

August 29, 2022

Via email

Hon. Summer Stephan
San Diego County District Attorney
summer.stephan@sdcda.org

Re: Cruelty to Animals Charges Against SeaWorld San Diego

Dear Ms. Stephan:

On behalf of People for the Ethical Treatment of Animals (PETA), I am writing to request your investigation and pursuit of appropriate cruelty to animals charges against SeaWorld and those of its employees responsible for the excessive and repeated infliction of torment, needless suffering, and unnecessary cruelty to orcas held at the San Diego facility pursuant to Penal Code section 597(b), and for the failure to provide them with an adequate exercise area as required by Penal Code section 597t.

On August 5, 2022, a paying customer observed and documented an orca, apparently Corky, being attacked by other orcas in the same tank, causing her to suffer a large wound on the right side of her body when she was unable to escape the aggression due to the crowded, small, cramped tanks in which SeaWorld confines orcas in knowing disregard of the risks to their welfare.¹ This is the latest of many such injuries at SeaWorld, including an incident in which another orca died attacking Corky. In stark contrast, in wild orca populations, incidents like this are rare, and when they do occur, individuals are able to flee from conflict to avoid physical injury. The company's statement that Corky's injury stemmed from "normal" behavior begs comparison to a defendant claiming innocence for knowingly confining incompatible dogs who attack and harm or kill each other.

As detailed in the attached appendix, this incident confirms what cetacean experts have made clear for years: captivity is physically and psychologically devastating to the orcas confined at SeaWorld. Orcas are highly social, long-lived, far-ranging, and psychologically and culturally complex apex predators, making them especially vulnerable to the suffering inflicted on them in their unnatural and deprived environments at SeaWorld.

Orcas are one of the fastest animals in the sea, traveling at speeds of up to nearly 28 miles per hour, 138 miles per day, and many thousands of miles over time. They regularly dive to nearly 1,000 feet below the ocean's surface and swim almost

¹ Alexander Nguyen, *SeaWorld Says Claim of Whale Attack in Video Released by PETA Is Normal Orca Behavior*, KBPS (Aug. 8, 2022), <https://www.kpbs.org/news/local/2022/08/08/20-year-old-seaworld-orca-dies-after-suffering-infection>.

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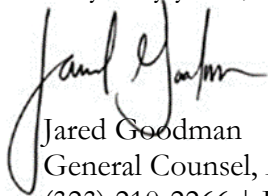
continuously. At SeaWorld, they can do none of that: SeaWorld keeps orcas in a series of small, gated, and barren concrete tanks that prevent them from performing even the most fundamental natural behaviors; they cannot swim at high speeds, dive, forage, or escape dangerous physical conflicts with the other incompatible orcas. Independent peer reviewed literature, investigation, the testimony of former trainers, and SeaWorld's own records demonstrate that the complete deprivation of all that is natural and important to these orcas causes them extreme stress and suffering, poignantly demonstrated by their abnormal behaviors including breaking and wearing down their teeth by biting on the concrete sides and steel gates of the tanks, listlessly floating at the surface or bottom of the tanks, and excessive aggression towards humans and other orcas. The orcas' survival demonstrates not that they are held in adequate conditions, but incredible perseverance through abject cruelty.

We believe any reasonable investigation will reveal that over many years, SeaWorld's employees and officers have knowingly inflicted cruelty on the orcas held captive at its San Diego facility, clearly and sufficiently establishing their culpability for these offenses, including the recent attack. Neither the fact that the orcas have been confined and suffering for many years, nor that they receive veterinary care while held in these cruel conditions, absolve SeaWorld of its responsibility for this conduct. The orcas' suffering at SeaWorld, inflicted for fleeting human entertainment, is also entirely "unnecessary." Yet SeaWorld has refused to prevent their suffering by constructing and transferring them to one or more protected coastal sanctuaries where they can live out their lives in a more natural habitat with far greater freedom of movement, separate from incompatible animals, and engage in the behaviors that they have been denied.

By any reasonable measure, holding the orcas in extreme confinement in circumstances of constant conflict, stress, agitation, injury, and suffering constitutes cruelty to animals.² We encourage you to consult with independent orca experts and make them an integral part of your investigation and we stand ready to assist you in facilitating contact with those experts.

Please let me know when we can schedule a meeting to discuss this matter further. Thank you for your consideration.

Very truly yours,



Jared Goodman
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Enclosure

² SeaWorld's license to exhibit orcas under the federal Animal Welfare Act (AWA) is wholly irrelevant to determining whether SeaWorld has violated state law. The AWA is abundantly clear that it does not preempt more protective state and local laws, 7 U.S.C. § 2143(a)(8), and state cruelty-to-animals charges are routinely brought against licensed exhibitors.

APPENDIX

I. California Cruelty to Animals Law

California's primary cruelty statute, Cal. Penal Code § 597, broadly provides that:

every person who . . . tortures [or] torments . . . any animal, or causes or procures any animal to be so . . . tortured [or] tormented . . . ; and whoever, having the charge or custody of any animal, either as owner or otherwise, subjects any animal to needless suffering, or inflicts unnecessary cruelty upon the animal, or in any manner abuses any animal, . . . is, for each offense, guilty of a crime punishable pursuant to subdivision (d).

Id. § 597(b). Torment, torture, and cruelty are defined collectively to include “every act, omission, or neglect whereby unnecessary or unjustifiable physical pain or suffering is caused or permitted.” *Id.* § 599b. “Unnecessary” is ordinarily defined as “not necessary,” and therefore means not “needed or required,” not “essential,” and not “required to be done.”³ A violation of this provision is punishable as a felony by imprisonment of up to three years, a fine of up to \$20,000, or both; or alternatively, as a misdemeanor by imprisonment in a county jail for up to a year, a fine of up to \$20,000, or both. *Id.* § 597(d).

Additionally, section 597t provides that “[e]very person who keeps an animal confined in an enclosed area shall provide it with an adequate exercise area.” *Id.* § 597t. A violation of this section is a misdemeanor, punishable by imprisonment of up to six months, a fine of up to \$1,000, or both. *Id.*

Sections 597(b) and 597t describe general intent crimes—a conviction requires only proof of criminal negligence. *People v. Adams*, No. D065680, 2015 WL 1886961, at *6 (Cal. Ct. App. Apr. 27, 2015), *reh'g denied* (May 14, 2015); *People v. Speegle*, 62 Cal. Rptr. 2d 384, 390-91 (Cal. Ct. App. 1997). Criminal or gross negligence exists where the defendant's conduct is “such a gross departure from the reasonably prudent that it amounts to reckless indifference with actual or imputed knowledge of the consequences.” *Speegle*, 62 Cal. Rptr. 2d at 390, n.7.

