# CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4402 (619) 767-2370



**F20c** 

Click here to go to original staff report

# **Second Addendum**

November 1, 2016

To: Commissioners and Interested Persons

From: California Coastal Commission

San Diego Staff

Subject: Addendum to **Item F20c**, Coastal Commission Permit Application No.

6-16-0483 (SeaWorld San Diego), for the Commission Meeting of Friday,

November 4, 2016.

\_\_\_\_\_

The purpose of this second addendum is to attach an ex parte communication that contains the applicant's briefing booklet, as well as a public comment letter in opposition. Staff recommends the following changes be made to the above-referenced staff report. Deletions shall be marked by a strikethrough and additions shall be underlined:

- 1. Add the attached letter to Exhibit 6 Ex Parte Communication
- 2. Attach Exhibit 7 Letter of Opposition

RECEIVED
OCT 31 2016

----Original Message----

From: Brindley, Corrine [mailto:corrine.brindley@SeaWorld.Com]

Sent: Monday, October 31, 2016 1:22 PM

To: Avina, Victor

Subject: Orca Encounter briefing book 6-16-0483 (SeaWorld, San Diego)

Hi Victor,

Attached please find the Orca Encounter briefing booklet. This will be provided to our CCC staff analyst Alex Llerandi today. It will also be made available to any other Commissioners who will accept it. Let me know if you have any questions. Thanks.

Corrine



# **ORCA ENCOUNTER**

CALIFORNIA COASTAL COMMISSION ITEM F20(c) Nov. 4, 2016



OCT 3 1 2016

CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT

EXHIBIT NO. 6

APPLICATION NO. 6-16-0483

Ex Parte

Communication

California Coastal Commissio

# **BACKGROUND**

Since the mid-1960s SeaWorld has had the privilege of introducing more than 160 million guests and nine million students and teachers to orcas through up-close interactions and shows.

In 2002 the California Coastal Commission certified the SeaWorld Master Plan Update, the local land use plan for Mission Bay Park. The SeaWorld Master Plan contemplates the renovation and enhancement of all areas of the theme park leasehold. In past decades dozens of projects have been approved by the Commission, the most recent, Ocean Explorer, a new park realm that will include rides and several sea life habitats, passed earlier this year on Consent.

At Shamu Stadium specifically, Coastal Commission actions have approved several projects including a major pool addition (1995), Dine With Shamu (1996) and set changes in 2005 and 2010.

# **CURRENT ACTION ITEM**

In March, 2016 SeaWorld Parks and Entertainment announced the current generation of orcas would be the last – the company would no longer breed orcas. SeaWorld also announced a plan to discontinue theatrical orca whale shows and transition to educational presentations that portray the whales' natural behavior.

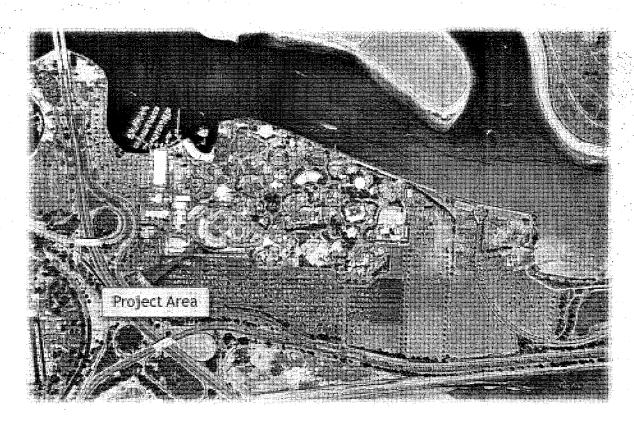
In September, 2016 Governor Jerry Brown signed SB839 memorializing the end to breeding and the transition of the show format. To comply with this new law SeaWorld seeks support for agenda item F20(c) to permit the renovation of the existing backdrop at the orca habitat to better depict a naturalistic setting reminiscent of the Pacific Northwest.

# MASTER PLAN CONSISTENCY

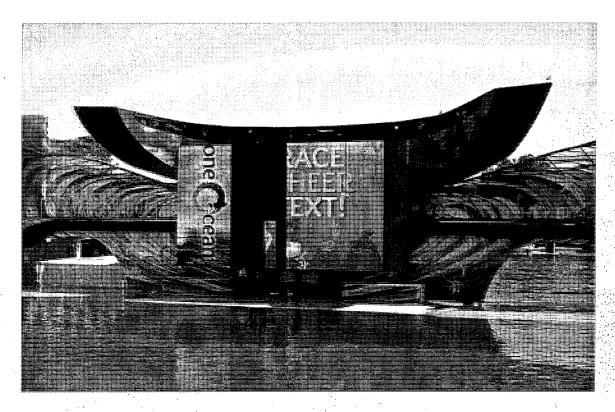
- Consistent with approved Master Plan and Mission Bay Park Master Plan
- No structures greater than 30'

- No impact on biological resources outside the leasehold
- No traffic impact
- Not visible outside the leasehold
- All site storm water is treated within SeaWorld's treatment facility
- Sound mitigation plan in place

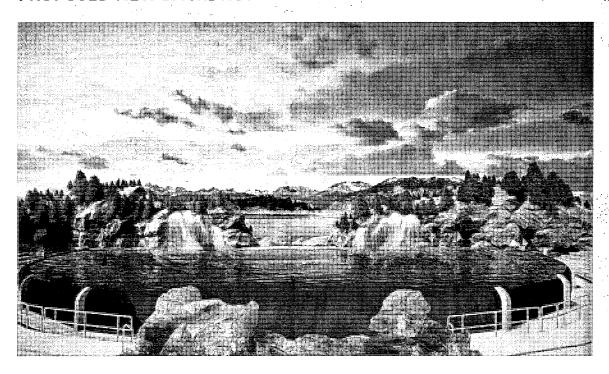
# **SITE LOCATION**



**CURRENT SET** 



PROPOSED NEW BACKDROP



**TECHNICAL CONSISTENCY** 

# Prior approvals passed by Commission at same location

- Shamu Show set change out (2010) CDP 6-10-086
- Shamu Show set change out (2005) CDP 6-05-031

# Noise Reduction Program (approved by Commission staff ecologist)

The project implements noise reduction measures to minimize any impacts to the orcas from construction noise. These measures include (but are not limited to):

- All work conducted above-grade
- Daily coordination and communication with orca trainers
- Trainer observation of orcas during all construction activities
- Construction work screened and separated by 8-foot tall panels
- Directing whales into pools farthest away from work
- Installation of water-filled K rails along perimeter
- Use of "wet" concrete saws
- Concrete trucks staged 100 feet away from habitat
- Cutting components into segments to be disassembled elsewhere

# **Water Quality**

SeaWorld has an extensive water treatment system and the project does not cause significant impact to the water quality of Mission Bay.

#### Landfill

Proposed project is located 1,700 feet to the west of the estimated limits of the landfill and will be completely above-grade with no excavation involved. Therefore, there is no potential for contamination or human health impacts.

# **Visual Resources**

The proposed construction will be located within the developed boundaries of SeaWorld and will not be visible from outside the park leasehold.

# **ECONOMIC IMPACT OF CONSTRUCTION**

# Estimated # of labor hours: 16,000

Rudolph & Sletten – General Contractor (Carpenters, cement masons, laborers)

Formed in 1962, Rudolph & Sletten count Monterey Bay Aquarium, Scripps
Institution of Oceanography, NOAA, and several California universities as clients.

# Dynalectric - Affiliated with IBEW Local Union 569

Founded in 1970, Dynalectric Company has nearly 500 employees and is one of San Diego's top electrical contractors.

# Bingham Plumbing & Piping - Local, family owned

Founded in 2010, the company's line of business includes providing plumbing, pipe fitting, and similar work

# **NEW 2016 LEGISLATION**

#### **FISH AND GAME CODE - FGC**

**CHAPTER 5. Marine Mammals [4500 - 4502.5]** 

(Heading of Chapter 5 amended by Stats. 1975, Ch. 786.)

## 4502.5

This section shall be known, and may be cited, as the California Orca Protection Act.

(a) It is unlawful for any person to do any of the following:

(1) (A) Except as provided in subparagraph (B) and subdivision (c), hold in captivity an orca, whether wild-caught or captive-bred, for any purpose, including, but not limited to, display, performance, or entertainment purposes.

(B) An orca located in the state on January 1, 2017, may continue to be held in captivity for its current purpose and after June 1, 2017, may continue to be used for educational presentations.

(2) Breed or impregnate any orca held in captivity in the state.

(3) Export, collect, or import the semen, other gametes, or embryos of an orca held in captivity for the purpose of artificial insemination.

(4) Export, transport, move, or sell an orca located in the state to another state or country unless otherwise authorized by federal law or if the transfer is to another facility within North America that meets standards comparable to those provided under the Animal Welfare Act (7 U.S.C. Sec. 2131 and following).

(b) A person, corporation, or institution that intentionally or negligently violates subdivision (a) is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine not to exceed one hundred thousand dollars (\$100,000).

(c) This section does not apply to an orca that is held by a bona fide educational or scientific institution for rehabilitation after a rescue or stranding or for research purposes. However, the department shall be notified immediately upon the rescue or acquisition of any orca, and an orca that is held for rehabilitation or research purposes shall be returned to the wild whenever possible. If return to the wild is not possible, the orca may be used for educational presentations, but shall not be used for breeding, performance, or entertainment purposes.

(d) As used in this section, the following terms are defined as follows:

- (1) "Educational presentation" means a live, scheduled orca display in the presence of spectators that includes natural behaviors, enrichment, exercise activities, and a live narration and video content that provides science-based education to the public about orcas.
- (2) "Orca" means a killer whale (Orcinus orca).

(3) "Bona fide educational or scientific institution" means an institution that establishes through documentation any of the following:

(A) Educational or scientific tax exemption from the Internal Revenue Service or the institution's national, state, or local tax authority.

(B) Accreditation as an educational or scientific institution from a qualified national, regional, state, or local authority for the institution's location.

(C) Accreditation by a nationally or internationally recognized zoological or aquarium accreditation organization.



# We Support Orca Encounter

The following organizations have submitted a letter to the California Coastal

Commission in support of SeaWorld's Orca Encounter application (partial list)

Assembly member Richard Bloom

Assembly member Toni Atkins

Mayor Kevin Faulconer

**Humane Society of the United States** 

League of Latin American Citizens (LULAC)

National Association for the Advancement of Colored People (NAACP)

**Helen Woodward Animal Center** 

**Reality Changers** 

**Hubbs-SeaWorld Research Institute** 

Rudolph & Sletten

**Dynalectric** 

San Diego County Tourism Authority

San Diego Regional Chamber of Commerce

San Diego Economic Development Corporation

COMMITTEES BUDGET BUSINESS AND PROFESSIONS HIGHER EDUCATION TRANSPORTATION

SUBCOMMITTEE SUBCOMMITTEE NO. 6 ON BUDGET PROCESS OVERSIGHT AND PROGRAM EVALUATION

# Assembly California Legislature



RICHARD BLOOM
CHAIR, BUDGET SUBCOMMITTEE NO. 3 ON RESOURCES & TRANSPORTATION ASSEMBLYMEMBER, FIFTIETH DISTRICT

P.O. BOX 942849 SACRAMENTO, CA 94249-0050 (916) 319-2050 FAX (916) 319-2150

STATE CAPITOL

DISTRICT OFFICE 2800 28TH STREET, SUITE 105 SANTA MONICA, CA 90405 (310) 450-0041 AND (818) 596-4141 FAX (310) 450-6090

E-MAIL Assemblymember Bloom @assembly ca

October 19, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission, San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

RE: SeaWorld Orca Encounter Set Changes

This letter acknowledges that I believe that SeaWorld's proposed set renovations for the orca habitat at the San Diego theme park are consistent with their decision earlier this year to end the captive orca breeding program and to phase out their theatrical shows at all of their theme parks across the country. The proposal is also consistent with SB 839, legislation that I authored that was signed by Governor Brown that enshrines this change in policy into California law so that no company will ever be able breed captive orcas in the state.

I applaud SeaWorld's commitment to end orca breeding and phase out their orca shows and believe that their actions demonstrate a forward-looking, humane and market-responsive approach. As the Coastal Commission moves toward a decision in this matter, it is very important that any conditions regarding the educational orca encounters that highlight the orca's natural behaviors and renovations that create a more natural setting are clearly consistent with the intent of the legislation as these will be the guidelines for park management for decades to come.

Again, I believe that the current proposal before you is consistent with the intent of SB 839. Please do not hesitate to contact me if any additional information is needed.

Sincerely,

**RICHARD BLOOM** 

Assemblymember, 50th District

Printed on Recycled Paper



## Celebrating Animals | Confronting Cruelty

Eric L. Bernthal, Esq. Chair of the Board

Jennifer Leaning, M.D., S.M.H. Vice Chair

Jason Weiss Second Vice Chair

Kathleen M. Linchan, Esq. Board Treasurer

Wayne Pacelle & Chief Executive Officer

Michael Markarian Chief Operating Officer

G. Thomas Waite III Treasurer & Chief Financial Officer

Andrew N. Rowan, Ph.D. Chief International Officer & Chief Scientific Officer

Katherine L. Karl & Chief Legal Officer

Amy C. Rodgers Secretary

#### DIRECTORS

Jeffrey J. Arciniaco Eric L. Bernthal, Esq. David Brownstein Erika Brunson Jerry Cesak Anna W. Coupe, Esq. Neil B. Fang, Esq., CPA Jane Greenspun Gale Spencer B. Haber Amanda Hearst Cathy Kangas Paula A. Kislak, D.V.M. Charles A. Laue Jonnifer Leaning, M.D. S.M.H. Kathleen M. Linehan, Esq. John Mackey Mary L Max Patrick L. McDonnell C. Thomas McMillen Judy Ney Sharon Lee Patrick Marsha R. Perelman Margaret Perenchio Marian G. Probst Jonathan M. Ramer Joshua S. Reichert, Ph.D. Walter J. Stewart, Esq. Andrew Weinstein Suzy Welch David O. Wiebers, M.D.

September 28, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

VIA EMAIL: Alexander Llerandi@coastal.ca.gov

#### RE: SeaWorld Orca Encounter set changes

Dear Mr. Llerandi,

On behalf of The Humane Society of the United States (HSUS), I am writing with regard to SeaWorld's proposed set renovations for the orca habitat at the San Diego park.

