EXHIBIT F

PRESURVEY NOTIFICATION FORM

Applicant/Permittee's Mailing Address		Date: 26 September 2016
Ecosystems Management Associates	Jurisdiction:	Federal _____ State x Both ____
2166 Avenida de la Playa, Suite E		If State: Permit #PRC 8536.9
La Jolla, CA, 92037		Region: Statewide
		Area:

GEOPHYSICAL SURVEY PERMIT

Check one: x New survey _____ Time extension of a previous survey

ECO-M (Applicant/Permittee) will conduct a geophysical survey offshore California in the survey area outlined on the accompanying navigation chart segment. If you foresee potential interference with commercial fishing or other activities, please contact the person(s) listed below:

FEDERAL WATERS (outside 3 nautical miles)

1) Applicant's representative
2) Federal representative (e.g., Bureau of Ocean Energy Management [BOEM] or National Science Foundation [NSF])

NOTE: Any comments regarding potential conflicts in Federal waters must be received by the Applicant's Representative and lead Federal agency within ten (10) days of the receipt of this notice.

STATE WATERS (Inside 3 nautical miles)

1) Permittee's representative
2) CSLC representative

NOTE: Any comments regarding potential conflicts in State waters should be received as soon as possible by the Permittee's representative, no more than fifteen (15) days after the receipt of this notice.

1. Expected Date of Operation October 9 - 21, 2016
2. Hours of Operation 0700-1700 hrs
3. Vessel Name Survey Vessel JAB
4. Vessel Official Number 1217549
5. Vessel Radio Call Sign N/A – no longer required by Feds
6. Vessel Captain's Name Brayton Pointer
7. Vessel will monitor Radio Channel(s) 16

8. Vessel Navigation System GPS

9. Equipment to be used 300 Joule Boomer System

a. Frequency (Hz, kHz) 1) 400-1600 Hz

b. Source level (dB re 1 μPa at 1 meter (m) [root mean square (rms)]) 207

c. Number of beams, across track beamwidth, and along track beamwidth 1

beamwidth 30°, H. 30°- V 30°

d. Pulse rate and length 0.5 sec repetition rate, 250 μsec,

e. Rise time 0.1 ms, 100 μsec

f. Estimated distances to the 190 dB, 180 dB, and 160 dB re 1 μPa (rms) isopleths

The table below gives distance between the source and for various dB values:

Source	Dist. To160 dB (m)	Dist. To 180 dB (m)	Dist. To190 dB (m)
300 J Boomer	56	5.6	1.8

g. Deployment depth 0.3 m

h. Tow speed 4 knots

i. Approximate length of cable tow less than 50 m

Applicant's Representative:
Dr. Hany Elwany
President, EcoSystems Management Assoc.
2166 Avenida de la Playa, Suite E
La Jolla, CA, 92037
hany@coastalenvironments.com

California State Lands Representative
Richard B. Greenwood
Statewide Geophysical Coordinator
200 Oceangate, 12th Floor
Long Beach, CA 90802-4331
(562) 590-5201

BOEM Representative
Joan Barminski
Chief, Office of Reservoir & Production
770 Paseo Camarillo
Camarillo, CA 93010
(805) 389-7707

Other Federal Representative (if not BOEM):

Updated Dates // Upcoming Geophysical Survey Offshore Dana Pt

Emily Callahan [emily@coastalenvironments.com]

Sent: Tuesday, September 27, 2016 10:42 AM
To: D11LNM@uscg.mil
Cc: Keen, Kelly@SLC
Attachments: 9.26 Notification Letter_~1.docx (804 KB)

Dear USCG

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you that the dates of our upcoming survey activities have been set for between October 9th and October 21st, 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

Updated Dates // Upcoming Geophysical Survey Offshore Dana Pt

Emily Callahan [emily@coastalenvironments.com]

Sent: Monday, September 26, 2016 3:23 PM
To: lremington@scwd.org
Cc: Keen, Kelly@SLC
Attachments: 9.26 Notification Letter_~1.docx (804 KB)

Dear Mr. Remington

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you that the dates of our upcoming survey activities have been set for between October 9th and October 21st, 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