The statutes apply to “corporations as well as individuals; and the knowledge and acts of any agent of, or person employed by, a corporation in regard to animals transported, owned, or employed by, or in the custody of, the corporation, must be held to be the act and knowledge of the corporation as well as the agent or employee.” Cal. Penal Code § 599b.

As detailed below, SeaWorld confines orcas in conditions that inflict such psychological harm that they lead to stress, aggression, abnormal repetitive behaviors, and physical injuries from attacks by other orcas. SeaWorld need not have intended to inflict torture, torment, needless suffering or unnecessary cruelty, or intend to deprive the orcas of an adequate exercise area; it is sufficient that they have continued to confine these orcas in woefully inadequate enclosures notwithstanding their

³ “A dictionary is a proper source to determine the usual and ordinary meaning of a word or phrase in a statute.” *People v. Ervin*, 62 Cal. Rptr. 2d 231, 234 (Cal. Ct. App. 1997); see *Unnecessary Definition*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/unnecessary>; *Necessary Definition*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/necessary>; *Necessary Definition*, THE AMERICAN HERITAGE DICTIONARY OF THE ENGLISH LANGUAGE, <http://www.thefreedictionary.com/necessary>; *Necessary Definition*, OXFORD DICTIONARIES, http://www.oxforddictionaries.com/us/definition/american_english/necessary.

awareness of the suffering caused by the orcas' confinement. Indeed, this suffering has been well-documented in the company's own records—and apparently disregarded—for many years. Moreover, this suffering cannot reasonably be considered “necessary” under any definition of the word. In no way is SeaWorld's confinement of orcas for mere human entertainment in any way needed, essential, or required to be done. Rather, it is done solely in the pursuit of maximizing corporate profit and, given SeaWorld's knowledge and reckless indifference of the consequences of their conduct, is properly chargeable as cruelty to animals.

II. The Conditions of Captivity at SeaWorld Cause Orcas to Suffer Unnecessarily

Orcas are highly intelligent and social apex predators, and living in concrete tanks at SeaWorld causes them extensive physical and psychological harm. Among other things, the physical limitations of the artificial enclosures at SeaWorld preclude their ability to exercise, disperse from incompatible pairings, or engage in natural behaviors such as swimming at high speeds or diving, causing extreme stress and frustration. Accordingly, these animals exhibit abnormal behaviors indicative of psychological distress.⁴ At SeaWorld, the orcas bite on the gates and concrete sides of the tanks that confine them, lay listlessly at the surface or bottom of the tank for extended periods, display aggression towards humans, and charge at and injure each other.

A. Orcas Are Highly Intelligent and Social Mammals Whose Brains Are Highly Developed in Areas Responsible For Complex Cognitive Functions Including Self-Awareness, Social Cognition, Culture, and Language

Orca brains share—and, in some respects, exceed—a number of important features with human brains that are associated with complex intelligence. According to neurologist and leading orca researcher Dr. Lori Marino, “The brains of orcas are like those of humans . . . in all of the ways that make a difference for their response to the chronic stresses of a concrete tank.”⁵

As with the human brain, orca brains are much larger than expected for their body size,⁶ meaning that they have more brain tissue available to serve complex cognitive functions, such as self-awareness (sense of self identity), social cognition, culture, and language.⁷ In addition, the neocortex (the outer wrinkled surface of the cerebrum) of the orca brain is highly differentiated, i.e., different parts have different specialized functions, and has even greater surface area—which indicates the amount of information processing possible—than the human brain.⁸ The neocortex is involved in integrating information from the different senses to form mental representations and is also part of the cerebral cortex—the system that processes higher-order thinking and complex and abstract processes, such as language, self-awareness, metacognition (the ability to think about your own

⁴ See Lori Marino & Toni Frohoff, *Towards a New Paradigm of Non-Captive Research on Cetacean Cognition*, 6 PLOS ONE 1, 3 (2011).

⁵ Remarks of Dr. Lori Marino, PETA Press Conference on Sea Sanctuaries (Apr. 27, 2016).

⁶ Lori Marino, *A Comparison of Encephalization between Odontocete Cetaceans and Anthropoid Primates*, 51 BRAIN, BEHAV. & EVOLUTION 230 (1998) (even when orcas' large body size is taken into account, their brains are still two and a half times larger than expected).

⁷ See Part II.B, *infra*.

⁸ Patrick R. Hof et al., *Cortical Complexity in Cetacean Brains*, 287A ANATOMICAL REC. 1142, 1151 (2005); Lori Marino, *Cetacean Brains*, in THE ENCYCLOPEDIA OF NEUROSCIENCE 807-810 (Larry R. Squire ed., 2008); Lori Marino et al., *Neuroanatomy of the Killer Whale (Orcinus Orca) from Magnetic Resonance Imaging*, 281A ANATOMICAL REC. 1256, 1262 (2004) [hereinafter *Neuroanatomy of the Killer Whale*].

thoughts), social cognition, and theory of mind (the ability to think about and infer the thoughts of others).

The orca brain also contains spindle-shaped cells known as von Economo neurons in the areas of the brain that are thought to be involved in high-level cognitive processing, such as “feelings of empathy, guilt, embarrassment, and pain, as well as judgement, social knowledge, and consciousness of visceral feelings.”⁹

Finally, orca brains possess a highly developed paralimbic region,¹⁰ which is believed to be involved in processing and integrating emotional information with other thought processes. In fact, the structure of this area suggests that the orca brain may have evolved certain kinds of sophisticated or complex functions and thought processes related to emotion-processing that did not evolve in the human brain—or at least not to the same extent.

In accord with their complex intelligence and cognitive abilities, orcas are among the most highly social, far-ranging, communicative and culturally complex mammals on the planet. Orcas have been shown to have self-awareness,¹¹ and distinct personalities.¹² Orca populations are distinguishable by diet,¹³ morphology, dialect, social structure, genetics, and other behaviors.¹⁴ Their transmission of these group-specific vocal and physical behaviors from generation to generation in complex multicultural societies is recognized as a form of culture,¹⁵ unrivaled by any species other than humans.¹⁶ Orcas are therefore highly dependent on learning from their parents and other members of the social group in order to develop into functioning, socially competent adults.¹⁷ Long-term studies of wild orcas have shown that many populations live in stable social groups with strong and long-term associations and some individuals, such as mothers and sons, stay together for life.¹⁸ In fact, these close relationships are so crucial that even adult offspring of a post-reproductive orca mother have been shown to have a significantly increased mortality risk in the year after their

⁹ Camilla Butti et al., *Total Number and Volume of Von Economo Neurons in the Cerebral Cortex of Cetaceans*, 515 J. COMP. NEUROLOGY 243, 244 (2009).

¹⁰ Marino, *Neuroanatomy of the Killer Whale*, *supra*.