In March of this year, HSUS announced with SeaWorld an agreement that will further both groups' missions and is based on our joint interest in preserving and protecting the health of our oceans and the animals they call home.

The HSUS is the nation's largest and most effective animal protection and advocacy organization that is seeking a humane world for people and animals alike by driving transformational change in the U.S. and around the world. HSUS and its affiliates provide hands-on care and services to more than 150,000 animals each year.

We commend SeaWorld for its decision to end orca breeding. Because SeaWorld has not collected oreas from the wild in nearly 40 years, this decision means that this is the last generation of oreas in SeaWorld's care. While the oreas live out their lives at SeaWorld, HSUS also commends the company for ending its theatrical performances of oreas in favor of orea encounters that highlight the whales' natural behaviors in more natural settings. The permit that SeaWorld is seeking is consistent with SeaWorld's progress along this front.

Please don't hesitate to contact us with any further questions.

Sincerely,

Nicole Paquette

Vice President, Wildlife Protection npaquette@humanesociety.org



October 28, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission, San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

Re: Sea World Orca Encounter Set Changes

Dear Mr. Llerandi,

I write in strong support of the proposed set renovations for the orea habitat at Sea World in San Diego. The design is consistent with the announcement by Sea World earlier this year to significantly change the way in which oreas are displayed at the theme park in conjunction with the decision to cease its orea breeding program.

I have reviewed the proposed design and am pleased that Sea World has succeeded in designing a more natural setting for the oreas. The new design will enhance opportunities for the public to learn about the natural behaviors of oreas in the wild.

I urge the members of the Coastal Commission to support the improvements proposed by Sea World that I find to be fully consistent with the intent of state legislation in Senate Bill 839 approved by the Legislature and signed by the Governor in 2016.

Warmly,

TONI G. ATKINS

Speaker Emeritus of the Assembly

78th Assembly District

TGA:dds



November 1, 2016

Chair Emeritus Milton C. Shedd (deceased)

Chair Emeritus Science Committee Dr. Clark Hubbs (deceased)

Chair William Shedd

Board of Trustees John R. Ahlering, MD Bradley F. Andrews James Atchison Dr. K.C. Bishop, III Dr. Chris Dold Jan Driscoll Robert C. Fletcher J. David Gardner, Sr. Todd W. Gutschow Murray Hutchison Bob Kelly Jill Kermes Jackie Meyer Michael Morton Jerry Sansom Mark Snell Laurilee Thompson Gerl Ann Warnke Louis Zimm

Trustees Emeriti
Senator Dede Alpert
Arthur DeFever (deceased)
Char DeMotte
George Gildred
Capt. Walter M. Schirra
(deceased)

Officers
Donald B. Kent, M.S.
President/CEO
Pamela K. Yochem, D.V.M., Ph.D.
Executive Vice President/Chief
Science Officer
Bethany J. Smith, M.B.A.
Chief Financial Officer

Mr. Steve Kinsey, Chairman California Coastal Commission c/o Mr. Alexander Llerandi, Coastal Program Analyst San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108

Re: SeaWorld Orca Encounter Project

Dear Mr. Kinsey,

I am the President/CEO of the Hubbs-SeaWorld Research Institute (HSWRI), an independent 501(c)3, non-profit marine research organization founded in 1963. I am writing in support of SeaWorld's Orca Encounter project.

We conduct research in both marine and oceanarium environments in accordance with our public trust mission "to return to the sea some measure of the benefits derived from it". Our research is funded through grants and contracts from federal (e.g., Departments of Commerce, Interior and Defense; National Science Foundation) and state (e.g., California Department of Fish and Wildlife) agencies, community foundations (e.g., The San Diego Foundation), corporations and individual donors. We often provide results of our studies and expert consultation to resource management agencies charged with mitigating the effects of human activities on marine life. In addition to our field research in ocean and coastal habitats around the world, we work with zoological parks like SeaWorld on research projects that advance conservation of wild marine life, such as measurements of marine mammal hearing and basal metabolic rate, improvements in remote monitoring devices, tests of responses to fisheries mitigation equipment, discovery of viral diseases, and investigations of causes of strandings.

As a native San Diegan, I visited the SeaWorld Park often as a child and over the decades have witnessed the evolution of the habitats developed by

2595 INGRAHAM STREET | SAN DIEGO, CA 92109 | T: (619) 226-3870 | F: (619) 226-3944 4300 GARFIELD STREET | CARLSBAD, CA 92008 | T: (760) 434-9501 | F: (760) 434-9502 3830 SOUTH HWY A1A #4-181 | MELBOURNE BEACH, FL 32951 | T: (321) 327-8970 | F: (321) 327-8973

WWW,HSWRI.ORG



SeaWorld and the increasing sophistication of their animal training and management practices. Before the first orcas came to SeaWorld, most people in Southern California had never seen a killer whale close up. Those who interacted with them in the wild feared them or reviled them as competitors for fisheries resources. SeaWorld's long history of orca conservation, education, and display has been a powerful force for change.

The planned Orca Encounter will educate park visitors in ways that engage audiences regardless of their previous experience, bringing to the public what we and others in the scientific community have discovered about orcas and ocean conservation.

Our scientists have reviewed the construction plans for the Orca Encounter project, and we note that much of the work will be done above water (noise in air does not transmit well into water) and in areas not in contact with the orca pools. Noisy construction activities in close proximity to the pools will be conducted according to procedures outlined by SeaWorld and their contractors, which are consistent with our recommendations – that the duration be kept to a minimum, that sound sources be modified to minimize noise, that the unavoidable noise should be on a predictable schedule, and that the zoological team should be able to move the orcas to other pools or alter the activity schedule if there is evidence of disturbance.

When it comes to understanding marine life, informal educational venues such as zoos and oceanariums provide experiences not available in formal educational systems. The Orca Encounter will surely promote an appreciation for orcas and the value of their conservation. The project also will advance marine conservation by presenting the latest findings from the scientific community on orca biology, physiology and behavior. The facility will allow scientists to continue studies of orca social behavior and vocal learning, physiology, and health. We unreservedly support the Orca Encounter project for the benefit of orcas at SeaWorld and in the wild, for advancing marine science, and for the lasting enjoyment and understanding of millions of visitors.

Sincerely,

Donald B. Kent President/CEO

# Llerandi, Alexander@Coastal

From: Sarb, Sherilyn@Coastal

Sent: Monday, October 31, 2016 4:47 PM
To: Llerandi. Alexander@Coastal

Cc: Mayer, Robin@Coastal; Pederson, Chris@Coastal

**Subject:** FW: Seaward Blue Water Project

Attachments: sea#3.pdf.pdf

fyi and addendum

Scott Andrews [scott300@earthlink.net] **Sent:** Monday, October 31, 2016 4:29 PM

To: Sarb, Sherilyn@Coastal; Lilly, Diana@Coastal; Lee, Deborah@Coastal

**Cc:** Scott Andrews; john McNab; <u>davidkennedydds@gmail.com</u>; <u>shellifun@yahoo.com</u>; <u>dmitrovich@sbcglobal.net</u>

**Subject:** Seaward Blue Water Project

October 31, 2016

Re: SEAWORLD RESUBMITTAL ORCA NEW TANK EXCAVATION FOR NEW SUBSURFACE PUBLIC VIEWING GALLERY

Application No. 6-16-0483

Dear Coastal Staff,

Having not received the courtesy of your normal mailed notice of the resubmittal of Seaworld's Mission Bay Park orca tank excavation project, please find this letter as stated public project opposition by

reference to prior SEA and public comments, and the SEA lawsuit filed against apparently the same or similar project as filed on January 17, 2016.

The project was not referred to proper agencies state and federal re a major excavation and dewatering to Mission Bay Park and it's bay waters, foraging grounds to endangered bird species, and a body of

water already listed impaired.

Consequently, the proposal has not received proper discharge permits to pump water from the Mission Bay Park toxic industrial military waste dump into Mission Bay.

As you are also aware, SeaWorld's own studies show high levels of trichloroethane and Hydrogen Sulfide and Methane gases within project leasehold boundaries. We urge staff to order the proper review,

permitting, and safety measures required to protect both the public and wildlife at and near this commercial leasehold operation.

Scott Andrews Save Everyone's Access (SEA) 619 221-5947



# CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4402 (619) 767-2370



# **F20c**

# Addendum

October 28, 2016

To: Commissioners and Interested Persons

From: California Coastal Commission

San Diego Staff

Subject: Addendum to **Item F20c**, Coastal Commission Permit Application No.

6-16-0483 (SeaWorld San Diego), for the Commission Meeting of Friday,

November 4, 2016.

\_\_\_\_\_

The purpose of this addendum is to include additional information and comments received by the Commission since publication of the staff report. Staff recommends the following changes be made to the above-referenced staff report. Deletions shall be marked by a strikethrough and additions shall be <u>underlined</u>:

- 1. Add the October 12, 2016 letter from SeaWorld San Diego to Exhibit 4 Noise Memorandum.
- 2. Add the attached letters to Exhibit 5 Letters of Support
- 3. Attach Exhibit 6 Ex Parte Communication





October 12, 2016

Alexander Llerandi, Coastal Program Analyst II California Coastal Commission 7575 Metropolitan Drive #103 San Diego, California 92108

Regarding: Orca Encounter Coastal Development Application

Dear Mr. Llerandi;

SeaWorld San Diego has a long standing history of successfully performing construction work adjacent to animal areas with no adverse effects. The construction of Orca Experience is similar to past projects in that care for our animals is of utmost importance. Construction means and methods are and have always been employed that mitigate and reduce sound impacts and duration of exposure. Choices have consciously been made when developing the structural design and choosing construction methods to reduce sound impacts on the facility.

Previous projects approved through the California Coastal Commission at this venue are:

Shamu Show Change Out CDP 6-05-031 – removal of existing fixed screen and scenic area; construction of a catwalk bridge structure on existing stage area. Addition of a whale tail structure with 3' diameter concrete column base including all electrical associated with lighting in tail structure. (Waiver de Minimus)

Shamu Show Change Out CDP 6-10-086 – Addition of stage embellishments on existing structure. Addition of speaker trusses on existing show set structure including all support structures. Addition of 4 cantilevered moving and rotating screens. (Approved)

Shamu Backstage CDP 6-95-013 – construction of new pool with underwater viewing currently identified on drawings as E pool (Approved)

Dine with Shamu CDP 6-04-158— construction of a new culinary facility adjacent to the existing facility. Facility also included a fish house, restrooms, and technical support and overhead metal shade canopy. (Approved)

These previous projects employed all the same construction methods in different forms and durations similar to those identified by Rudolph & Sletten in their letter dated October 7, 2016. In addition, we plan to address the proposed work activities as follows:

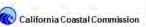
Area 1 Crane set up is performed outside of the venue. The work is performed behind large earthen berm and the stadium bleachers. The work is done at the lower elevation and the sound relates to equipment in operation. This barrier and the distance from the work being performed to the animal habitat protect the animals from noise affects.

EXHIBIT NO. 4

APPLICATION NO.

6-16-0483

Noise Memorandum



Area 2 Concrete Maintenance-This includes concrete work in stadium area maintenance work to remove and replace broken concrete in main walkway. Animals will be relocated to back pools during removal and placement of concrete. Animals will be farther than 100' away from sound producing activities.

Area 3 Main stage area-With removal of existing scenic pieces including whale tail construction methods will be employed to mitigate any vibrations in pool walls (i.e. use of saw cutting vs jackhammering). Animals will be located to E pool during the limited duration of this type of construction activity.

Area 4 Skywalk Roof- Removal of false roof structure on skywalk will be limited to collapsing the roof structure into the main walkway, thus protecting any debris from falling outside of the skywalk and any sound will be limited. Alternatively contractor will rig and fly off the roof structure in sections for recycling off site. This roof structure is scenic only (not structural) and was added in early 2000s as scenic addition. Whales will not be located in an adjacent pool.

Area 5 Lower Concrete Replacement- Maintenance replacement of existing concrete that is not in direct structural contact with pool walls or pool structure. The replacement of this concrete is to remove existing cracked concrete on the walkway and recess existing piping. Existing fountain piping used for current show is being removed. This existing concrete is non-structural and is used as a pathway only.

Area 6 Rockwork Addition- Area 6 identifies where additional rockwork will be added on the sides of the facility. This work is off the stage and not directly over the pools. The work is adjacent to main pool but is not in direct contact with pool walls. Whales will be in pools B, C, or E for the intermittent duration of this work.

From a safety standpoint, management takes every precaution to always ensure the safety and well-being of the animals. The contractors, engineers, and trainers, coordinate on a daily basis to ensure that animals are located correctly in accordance with the proposed work for that day. Project schedules always insure that a minimum of 8 hours is provided daily where no construction occurs to provide the whales a standard rest period. This has been our protocol for many years and was in place during the aforementioned approvals of previous Coastal applications in this venue.

The overall means and methods for construction have been, and will continually be, reviewed with Curatorial, Veterinary and Animal Training staff on an ongoing basis. Recommendations will continuously be incorporated to ensure that all construction activities are performed to minimize or negate any sound impacts to the existing structures that could affect or migrate to the adjacent pools.

If you require any further information, I can be reached at (619) 226-3626.

Sincerely

Darlene K. Walter, PMP Vice – President Engineering

SeaWorld San Diego



F20c

October 27, 2016

VIA ELECTRONIC MAIL and U.S. MAIL

Mr. Steve Kinsey, Chair, and Members of the California Coastal Commission c/o Alexander Llerandi 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4402

Re: November 4, 2016: Support for Orca Experience Application 6-16-0483

Dear Chair Kinsey and Members of the Coastal Commission:

I am writing to respectfully request your approval of SeaWorld San Diego's Orca Experience coastal development permit.

Orca Encounter, SeaWorld's new behavioral-based orca presentation will inspire and educate audiences about the majesty of these complex creatures, while underscoring SeaWorld's commitment to conservation, research, rescue and care for orcas.

Orca Encounter is based on orca behavior in the wild ... how they move, what they eat, how they hunt, how they navigate, even how they communicate. This educational presentation will also explore broader themes such as research, conservation, habitats and distribution, husbandry and care, social structures and more. To enhance the presentation, a new backdrop design will reflect the natural word of the orca . . . a rugged coastal inlet, with realistic Douglas fir trees, cliffs, waterfalls, and rockscapes that immerse viewers— and the orcas — in a coast-like scene.