Updated Dates // Upcoming Geophysical Survey Offshore Dana Pt

Emily Callahan [emily@coastalenvironments.com]

Sent: Monday, September 26, 2016 3:24 PM
To: info@beachcitiesscuba.com
Cc: Keen, Kelly@SLC
Attachments: 9.26 Notification Letter_~1.docx (804 KB)

Dear Beach Cities Scuba

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you that the dates of our upcoming survey activities have been set for between October 9th and October 21st, 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

Updated Dates // Upcoming Geophysical Survey Offshore Dana Pt

Emily Callahan [emily@coastalenvironments.com]

Sent: Monday, September 26, 2016 3:20 PM
To: Tobin, Julie@Parks
Cc: Keen, Kelly@SLC
Attachments: 9.26 Notification Letter_~1.docx (804 KB)

Dear Julie-

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you that the dates of our upcoming survey activities have been set for between October 9th and October 21st, 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

EXHIBIT G

California State Lands Commission Presurvey Notice Requirements for Permittees to Conduct Geophysical Survey Activities

All parts of the Presurvey Notice must be adequately filled out and submitted to the CSLC staff a minimum of twenty-one (21) calendar days prior to the proposed survey date to ensure adequate review and approval time for CSLC staff. Note that one or more of the items may require the Permittee to plan well in advance in order to obtain the necessary documentation prior to the Notice due date (e.g., permits from other State or Federal entities).

Please use the boxes below to verify that all the required documents are included in the Presurvey Notice. If "No" is checked for any item, please provide an explanation in the space provided. If additional space is needed, please attach separate pages.

Yes	No	
☑	☐	Geophysical Survey Permit Exhibit F
☑	☐	Survey Location (including a full-sized navigation chart and GPS coordinates for each proposed track line and turning point) Explanation: _____
☐	☑	Permit(s) or Authorization from other Federal or State agencies (if applicable) Explanation: n/a
☑	☐	21-Day Written Notice of Survey Operations to Statewide Geophysical Coordinator/
☐	☑	U.S. Coast Guard Local Notice to Mariners/
☑	☐	Harbormaster and Dive Shop Notifications Explanation: _____
☑	☐	Marine Wildlife Contingency Plan Explanation: _____
☑	☐	Oil Spill Contingency Plan Explanation: _____
☑	☐	Verification of California Air Resources Board's Tier 2-Certified Engine Requirement Explanation: _____
☑	☐	Verification of Equipment Service and/or Maintenance (must verify sound output) Explanation: _____
☐	☑	Permit(s) or Authorization from California Department of Fish and Wildlife for surveys in or affecting Marine Protected Area(s) (if applicable) Explanation: Survey area is ~4miles from the nearest MPA

NOTE: CSLC staff will also require verification that current biological information was obtained and transmitted as outlined in Section 5 of this permit.

8 September 2016

Statewide Geophysical Survey Coordinator
California State Lands Commission
Mineral Resources Management Division
200 Oceangate, 12th Floor
Long Beach, CA, 90802-4331

Subject: Proposed Geophysical Survey Offshore of Dana Point, CA.

Dear Statewide Geophysical Survey Coordinator:

Please find attached our pre-survey requirements for a survey offshore of Dana Point, California. The acoustic source will consist of a small 300-joule boomer similar to sources used by the U.S. Geological Survey. To improve the signal quality and attenuate the water bottom multiple, a 24-channel high-resolution digital streamer hydrophone array will be used to collect signals returning from the seafloor. Hyrdrophones will also be placed on the beach to collect signals from offshore. The purpose of this survey is to determine the boundaries of the offshore San Juan paleo-river channel seaward of Doheny State Beach.

Figure 1 shows the location of the survey. The survey area will occur offshore and adjacent to San Juan Creek in Dana Point, California. Survey operations will be conducted from just beyond the surf zone to about 3000 feet (ft) (0.6 miles) offshore and approximately 2500 ft (0.47 miles) alongshore. Twenty-six (26) survey lines will be conducted (Table 1).

