to 3:1. 9 C.F.R. § 3.111(e)(4), However, APHIS proposes to drop a requirement for a fixed ratio and instead proposes to “require that there be a sufficient number of session

³² Kristen Delguzzi, "Stober says she warned of danger Polar bear didn't belong in small cage, she testifies," Cincinnati Inquirer, November 11, 1994.

³³ "Ex-keeper at Cincy zoo wins over lost arm," Associated Press, December 1, 1994.

³⁴ "Tourist bitten after getting too close to bear's cage," Knoxville News-Sentinel (AP), July 31, 1994.

³⁵ "Polar bear strikes again," New York Times (AP), September 13, 1994.

attendants (which includes trainer, handler, or attendants) to effectively conduct the session in a safe manner. “ Proposed Rule at 5641. The words “sufficient,” “effectively,” and “safe” are entirely subjective and thus these performance standards are entirely impossible to enforce to ensure that no harm comes to animals, swimmers, or staff. APHIS should continue to require a specific maximum swimmer to staff ratio such as is currently in regulations.

(f) Recordkeeping

The proposed standards stipulate that any injury be reported to APHIS in a timely manner. *Id.* at 5657. However, this relies on the regulated entity self-reporting incidents that might be to its logistic or economic disadvantage. In such situations, regulated entities are unlikely to self-report problems.³⁶ While self-reporting is likely to be under-reporting, we agree with APHIS that it is necessary to expand reporting to include incidents that involve staff or other members of the public and incidents that occur during training sessions.

APHIS also proposes to replace § 3.111(f)(4), which requires regulated entities to maintain records for three years, with the newly designated § 3.111(f)(3), requiring that records be kept for a single year only. *See* 9 C.F.R. § 3.111(f)(4); Proposed Rule at 5644. We oppose this change. The current requirement should not pose a burden to facilities, since recordkeeping is already required annually and, with current computer technology, reporting is done electronically and does not require inconvenient rooms of filing cabinets of paper records. Therefore, it should not prove a burden to facilities to maintain records over longer period of time than a single year, and this longer data set provides a better context in which to evaluate problematic situations.

Conclusion

We are pleased to see that APHIS is considering updating the standards currently in place, as they are well over twenty years old. Even the agency’s Advanced Notice of Proposed Rulemaking was issued in 2002—fourteen years ago. However, as our comments indicate, there are manifest flaws in the Proposed Rule which would, in some cases maintain an inadequate status quo, and in other cases weaken necessary minimum protections for captive marine mammals. For that reason, the Proposed Rule must be substantially revised before it can be finalized. The current approach does not sufficiently meet the requirements of the AWA that APHIS’ regulations “insure that animals intended for exhibition purposes are provided humane care and treatment.” 7 U.S.C. §2131(1).

Sincerely,



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³⁶ For example, see: Credle, V. R., D. P. DeMaster, M. M. Merklein, M. B. Hanson, W. A. Karp, and S. M. Fitzgerald (eds.). 1994. NMFS observer programs: minutes and recommendations from a workshop held in Galveston, Texas, November 10-11, 1993. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-OPR-94-1, 96 pp. Finding that vessel owner self-reports of marine mammal injury and mortality in their fishing gear were dramatically under-reported compared to reports from a vessel-based, independent government observer program.

Attachments:

Attachment 1: HSUS comments on 2002 ANPR for this rulemaking

Attachment 2: Couquiaud, L. 2005. A survey of the environments of cetaceans in human care. *Aquatic Mammals*. 31: 279-285.

Attachment 3: Petition for rulemaking to address dangers inherent in dolphin petting pools