¹¹ Louis M. Herman, *Body and Self in Dolphins*, 21(1) CONSCIOUSNESS AND COGNITION 526 (2012); Kenneth Martin & Suchi Psarakos, *Evidence of Self-awareness in the Bottlenose Dolphin (Tursiops truncatus)*, in SELF-AWARENESS IN ANIMALS AND HUMANS: DEVELOPMENTAL PERSPECTIVES (S.T. Parker et al. eds. 1994); Diana Reiss & Lori Marino, *Mirror Self-recognition in the Bottlenose Dolphin: A Case for Cognitive Convergence*, 98(10) PROCEEDINGS OF THE NAT'L ACADEMY OF SCI. 5937 (2001).

¹² Yulan Úbeda et al., *Personality in Captive Killer Whales (Orcinus orca): A Rating Approach Based on the Five-factor Model*, 133(2) J. COMPARATIVE PSYCHOLOGY 252 (2019).

¹³ E.g., Ingrid N. Visser, *First Observations of Feeding on Thresher (Alopias Vulpinus) and Hammerhead (Sphyrna Zygaena) Sharks by Killer Whales (Orcinus Orca) Which Specialise on Elasmobranchs as Prey*, 31 AQUATIC MAMMALS 83 (2005); Ingrid N. Visser et al., *Antarctic Peninsula Killer Whales (Orcinus Orca) Hunt Seals and a Penguin on Floating Ice*, 24 MARINE MAMMAL SCIENCE 225 (2008); John K. B. Ford et al., *Shark Predation and Tooth Wear in a Population of Northeastern Pacific Killer Whales*, 11 Aquatic Biology 213 (2011).

¹⁴ John K. B. Ford & Graeme M. Ellis, *Selective Foraging by Fish-Eating Killer Whales Orcinus Orca in British Columbia*, 316 MARINE ECOLOGY PROGRESS SERIES 185, 187 (2006); Luke Rendell & Hal Whitehead, *Culture in Whales and Dolphins*, 24 BEHAVIORAL AND BRAIN SCIENCES 309, 311 (2001). *See also* Suzanne Beck et al., *The Influence of Ecology on Sociality in the Killer Whale (Orcinus orca)*, 23 BEHAVIORAL ECOLOGY 1, 7-8 (2011); Deecke et al., *The Structure of Stereotyped Calls Reflects Kinship and Social Affiliation in Resident Killer Whales (Orcinus orca)*, 97 NATURWISSENSCHAFTEN 513 (2010).

¹⁵ Rendell & Whitehead, *supra*, at 320.

¹⁶ *Id.* at 309, 316.

¹⁷ *Id.* at 323.

¹⁸ E.g., *id.* at 314 (citations omitted); Robin W. Baird & Hal Whitehead, *Social Organization of Mammal-Eating Killer Whales: Group Stability and Dispersal Patterns*, 78 CAN. J. OF ZOOLOGY 2096 (2000).

mother's death.¹⁹ While other populations have more fission-fusion societies, these populations also maintain long-term associations, and the social units are based on long-term stable membership.²⁰

Given their cognitive and social complexity,²¹ it is unsurprising that orcas are particularly vulnerable to stress-related psychological and physical harm in captivity.²²

B. The Orcas at SeaWorld are Deprived of Every Facet of Their Culture and the Ability to Engage in Natural Behaviors, Causing Extreme Stress, Torment, and Suffering

SeaWorld causes “needless suffering,” “unnecessary cruelty” and “torment” by depriving the orcas of, among other things, adequate space, environmental enrichment, social stability, and the opportunity to perform natural behaviors such as swimming long distances, diving, and foraging. The confined space and repeated scheduled performances and related training eviscerates their autonomy. This deprivation is physically and psychologically harmful to orcas.²³

1. The Tanks at SeaWorld Provide Inadequate Space and Cause Stress

The tanks at SeaWorld provide woefully inadequate space for an orca. Orcas are one of the fastest animals in the sea, traveling at speeds of up to nearly 28 miles per hour.²⁴ They are also adapted for swimming extended distances and durations. Orcas have been recorded traveling nearly 140 miles per day²⁵ and many thousands of miles over time.²⁶ They regularly dive nearly 1,000 feet below the ocean's surface,²⁷ with a maximum recorded depth of 3,566 feet,²⁸ and spend 95% of their time submerged.²⁹ In the wild, orcas swim almost continuously.³⁰

¹⁹ Emma A. Foster et al., *Adaptive Prolonged Postreproductive Life Span in Killer Whales*, 337 SCI. 1313 (2012).

²⁰ See, e.g., Ingrid N. Visser, *Orca (Orcinus orca) in New Zealand Waters* (2000) (Ph.D. dissertation, U. of Auckland).

²¹ Lori Marino et al., *The Harmful Effects of Captivity and Chronic Stress on the Well-Being of Orcas*, 35 J. OF VETERINARY BEHAV. 70 (2020) (cytoarchitectonic patterns in cetaceans are far more varied and complex than previous thought...[this is] also evidence of cetacean behavioral and social complexity).

²² *Id.*

²³ *Id.* at 78.

²⁴ Terrie M. Williams, *Swimming*, in ENCYCLOPEDIA OF MARINE MAMMALS 1140, 1145 (William F. Perrin et al. eds. 2008) (orcas swim at an average ‘casual’ speed of 8.05 mph and ‘sprint’ at up to 27.96 mph); John K.B. Ford, *Killer Whale: Orcinus orca*, in ENCYCLOPEDIA OF MARINE MAMMALS 654 (William F. Perrin et al. eds., Academic Press 2002) (traveling over distance at speeds of over 20 km/h (12.43 mph)); *id.* (a mean travelling speed of 10.4 km/h (6.46 mph)).

²⁵ John W. Durban & Robert L. Pitman, *Antarctic Killer Whales Make Rapid, Round-Trip Movements to Subtropical Waters: Evidence for Physiological Maintenance Migrations?*, 8 Bio. Letters 274 (2012).

²⁶ *Id.* (5,075 nautical miles in 42 days).

²⁷ Craig O. Matkin et al., *Expanding Perspectives: Investigating Pod Specific Killer Whale Habitat with ARGOS Satellite Telemetry*, Presented at the Alaska Marine Science Symposium, Anchorage, Alaska (Jan. 2012) (orca for whom “regular dives of 200-300 m were recorded and one dive of 400 m was logged”); Robin W. Baird et al., *Factors Influencing The Diving Behaviour of Fish-Eating Killer Whales*, 83 CAN. J. OF ZOOLOGY 257, 262-63 (2005) (a population that uses “primarily near-surface waters” still dives “below 150 m on a regular basis” and up to 264 m).

²⁸ Jared R. Towers et al., *Movements and Dive Behaviour of a Toothfish-depredating Killer and Sperm Whale*, 76(1) ICES J. MARINE SCIENCE 298 (2019).