The target dates for survey operations will likely occur between September 28 and October 15, 2016. The variability in dates is due to unpredictable weather conditions at that time of year. Survey activities will only be conducted during daylight hours only. Operations will be conducted from the survey vessel 'JAB', a 2010 Armstrong marine aluminum catamaran.

Equipment will include the following:

1. 300 Joule Boomer system, including the Boomer Control Box and towed sonographic delivery system;
2. Geometric CNT-2 controller data-acquisition system with nominal 240-channel recording capability;
3. 24-channel, high-resolution GeoEel™ digital streamer hydrophone array;
4. Trimble GPS antenna and differential GPS receiver.

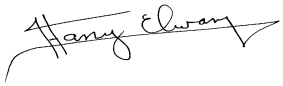
The 300 Joule Boomer provides sub-bottom seismic energy penetration of as much as 100-300 milliseconds (ms) (about 75 to 250 m) in soft sediments. The typical bandwidth achieved is 400-1200 hertz (Hz) for sub-meter resolution (vertical imaging), with a center frequency of 677 Hz. It is a typical broadband acoustical source that uses high-voltage electrical discharge in a coil to repel an aluminum plate within a rubber diaphragm, which creates repeating acoustic signals. The

boomer and the streamer hydrophone array will be towed at a shallow depth, ~0.3-m (1-ft) below the sea surface. Detailed equipment specifications for the 300 Joule Boomer is in Exhibit F.

Return signals (echoes) from sub-bottom strata return to a hydro-phone streamer array being towed by the ship. The streamer has a non-toxic silicone ballast fluid in a clear polyurethane jacket to satisfy environmental regulations. ECO-M utilizes a 24-bit analog-to-digital recorder, the Geometrics CNT-2TM controller data-acquisition system, with nominal 240-channel recording capability, which provides the requisite resolution for the multichannel hydrophone arrays.

Enclosed in this application you will find: 1) Exhibit G, 2) Exhibit C, 3) Exhibit E, 4) Exhibit F, 5) Marine Wildlife Contingency Plan (which covers the MM BIO 1-9 specifications listed in Exhibit H), 6) the Oil Spill Contingency Plan (which covers the MM HAZ-1 –3 specifications listed in Exhibit H).

Sincerely,



ECOSYSTEMS MANAGEMENT ASSOCIATES, INC.

Hany Elwany, Ph.D.
President

Attachments (Electronic):

a. Exhibit G checklist
b. Exhibit C
c. Exhibit E
d. Exhibit F
e. Marine Wildlife Contingency Plan
f. Oil Spill Contingency Plan