Guests will gain a deeper appreciation and respect for the orcas, and will leave with a new sense of determination and purpose to help preserve the future of these important animals. Each presentation will underscore the vital connection we all share as protectors of the planet, and its inhabitants, and how each play a key role in the future health and vitality of the orca, oceans and the planet.

EXHIBIT NO. 5
APPLICATION NO.

6-16-0483

Public Letters of Support

California Coastal Commission



Page 2 Mr. Steve Kinsey

Work proposed will include removal of the existing theatrical moving screens and show set and replacement with the natural backdrop. To correlate and promote education of the guests about whale behaviors in the wild, video content may augment the natural backdrop. Additional work in the area may include naturalizing the front area slideout, painting of adjacent areas to blend, and addition of educational information areas at underwater locations.

The new Orca Experience is consistent with the requirements of the newly adopted Orca Protection Act, Fish & Game Code section 4502.5, which requires SeaWorld to transition its orca theatrical shows to education presentations, prohibits breeding orcas and allows for transportation, rescue and rehabilitation. As described in that new statute, the Orca Experience will include "natural behaviors, enrichment, exercise activities, and a live narration and video content that provides science-based education to the public about orcas."

We request your approval of the Orca Experience coastal development permit.

Very truly yours,

Marilyn Hannes

President

cc: Sherilyn Sarb

Alexander Llerandi

COMMITTEES
BUDGET
BUSINESS AND PROFESSIONS
HIGHER EDUCATION
TRANSPORTATION

SUBCOMMITTEE
SUBCOMMITTEE NO. 6 ON BUDGET
PROCESS OVERSIGHT AND
PROGRAM EVALUATION





RICHARD BLOOM

CHAIR, BUDGET SUBCOMMITTEE NO. 3 ON RESOURCES & TRANSPORTATION
ASSEMBLYMEMBER, FIFTIETH DISTRICT

STATE CAPITOL P.O. BOX 942849 SACRAMENTO, CA 94249-0050 (916) 319-2050 FAX (916) 319-2150

DISTRICT OFFICE

2800 28TH STREET, SUITE 105 SANTA MONICA, CA 90405 (310) 450-0041 AND (818) 596-4141 FAX (310) 450-6090

E-MAIL

Assemblymember.Bloom@assembly.ca.gov

October 19, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission, San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

RE: SeaWorld Orca Encounter Set Changes

This letter acknowledges that I believe that SeaWorld's proposed set renovations for the orca habitat at the San Diego theme park are consistent with their decision earlier this year to end the captive orca breeding program and to phase out their theatrical shows at all of their theme parks across the country. The proposal is also consistent with SB 839, legislation that I authored that was signed by Governor Brown that enshrines this change in policy into California law so that no company will ever be able breed captive orcas in the state.

I applaud SeaWorld's commitment to end orca breeding and phase out their orca shows and believe that their actions demonstrate a forward-looking, humane and market-responsive approach. As the Coastal Commission moves toward a decision in this matter, it is very important that any conditions regarding the educational orca encounters that highlight the orca's natural behaviors and renovations that create a more natural setting are clearly consistent with the intent of the legislation as these will be the guidelines for park management for decades to come.

Again, I believe that the current proposal before you is consistent with the intent of SB 839. Please do not hesitate to contact me if any additional information is needed.

Sincerely,

RICHARD BLOOM

Assemblymember, 50<sup>th</sup> District



October 28, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission, San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

Re: Sea World Orca Encounter Set Changes

Dear Mr. Llerandi,

I write in strong support of the proposed set renovations for the orca habitat at Sea World in San Diego. The design is consistent with the announcement by Sea World earlier this year to significantly change the way in which orcas are displayed at the theme park in conjunction with the decision to cease its orca breeding program.

I have reviewed the proposed design and am pleased that Sea World has succeeded in designing a more natural setting for the orcas. The new design will enhance opportunities for the public to learn about the natural behaviors of orcas in the wild.

I urge the members of the Coastal Commission to support the improvements proposed by Sea World that I find to be fully consistent with the intent of state legislation in Senate Bill 839 approved by the Legislature and signed by the Governor in 2016.

Warmlv.

TONI G. ATKINS

Speaker Emeritus of the Assembly

78<sup>th</sup> Assembly District

TGA:dds



www.sdchamber.org

October 24, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

Regional

VIA EMAIL: <u>Alexander.Llerandi@coastal.ca.gov</u>

# RE: In Support of SeaWorld's Set-Change for Orca Education

On behalf of the San Diego Regional Chamber of Commerce, I am writing to request that the Coastal Commission approve SeaWorld's proposed Orca Encounter set change. With nearly 3,000 members representing 400,000 employees, the Chamber is dedicated to growing commerce in the San Diego region and maintaining our legacy as a premier tourist destination.

For 50 years, SeaWorld has been a major contributor to the vitality of the region's economy. Known and regarded as responsible stewards for animals, a strong community partner, and a driving force for tourism, SeaWorld is one of the area's major employers.

As you know, the current generation of orcas will be the last at SeaWorld. In addition to ending its breeding program, SeaWorld also committed to transition its traditional orca shows to more educational Orca Encounters. Legislation recently passed and signed by the Governor requires that SeaWorld begin the educational encounters by June 1<sup>st</sup>, 2017.

Approval of the new Orca Encounter program will not only ensure that millions of visitors will become better informed about the natural behaviors of orcas and what can be done to protect them in the wild, but continue to draw millions of visitors to our region each year contributing tens of millions of dollars to the local economy.

I respectfully urge the Coastal Commission to approve this project.

Sincerely,

Jerry Sanders
President & CEO

San Diego Regional Chamber of Commerce



# California League of United Latin American Citizens

# State Office

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

VIA EMAIL: Alexander.Llerandi@coastal.ca.gov

# RE: In Support of SeaWorld's Set-Change for Orca Education

Greetings from all California chapters of the League of United Latin American Citizens. LULAC is a national civil rights organization that has been in existence for over 86 years. *Our mission is to advance the economic condition, educational attainment, political influence, housing, health and civil rights of the Hispanic population of the United States*. Our organization is a trusted advisor to the Latino community.

On behalf of all California members, we are writing to express our support of SeaWorld's proposed set change to facilitate more educational Orca presentations to its guests.

As a volunteer leader of LULAC, I have seen firsthand the value and impact of hands-on learning as a means to inspire Latino youth to pursue higher education and possible careers in STEM fields.

Through a partnership we have built with SeaWorld San Diego, dozens of Latino youth from disadvantaged neighborhoods like Compton, Salinas and San Bernardino, have had the opportunity to dissect squid, touch bat rays, be inspired by a Latino animal rescuer, and ask questions of leading veterinarians about the level of dedication and education necessary to be a doctor to animals.

This exposure has had a tremendous impact on our youth participants. It has been awe-inspiring for youth and adults to see orcas and other marine life up close, and to hear from veterinarians about how research in zoological facilities is helping save animals in the wild.

Letter to Mr. Alexander Llerandi October 26, 2016

Up-close encounters with these animals also helps cement compassion and understanding of the environmental and man-made threats they face in the wild, and what we can do in our communities to help.

It comes as no surprise to me that SeaWorld and perhaps other zoos and aquariums are evolving and changing how they continue to educate and engage guests. Rather than theatrical glitz they are getting back to basic education about the animals, their habitats and how our actions can contribute to their preservation or decline.

Having witnessed how the behind the scenes educational programs at the park captivated high school aged Latino youth, there is no question in my mind that theatrics are not needed to interest and inspire future generations.

LULAC will continue to seek out real-work experiences for our youth as we do our part to empower Latino advocates, parents, students, and others with the information and experiences to expand the pipeline of Latinos into STEM fields.

We look forward to our youth having the opportunity to be educated and inspired by the Orca Encounter presentations in the future.

If you have any questions please feel free to contact me at (805) 258-1800. Thank you for your consideration of our position.

Sincerely,

CALIFORNIA LEAGUE OF UNITED LATIN AMERICAN CITIZENS

David Rodriguez, State President

Member, LULAC National Board of Directors

dave.rodriguez.lulac@gmail.com www.california lulac.com

Mr. Steve Kinsey, Chairman
California Coastal Commission
c/o Mr. Alexander Llerandi, Coastal Program Analyst
San Diego District
7575 Metropolitan Drive, Suite 103
San Diego, CA 92108

Re: Support SeaWorld's orca show set change

Dear Mr. Kinsey,

Over the years, Helen Woodward Animal Center has been fortunate enough to have the support of Sea World during some challenging times and they have been by our side to rescue a number of animals in need. In addition, our team has had the opportunity to observe a recent release of sea lions that had been nursed back to health by caring Sea World staff members and we know that they represent just a handful of the thousands of injured and ill animals rescued by Sea World. Whether acting as an evacuation site for our animals during wildfires or assisting us as we rescue animals from Hurricane Sandy, the team at Sea World is completely dedicated to the welfare of all animals.

In light of this past show of commitment to animal welfare and due to the fact that we are dedicated to any project that will enrich the lives of all types of animals, we lend our support for SeaWorld's new Orca Encounter Project. Since SeaWorld is now required to change from theatrical shows to a more educational presentation approving this project allows them to change the bright, busy set at Shamu Stadium to a beautiful naturalistic backdrop appropriate for such majestic animals.

Here at Helen Woodward Animal Center we have been committed to the idea of people helping animals and animals helping people for more than 40 years. That's why we have such a strong bond with SeaWorld – they share a similar belief and have been working tirelessly for animals for over 50 years.

We respectfully urge you to approve the Orca Encounter project and let SeaWorld develop a beautiful backdrop from which they can display these amazing animals.

Sincerely,

Michael M. Arms,

President, Helen Woodward Animal Center



October 24, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421 Alexander.Llerandi@coastal.ca.gov

Dear Mr. Llerandi,

I hope this finds you well!

On behalf of all of us at the San Diego Tourism Authority, I would like to extend our support for the proposed set change of the new orca experience at SeaWorld San Diego.

SeaWorld San Diego is a great partner of ours and has been vital in the care of animals in our community for over the past 50 years. This change will help to educate visitors which will bring numerous benefits to our local economy. Currently, there are millions of visitors who enjoy SeaWorld each year. This update will help to increase tourism and help to provide tens of millions of dollars to our regional economy.

Additionally, there are thousands of local residents who are employed by SeaWorld San Diego. The Park provides millions in tax revenue to local governments and schools in our region.

We kindly ask the California Coastal Commission to approve SeaWorld's proposed set changes to their orca exhibit. I am happy to discuss this further with you should you have any questions.

Best regards,

President & CEO

RECEIVED

OCT 27 2016

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DETRIC





9505 Chesapeake Drive San Diego, CA 92123 Phone: 858-712-4700 Fax: 858-712-4701 www.dyna-sd.com

10/27/2016

Mr. Steve Kinsey, Chairman
California Coastal Commission
c/o Mr. Alexander Llerandi, Coastal Program Analyst
San Diego District
7575 Metropolitan Drive, Suite 103
San Diego, CA 92108

VIA EMAIL: <u>Alexander.Llerandi@coastal.ca.gov</u>

Re: Support SeaWorld's Orca Experience Application

Dear Mr. Kinsey,

On behalf of Dynalectric San Diego, I am writing to ask your support for SeaWorld's application to change the backdrop at Shamu Stadium. This project and the previously approved Ocean Explorer will help stimulate our region's economy by providing high-quality construction jobs. It also will align SeaWorld's orca venue with new state requirements to provide educational orca presentations.

For 50 years, SeaWorld has been a responsible steward of animals, a great community partner, a driving force for tourism, a major employer, and an important economic driver in the San Diego region. By approving the application to change the set at Shamu Stadium, you will be contributing to the economic benefits SeaWorld brings to our city.

The Orca Encounter project will provide good construction jobs for San Diegans. From carpenters to cement masons, electricians to plumbers, it will keep tradesmen and others employed for several months. While both union and non-union companies will be utilized, the vast majority of workers will come from San Diego County.

I urge the Coastal Commission to approve this project.

Sincerely,

Channey Doud, Executive Vice President



# EX PARTE COMMUNICATION DISCLOSURE FORM

Filed by Commissioner: Greg Cox

- 1) Name or description of project: <u>SeaWorld San Diego removal and replacement of existing, abovegrade stage at Shamu Stadium for new Orca Experience show</u>
- 2) Date and time of receipt of communication: Tuesday, October 25, 2016, 1:30 p.m.
- 3) Location of communication: 500 SeaWorld Drive, Mission Bay Park, San Diego, CA
- 4) Identity of person(s) initiating communication: Corrine Brindley
- 5) Identity of person(s) on whose behalf communication was made: SeaWorld San Diego
- 6) Identity of persons(s) receiving communication: Greg Cox, Victor Avina
- 7) Identity of all person(s) present during the communication:

Greg Cox, County Supervisor, County of San Diego

Victor Avina, Policy Advisor, Office of Supervisor Greg Cox

Marilyn Hannes, Park President, SeaWorld San Diego

Darlene Walter, Vice President Maintenance and Engineering, SeaWorld San Diego

Corrine Brindley, Corporate Vice President, State Affairs, SeaWorld San Diego

Al Garver, Curator, Zoological Operations, SeaWorld San Diego

Ken Peters, Assistant Curator, Animal Training, SeaWorld San Diego

Lindy Donahue, Supervisor, Animal Training, SeaWorld San Diego

Kristie Burtis, Supervisor, Animal Training, SeaWorld San Diego

David Watson, Attorney, Duane Morris

Ben Haddad, Principal, California Strategies

Allison Rolfe, Vice President, California Strategies

Complete, comprehensive description of communication content (attach complete set of any text or graphic material presented):

On October 25, 2016 at 1:30 p.m., my staff member Victor Avina and I met with the group listed above to discuss SeaWorld San Diego's proposal for the removal and replacement of the existing, above-grade stage set at Shamu Stadium for a new Orca Experience show to debut in 2017. The SeaWorld representatives expressed their desire to replace the existing stage set for one that better complements an educational presentation, as opposed to a theatrical presentation.

The representatives explained that the new stage set would remove the four rotating screens and whale tail that currently exist and install a solid, static screen two or three feet from the water that pictures a natural setting and would not exceed 30 feet in height. Further, the screen would be attached to the existing stainless steel catwalk and would be surrounded by rocks mostly made of fiberglass.