²⁹ Nat'l Marine Fisheries Serv., N.W. Reg'l Office, *Proposed Conservation Plan for S. Resident Killer Whales (Orcinus orca)* 16 (2005), available at <http://orcaspHERE.net/pdfs/SRKWpropconsplan-Oct05.pdf>.

³⁰ Rob Williams & Dawn P. Noren, *Swimming Speed, Respiration Rate, and Estimated Cost of Transport in Adult Killer Whales*, 25(2) MARINE MAMMAL SCI. 257, 257 (2009).

It is well-established in the public display industry that marine mammal enclosures “should consider the natural history and behavior of the species,” “permit the performance of most, if not all, of their natural behaviors,” and “must meet the physical, psychological and behavioral needs of the animals.”³¹ Put simply, “[m]arine mammals need enough space to allow them to perform natural behaviors with freedom of movement.”³² Small enclosures have been shown to induce stress in various species,³³ and wide-ranging species such as orcas “show the most evidence of stress and/or psychological dysfunction in captivity.”³⁴

At SeaWorld, the orcas are kept in a series of tanks that fail to provide anything approximating adequate space. They are confined to an interconnected series of gated tanks, the *largest* of which is approximately 170 feet by 80 feet, and only thirty-five feet deep—less than twice as deep as the average orca is long:

Pool	Approximate Dimensions	Approximate Surface Area
A	35' deep x 170' long x 80' wide	11,692 sf
B	15' deep x 118' long x 75' wide	9,504 sf
C	15' deep x 118' long x 75' wide	9,819 sf
D	9' deep x 53' long x 25' wide	1,489 sf
E Existing	30' deep x 125' long x 75' wide (google earth)	10,729 sf

Source: Cal. Coastal Comm'n Findings

The orcas are unable to swim any meaningful distance or dive, and are forced to spend a majority of their lives at, or just below, the surface of the water.³⁵ An orca would have to swim the circumference of the largest tank nearly 1,500 times in a single day to approximate the distance she may have swam in that time in the wild.

In addition to providing inadequate space to the orcas, SeaWorld has forcibly separated calves from their mothers and family groups to “balance” the genetic pool for breeding³⁶ and for use in performances, confined incompatible orcas from different populations together,³⁷ and suppressed cultural traditions. SeaWorld further degrades the orcas’ autonomy by imposing an enforced schedule of activity and behavior, causes boredom by holding them in a barren and unchanging

³¹ Brian Joseph & James Antrim, *Special Considerations for the Maintenance of Marine Mammals in Captivity*, in WILD MAMMALS IN CAPTIVITY: PRINCIPLES AND TECHNIQUES FOR ZOO MANAGEMENT 181, 181 (Devra G. Kleiman et al. eds. 2010).

³² *Id.* at 183; see also Laurence Couquiaud, *Special Issue: Survey of Cetaceans in Captive Care*, 31(3) AQUATIC MAMMALS 279, 327 (2005) (“Enclosures in which cetaceans are housed should be as naturalistic as possible, considering the fundamental needs of the animals before aesthetic considerations.”).

³³ See generally Kathleen N. Morgan & Chris T. Tromborg, *Sources of Stress in Captivity*, 102 APPLIED ANIMAL BEHAV. SCI. 262, 277-78 (2007).

³⁴ Georgia Mason, *Captivity Effects on Wide-Ranging Carnivores*, 425 NATURE 472 (2003).

³⁵ Oleg I. Lyamin et al., *Cetacean Sleep: An Unusual Form of Mammalian Sleep*, 32 NEUROSCIENCE BIOBEHAV. REV. 1451, 1457–58 (2008); Robert W. Osborne, *A Behavioral Budget of Puget Sound Killer Whales*, in BEHAV. BIOLOGY OF KILLER WHALES 211, 231 (Barbara C. Kirkeveld & Joan S. Lockard eds. 1986).

³⁶ Transcript of Proceedings at 651, 736, *Sec’y of Labor v. SeaWorld of Fla.* (OSHRC No. 10-1705). Amid intense public pressure, the California Coastal Commission’s rejection of a permit SeaWorld sought to breed more orcas, and a ban on orca breeding then being considered by the California legislature, which has since been enacted, SeaWorld ended its breeding program. See Joel Manby, *SeaWorld CEO: We’re Ending Our Orca Breeding Program. Here’s Why.*, L.A. Times (Mar. 17, 2016), <http://www.latimes.com/opinion/op-ed/la-oe-0317-manby-sea-world-orca-breeding-20160317-story.html>.

³⁷ See, e.g., JETT AND VENTRE, *supra*, at 1; see e.g. Tim Zimmermann, *Do Orcas at Marine Parks Injure One Another?*, <http://timzimmermann.com/2010/09/14/do-orcas-at-marine-parks-injure-one-another/> (Sept. 14, 2010).

environment, induces frustration, and inhibits their ability to carry out natural behaviors such as hunting and traveling.³⁸

Accordingly, stress and disease “is an inevitable outcome of such confinement, loss of control and deprivation,”³⁹ and “[m]any captive cetaceans display physiological and behavioral abnormalities indicative of psychological distress and emotional disturbance” such as persistent repetitive behavior (stereotypy) and excessive aggression towards other orcas and humans.⁴⁰ These abnormalities are evident in the orcas at SeaWorld.

2. *Orcas at SeaWorld Exhibit Abnormal Behaviors Indicative of Needless Suffering, Unnecessary Cruelty, and Torment*

Because of their intellectual and emotional capacities, cetaceans are highly susceptible to the adverse effects of chronic boredom in captivity.⁴¹ In 2005, a dolphin researcher who specialized in the design of captive facilities concluded a decade-long survey in which she observed that in captive cetaceans, “some behaviours tend to occur when space is limited; the environment does not provide occupational activity; and when animals are kept alone, deprived of stimulus diversity, or are subject to environmental stress.”⁴² Another study on animal boredom acknowledged that “[s]tereotyped behavior patterns . . . tend to emerge when the animal cannot engage in behavior it is highly motivated to perform, such as searching or hunting for food, seeking social interaction, or just trying to escape.”⁴³ Other research and history has shown that orcas’ inability to carry out even the most rudimentary behaviors that they would in nature causes abnormal, repetitive behaviors.⁴⁴ These include biting on the concrete sides of their tanks and the metal gates that separate the tanks at Shamu Stadium, and spending inordinate amounts of time “surface resting” and lying motionless at the bottom of the tanks and on shallow ledges referred to as slide-outs. When these repetitive behaviors emerge, they increase fixation on a monotonous behavior and further reduce the behavioral range of the individual.⁴⁵

In addition, according to SeaWorld’s records, at least one of the orcas, Corky, also “appears to regurgitate her food in response to boredom, confusion, or avoidance. She will exhale, drop her head, and apparently regurgitate for about 2-10 seconds.”

a. *Dental Problems*

³⁸ Marino & Frohoff, *supra*, at 3 (citations omitted).