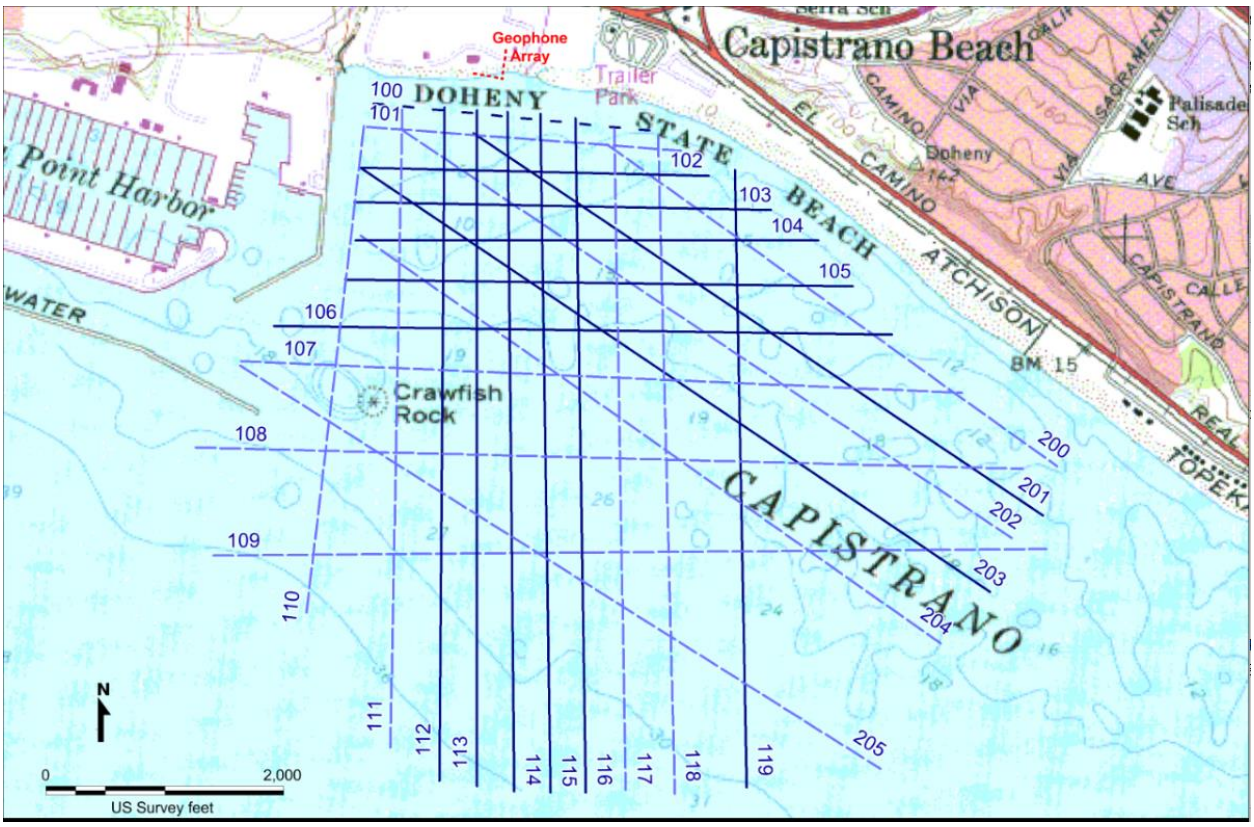


Figure 1. **Map showing location of the proposed geophysical survey offshore of Dana Point, Orange County, CA. A nautical chart serves as a background map, and shows the full area of coverage. The blue solid lines indicate the 13 piority tracklines, the blue dashed lines indicate the 13 secondary priority tracklines. In total there are a proposed 26 tracklines, however the 13 secondary priority tracklines may not be surveyed depending on weather and time.**

Table 1. GPS coordinates (NAD83) for the start and end points of each survey line.

Line Number	Trackline	Long. Start	Lat. Start	Long. End	Lat. End
1	205	-117.691897	33.455074	-117.674063	33.445944
2	204	-117.688620	33.458121	-117.672446	33.448864
3	203	-117.688683	33.459712	-117.671095	33.450068
4	202	-117.687561	33.460602	-117.670521	33.451321
5	201	-117.685542	33.460530	-117.669667	33.451855
6	200	-117.681851	33.460312	-117.669287	33.452994
7	100	-117.688310	33.461178	-117.680151	33.460607
8	101	-117.688491	33.460639	-117.679804	33.460191
9	102	-117.688631	33.459691	-117.679024	33.459612
10	103	-117.688806	33.458890	-117.677291	33.458841
11	104	-117.688760	33.458002	-117.675975	33.458150
12	105	-117.689027	33.457099	-117.675009	33.457105
13	106	-117.690978	33.456002	-117.673909	33.455997
14	107	-117.691879	33.455174	-117.671945	33.454671
15	108	-117.693099	33.453165	-117.670238	33.452935
16	109	-117.692557	33.450667	-117.669559	33.451084
17	110	-117.688571	33.460652	-117.689978	33.449303
18	111	-117.687524	33.461052	-117.687604	33.446194
19	112	-117.686351	33.461108	-117.686235	33.445531
20	113	-117.685456	33.461057	-117.685200	33.445415
21	114	-117.684609	33.461035	-117.684162	33.445300
22	115	-117.683700	33.461001	-117.683159	33.445285
23	116	-117.682726	33.460903	-117.682189	33.445297
24	117	-117.681651	33.460649	-117.681085	33.445372
25	118	-117.680439	33.460504	-117.679730	33.445300
26	119	-117.678304	33.459756	-117.677741	33.445468