Construction for the set, if approved, would commence in early January 2017 and last through the end of April. In response to our question, the group explained that the Stadium would be closed to guests during construction and that the construction would avoid jack hammering and, instead, use core drilling and saw cutting, which minimizes sound impact on the whales. The representatives assured us that, at minimum, seven people would be monitoring whale behavior during construction and that construction would be stopped if the whales displayed signs of distress. They also informed us that Dr. Ann Bowles, a senior research scientist at Hubbs-SeaWorld Research Institute who specializes in animal bioacoustics, would be at the Coastal Commission meeting to answer any questions the Commissioners might have.

EXHIBIT NO. 6
APPLICATION NO.
6-16-0483

Ex Parte

Communication
California Coastal Commission

presentatives informed us that SeaWorld San Diego had received letters of support for the from Assemblymember Richard Bloom and the Humane Society of the United States.

TIMING FOR FILING OF DISCLOSURE FORM: File this form with the Executive Director within seven (7) days of the ex parte communication, if the communication occurred seven or more days in advance of the Commission hearing on the item that was the subject of the communication. If the communication occurred within seven (7) days of the hearing, provide the information orally on the record of the proceeding and provide the Executive Director with a copy of any written material that was part of the communication. This form may be filed with the Executive Director in addition to the oral disclosure.

# RECEIVED

OCT 31 2016

**From:** Brindley, Corrine [mailto:corrine.brindley@SeaWorld.Com]

**Sent:** Monday, October 31, 2016 7:55 AM

To: Avina, Victor

Subject: PETA protest at CCC

FYI, wanted you to be aware of this development. This increases the chances the item will get pulled off consent. Let me know if you have any questions. Thank you.

http://m.topix.com/county/san-mateo-ca/2016/10/urgent-seaworld-protest-at-coastal-commission-hearing?fromrss=1

## CALIFORNIA COASTAL COMMISSION

SAN DIEGO AREA 7575 METROPOLITAN DRIVE, SUITE 103 SAN DIEGO, CA 92108-4421 (619) 767-2370



# **F20c**

Filed: 5/23/16 180th Day: 11/19/16 Staff: A. Llerandi-SD Staff Report: 10/7/16 Hearing Date: 11/4/16

# STAFF REPORT: REGULAR CALENDAR

**Application No.: 6-16-0483** 

Applicant: SeaWorld San Diego

**Agent:** Darlene Walter

**Location**: 500 SeaWorld Drive, Mission Bay Park, San Diego,

San Diego County (APN: 760-037-01-01)

**Project Description**: Removal of existing above-water theatrical screens

and show set and installation of new stage set pieces

for new Orca Experience show.

**Staff Recommendation:** Approval with Conditions

# SUMMARY OF STAFF RECOMMENDATION

The proposed development is to remove and replace the existing, above-grade stage set at the existing Shamu Stadium for a new Orca Experience show to debut in 2017.

In October, 2015, the Commission approved a permit to expand the existing orca facility with new 450,000 gallon and 5.2 million gallon pools and replacement of a nearby restroom facility (CDP No. 6-15-0424). However, the applicant has indicated to Commission staff that SeaWorld is unlikely to move forward with completing the permit process for that much larger project; the applicant has not satisfied the prior-to-issuance conditions placed on the permit and the permit has thus not yet been issued. This permit

currently before the Commission is independent of the previously approved tank expansion and is not dependent upon or related to that development.

Because SeaWorld is a large, well-frequented facility located in an already popular coastal park area, its operation and expansion could create potential impacts to nearby coastal resources. Mission Bay Park is served by a limited number of access roads that often become congested during periods of high vehicle volume, which the addition of a new attraction area at SeaWorld may exacerbate. Mission Bay Park consists of large amounts of open space and water area, and the erection of new, visually intrusive structures may impair public views or detract from the visual quality of the park. Because SeaWorld is located on a site adjacent to Mission Bay and in an area with nearby geological faults, the potential for water quality impacts due to runoff from the proposed attraction area or public risk from creating a public attraction in a geologically unstable area may be present. While the work will not occur within the tanks housing the orcas, the presence of construction machinery and proximity to the orcas raises the possibility that construction noise could impact them.

However, the proposed project will not impact public access and recreation because annual traffic monitoring demonstrates that the surrounding intersections and road segments are still operating at acceptable levels, and that SeaWorld has adequate parking supply to handle their attendance numbers. Visual impacts are not expected because the site of the proposed attraction area is located within the developed amusement park area, and will be surrounded by existing structures and landscaping, screening it from public view. Water quality and geologic impacts will be avoided because the project site is located well away from the limits of a buried, historic landfill and will direct all site runoff into the existing water treatment system serving the park. Because the proposed development is above-water, and noise mitigation measures will be incorporated into the project, significant noise impacts to the resident orcas are not anticipated.

To address these potential adverse impacts, the Commission staff is recommending five special conditions. **Special Condition No. 1** will require adherence to final revised plans that prohibit any stage element from extending beyond 30 feet above grade. **Special Condition No. 2** requires a final drainage plans to ensure that runoff from the upgraded stage area enters SeaWorld's existing water treatment system before entering Mission Bay Park and final construction staging and storage plans to avoid adverse impacts to public access in the surrounding park area from construction activity. **Special Condition No. 3** requires that the project adhere to the construction noise mitigation measures contained in the August 15, 2015, and October 7, 2016 memoranda offered by SeaWorld so as to avoid noise impacts to the resident orcas. **Special Condition No. 4** gives SeaWorld notice that should its attendance figures surpass 4 million annual visitors, additional public access improvement measures may be required to mitigate for future development.

Commission staff recommends **approval** of coastal development permit application 6-16-0483 as conditioned.

# **TABLE OF CONTENTS**

I.	MO	ΓΙΟΝ AND RESOLUTION	4
II.	STA	NDARD CONDITIONS	4
		CIAL CONDITIONS	
		DINGS AND DECLARATIONS	
	A.	PROJECT DESCRIPTION	
	B.	PROJECT HISTORY	
	C.	MARINE RESOURCES	.11
	D.	PUBLIC ACCESS	. 14
	E.	WATER QUALITY	
	F.	HAZARDS	. 17
	G.	VISUAL RESOURCES	
	H.	LOCAL COASTAL PLANNING.	
	Ţ	CALIFORNIA ENVIRONMENTAL OLIALITY ACT	

# **APPENDICES**

<u>Appendix A – Substantive File Documents</u>

# **EXHIBITS**

Exhibit 1 – Vicinity Map

Exhibit 2 – Aerial View

Exhibit 3 – Site Plans

Exhibit 4 – Noise Memorandum

Exhibit 5 – Letter of Support

# I. MOTION AND RESOLUTION

#### **Motion:**

I move that the Commission approve Coastal Development Permit Application No. 6-16-0483 subject to the conditions set forth in the staff recommendation.

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

#### **Resolution:**

The Commission hereby approves coastal development permit 6-16-0483 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

# II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

- 1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

# III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

#### 1. Submittal of Revised Final Plans.

# A. **PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of the following revised final plans, modified as required below.

- 1. Final construction plans that substantially conform with the plans submitted to the Commission, titled "SWSD Orca Experience 2017" dated May 11, 2016, except that they shall be modified as required below:
  - a. No element of the approved development shall exceed 30 feet in height above existing grade.
- B. All revised plans shall be prepared and certified by a licensed professional or professionals as applicable (e.g., architect, surveyor, geotechnical engineer), based on current information and professional standards, and shall be certified to ensure that they are consistent with the Commission's approval and with the recommendations of any required technical reports.
- C. The applicant shall undertake the development in conformance with the approved plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviation.

#### 2. Submittal of Final Plans.

# A. **PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT**, the applicant shall submit, for the review and written approval of the Executive Director, two full-size sets of the following final plans:

- 1. Final construction and post-construction drainage and Best Management Practice (BMP) plans. Said plans shall demonstrate that all runoff from the project area shall be captured by SeaWorld's existing stormwater treatment system.
- 2. Final construction staging and storage plans that contain staging and storage within the SeaWorld leasehold and do not spread, or

- cause other SeaWorld activity, to spread into public park areas outside the leasehold.
- B. The permittee shall undertake the development in conformance with the approved final plans unless the Commission amends this permit or the Executive Director determines that no amendment is legally required for any proposed minor deviation.
- 3. **Noise Reduction Program.** PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director a written agreement whereby the applicant agrees to implement the noise reduction measures outlined in the SeaWorld memoranda dated August 21, 2015, and October 7, 2016 from Hubbs-SeaWorld Research Institute and Rudolph and Sletten, respectively.

The applicant shall undertake the development in accordance with the approved plan. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission-approved amendment to the coastal development permit unless the Executive Director determines that no amendment is legally required.

4. **Future Development.** When documented annual attendance at the SeaWorld Park reaches 4 million visitors, the applicant shall notify the Executive Director in order to review potential impacts to public access. Additional traffic and parking mitigation measures may be required for subsequent identified Tier 2 project and Special project sites, according to criteria in the SeaWorld Master Plan Update.

#### IV. FINDINGS AND DECLARATIONS

#### A. PROJECT DESCRIPTION

SeaWorld San Diego proposes to demolish the existing above-water stage set in the Shamu Stadium and construct a new set in its place with related sound and lighting upgrades in anticipation of a new "Orca Experience" show expected to debut in 2017. The existing set pieces including the four LED screens and motors will be unbolted and craned away to be further disassembled. The substructure that supports the existing set will remain in place to support the new backdrop.

The new backdrop proposed to be installed is designed to mimic an outdoor coastal setting in the Pacific Northwest. The set will utilize a rockwork façade consisting of multiple fiberglass reinforced panels that will be brought in by crane and bolted to the existing substructure. Seams between the panels will be bonded together to create a seamless appearance across the set. Artificial trees and a waterfall feature will also be incorporated into the backdrop. Rockwork away from the pool area will consist of traditional concrete that is carved and colored to resemble natural rock. Various stairways within the stadium will also be demolished and reconstructed, along with sound and lighting upgrades. Additional aesthetic treatments and decorations will also be installed at various points in the stadium complex, such as around the orca haul out platform at the front of the show pool and around the public viewing area adjacent to one of the rear orca tanks.

The project consists entirely of above-water work and does not involve demolition, reconstruction, or modification to any of the existing pools that currently house the orcas residing at SeaWorld.

#### B. PROJECT HISTORY

SeaWorld began construction in 1961 and opened to the public in 1964. Since then, the park has operated under a number of different master plans. The SeaWorld Master Plan is a separate, stand-alone segment of the certified Mission Bay Park Master Plan LUP. The most current plan, the SeaWorld Master Plan Update, was certified by the Commission on February 7, 2002, and addressed future development within the SeaWorld leasehold over the subsequent 15-20 years (LCPA No. 2-2001C). The SeaWorld Master Plan Update sets forth the long-range conceptual development program, development parameters, and project review procedures for the future renovation of the SeaWorld Adventure Park. One of the stated goals of the SeaWorld Master Plan Update is "to define development criteria for future conceptual development areas," and the purpose is to "create a framework for continued improvements and renovations to the park into the new century." The SeaWorld Master Plan update recognizes that:

The SeaWorld site is unique in both the type and frequency of development projects within the leasehold. Each year, SeaWorld processes numerous projects to upgrade park facilities and keep attractions in top working order. Additionally, in response to

consumer demands and competition in the theme park industry, SeaWorld regularly undertakes renovations of its larger attractions, rides, shows, or exhibits.

The Commission has approved multiple above-water improvements to Shamu Stadium related to changes in shows or attractions, including shade structures (6-83-190), a 1,000 seat addition (6-87-658), a 1,500 seat addition (6-89-363), lighting upgrades (6-01-075), a "Dine with Shamu" eating area (6-04-158), replacement of the stadium stage set (6-05-031-W), and lighting, sound, and effects upgrades (6-10-086).

In October, 2015, the Commission approved a permit to expand the existing orca facility with new 450,000 gallon and 5.2 million gallon pools and replacement of a nearby restroom facility (CDP No. 6-15-0424). However, the applicant has indicated to Commission staff that SeaWorld is unlikely to move forward with completing the permit process for that much larger project; the applicant has not satisfied the prior-to-issuance conditions placed on the permit and the permit has thus not yet been issued. This permit currently before the Commission is independent of the previously approved tank expansion and is not dependent upon or related to that development.

#### C. MARINE RESOURCES

Section 30001 of the Coastal Act describes the goals of the Act:

*The Legislature hereby finds and declares that:* 

- (a) That the California coastal zone is a distinct and valuable natural resource of vital and enduring interest to all the people and exists as a delicately balanced ecosystem.
- (b) That the permanent protection of the state's natural and scenic resources is a paramount concern to present and future residents of the state and nation.
- (c) That to promote the public safety, health, and welfare, and to protect public and private property, wildlife, marine fisheries, and other ocean resources, and the natural environment, it is necessary to protect the ecological balance of the coastal zone and prevent its deterioration and destruction.
- (d) That existing developed uses, and future developments that are carefully planned and developed consistent with the policies of this division, are essential to the economic and social well-being of the people of this state and especially to working persons employed within the coastal zone.

Additionally, Section 30001.5 of the Coastal Act states:

The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.

- (b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state.
- (c) maximize public access to and along the coast and maximizing public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.
- (d) Assure priority for coastal-dependent development over other development on the coast.
- (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

### Chapter 3 policy, Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological significance. Uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

The proposed project is a demolition and remodel of the above-water stage area of the Shamu Stadium in preparation of a new "Orca Experience" show to debut in 2017. While the work will not occur within the tanks housing the orcas, the presence of construction machinery and proximity to the orcas raise concerns regarding possible noise impacts. As orcas are a marine resource, these impacts and the methods to avoid them must be analyzed.

#### Noise Impact Analysis

In the past, the Commission has looked at development wherein impacts to marine mammals were anticipated, including noise impacts. Many marine mammals, such as orcas, utilize sound to navigate or communicate, and noise impacts from human development can either interfere with these functions or harm the sensitive hearing of the mammals, causing injury, death, or alteration of natural behaviors. When SeaWorld applied for construction of the Journey to Atlantis splashdown ride, which was designed to hold 10 Commerson's dolphins within its structure, the Commission requested that SeaWorld submit information detailing the existing and anticipated ambient noise levels within the dolphin facility and the steps to be taken to shield the dolphins from noise impacts, which SeaWorld did to the Commission's satisfaction.

SeaWorld has addressed noise impacts on it captive marine mammals in the past. At the Commission hearing for the SeaWorld Master Plan Update in February 2002, members

of the public and Commissioners raised concerns over how the animals would be affected by noise generated by development contained in the master plan. In the case of the Journey to Atlantis splashdown ride, the first development built pursuant to the current master plan and approved in CDP No. 6-01-0129, the concerns was focused on Commerson's Dolphins proposed to be housed within the ride area. To address those concerns, SeaWorld submitted a memorandum demonstrating that the ambient noise level in the water would be lower than existing levels once the ride was completed, and detailed the construction measures and design features that would be utilized to achieve that result.