³⁹ *Id.*; see also Mike Thomas, *Tilikum’s Captivity May Be Problem, But He’s Important for Conservation*, ORLANDO SENTINEL, Feb. 25, 2010 (quoting marine-mammal biologist Fred Felleman) (The artificial groupings at marine facilities are “a tremendous violation of the basic premise of the pod” and result in “constant stress.”).

⁴⁰ Marino & Frohoff, *supra*, at 3.

⁴¹ Marino et al., *supra* at 77.

⁴² Couquiaud, *supra* at 297.

⁴³ Françoise Wemelsfelder, *Animal Boredom: Understanding the Tedium of Confined Lives*, in MENTAL HEALTH AND WELL-BEING IN ANIMALS (Franklin D. MacMillan ed. 2005), at 85.

⁴⁴ Ros Clubb & Georgia Mason, *Captivity Effects on Wide-Ranging Carnivores*, 425 NATURE 473, 473 (2003); See generally JETT AND VENTRE, *supra*.

⁴⁵ Marino et al., *supra* at 77.

“As animals stay longer in their cages, they begin to direct their attention to inadequate substrates. They may lick, suck, or chew the floors and bars of their cages”⁴⁶ “By the time the animal begins to develop a fixation on inadequate substrates, the situation has become severe.”⁴⁷

At SeaWorld, orcas are separated by steel gates prior to training sessions, shows, or when they become aggressive towards each other.⁴⁸ “[A]s an oral stereotypy, biting and chewing of hard tank surfaces by captive orca seems to factor prominently in their dental pathology.”⁴⁹ According to Jeff Ventre, M.D., and John Jett, Ph.D., former orca trainers at SeaWorld,

When separated by these gates, it is common for whales to engage in a particular behaviour known as jaw-popping, which is an open-mouth threat-display of teeth followed by quick closure, or ‘popping’ of the upper and lower jaws. If the killer whale is charging a gate, the jaw pop can damage teeth if they contact the metal bars.

Additionally, under-stimulated whales sometimes exhibit stereotypic behaviours and will ‘chew’ on concrete pool corners or other protruding features of an exhibit. . . . Tooth breakage leaves the soft pulp of some teeth exposed. If left alone, the decaying pulp can form a cavity that leads to food plugging. As a corollary, humane studies show that tooth caries can create inflammation and become a focus for systemic infection. Thus, as a prophylactic measure, the fleshy pulp of the whale’s tooth is bored out, creating an open hole into the (upper or lower) jaw. Veterinarians and trainers using a variable speed drill perform this procedure, known as a ‘modified pulpotomy’. This is an uncomfortable husbandry procedure for the whales, which we observed refusing to participate by sinking down into the water, shuddering, or slipping from their keepers. These bore holes are typically not filled with amalgam and thus serve as a conduit for fish debris and pathogens to penetrate into the mandible. . . .

“The staff knew it was a successful drill when blood started to bubble out from the bore hole.”⁵⁰ Since this leaves the orcas with gateways for “chronic bacteria loading and other health implications,” trainers “irrigate the bored teeth two to three times each day” of the orca’s life.⁵¹

After SeaWorld was cited by the Occupational Safety and Health Administration for endangering the life and safety of its employees after a senior trainer was killed by an orca, the company’s now-Chief Zoological Officer, Dr. Christopher Dold, admitted that the orcas at the company’s facilities “will erode the surface of their teeth, exposing the pulp cavity, and that can be and is a common management concern of ours.”⁵² This can lead to “an abscess or an infection within the pulp cavity of the tooth that’s under pressure,” so the trainers will “drill out the center of the tooth,” which as

⁴⁶ Wemelsfelder, *supra* at 84.

⁴⁷ *Id.* at 85.

⁴⁸ JETT AND VENTRE, *supra*.

⁴⁹ See John Jett et al., *Tooth Damage in Captive Orcas (Orcinus orca)*, 84 Archives of Oral Biology 151 (2017).

⁵⁰ DAVID KIRBY, DEATH AT SEAWORLD 162 (2012).

⁵¹ Jeff Ventre & John Jett, *Killer Whales, Theme Parks and Controversy: An Exploration of the Evidence*, in *Animals and Tourism: Understanding Diverse Relationships* (K. Markwell ed. Channel View Pubs. 2015).

⁵² SW/OSHA Transcript at 1730.

of late 2010 had been done to approximately 14 of the 20 (70%) orcas at SeaWorld parks at that time.⁵³

The adult orcas still living at SeaWorld San Diego—just as the many before them—have suffered broken and worn teeth from biting on the metal gates and concrete sides of their tanks. According to SeaWorld’s own behavioral logs, as well as photographs and affidavits:

- *Orkid*, who “jaw pops” through the gates and bangs the gates, had one of her teeth removed.
- *Keet* has had “[d]ental work done” on eight teeth, and his front teeth are worn and hollow.
- *Corkey* has “[w]orn teeth on lower and upper jaw” and “[m]any decayed and discolored.”
- *Ulises* has “[r]ough yellow teeth.”
- *Kalia*’s front teeth are worn.
- *Ikaika*’s teeth are worn and hollow. “At the time of his transfer to Marineland [in Ontario, Canada] in 2006,” since which time he has been returned to SeaWorld, “Ikaika exhibited . . . a chronic dental problem with which he still has difficulties today. Due to the nature of the dental problem, Ikaika’s teeth will always be subject to infection. . . . The normal course of treatment is to flush his teeth consistently, numerous times daily, and treat him with antibiotics and pain medications.”⁵⁴ Ikaika had suffered from at least four dental infections prior to being transferred to Marineland, during which he “would exhibit redness and swelling in the area around the infected tooth, would have less energy and would be less willing to eat.”⁵⁵ Days before his transfer, SeaWorld staff drilled two teeth so badly damaged and infected that they were giving off heat noticeable to the trainers.⁵⁶ According to veterinary records, staff observed that “pulp is protruding from the third left mandibular canine” and there was infected discharge (“purulent exudate”) oozing from the “second left mandibular tooth.”⁵⁷

This high prevalence of broken and worn teeth and exposed pulp in captive orcas is in stark contrast to those in nature, many of whom “show little or no tooth wear, while those who do tend to specialize in prey with abrasive morphology. Broken teeth in wild orcas are rare.”⁵⁸ This abnormal behavior, along with its painful consequences, is a physical indicator of psychological distress, and demonstrates that SeaWorld subjects these orcas to unnecessary and unjustifiable physical pain and suffering, and that they therefore cause torment, needless suffering, and unnecessary cruelty, in apparent violation of Penal Code section 597(b).

b. Excessive Aggression

⁵³ *Id.* at 1743.

⁵⁴ SeaWorld Parks & Entertainment LLC v. Marineland of Canada Inc., Affidavit of Lanny Cornell (Mar. 28, 2011) ¶¶ 16-17.