EXHIBIT F

PRESURVEY NOTIFICATION FORM

Applicant/Permittee's Mailing Address		Date:	7 September 2016
Ecosystems Management Associates	Jurisdiction: Federal _____	State	x Both ____
2166 Avenida de la Playa, Suite E	If State: Permit #PRC	8536.9	
La Jolla, CA, 92037	Region:	Statewide	
	Area:		

GEOPHYSICAL SURVEY PERMIT

Check one: x New survey _____ Time extension of a previous survey

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a. Frequency (Hz, kHz) 1) 400-1600 Hz

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c. Number of beams, across track beamwidth, and along track beamwidth 1

beamwidth 30°, H. 30°- V 30°

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300 J Boomer	56	5.6	1.8

g. Deployment depth 0.3 m

h. Tow speed 4 knots

i. Approximate length of cable tow less than 50 m

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Joan Barminski
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770 Paseo Camarillo
Camarillo, CA 93010
(805) 389-7707

Other Federal Representative (if not BOEM):

ECOSYSTEMS MANAGEMENT ASSOCIATES, INC.

MARINE WILDLIFE CONTINGENCY PLAN

Submitted to

California State Lands Commission
Mineral Resources Management Division
200 Oceangate, 12th Floor
Long Beach, CA 90802-4331

by

EcoSystems Management Associates, Inc.
2166 Avenida de la Playa, Suite E
La Jolla, CA 92037

06 September 2016

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Appendix A. Marine wildlife monitor qualifications A-1

ECOSYSTEMS MANAGEMENT ASSOCIATES, INC.

MARINE WILDLIFE CONTINGENCY PLAN

1.0 INTRODUCTION

This plan is intended to serve as a guide to operations to avoid significant impacts to marine wildlife that may occur during a geophysical survey. This plan is prefaced by a brief description of the project and the regulatory basis for marine wildlife protection followed by:

- The species likely to be present during the survey and the special status species of concern;
- A proposed operational plan for the company performing the survey, EcoSystems Management Associates, Inc. (ECO-M), to exercise caution while marine wildlife is present; and
- The procedure to follow should a collision occur between the survey vessel and marine wildlife.

2.0 REGULATORY BASIS

Species that are either currently in danger or soon likely to be in danger of extinction throughout all or a portion of its range are protected by the Endangered Species Act of 1973. The United States Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration Fisheries (NOAA), National Marine Fisheries Service (NMFS) implement the Endangered Species Act. During the consultation with NMFS to issue a permit for the offshore geophysical survey, it was determined no incidental take permits are required to use the equipment and conduct the fieldwork. Regarding the consultation, the U.S. Army Corps of Engineers determined proposed activities may affect, but were not likely to adversely affect listed species (i.e., informal consultation). NMFS and USFWS have concurred with this statement.

NMFS also implements the Marine Mammal Protection Act of 1972, which protects all marine mammals within U.S. waters from intentional killing or harassment. Any accidental contact with marine wildlife during the course of the survey will be promptly reported to the NMFS Stranding Coordinator, Southwest Region, Long Beach.

The California State Lands Commission (CSLC) protects the natural environment for scenic and wildlife habitat values for the public trust. State agencies require marine mammal monitoring for any survey operations. The marine mammal population in general includes whale species, porpoises, dolphins, pinnipeds, and others. Some species are migrants that pass through central California waters on their way to calving or feeding grounds elsewhere, some are seasonal visitors that remain for weeks or months; others are resident for much or all of the year.

3.0 OPERATIONAL MEASURES FOR REDUCING IMPACTS TO MARINE MAMMALS AND TURTLES

ECO-M's project operations will utilize the following procedural techniques to limit the imposition of survey activities on any marine animals known to be within a sphere of influence. The survey vessel will have personnel on board during operations that are NOAA-approved marine wildlife monitors. The monitors will have authority to influence the operation of the vessel in regard to marine wildlife interaction but will be contravened by the captain of the vessel in matters of vessel and crew safety.

3.1 Pre-Survey Activities

Sources indicate that the north-bound gray whale migration on the West Coast of the US occurs from mid-February to May (NOAA, 2013b; NPS, 2015; Ocean Institute, 2008). The time frame of the survey falls just before the beginning of the southbound gray whale migration which begins in late November.