In October 2015, the Commission approved the "Blue World" project, an expansion of the existing orca facility through construction of a new, larger pool. The project involved the excavation of 35,000 cubic yards of soil and construction of a large 5,000,000 gallon tank, creating the risk that construction activity could create noise impacts for the orcas in the adjacent, remaining pools, as construction sounds travel through the water. In the application, SeaWorld submitted an August 21, 2015 memo from Hubbs-SeaWorld Research Institute addressing sound propagation in water and describing the construction methods that would have been implemented in order to minimize noise generation and isolate the orcas from the noise. The memo was reviewed by the Commission and found adequate to address noise impact concerns.

In this current proposal consisting wholly of above-water work, SeaWorld resubmitted the memo (Exhibit 4) from the Hubbs-SeaWorld Research Institute, confirming that sounds attenuates (declines in level) at different rates depending on the location of origin and the medium in which it is travelling. Within a SeaWorld pool, the memo states that attenuation averages 2-3 decibels (dB) for a 10kHz tonal (narrowband) signal, which is fairly low attenuation. However, the memo continues that when a sound travels from outside a boundary such as a concrete wall, the attenuation is greater, depending on the intervening substance. In the case of propagation of sound from air into water, sound originating in the open air transmits inefficiently into water (unless produced directly overhead in a narrow cone), and will be attenuated by approximately 30 dB (comparable to the difference in noise level between the inside and outside of a building with doors and windows shut). Furthermore, the memo states that orcas hear best at higher frequencies, and that high frequency noise is attenuated more than low frequencies when traveling over a distance.

For this application, SeaWorld also submitted a letter dated October 7, 2016, from Rudolph & Sletten (Exhibit 4), the construction firm contracted to construct this project and who has constructed other major improvements within SeaWorld in the past. The letter states that the construction will coordinate with the orca trainers overseeing the orcas to inform them of upcoming activities and that construction crews will be made aware of any issues the trainers observe in the orcas during their monitoring. The letter further states some of the noise mitigation measures that will be utilized: constructing the crane beyond the rear of the stadium, using "wet" concrete saws to reduce noise and dust and produce pieces that can be removed by loaders or by hand, and to muffle pneumatic tools, install water-filled K-rails along the perimeter, and stage concrete trucks at least 100 feet away while hosing in the concrete. To minimize noise impacts, the proposed

construction work will be screened and separated above grade by 8-ft. tall panels. When above grade work such as demolition occurs, the whales will be directed into the pools farthest away from the work. Many stage components will be cut into segments and removed or craned away and disassembled elsewhere so as to avoid the use of noisier jack hammers. Due to the size of the excavation area, the majority of the work will be conducted more than 50 feet away from the concrete wall separating the expansion area from the remaining orcas pools, so that construction noise will be greatly attenuated.

The Commission's staff ecologist has reviewed the proposed noise attenuation measures and determined that they are adequate to protect the marine resources at the site. **Special Condition No. 3** requires that SeaWorld adhere to the construction measures contained in its April 21, 2015 memo and October 7, 2016 letter, and that any deviation from such measures be reviewed by the Executive Director for determination as to whether an amendment to this CDP is required.

In conclusion, with the above-grade nature of the proposed work and the aforementioned noise-attenuation measures incorporated into the project, the Commission finds that the proposed project, as conditioned, is in conformance with the marine resource protection policies of Chapter 3 of the Coastal Act.

### D. PUBLIC ACCESS

Section 30210 of the Coastal Act states:

In carrying out the requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211 of the Coastal Act states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first terrestrial vegetation.

Section 30212 of the Coastal Act states, in part

a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

 $[\ldots]$ 

c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

Section 30213 of the Coastal Act states, in part:

Lower cost visitor serving and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30604 of the Coastal Act states, in part:

[...]

c) Every coastal development permit issued for any development between the nearest public road and the sea of the shoreline of any body of water located within the coastal zone shall include a specific finding that the development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).

SeaWorld is a private commercial leasehold within Mission Bay Park, a public park owned by the City of San Diego. The site is located between the first coastal roadway and the bay.

There are only a few remaining areas of Mission Bay Park where public access is routed inland around existing commercial leaseholds rather than along the shoreline. SeaWorld is one of those leaseholds. Although public lateral access is available along most of the Mission Bay shoreline, there is no access through the SeaWorld leasehold, which extends to or beyond the waterline in places. Pedestrian and bicycle traffic can cross through the parking areas and rejoin the bayside pathway on either side of the leasehold. Vertical access is available at those same two locations and informally elsewhere along the shore depending upon parking or transit availability. The proposed development will be located entirely within the private leasehold, approximately 1,100 feet from the shoreline, and will not encroach into any existing or proposed public accessways. The Mission Bay Master Plan lists a complete pedestrian access pathway around the bay as a future goal; access through SeaWorld may itself be an issue when the lease is renewed, but for this permit, the Commission finds that lateral and vertical access is adequate and available to serve the needs of the public in this area of Mission Bay Park, and the proposed project will not preclude the ability to provide public shoreline access in the future.

Sea World Drive and Ingraham Street serve as major coastal access routes for all areas of Mission Bay Park and the public beaches at Pacific Beach, Mission Beach, and Ocean Beach, and serves as a popular commuter route as well. These are the only roadways serving SeaWorld. The lease between SeaWorld and the City of San Diego, as well as the

SeaWorld Master Plan Update, calls for phased traffic improvements based on the expected increase in attendance at the park. SeaWorld typically submits its annual attendance figures for each past year so the Commission will be aware when the next critical level of attendance occurs that would trigger traffic mitigation measures. Increased SeaWorld attendance has triggered, and SeaWorld has implemented, various traffic mitigation measures over the years. Numerous Commission-approved traffic and parking mitigation projects have been completed by SeaWorld since the certification of the SeaWorld Master Plan Update, including the addition of a public pedestrian promenade (CDP No. 6-06-022), road improvements along Sea World Drive and the southbound Interstate 5 interchange (CDP No. 6-08-016), and resurfacing, restriping, and landscaping to extend and widen bicycle and pedestrian paths across the southern and western edges of SeaWorld's main parking lot (CDP No. 6-05-075). Those improvements as well as the previously established traffic, roadway, and parking systems have been designed and constructed to support up to 4 million visitors annually. The next improvements are not required until attendance reaches 4 million, which is anticipated as the maximum anticipated attendance at full buildout. Last year, SeaWorld's annual attendance was approximately 3.613 million visitors.

Regarding traffic, SeaWorld submits annual traffic monitoring reports to the Commission for review of the impact of park operations on the surrounding transportation infrastructure. Because parks such as SeaWorld serve the public and are subject to changing preferences and market forces, attendance levels, and thus traffic impacts, can fluctuate over the years. Last year, Commission staff reviewed the preceding 5 years of traffic reports, as well as a summary report of those past years to discern any patterns. The analysis determined that the major intersections around SeaWorld have consistently operated at a Level of Service (LOS) of D or better, and that some intersections actually improved slightly in service over the past 5 years of monitoring. Regarding Average Daily Traffic (ADT), the studies focus mainly on AM peak periods and PM peak periods, as that is when SeaWorld traffic combines with local rush hour traffic to create the greatest impact. The past 5 years of studies show that AM peak ADTs have decreased by 5% while PM peak ADTs have increased by 6%. Overall, ADTs increased by 4% over the preceding 5 years, but as mentioned above, the LOS for the surrounding intersections has held steady or improved slightly. Thus, the growth in traffic has been relatively low at an average of just 1% a year over the preceding 5 years, with the LOS indicting that the existing infrastructure is adequately processing the load.

With respect to the adequacy of on-site parking, SeaWorld currently provides a total of 8,664 parking spaces for visitors, staff, and employees. SeaWorld's employment base includes full-time, part-time, and seasonal employees. Employee numbers vary during the year from approximately 2,600 non-peak employees to approximately 4,500 peak time employees. Parking spaces have not been specifically allocated to individual uses, but most employee parking occurs in the lots nearest the administrative facilities and, during times of heaviest park use, in the parking lot in the northwest portion of SeaWorld and within the leasehold boundaries. In addition to serving SeaWorld, the existing parking facilities have also served the needs of Hubbs Research Institute personnel. The Hubbs facilities, which include laboratories, aquaculture tanks, and associated research and administrative functions, are currently housed in the western area of SeaWorld, along

with many of SeaWorld's administrative, storage, and employee facilities. Under CDP No. 6-93-086, Hubbs converted the former Atlantis Restaurant building to research facilities retaining 77 spaces in the former Atlantis lot for use by Hubbs' researchers. The remainder of that lot and all other on-site parking facilities continue to be used by SeaWorld patrons and employees.

In 2010, total peak parking demand was 5,466 spaces. In 2011, peak parking demand was 6,382 spaces. In 2012 peak demand was 7,028 spaces. In 2013 peak demand was 7,103 spaces. In 2014, the peak demand was 6,357 spaces on July 19, 2014 (73% of total supply). Thus, SeaWorld's parking demand has not exceeded its on-site supply of 8,664 parking spaces.

The proposed development will not increase the capacity of the existing Shamu Stadium, and it will not increase the footprint of the existing structures. Thus, the project is not expected to result in an increase in traffic or parking demand. **Special Condition No. 4** reaffirms Master Plan requirements and puts SeaWorld on notice that when the annual SeaWorld Park attendance levels reach 4 million visitors, future development proposals may be required to complete certain traffic and parking mitigation measures as conditions of approval, such as enhancing surrounding public right-of-ways and road improvements, in conformance with mitigation criteria established in the SeaWorld Master Plan Update EIR. Furthermore, **Special Condition No. 2** requires SeaWorld to adhere to approved construction staging and storage plans to ensure that construction activity is properly contained within the leasehold and will not spill out into public areas or displace on-site parking to an extent that will cause patron parking to spread into public areas.

In summary, the Commission finds that the proposed project will not adversely impact the existing vertical and lateral accessways around the Sea World leasehold, or result in significant increases in traffic or parking demand. Therefore, the Coastal Commission finds the proposal consistent with all of the public access policies of the Coastal Act.

# E. WATER QUALITY

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological significance. Uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where

feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

#### Stormwater Runoff, Discharge, and Intake

The federal Clean Water Act (CWA) requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. States are required to compile these water bodies into a list, referred to as the "Clean Water Act Section 303(d) list of Water Quality Limited Segments" (List). States must also prioritize the water bodies on the list and develop Total Maximum Daily Loads (TMDLs) to improve water quality. At the time of the adoption of SeaWorld's National Pollutant Discharge Elimination System (NPDES) permit in June, 2011, Mission Bay was listed on the 303(d) list of impaired water bodies as impaired because of bacteria, lead, and eutrophication. A total maximum daily load has not yet been adopted for these pollutants.

As with all structural development in Mission Bay Park, storm runoff from SeaWorld San Diego enters into the adjacent Mission Bay. In addition, SeaWorld is unique in that it uses sea water for its aquariums and show tanks, and circulates this water to and from the bay. To address water quality concerns, SeaWorld constructed two on-site treatment facilities that have been operational since October, 1991. Conceived initially to address the treatment of used aquarium water, these facilities are subject to a NPDES permit and were ultimately designed with enough capacity to treat the entire leasehold and future planned leasehold improvements. The NPDES permit requires weekly sampling of coliform, chlorine, and acidity of the effluent, which discharges into Mission Bay, and semiannual monitoring of solids, turbidity, grease, and oil. Although designed primarily for the treatment of used aquarium water, these facilities also treat surface runoff from the developed park area and the improved parking lots before discharging into Mission Bay. The remainder of the parking lot runoff enters the City's municipal storm drain system, which is outfitted with low-flow interceptors. During more intense storm events, the nearest storm drain discharges directly into Mission Bay in the Perez Cove area (westernmost point of SeaWorld).

The current park layout includes a series of storm water and catchment areas that convey water to either SeaWorld's Western Wastewater Treatment Plant or the Eastern Wastewater Treatment Plant. The main visitor parking lot drains southerly to the municipal storm water system. The two treatment plants are used to treat the collected outfall discharge from storm water sources, landscape irrigation runoff, and various industrial activity wastewater from exhibit pools and aquaria. With the proposed development, the volume of influent and effluent will increase but will still be within the existing Regional Water Quality Control Board permit limits, and will not require amendments to those permits. SeaWorld also has two backup generators, one each at the

west and east treatment facilities, to ensure they are operable during extended power outages.

In addition, SeaWorld has a Best Management Practices (BMP) program in place to control non-point sources of pollution during its day-to-day operations. In the past, concerns have been raised regarding SeaWorld's land and water operations with respect to maintaining optimum water quality. In particular, the manner in which surface runoff from the parking lots is discharged has been raised as a significant issue. This issue was addressed in detail in the Commission's review of the SeaWorld Master Plan, and SeaWorld's grading, drainage, erosion, and storm water requirements in that document were reviewed and found acceptable by the Commission's water quality staff. The proposed development is designed to tie into the park's existing storm water system. Moreover, the proposed development will not substantially increase impermeable surfaces or significantly change existing patterns of runoff. The subject proposal does not modify any of SeaWorld's existing water treatment, collection, or discharge facilities. These facilities currently process runoff from some of SeaWorld's paved parking lots and nearly all of its developed venues; this treatment will continue.

Because SeaWorld has an extensive water treatment system to handle water from both the stage area and surface runoff, which is monitored under a thorough permitting regimen that has identified minimal water quality violations, the proposed development, as conditioned, will not cause significant impact to the water quality of adjacent Mission Bay.

#### Landfill

The southeastern-most parking area of SeaWorld leasehold is underlain by a portion of the inactive Mission Bay Landfill. The City of San Diego operated the landfill from approximately 1952 until 1959. The landfill reportedly accepted municipal solid waste and some liquid industrial wastes (including acids, alkaline solutions, solvents, and paint wastes). The U.S. EPA estimates that up to 737,000 gallons of industrial wastes may have been disposed at the landfill during its operation. After closure of the landfill, dredged material from Mission Bay (consisting of mostly fine-grain material) was placed on top of the former landfill surface to a depth of approximately 15 feet. A portion of the site is currently paved with a chip-seal paving surface which allows for diffusion of landfill gases while remaining impervious to water infiltration. The proposed stage improvements are located approximately 1,700 feet to the west of the estimated western limits of the landfill and will be completely above-grade, with no excavation involved. Thus, there is no potential for contamination or human health impacts.