⁵⁵ *Id.* ¶ 19.

⁵⁶ *Id.* Ex. B.

⁵⁷ *Id.* Ex. B.

⁵⁸ NAOMI A. ROSE, HUMANE SOCIETY INTERNATIONAL AND THE HUMANE SOCIETY OF THE UNITED STATES, KILLER CONTROVERSY: WHY ORCAS SHOULD NO LONGER BE KEPT IN CAPTIVITY 2 (2011) (citing Ford, J.K.B., Ellis, G.M., Matkin, C.O., Wetklo, M.H., Barrett-Lennard, L.G., and Withler, R.E. 2011. Shark predation and tooth wear in a population of northeastern Pacific killer whales. *Aquatic Biology* 11: 213-224; see also Guerrero-Ruiz, M., Pérez-Cortés M., H., Salinas Z., M., and Urbán R., J. 2000. First mass stranding of killer whales (*Orcinus orca*) in the Gulf of Mexico, California. *Aquatic Mammals* 32: 265-272.).

Further evidence of psychological and behavioral disturbances in captive orcas is found in the “long record of orcas . . . killing and seriously injuring humans, other whales, and themselves in captivity.”⁵⁹ There are no recorded instances of an orca seriously injuring or killing a human in the wild. Captive orcas exhibit a range of hyper-aggressive abnormal behaviors, and this aggression “may be one of their most consequential social behaviors.”⁶⁰

Although free-ranging orcas do have aggressive encounters with other orcas, these are rare events and typically involve behavior that results in the displacement of others with limited or no physical injury.⁶¹ Conflict is resolved through dispersion and shifting alliances within groups of orcas (giving each other space),⁶² which they are unable to do in captivity. Since subordinates “are unable to leave the area to avoid the situation, stress, psychological, and physical trauma can occur.”⁶³ At SeaWorld, orcas have no influence over their social associations as they are limited by the groups, tanks, and facilities to which they are confined,⁶⁴ leading to chronic frustrations and sparking aggression despite overwhelming cultural prohibitions against violence.⁶⁵

As noted above, captive orcas damage their teeth in their enclosures not only as a result of boredom-induced gnawing, but also by displays of aggression. In an attempt to establish social dominance in this environment, the orcas repeatedly charge with open mouths and rake others with their teeth when housed together, and snap and gnaw at the gates between them when in separate tanks.⁶⁶ This latter behavior, a threat display known as “jaw popping” or “barking” often results in fractured teeth, chronic pain, and painful pulpotomies.

The August 5, 2022, attack that resulted in significant harm and injury to Corky involved raking by other orcas who were confined in the same tank. In response to the incident, which left visitors disturbed and frightened as the orca’s blood filled the pool, SeaWorld stated that the incident showed “normal orca behavior known as rake marking.”⁶⁷ As noted above, while raking does occur in wild orca populations, it is rare. Moreover, had Corky been able to engage in “normal orca behavior,” she would have been able to protect herself and resolve the situation by simply escaping the conflict.⁶⁸ SeaWorld is aware of raking behavior in the wild; however, captive orcas in SeaWorld’s San Diego facility are intentionally confined in such small tanks that they are unable to escape aggressive behavior. Therefore, it appears that SeaWorld allows predictable aggressive behaviors and attacks such as the one that took place on August 5, but does not utilize any system to

⁵⁹ *Id.* at 3 (citations omitted).

⁶⁰ Marino et al., *supra* at 73.

⁶¹ *Id.*; Couquiaud, *supra*, at 296 (“Aggressive hierarchical dominance may be naturally occurring in the wild, but in captivity, it can disrupt the group and harm subordinates.”); Ingrid N. Visser, *Prolific Body Scars and Collapsing Dorsal Fins on Killer Whales (Orcinus orca) in New Zealand Waters*, 24 *AQUATIC MAMMALS* 71, 79 (1998).

⁶² Marino & Frohoff, *supra*, at 3.

⁶³ Couquiaud, *supra*, at 296.

⁶⁴ *Id.* (“These disruptions also can be caused by the fact that some of the animals may have been removed from their original social structure, separated from family members or a social unit, and now have to adjust to a new social environment.”).

⁶⁵ See generally, Jeff Warren, *Why Whales Are People Too*, READERS’ DIGEST CANADA (July 2012) (quoting Marino) (“Killer whales, for instance, do not kill or even seriously harm one another in the wild . . . Their social rules prohibit real violence, and they seem to have worked out a way to peacefully manage the partitioning of resources among different groups.”), available at <http://www.readersdigest.ca/magazine/true-stories/why-whales-are-people-too?page=0,3>.

⁶⁶ Mark J. Palmer, *Former Orca Trainer John Hargrove On the SeaWorld ‘Façade’*, Earth Island Journal (Apr. 24, 2015), https://www.earthisland.org/journal/index.php/articles/entry/john_hargrove_on_seaworld/.

⁶⁷ Nguyen, *supra*.

⁶⁸ Couquiaud, *supra*, at 296.

protect an orca from that danger, leading to inevitable injury. By its own admission, SeaWorld knowingly causes orcas to be tormented and subjects them to needless suffering in violation of Penal Code section 597(b).

According to former SeaWorld trainers, this aggressive behavior and its resulting injuries occur regularly. One trainer who worked with Tilikum, the orca at the Orlando facility whose suffering at SeaWorld was at the center of the documentary *Blackfish*, noted that the orca would sometimes have to be held out of shows until his raked and bloody skin healed, after which he would exhibit nervous and agitated behaviors such as swimming in circles at high speeds, distress vocalizations, and avoiding contact with the other orcas.⁶⁹ A former diver at SeaWorld San Diego reported that her team regularly found “long strips of what looked like black rubber” that was actually “skin they’d peeled off each other.”⁷⁰

A number of additional reported incidents involving other orcas are described below, as are the SeaWorld San Diego orcas’ aggressive tendencies as outlined in their dated behavioral profiles, and there are undoubtedly many other incidents that occurred outside the view of the public or have gone undocumented by SeaWorld.