ECO-M contacted the NOAA Long Beach Office staff and local whale-watching operations to acquire information on the current composition and relative abundance of marine wildlife offshore as well as any pinniped haul out sites. The NOAA Long Beach office representative indicated that most migrating whales are more likely to be found about 1 mile offshore. This is also in line with reports from local whale watching operations, who stated that they generally travel about 1 mile offshore to see migrating gray whales in late November.

Two local whale watching operations out of Dana Point were contacted to find out the current composition and relative abundance of marine wildlife offshore. These operations were: 1) Dana Point Whale Watching, and 2) Capt. Dave's. Both operations will be conducting whale watching tours during the time frame of our survey.

In regards to pinniped haul out sites, a map provided by Justin Greenman from the NOAA Long Beach office, does not show any pinniped haul out sites at or near the project area (Figure 1).

This information will be conveyed to the vessel operator and crew, survey party chief, and onboard Marine Wildlife Monitors (MWMs). Additionally, one day prior to survey activities, the NOAA Long Beach office and local whale watching operations will be contacted to get an update on marine wildlife sightings in the area. This information will be conveyed to the captain and crew prior to the survey.

An initial or board review of environmental responsibility of project operations will be undertaken at the beginning of each segment of the project. When new personnel will be in the crew, this training will be repeated at least for those new to the crew. They will be made aware of their individual responsibility and will be shown how to be aware of possible environmental impacts and how to mitigate them within the geophysical survey vessel's operations. Information relating to seasonality, as an indication of the types of animals that might be in our survey area, at the time of survey work will also be presented to the crew(s). A copy of this document will be provided to each

member of the geophysical survey team, as well as the crew of our survey vessel.

All personnel will be expected to be consistently aware that they are to be alert to any presence of marine wildlife while they are performing their duties. There are a number of signs/indications of marine wildlife presence and each crew member will be responsible to maintain vigilance for those signs within the constraints of their project duties. Some of those indications are:

a. Sounds - such as splashing, vocalizations (by animals and birds), and blowing (breathing).

b. Visual indications - birds aggregating, changes in water character such as areas of rippled water, white water caused by splashing, changes in color or shape of the ocean surface, spume, the disturbance of the normal sea view that can be caused by animals floating, rolling, diving, or leaping.

c. Smell - on occasion marine organisms can be associated with smell from breath or defecation.

d. Electronic observation - often the presence of schools of "bait fish" can be seen on some of the geophysical survey equipment. That presence, along with an increasing number of schools, can suggest that this area could possibly be associated with increased feeding activity of marine mammals and thereby suggest that increased awareness efforts should be undertaken. Under these circumstances, ECO-M's personnel will be alerted to be more observant.

3.2 Marine Wildlife Monitors

At all times during survey activities, there will be two marine wildlife monitors (MWM) present on the vessel, one of which will be a vessel crew member. The onboard MWMs shall have the authority to stop operations if a mammal or turtle is observed is observed within the specified safety zone. The MWMs will be present at the highest practical vantage point on the vessel and will use binoculars to observe the surrounding area. There will be two MWMs instead of one present on our boat. The reasons are: 1) the geophysical survey data will occur in nearshore ocean bottom areas where the likelihood of encountering marine mammals is less, 2) the small size of the vessel (43 ft.) will allow both MWMs to effectively monitor the radius around our survey area, one MWM will stand at the front of the vessel for observations, and the other on the second deck. After speaking to Justin Greenman, Assistant Stranding Coordinator at the NOAA Long Beach office, migrating whales are more likely to be found further offshore (1 mile or more). The offshore extent of our survey boundary will be within 1 mile from shore; therefore the likelihood of encountering a migratory marine mammal within this area is low. However, in order to minimize contact with marine mammals within our survey area, we will make contact with the local whale watching operations out of Dana Point within a few days prior to survey operations to get an update on the presence and abundance of marine wildlife in the area. We believe this method, coupled with the MWMs and the specified radii will avoid any negative contact with marine mammal species.