#### Conclusion

Because SeaWorld continues to intake and discharge water in and out Mission Bay, and because storm water runoff from the site and water from the expanded tanks will eventually enter the bay, **Special Condition No. 2** requires SeaWorld to submit a final drainage plan that ties into the existing treatment system currently serving the park, which the Commission and other agencies have found adequate to treat such outflows.

In conclusion, the water quality data submitted both for the current proposal as well as past developments approved by the Commission, in conjunction special conditions regulating water quality, means the proposed development will not adversely impact the water quality of coastal waters and is found in conformance with Chapter 3 of the Coastal Act.

#### F. HAZARDS

Section 30253 of the coastal act states in relevant part:

*New development shall <u>do all of the following:</u>* 

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along the bluffs and cliffs.

[...]

A March 17, 2015 Christian Wheeler geotechnical report indicates that the soils at the Shamu Stadium site are susceptible to liquefaction in the event of a major earthquake on the Rose Canyon Fault (1.5 miles from the site) could produce liquefaction-induced settlement of 5-8 inches, and differential settlement of 3.5-5.5 inches. However, the proposed development doesn't involve excavation of soils or construction of below-grade improvements. The new stage set will be bolted onto existing foundational framework that is already in place and that supported the existing stage set. The project will not create nor increase any hazards, consistent with Chapter 3 of the Coastal Act.

#### G. VISUAL RESOURCES

Section 30251 of the Coastal Act states, in part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.

The proposed set reconstruction will be located within the developed boundaries of SeaWorld, near the center of the park leasehold, within the existing Shamu Stadium. The proposed development is designed to be visually consistent with the existing adjacent

structures. The proposed improvements are substantially above-grade, and the above-grade improvements will not be above 30 feet in height and will not be visible from outside of the park leasehold.

Mission Bay Park is recognized nationally as a public resource providing a wide variety of passive and active recreational opportunities in a unique, visually-pleasing setting. The park is generally horizontal in character, consisting primarily of rolling grassy areas, sandy beach, and open water. There are a number of commercial leaseholds scattered throughout the park, which have been developed to various intensities. For the most part, the structural improvements in Mission Bay Park are low scale and do not detract from the wide open feeling of the park. Limited exceptions exist in four hotel towers (Hyatt Islandia, Bahia, Catamaran, and Hilton) and three attractions at SeaWorld (the observation tower, the gondola ride, and the splashdown ride). The majority of these structures predate the Coastal Act as well as the City's 30-foot coastal height limit overlay zone passed by City voters in the 1970's.

In 1998, SeaWorld sponsored, and City voters approved, an initiative exempting its leasehold from the City's 30-foot coastal height limit overlay zone. This initiative allowed future development within the leasehold to go as high as 160 feet – half the height of the existing observation tower. The splashdown ride was approved by the Commission subsequent to this exemption and the 2002 updates to the certified Mission Bay Park Master Plan and the SeaWorld Master Plan incorporated the initiative exemption. However, the majority of the facilities at Sea World are completely or largely screened from the surrounding park and bay. The gondola ride, which supports are 100 feet tall, is in an area of existing mature vegetation that is 60-80 feet in height that provides screening. The currently developed portions of SeaWorld are heavily landscaped with a variety of mature trees, shrubs, and groundcovers. Many existing trees are 60-80 feet tall and effectively screen the interior of the park from views outside SeaWorld. In addition, the existing landforms and development in this area obscure any view of Mission Bay across the historic leasehold itself.

All of Mission Bay Park is a highly scenic public recreational resource, such that protection and enhancement of visual amenities is a critical concern for any proposed development in the park. The appropriate height of any proposed structure must consider the specific details, siting, scale, and bulk of the proposed development, the nature of surrounding development, and the potential for cumulative impacts from additional future development.

The Commission's primary concern with respect to view preservation is to assure that views currently available to the general public recreating in Mission Bay Park are not obscured or significantly degraded. The public recreational amenities at South Shores Park are located immediately east of the SeaWorld leasehold, but significantly distant from the proposed development. Across the Pacific Passage to the north of the leasehold lies Fiesta Island. Along with South Shores, this is the last remaining large piece of undeveloped parkland designated for public recreational uses. Like South Shores, anticipated improvements include grassy picnic areas, open play areas, restrooms, and

parking lots. These two areas are the closest to the SeaWorld leasehold, and thus most likely to be affected by development within the park.

The proposed stadium set upgrade is located within, but not along the perimeter of, the existing enclosed Sea World theme park, near the center. The project originally included artificial trees that would have exceeded 30 feet in height, but after discussion with Commission staff, the applicant has revised the project to lower all elements of the project to be less than 30 feet in height. Due to the existing mature vegetation throughout much of the developed park, buildings 30 feet in height or lower cannot be readily seen from outside the park. Therefore, the project will not impact the visual resources of the area.

Because the draft plans submitted show some elements exceeding 30 feet in height, **Special Condition No. 1** requires SeaWorld to adhere to revised final plans, which show the development to be completely under 30-feet in height. Thus, the Coastal Commission finds the proposed development visually compatible with the surrounding existing development, with no adverse impact on the existing scenic coastal area.

#### H. LOCAL COASTAL PLANNING

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

Mission Bay Park is primarily unzoned. As a whole, Mission Bay Park is a dedicated public park, and SeaWorld is designated as "Lease Area" in the certified Mission Bay Park Master Plan. The subject site is located within the City of San Diego in an area of deferred certification, where the Commission retains permit authority and Chapter 3 of the Coastal Act remains the legal standard of review.

However, as previously noted, the Commission has certified the SeaWorld Master Plan Update as a separate, stand-alone segment of the certified Mission Bay Park Master Plan LUP. The certified SeaWorld Master Plan Update divides the anticipated development and redevelopment needs of the entire SeaWorld leasehold into three categories: Tier 1, Tier 2, and Special Projects. Tier 1 identifies the sites and projects where new development or park renovations planned to be processed concurrently with the SeaWorld Master Plan or likely to be initiated shortly after the adoption of the master plan. Those projects include the Journey to Atlantis splashdown ride, an educational facility, front gate renovation, special events center expansion, and bicycle/pedestrian path enhancement. To date, all of those developments listed in that tier except for the special events center expansion have already occurred.

Tier 2 identifies sites within Area 1 (the developed park area) that are candidates for redevelopment; however, only general project descriptions are included in the master plan. Submittals for individual projects are expected to be made over a span of many years, and some have already been made, approved, and constructed (e.g. Manta

rollercoaster). Potential Tier 2 projects were not approved as part of the master plan, and no entitlements to redevelopment in the designated areas were granted nor implied. Finally, Special Projects are conceptual development proposals that have been identified for sites outside of the developed park but still within the SeaWorld leasehold. Like Tier 2 projects, Special Projects are not proposed to be built for many years, and like Tier 2 projects, only general project descriptions for future use are included.

The proposed development of a new set in Shamu Stadium is not specifically listed in the SeaWorld Master Plan Update as a Tier 1, Tier 2, or Special Project. However, SeaWorld is a large, public-serving facility with complex operations, and the SeaWorld Master Plan Update recognized that not all development that would occur in SeaWorld rose to the level requiring specific listing in the master plan. The master plan states that the:

...SeaWorld site is unique in both the type and frequency of development projects within the leasehold. Each year, SeaWorld processes numerous projects to upgrade park facilities and keep attractions in top working order. Additionally, in response to consumer demands and competition in the theme park industry, SeaWorld regularly undertakes renovations of its larger attractions, rides, shows, or exhibits.

Sections III and IV of the SeaWorld Master Plan establish "Development Criteria" and "Design Guidelines," respectively, to govern subsequent development. Section III states that it:

...sets forth the development parameters applicable to the entire leasehold or specific leasehold areas in this plan. The intent is to ensure that all future development will be distributed and constructed in a manner that, to the extent feasible, harmonizes with the established visual quality of Mission Bay Park.

### Section IV states that the guidelines:

...are intended as standards to be used by SeaWorld designers of buildings, landscaping, signage, and lighting as well as by maintenance personnel. The City of San Diego Real Estate Assets, Park and Recreation and Planning Departments, parks advisory committee, and City Council will utilize the design guidelines as a standard for evaluation of proposed new projects or for modifications to existing development.

Because of this recognition, in addition to the tiered project list, the SeaWorld Master Plan update contains development and design criteria regarding aspects such as public access, visual aesthetics, landscaping, and so on that apply not just to the listed Tier 1, Tier 2, and Special Projects, but to all development in SeaWorld in general. These guidelines include utilizing drought-tolerant plants and low-water irrigation, screening development from public park areas, designing visitor furnishings to be durable and visually compatible to the surrounding setting, utilizing non-glare lighting and limiting light spill over and intrusion into public views, and ensuring that architectural design conforms to the aquatic and educational nature of SeaWorld. The proposed development

is an upgrade of the existing Shamu Stadium stage area, and complies with the applicable guidelines contained in the plans. The Commission finds that the project is consistent with the SeaWorld Master Plan Update.

As conditioned, the proposed development is consistent with Chapter 3 of the Coastal Act, and thus, approval of the development, as conditioned, will not prejudice the ability of the City of San Diego to implement its certified LCP for the Mission Bay Park segment.

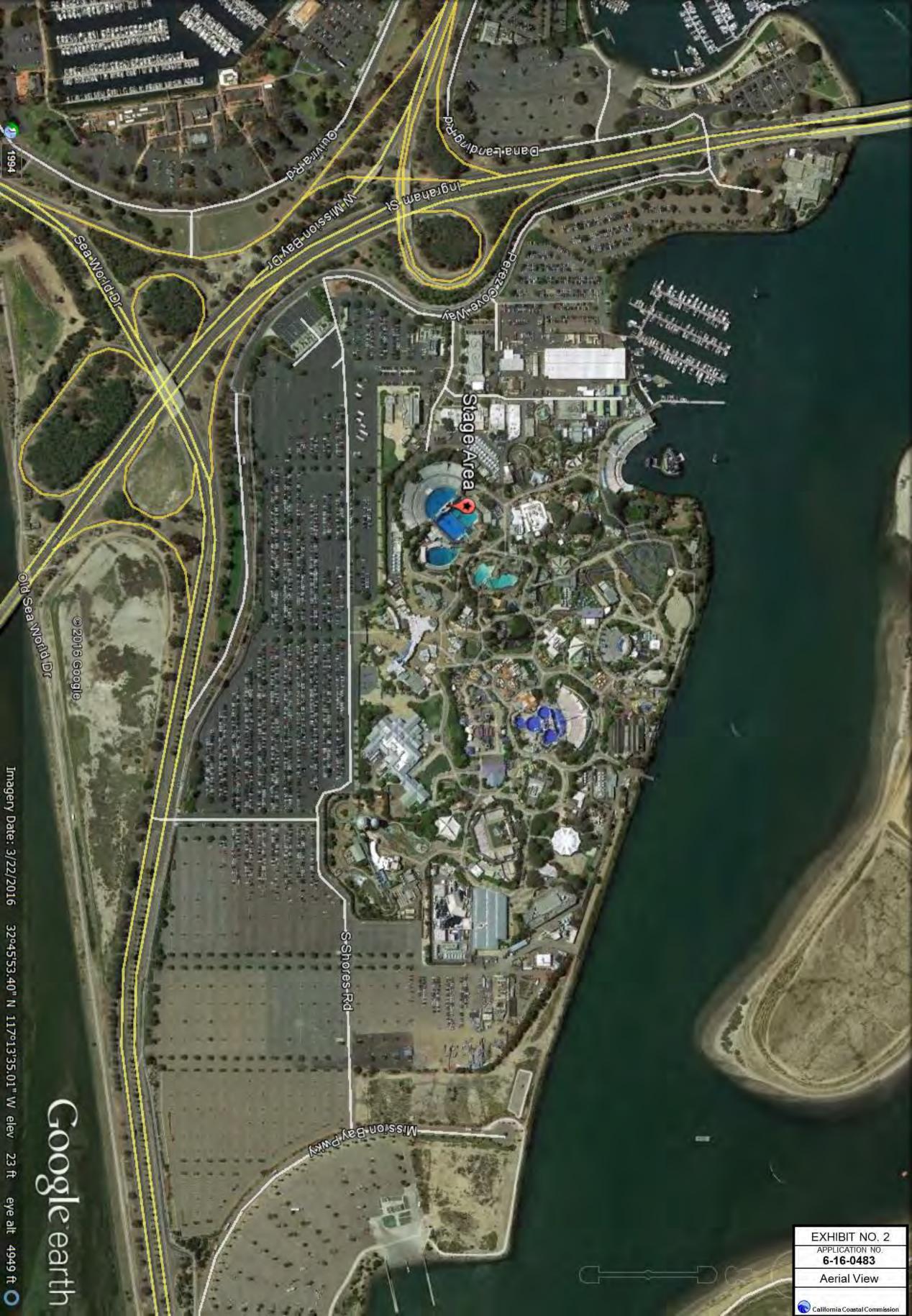
# I. CALIFORNIA ENVIRONMENTAL QUALITY ACT

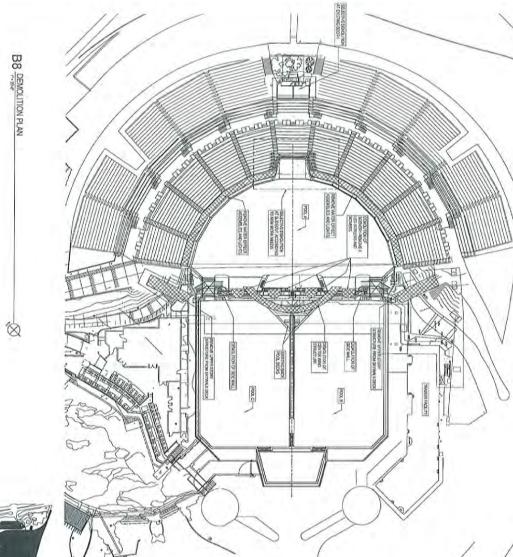
Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. A certified Environmental Impact Report (EIR 99-0618) was produced in 1999 in conjunction with the current SeaWorld Master Plan Update. Although the EIR for the Master Plan does not directly include this specific project, the EIR addresses the relevant impacts potentially created by the project, such as visual impacts, traffic impacts, geologic hazards, noise impacts, and impacts to water quality. The City of San Diego is the lead agency for the purposes of CEQA, and the City determined that because the 1999 EIR contemplated the type of impacts that the proposed project could produce and that the EIR recognized that SeaWorld had preexisting marine-related facilities that would require repair and upgrades, a new, projectspecific EIR was not required.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including conditions addressing final construction plans, drainage plans, construction staging, disposal of graded materials, and noise attenuation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