Prior to the show that trainer Dawn Brancheau had just concluded when she was killed by Tilikum, another performance was halted when an orca reportedly raced into the pool and chased another aggressively, and cancelled when the orcas failed to follow commands even following an unscheduled intermission. It has been reported that these two orcas were Kalina and Kayla, who had a history of discord between them,⁷¹ including when Kayla raced into the pool and collided with Kalina, “causing a scuffle that went on for several seconds, water thrashing about and squeals from the orcas.”⁷² Kayla then left the tank and Kalina remained, swimming laps and refusing to listen to trainers’ orders, halting the show. When Kayla returned to the tank, “Kalina would approach the gate to the opposite back pool and cower there, as if trying to get away. The gate was never opened.”⁷³ When Kalina again began to obey the trainers and emerged from the water, a bleeding gash could be seen above her right eye.⁷⁴ The trainers falsely explained to the crowd: “There are just days that they just want to play with one another and be extremely social.”⁷⁵

In 1987, an orca named Kanduke arrived at SeaWorld Orlando. Kotar, an orca already held at the park, reportedly did not get along with Kanduke and exhibited serious aggression towards him. Since SeaWorld staff continued to require these orcas to interact, the aggression culminated in Kotar biting Kanduke’s penis, resulting in show cancellations and scarring. Kotar was moved to SeaWorld San Antonio the next year, where he remained until 1995 when a gate closed on his head and he died of a fractured skull and severe blood loss. Although neither Tilikum nor Kanduke were held in

⁶⁹ Tim Zimmermann, *The Killer in the Pool*, Outside (Jul. 30, 2010), <https://www.outsideonline.com/outdoor-adventure/environment/killer-pool/>.

⁷⁰ Ameena Schelling, *Ex-SeaWorld Employee Gives Chilling New Details About Orca Mistreatment*, The Dodo (Dec. 8, 2015), <https://www.thedodo.com/seaworld-orcas-peel-skin-off-each-other-1498617162.html>.

⁷¹ See Tim Zimmermann, *Do Orcas at Marine Parks Injure One Another?*, <http://timzimmermann.com/2010/09/14/do-orcas-at-marine-parks-injure-one-another/> (Sept. 14, 2010).

⁷² See *id.*

⁷³ See *id.*

⁷⁴ See Exhibit 3.

⁷⁵ See Zimmermann, *Do Orcas at Marine Parks Injure One Another?*, *supra*.

San Diego, these incidents demonstrate that these are widespread problems that are well-known to the company.

In 1986, Corky was first brought to SeaWorld San Diego from another facility. Although it was widely reported that Kandu, the dominant female orca at SeaWorld at that time, repeatedly exerted her dominance over Corky,⁷⁶ SeaWorld required the orcas to be housed and exhibited in the same tank. In 1987, a complaint was filed with the National Marine Fisheries Service describing aggressive behavior and a violent collision between Kandu and Corky, after which the complainant “witnessed blood boiling from a 2 1/2 to 3 foot slash along the lower abdomen” of one of the orcas.⁷⁷ Then, in 1989, Kandu charged Corky with an open mouth in a “normal, socially induced act of aggression to assert her dominance,” according to a then-staff veterinarian. This occurred in a holding tank just before the orcas were to appear in a show in the main tank. Trainers then commenced with the show, where the orcas chased each other and, as it progressed, the tank became “cloudy with Kandu’s blood,” and blood-stained water began spouting from her blowhole.⁷⁸ Unbeknownst to staff at the time, Kandu fractured her jaw when she exhibited aggression toward Corky, which caused fatal hemorrhaging of major arteries in her nasal passages.⁷⁹ After the incident, SeaWorld repeated that this was “common behavior” and “the altercation was not a rare event at all.”⁸⁰

A review of SeaWorld’s behavior profiles for the orcas demonstrates that the aggression leading to such incidents is common:

- *Keet*, after his mother was moved and a female with whom he was close died, “was the subject of increased displacement and overt aggression from Haida and Kyuquot. During this time, Keet began to avoid separations into pools with the other whales by leaving control and regurgitating. . . . He has on occasion been raked by other animals to the point that he will shiver. This behavior has been seen on several occasions, and usually subsides after a few days.”
- *Orkid* “jaw pops through gates, pushes and pins whale up in the slide out, displaces Ulises frequently,” and bangs against the gates.
- *Ulises* “show[s] normal precursors to aggression, which include red eyes, hunching of back, sitting off sideways, pec slaps, lob tails and vocals.”

Marineland’s veterinary consultant Lanny Cornell, DVM, wrote in an affidavit that Ikaika “exhibited certain aggressive tendencies . . . while at SeaWorld in both 2005 and 2006. In 2006, Ikaika raked a young calf with his teeth and had to be given tranquilizers by the SeaWorld staff.”⁸¹ SeaWorld’s veterinary records included as an exhibit to Dr. Cornell’s affidavit state that Ikaika was “showing some aggression to Tina’s calf” and was given Diazepam to “try to mellow him”—which had already been given to two other orcas at the facility for acting aggressively towards the days-old calf, including the calf’s mother and a male trying to breed with the calf.

⁷⁶ *Performing Whale Dies in Collision with Another*, NEW YORK TIMES, Aug. 23, 1989, available at <http://www.nytimes.com/1989/08/23/us/performing-whale-dies-in-collision-with-another.html> (emphasis added).

⁷⁷ The Orca Ocean, Aggression, http://webspaces.webring.com/people/sl/little_orca/OrcaAggression.html (citing Letter from John Randolph to NMFS, Aug. 24, 1989).

⁷⁸ See Exhibit 4.

⁷⁹ *Performing Whale Dies in Collision with Another*, *supra*.

⁸⁰ Greg Johnson, *Killer Whale Bled to Death After Breaking Jaw in Fight*, LOS ANGELES TIMES, Aug. 23, 1989.

⁸¹ Affidavit ¶ 40

Similarly, despite centuries of encounters between seafarers (including modern researchers) and orcas, there have been no reliable reports of orcas killing or seriously injuring a human being in nature.⁸² Yet captive orcas' displays of aggression are often focused on trainers as well. As indicated by SeaWorld's own corporate incident logs revealed in the proceedings regarding its violation of federal workplace safety laws after trainer Dawn Brancheau's death—the third trainer killed by a captive orca⁸³—the company itself has recorded “600 pages of incident reports documenting dangerous and unanticipated orca behavior with trainers,” consisting of “some 100 occurrences of killer whales biting, hitting, lunging toward, pulling on, pinning, dragging, and aggressively swimming over SeaWorld trainers” regularly for decades.⁸⁴ These logs are also incomplete, as the Secretary of Labor's questioning revealed during these proceedings incident after incident that SeaWorld failed to include, including Ms. Brancheau's death that spurred the citation.⁸⁵ Another orca rammed and killed his trainer during a training session in 2009.⁸⁶ A sample of the reported incidents involving the orcas who were at SeaWorld San Diego include:

- April 10, 2007: Orkid was being given an ultrasound to prepare for possible artificial insemination when she knocked the trainer off of a retaining wall next to her tank. The trainer was taken to a hospital for examination and was treated for minor injuries. SeaWorld's behavioral log provides that Orkid “pulled trainer in few times, hit in abdomen.”
- November 29, 2006: During a performance, Kasatka took senior trainer Ken Peters' feet in her jaws, and a video from SeaWorld's underwater camera shows her “rag-dolling [Peters] violently back and forth under the surface of the pool.” She held on to him underwater for nearly a minute before she slowly started to bring him to the surface, after which she again took him underwater before she released his foot. Kasatka continued to swim directly beneath Peters as he treaded water, ultimately grabbing him by the feet again, pulling him under, thrashing, and pinning him to the bottom of the pool for another minute. At that point, Kasatka began to respond to calls by the other trainers, which she had been ignoring throughout the attack, and Peters narrowly escaped as she again chased him over a safety net. Peters was hospitalized for three days, undergoing surgery to repair a broken foot and receiving antibiotics to prevent infection of the bite wounds. Kasatka had previously attempted to bite Peters in 1993 and 1999. SeaWorld's behavioral log provides that Kasatka has the tendency for mouthing or grabbing trainers, pulling booties, and grabbing dive gear, and that she has “demonstrated more intense physical aggressive behavior.”
- November 15, 2006: A trainer was in the water with Sumar and Orkid during a show and had just dived off of Orkid when the orca grabbed him by the foot and held him underwater for approximately 26 seconds while the other trainers attempted to use emergency calls with no success. Orkid ultimately responded to the trainers' calls, allowing the trainer to exit the water. He suffered a torn ligament in his left ankle.
- July 31, 2002: A female trainer was training Orkid when the orca pulled her into the water. She was taken to the hospital, where doctors implanted a pin in her broken arm.

⁸² HOYT, *supra*, at 87-88

⁸³ See Ed Pilkington, *Whale Killing: They Played as Usual. Then He Drowned Her*, THE GUARDIAN, February 26, 2010; *Whales Kill Trainer as Spectators Watch*, CHICAGO TRIBUNE, Feb. 22, 1991, at C3.

⁸⁴ E.g., Brief for Respondent Secretary of Labor at 25-28, *SeaWorld of Fla. v. Perez* (D.C. Cir. No. 12-1375).

⁸⁵ Transcript of Proceedings at 373-74, 448-57, 467-69, *Sec'y of Labor v. SeaWorld of Fla.* (OSHRC No. 10-1705).

⁸⁶ Tim Zimmermann, *Blood in the Water*, OUTSIDE ONLINE (July 15, 2011), <http://www.outsideonline.com/1886916/blood-water>.

This abnormal aggressive behavior, along with the physical and psychological injuries caused by raking and ramming between orcas, is an indicator of psychological distress, and demonstrates that SeaWorld subjects these orcas to unnecessary and unjustifiable physical pain and suffering, and that they therefore cause torment, needless suffering, and unnecessary cruelty, in apparent violation of Penal Code section 597(b).

c. Surface Resting and Lying at the Tank Floor

While wild orcas typically spend more than 90 percent of their time submerged,⁸⁷ “with little horizontal or vertical space in their enclosures, captive orcas swim only limited distances, with most spending many hours surface resting.”⁸⁸ The amount of time captive orcas commonly spend surface resting and lying at the bottom of the pool is highly abnormal and has never been reported in wild populations.

“[I]n aquaria . . . killer whales (and other whales and dolphins) rest while floating and lying on the bottom of pools.”⁸⁹ They have been observed alone and “completely immobile for about 1 h or even longer while floating at the surface.”⁹⁰ In contrast, resting orcas in nature

usually swim tightly together side by side, forming a resting line. Group diving and surfacing become closely synchronized and regular, with longer dives of 2-5 min duration separated by 3 or 4 short, shallow dives. Rate of forward progression is slow compared to foraging and traveling, and resting groups may stop altogether and rest motionless at the surface for [only] several minutes.⁹¹

“This type of stationary resting at the surface has never been observed to be repeated more than three to four times in succession by the same individual.”⁹² Again, as opposed to these short rests at the ocean’s surface, captive orcas continue this behavior for over an hour.⁹³

Surface resting, or logging, also exposes the orca to sunburns, which are covered by trainers at captive facilities with black zinc oxide cream.⁹⁴ Relatedly, tanks are typically painted a light color to increase visibility of the animals, lack adequate shade, and the water is treated to be clear, exposing orcas to higher levels of ultra violet light than in nature, which can cause immunosuppression and “in turn lead to severe infections from bacteria, viruses and other pathogens that do not typically cause serious infections.”⁹⁵ It is also known to increase the risk of eye damage in other marine mammals.⁹⁶ Similarly, captive orcas have been observed and reported in a peer reviewed publication

⁸⁷ NATIONAL MARINE FISHERIES SERVICE, NORTHWEST REGION, PROPOSED CONSERVATION PLAN FOR SOUTHERN RESIDENT KILLER WHALES (*ORCINUS ORCA*) 16 (Aug. 2005), available at <http://www.nwr.noaa.gov/Marine-Mammals/Whales-Dolphins-Porpoise/Killer-Whales/ESA-Status/upload/SRKW-Recov-Plan.pdf>.

⁸⁸ JETT AND VENTRE, *supra*, at 5.

⁸⁹ Lyamin et al., *supra*, at 1457.

⁹⁰ Lyamin et al., *supra*, at 1458.

⁹¹ Ford, *supra*, at 654.

⁹² Visser Decl. (citing Robert W. Osborne, *A Behavioral Budget of Puget Sound Killer Whales*, in BEHAVIORAL BIOLOGY OF KILLER WHALES 211, 231 (Barbara C. Kirkevold & Joan S. Lockard eds. 1986)).

⁹³ Lyamin et al., *supra*, at 1458.

⁹⁴ Ventre & Jett, *supra*, at 139.

⁹⁵ *Id.*

⁹⁶ See Laurie J. Gage, *Captive Pinniped Eye Problems, We Can Do Better*, 4 J. MARINE ANIMAL ECOLOGY 25 (2011).

to spend inordinate amounts of time lying motionless at the bottom of the tanks—“[l]ying on the bottom of the pool is . . . characteristic of all adult killer whales currently residing at SeaWorld, San Diego.”⁹⁷ “Single episodes of rest on the bottom for these killer whales lasted between 3 and 7 min.”⁹⁸ This behavior has never been observed in wild populations.

This abnormal stationary behavior is yet another indicator of psychological distress, and demonstrates that SeaWorld subjects these orcas to unnecessary and unjustifiable physical pain and suffering, and that they therefore cause torment, needless suffering, and unnecessary cruelty, in apparent violation of Penal Code section 597(b).

* * *

The conditions of the orcas’ confinement at SeaWorld are physically and psychologically devastating, as demonstrated by their frequent displays of abnormal behaviors that are known to result from particularly damaging captive environments and are reflected in SeaWorld’s own records and reported by former trainers. The evidence demonstrates that the orcas are deprived of an adequate exercise area, in apparent violation of Penal Code section 597t, and indicates—and further investigation and consultation with experts will reveal—that SeaWorld has long known that the conditions in which the orcas are held cause torment, needless suffering, and unnecessary cruelty, in apparent violation of Penal Code section 597(b).

⁹⁷ *Id.* at 1459.

⁹⁸ *Id.*