(G:\San Diego\Reports\2016\6-16-0483 SeaWorld Orca Experience stf rpt draft.docx)

# $A {\tt PPENDIX} \ A - S {\tt UBSTANTIVE} \ FILE \ DOCUMENTS$





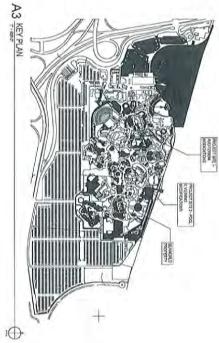


EXHIBIT NO. 3
APPLICATION NO.
6-16-0483

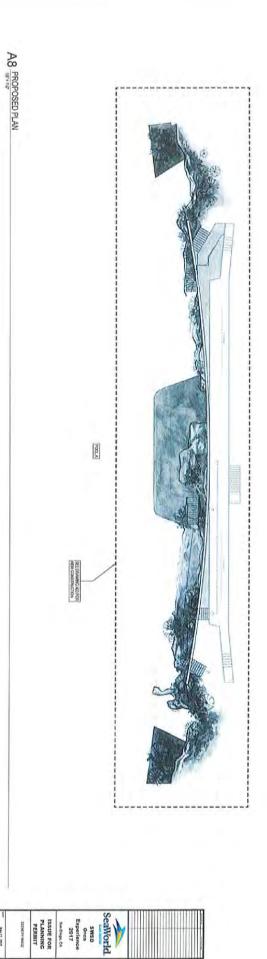
Site Plans



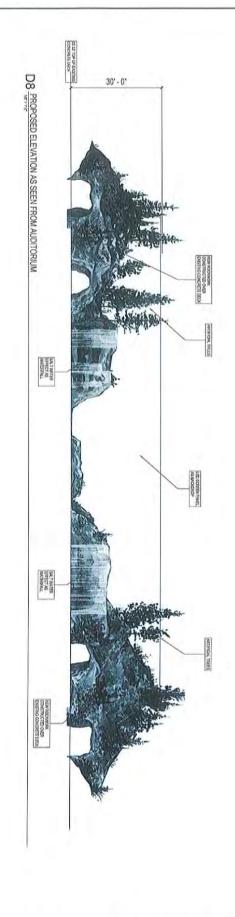








A02



Keynote List

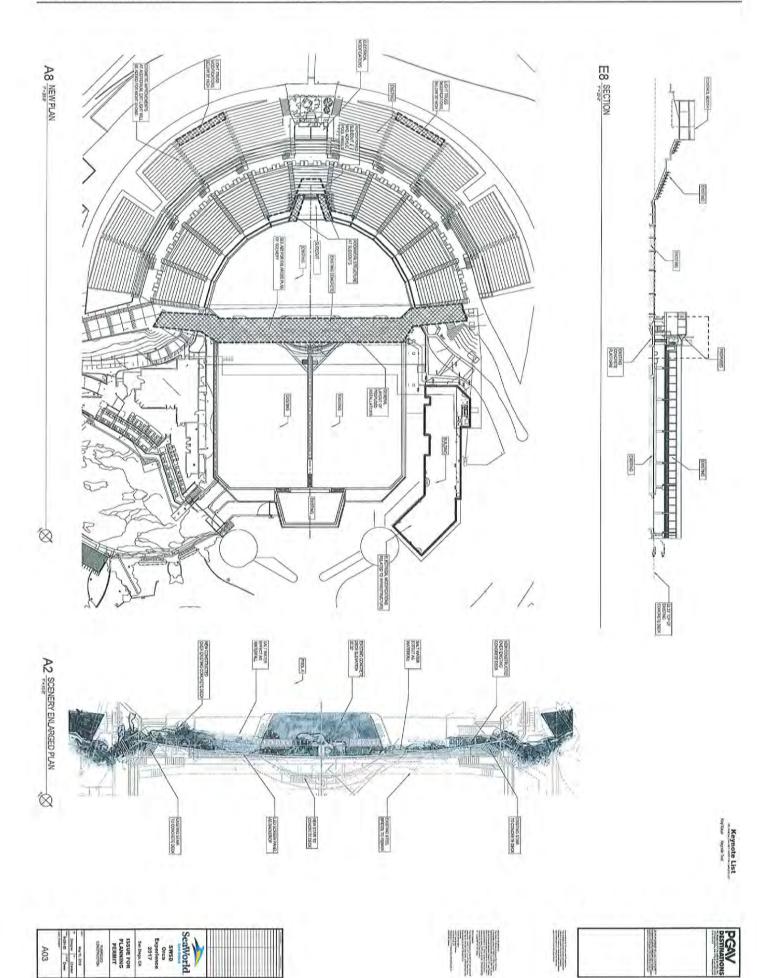














### MEMORANDUM

TO: DARLENE WALTER

FROM: ANN BOWLES, PHD, AND PAMELA K. YOCHEM, PHD, DVM

DATE: 8/21/15

RE: REGARDING NOISE, BLUE WORLD PROJECT CONSTRUCTION

CC: CORRINE BRINDLEY, CHRIS DOLD, AL GARVER, HENDRIK NOLLENS, JOHN

REILLY, MIKE SCARPUZZI

We are writing to address your questions about noise that may be produced during the Blue World construction project and ambient noise following construction. One of us (Bowles) leads the Bioacoustics Program at Hubbs-SeaWorld Research Institute (HSWRI) and was a member of the NOAA Acoustic Criteria Panel that developed science-based criteria for protecting marine mammals from exposure to noise in the environment (Southall et al. 2007). The other (Yochem) is a Ph.D. veterinarian and the Vice President for Research at HSWRI; she has over 30 years of research experience in marine mammal health.

Below, we summarize information from the published literature on construction noise and from publications written by our staff containing data on ambient sound measurements in SeaWorld pools. The citations are given in "References" at the bottom of the memo.

Applicable Principles of Acoustic Propagation of Sound:

Richardson et al. (1995) and Erbe (2010) are the best references for this brief description of basic acoustic principles.

First, it is important to note that the decibel (dB), the measure commonly used to express sound level, is not an absolute measure, but calculated relative to a standard quantity (and expressed on a logarithmic scale). The standard used in water is not the same as that in air. In addition, because the density of air and water are very different, it is necessary to compensate for the density difference to compare levels between the two – otherwise the comparison is "apples to oranges". To get an intuitive feel for the relationship between the level of a sound in air and one in water, subtract 62 dB from the level in water.

EXHIBIT NO. 4

APPLICATION NO. 6-16-0483

Noise Memorandum



In homogeneous seawater and in the absence of barriers, sound attenuates (declines in level) as a function of the square of distance, a decline of 6 dB in units of sound pressure level (SPL) for each doubling of distance between source and receiver. In shallow water, the decline may drop to 3 dB or less per doubling of distance. Through structures like walls, the decline may be much greater than 6 dB

Within a pool, where sound may be channeled by surfaces such as the water's surface, bottom, and walls, attenuation can be even less than in shallow water. In addition, the sound field can be complex in a pool and will certainly depend on the amount of energy at given frequencies. Finneran and Schlundt (2007) give detailed measurements made in a small pool on a concrete pad, showing that signals with broader bandwidths attenuate less with distance than those with narrow bandwidths (most construction noise will be broadband). Bowles and Anderson (2012) found that attenuation across a SeaWorld pool averaged 2-3 dB for a 10 kHz tonal (narroband) signal. Thus, within the space of a pool, attenuation can be low.

However, where sound travels from *outside* across a boundary like a concrete wall, or multiple walls separated by sand, the attenuation is much greater, just as sound in air is attenuated substantially by a glass window. Generally, the greater the difference in density across the boundary, the greater the attenuation.

Propagation of sound from air into water is a special case. Except when produced directly overhead, within a cone defined by an angle of 13° around the source, sound in air transmits inefficiently into water. Sounds produced anywhere except directly overhead will be attenuated by around 30 dB. This is comparable to the difference between noise inside vs. outside a building when doors and windows are shut. The attenuation across the airwater boundary is greater than across an 8′ plywood sound barrier in air.

Both distance and barriers affect sound differently depending on frequency. Higher frequencies, which the whales can hear well, are attenuated more than low frequencies, which they hear poorly (Szymanski et al. 1999). Thus, sound levels that the whales actually hear are likely to be lower than estimates of levels made without reference to their auditory thresholds.

Propagation of noise from construction activities into whale pools will first be a function of distance and second a function of the barriers or channels through which the sound propagates:

- 1) Construction activities with the potential to produce the highest received sound levels will be those in contact with pool walls or the concrete immediately adjacent to a pool, e.g., when cutting through the wall of an existing pool.
- 2) Propagation into pools can be reduced significantly by:
- a. Increasing distance between the sound source and whales;

- b. Placing the whales on the other side of a wall or away from an overhead source, i.e., away from line-of-sight propagation;
- c. Conducting construction activities behind barriers, for example by emptying a pool to create a layer of air; by introducing a watertight gate; or by working at a distance with soil or air between the work and the wall;
- d. Minimizing or eliminating channels between the sound source and a pool with, such as water-filled pipes or filled gate channels.

We note that exposure of the whales to construction activities will be managed according to protocols designed to minimize exposure to the most intense activities, as described in SeaWorld's Blue World Construction Sound Memorandum (8/21/15).

#### Levels of Construction Sound Sources:

Drilling and concrete cutting are the activities likely to occur during Blue World construction that will be close to pools with whales. Drilling noise (from unspecified equipment) has been measured at long range (ca. 600 m [1968 ft]) through seawater in Sarasota Bay (Buckstaff et al. 2013). They reported received levels of 68-70 dB re 1  $\mu$ Pa (RMS SPL) at this distance. However, they did not provide source levels. We have not found any published measurements of noise from concrete cutting in seawater.

#### Ambient Noise in Pools:

There is no published, systematic, cross-industry review of ambient sound in oceanaria. However, there are a few published accounts with ambient noise measurements (O'Neal 1998, Wisdom et al. 2001, Finneran et al. 2005, Bowles & Anderson 2012, Scheifele et al. 2012). Generally, the ambient has been relatively uniform, mostly noise emitted by water conditioning equipment and the flow of water. Intermittently, there are higher levels produced by the animals themselves or maintenance activities (e.g., cleaning pools). Ambient levels measured by HSWRI in one of the killer whale pools at SeaWorld (Wisdom et al. 2001) were as quiet or quieter than in comparable facilities. In the low frequency range, levels averaged around 100 - 120 dB re 1  $\mu$ Pa<sup>2</sup>/Hz (the accepted unit of measurement for broadband sound), which is within or below the levels published elsewhere. Above 1000 Hz, it was in the range from 40-50 dB re 1  $\mu$ Pa<sup>2</sup>/Hz, or comparable to quiet surface waters (little wind or waves) and close to the realistic lower limit for ocean noise. Levels measured in another SeaWorld pool were slightly higher (Bowles & Anderson 2012), averaging 40-60 dB re 1  $\mu$ Pa<sup>2</sup>/Hz above about 5 kHz, but still within the range of quiet ocean conditions. Levels measured in other holding facilities were comparable to these or higher (O'Neal 1998, Finneran et al. 2005, Scheifele et al. 2012)<sup>1</sup>.

Perspectives on Ocean Noise:

A review of the literature on noise in the ocean is beyond the scope of this document. However, a few notes are relevant.

**Killer Whale Hearing**. Killer whales hear well from 1 kHz to about 120 kHz (Szymanski et al. 1999).

**Killer Whale Sounds**: Killer whales vocalize at varying levels. Estimated source levels of their social signals are in the range 135 - 175.7 dB RMS SPL (Holt et al. 2011). Echolocation clicks are higher, in the range 195 - 224 dB re 1  $\mu$ Pa (Au et al. 2004).

**Ocean Ambient**: Generally, ambient levels are greatest in the range from a few Hz to about 300 Hz, and decline at higher frequencies until the thermal limit of noise is reached above about 100 kHz (Dahl et al. 2007, Erbe 2010).

Dahl et al. (2007) summarized the literature on broadband ocean noise and compared it with terrestrial ambient noise. An important conclusion of their analysis is that vessel noise in the ocean is as ubiquitous and as important as traffic noise in the terrestrial environment. Above 1000 Hz, the quietest ocean ambient (without waves, water flow, and wind) is around 30-40 dB re 1  $\mu$ Pa²/Hz (Dahl et al. 2007, Figure 2), but more usual conditions of light wind average 50-80 dB in open waters. Heavy shipping has elevated the ocean ambient worldwide (see figures in Dahl et al. 2007 and Erbe 2010), but the majority of this noise is at very low frequencies, in the range that killer whales hear poorly. Smaller boats at relatively close range are the most important human-made noise in killer whale habitat. In the Pacific Northwest, endangered Southern Resident killer whales are exposed to broadband ambient noise levels produced by vessel traffic reaching 120 dB re 1  $\mu$ Pa in the 1- 40 kHz band (Holt et al. 2009). In some parts of their critical habitat, the exposure is present for 90% of the whales' daytime hours during the summer.

Snapping shrimp are ubiquitous in tropical and temperate shallow waters, and they produce sounds that span the range of frequencies that killer whales hear well. In coastal zones, they can average 100-120 dB re 1 uPa<sup>2</sup>/Hz from around 300 Hz to 200 kHz (Au and Banks 1997). This noise is continuous, with only moderate changes in level over the course of a day.

#### NOTE:

1) The units of measurement for spectra (representations of level across frequencies) differ among publications. Oceanographers generally use power spectral densities, calculated in 1 Hz bands and expressed in dB re 1  $\mu$ Pa²/Hz (or its equivalent, 1  $\mu$ Pa/ $\sqrt{Hz}$ ). However, levels may also be calculated in wider bands and expressed as average spectral level (units SPL, in dB re 1  $\mu$ Pa). Comparisons across these scales are usually "apples-to-oranges". For the purposes of comparing oceanarium levels with levels in the ocean, we have elected to report levels in dB re 1  $\mu$ Pa²/Hz, and have used summary graphs in Dahl et al. (2007, Fig. 2) and Erbe (2010, Fig. 5) as the points of comparison for noise in the ocean.

#### References:

Au, W.W.L. and Banks, K. 1997. The acoustics of snapping shrimp *Synalpheus parneomeris* in Kaneohe Bay. Journal of the Acoustical Society of America 103(1): 41-47.

Au, W.W.L., Ford, J.K.B., Horne, J.K., and Allman, K.A.N. 2004. Echolocation signals of free-ranging killer whales (*Orcinus orca*) and modeling of foraging for chinook salmon (*Oncorhynchus tshawytscha*). Journal of the Acoustical Society of America 115(2): 901-909.

Bowles, A.E., and R.C. Anderson. 2012. Behavioral responses and habituation of small cetaceans and pinnipeds to novel objects and simulated fishing gear with and without a pinger. Aquatic Mammals 38(2): 161-188.

Buckstaff, K.C., Wells, R.S., Gannon, J.G., and Nowacek, D.P. 2013. Responses of bottlenose dolphins (*Tursiops truncatus*) to construction and demolition of coastal marine structures. Aguatic Mammals 39(2): 174-186

Dahl, P.H., Miller, J.H., Cato, D.H., and Andrew, R.K. 2007. Underwater ambient noise. Acoustics Today 3(1): 23-33.

Erbe, C. 2010. Noise and the Effects on Marine Mammals. A Pocket Handbook, 3<sup>rd</sup> Ed. JASCO Applied Sciences, Victoria, B.C., CANADA.

Finneran, J.J., & Schlundt, C.E. 2007. Underwater sound pressure variation and bottlenose dolphin (Tursiops truncatus) hearing thresholds in a small pool. Journal of the Acoustical Society of America 122(1): 606-614.

Finneran, J.J., Carder, D.A., Dear, R., Belting, T., McBain, J., Dalton, L., and Ridgway, S.H. 2005. Pure tone audiograms and possible aminoglycoside-induced hearing loss in belugas (*Delphinapterus leucas*). Journal of the Acoustical Society of America 117(6):

3936-3943.

Holt, M.M., Noren, D.P., and Emmons, C.K. 2011. Effects of noise levels and call types on the source levels of killer whale calls. Journal of the Acoustical Society of America 130(5): 3100-3106.

Holt, M.M., Noren, D.P., Viers, V., Emmons, C.K., and Viers, S. 2009. Speaking up: Killer whales (*Orcinus orca*) increase their call amplitude in response to vessel noise. JASA Express Letters 135(1): EL27-EL32.

O'Neal, D.M. 1998. Comparison of the underwater ambient noise measured in three large exhibits at the Monterey Bay Aquarium and in the Inner Monterey Bay. Master's Thesis, Naval Post Graduate School, Monterey, CA. June 1998.

Richardson, W. J., Greene, C. R., Jr., Malme, C. I., Thomson, D. H. 1995. *Marine Mammals and Noise*. Academic Press, San Diego. 576 pp.

Scheifele, P.M., Johnson, M.T., Kretschmer, L., Clark, J.G., Kemper, D., and Potty, D. 2012. Ambient habitat noise and vibration at the Georgia Aquarium. JASA Express Letters 132(2): EL88-EL 94.

Southall, B., A.E. Bowles, W.T. Ellison, J.J. Finneran, R.L. Gentry, C.R. Greene, Jr., D. Kastak, D.R. Ketten, J.H. Miller, P.E. Nachtigall, W.J. Richardson, J.A. Thomas, and P.L. Tyack. 2007. Marine mammal noise exposure criteria: Initial scientific recommendations. Aquatic Mammals 33(4): 411-521.

Szymanski, M.D., Bain, D.E., Kiehl, K., Pennington, S., Wong, S., and Henry, K.R. 1999. Killer whale (*Orcinus orca*) hearing: Auditory brainstem response and behavioral audiograms. Journal of the Acoustical Society of America 106(2): 1134-1141.

Wisdom, S., Bowles, A.E., and K.E. Anderson. 2001. Call development and behavior of 'JJ', a rehabilitated gray whale calf, *Eschrichtius robustus*. Aquatic Mammals 27(3):239- 255.



October 7, 2016

Darlene Walter SeaWorld of San Diego 500 SeaWorld Drive San Diego, CA 92109

Project: SeaWorld Orca Experience Subject: Noise Impact Mitigation

Dear Ms. Walter,

Four over 50 years, Rudolph and Sletten has successfully built projects across the State of California for clients such as the San Diego Zoo and Wild Animal Park, Chula Vista Nature Preserve Center, Scripps Institute of Oceanography, and Monterey Bay Aquarium. However, it's our history with SeaWorld San Diego that makes this project a welcomed addition to our long line of successful projects together. These projects include the 4D Theater, Cirque de la Mer, Pets Rule, Seal and Otter Renovation, Blue Horizon Dolphin Show and several Shamu Stadium Pool upgrades. With this experience, we have continually demonstrated our ability to attain SeaWorld's schedule and quality while minimizing the impact to your daily operations. Our familiarity with working inside the park and the uniqueness to this environment is quite extensive.

For the Orca Experience project, Rudolph and Sletten has placed a high priority on making sure that the Orca trainers are always satisfied with the approach to our construction work to help support the monitoring of whale behavior and their well-being. This concern will be address by constant communication with the trainers. We will always clearly discuss our work plans for review and approval by SeaWorld, and the trainers specifically. Work plans will include the time to complete the work as well as communicating the type of work, and equipment and tools to be used. A significant area of mitigation is the work located on stage. R&S will develop detailed daily execution plans to be reviewed with SeaWorld that address, worker safety, working hours, protection from foreign objects entering the pools, whale barriers, and noise generated from our equipment and tools.

In order to have a better understanding of the expected noise levels generated by the construction operations, we have prepared a Map that shows the area of impact and a corresponding table that provides a description of the proposed work, expected noise level, type of equipment/tools to be used, and duration of work for the specific activities. It is our intent to distribute a similar document to communicate to the SeaWorld staff on a weekly basis with the schedule for the expected activities.

In order to mitigate the noise produced by the various tools and equipment, below are some of the noise mitigation measures that will be employed at various times of the project by Rudolph and Sletten:

- Crane Erection Keep assembly of the crane behind the rear of the stadium. Use top tier equipment with low emissions that generate less noise.
- Concrete demolition Use "wet" saws to cut concrete which reduces dust and sound. Limit or eliminate the use of jackhammers and chipping guns by saw cutting the concrete to sizes that can be removed by equipment loaders or by hand.

- Stage demolition- Use more hand tools to disassemble the existing construction. Minimize use of impact wrenches and drills. Use mufflers on pneumatic tools if possible. Utilize sound blankets where appropriate. Install water filled K-Rails around the perimeter to help shield noise.
- Concrete placement Stage concrete trucks at least a 100 feet away from placement areas and utilized hoses and pumps to place the concrete. Use rubber mallets to dismantle formwork in lieu of metal hammers.
- General
  - Coordinate work with Orca Trainers to relocate animals temporarily.
  - o If necessary, research, design, and engineer sound enclosures to encapsulate specific work areas to eliminate sound from being transmitted directly to areas not acceptable to the trainers.

Rudolph and Sletten takes the safety and work area environment planning and execution of occupied space construction very seriously. We will work diligently to plan, minimize and mitigate exposure on each project we construct. Through experience, thorough planning and careful process compilation and development, Rudolph and Sletten has developed best practices that, with SeaWorld input, will ensure safety and the least impact to everyone affected by the construction work.

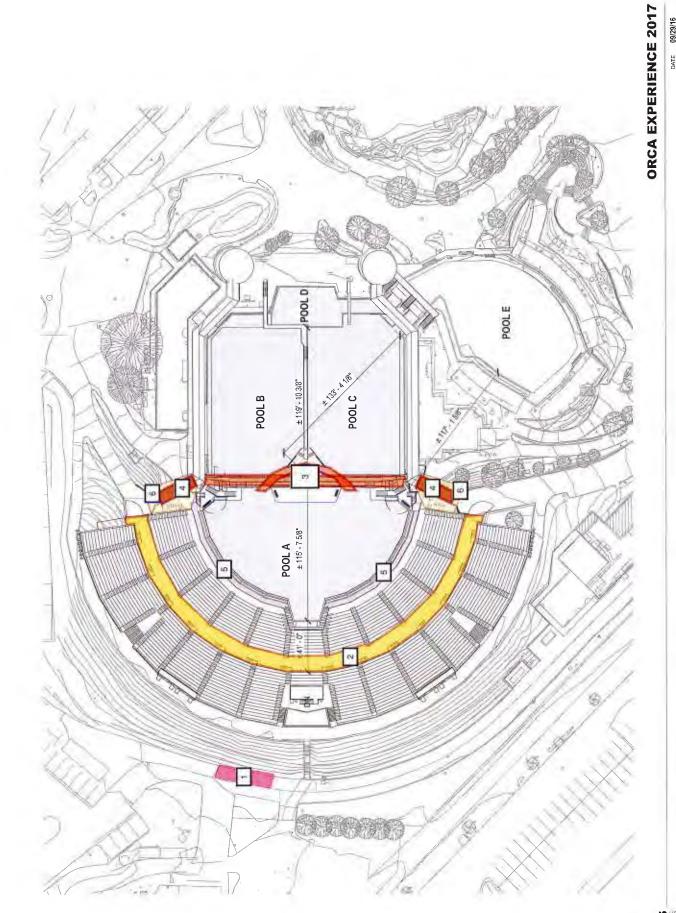
If you have any questions, please contact me at 619-247-8885.

Sincerely,

RUDOLPH AND SLETTEN, INC.

Nestor Comandante

Sr. Project Manager





MAP ID#	ACTIVITY DESCRIPTION	NOISE TYPE (TOOLS/EQUIPMENT) BEING USED	DURATION	NOIL	APPROXIMATE TIME OF ACTIVITY
Ħ	Grane Set-up and Operation	90 Ton assist crane to erect 400 Ton Crane	01/09/17	01/10/17	80%
2	Demo and removal of existing upper concrete walkway at stadium	Saw cut, mini-excavator, compressor, and small hand tools	01/10/17	01/30/17	75%
2	Install of new concrete walkway	Mini-excavator for grading (if necessary), and small hand tools	01/24/17	02/13/17	25%
ĸ	Stage demolition	Sawzall, hand reciprocating saws, torches, hammers, screwdrivers, stripping bars. hand tools for unbolting connections	01/12/17	01/27/17	70%
m	Stage deck structural modifications (column bases)	Roto-Hammer, concrete vibrator, & hand tools, vacuum cleaner	01/30/17	02/14/17	%05
ю	Installation of Structural Steel	Welding equipment, hammers, hand tools, electric drill for wrenches.	02/15/17	03/08/17	%09
4	Demolition of roof structure at walkways	Hand tools (soft demo), sawzall, hammers, small tools	01/30/17	02/06/17	75%
in.	Demo and removal of existing lower concrete walkway at stadium behind trench drain.	Concrete saw cut equipment, compressor, small hand tools.	01/24/17	02/13/17	75%
9	Shotcrete Rockwork installation	Air Compressor, pump, small hand tools	03/20/17	04/14/17	25%

construction activities. The equipment/tools will be used intermittently and will be conveyed to the SeaWorld staff on a daily basis of the specific activity that is scheduled, the expected noise, and duration of such work so the SeaWorld staff and Rudolph & Sletten can plan accordingly. NOTE: It is NOT the intent of this table to show that the equipment/tools listed will be used constantly during the entire duration of the



# Celebrating Animals | Confronting Cruelty

Eric L. Bernthal, Esq. Chair of the Board

Jennifer Leaning, M.D., S.M.H.

Vice Chair

Jason Weiss Second Vice Chair

Kathleen M. Linehan, Esq. Board Treasurer

Wayne Pacelle President & Chief Executive Officer

Michael Markarian Chief Operating Officer

G. Thomas Waite III Treasurer & Chief Financial Officer

Andrew N. Rowan, Ph.D. Chief International Officer & Chief Scientific Officer

Katherine L. Karl General Counsel & Chief Legal Officer

Amy C. Rodgers Secretary

#### DIRECTORS

Jeffrey J. Arciniaco Eric L. Bernthal, Esq. David Brownstein Erika Brunson Jerry Cesak Anita W. Coupe, Esq. Neil B. Fang, Esq., CPA Jane Greenspun Gale Spencer B. Haber Amanda Hearst Cathy Kangas Paula A. Kislak, D.V.M. Charles A. Laue Jennifer Leaning, M.D, S.M.H. Kathleen M. Linehan, Esq. John Mackey Mary I. Max Patrick L. McDonnell C. Thomas McMillen Judy Ney Sharon Lee Patrick Marsha R. Perelman Margaret Perenchio Marian G. Probst Jonathan M. Ratner Joshua S. Reichert, Ph.D. Walter J. Stewart, Esq. Andrew Weinstein Jason Weiss Suzy Welch David O. Wiebers, M.D.

September 28, 2016

Mr. Alexander Llerandi Coastal Program Analyst California Coastal Commission San Diego District 7575 Metropolitan Drive, Suite 103 San Diego, CA 92108-4421

VIA EMAIL: <u>Alexander.Llerandi@coastal.ca.gov</u>

RE: SeaWorld Orca Encounter set changes

Dear Mr. Llerandi,

On behalf of The Humane Society of the United States (HSUS), I am writing with regard to SeaWorld's proposed set renovations for the orca habitat at the San Diego park.

In March of this year, HSUS announced with SeaWorld an agreement that will further both groups' missions and is based on our joint interest in preserving and protecting the health of our oceans and the animals they call home.

The HSUS is the nation's largest and most effective animal protection and advocacy organization that is seeking a humane world for people and animals alike by driving transformational change in the U.S. and around the world. HSUS and its affiliates provide hands-on care and services to more than 150,000 animals each year.

We commend SeaWorld for its decision to end orca breeding. Because SeaWorld has not collected orcas from the wild in nearly 40 years, this decision means that this is the last generation of orcas in SeaWorld's care. While the orcas live out their lives at SeaWorld, HSUS also commends the company for ending its theatrical performances of orcas in favor of orca encounters that highlight the whales' natural behaviors in more natural settings. The permit that SeaWorld is seeking is consistent with SeaWorld's progress along this front.

Please don't hesitate to contact us with any further questions.

Sincerely,

Nicole Paquette Vice President, Wildlife Protection npaquette@humanesociety.org

EXHIBIT NO. 5

APPLICATION NO. 6-16-0483

Letter of Support