3.3 Operational Measures

Operational measures to reduce impacts to marine mammals or turtles will include: 1) soft-start technique, 2) acoustic safety zone radii, 3) slow vessel speeds, 4) avoidance of pinniped haul out sites, and 4) limitations on equipment usage.

Soft Start Technique

The soft-start technique will involve initiating each piece of equipment at the lowest practical sound level, increasing the output in steps not exceeding pproximately 6 decibels per 5-minute period. During this time, the MWMs will monitor the safety zone for marine mammal or turtle sightings by one MWM standing on the front bow of the vessel, and the other on the second deck.

Acoustic safety zone radius

The safety zone monitoring will follow the protocols outlined in Exhibit H of the Permit (PRC 8536.9), which sets a safety zone of 100 m for the boomer system. In the event a pinniped haul out site is located within 300 m of the survey boundary, ECO-M will take the following measures:

- Not approach within 91 m of the haul-out site (consistent with NMFS guidelines);
- Expedite survey activity in this area in order to minimize the potential for disturbance of pinnipeds on land;
- Have the MWM monitor pinniped activity onshore as the vessel approaches, observing and reporting on the number of pinnipeds potentially disturbed

Initially, ECO-M will make a circuit of the survey area to ascertain if any marine wildlife is apparent in the intended survey area(s). This being done, there are three specific measures to be taken in the event that the vessel appears to be approaching marine mammals on one of the pre-established and specific survey transects. *One:* Stop vessel operations and wait until the animals have passed (this is in case animals are transiting the area). The mammal monitors shall observe and determine if migrating cetaceans are in the area. The captain will not knowingly cause complications with their intended migratory path. *Two:* Shift to another pre-established survey transect thereby avoiding close encounters (this is for animals that are occupying a given area for a period of time). *Three:* Do not begin the survey until observed animals in the survey area have departed or are at such a distance (as noted above) that they will be out of the range of ECO-M's influence. If the marine mammal monitor should sight marine wildlife within the path of the vessel, he/she will report the sighting to the vessel operator. The vessel will then slow down and continue a course that parallels that of the marine mammal. The marine mammal monitors shall have the authority to halt any operations or redirect the vessel that poses an immediate threat to marine wildlife. Onboard personnel will be watchful as the vessel crosses this path or anytime whales are observed in the area. The vessel operator shall observe the following guidelines:

- Make every effort to maintain distance from sighted marine mammals and other marine wildlife;

- Do not cross directly in front of (perpendicular to) migrating whales or any other marine mammal or turtle;
- When paralleling marine mammals or turtles, the vessel will operate at a constant speed that is not faster than that of the whales;
- Care will be taken to ensure female whales are not separated from their calves; and,
- If a whale engages in evasive or defensive action, the vessel will reduce speed or stop until the animal calms or moves out of the area.

Vessel speed

To obtain good, clean data, normal survey speeds are usually maintained between 2 and 3 knots. This speed is significantly slow in relation to transit speeds maintained by marine mammals and is only a little above the speed necessary to maintain steerage.

Mitigation Measure FISH-2

As per Mitigation Measure FISH-2 in Exhibit H in Mitigation Monitoring Program of the General Permit, the vessel shall implement the following to minimize interaction with fishing gear that may be present within the survey area:

(1) The geophysical vessel (or designated vessel) shall traverse the proposed survey corridor prior to commencing survey operations to note and record the presence, type, and location of deployed fishing gear (i.e., buoys);

(2) No survey lines within 30 m (100 feet) of observed fishing gear shall be conducted. The survey crew shall not remove or relocate any fishing gear; removal or relocation shall only be accomplished by the owner of the gear upon notification by the survey operator of the potential conflict.

Limitations on equipment usage

Limitations on the frequency, pulse length, and pulse rate will be implemented to reduce potential harmful noises. For the sub-bottom profiler, the highest frequency band possible will be used and the shortest possible pulse length and lowest pulse rate (pings per second) will be used.

4.0 COLLISION REPORTING

In the event of a collision between the vessel and a marine mammal or reptile, the vessel operator will document the conditions under which the accident occurred. These conditions include:

- Vessel location (latitude, longitude) when the collision occurred;
- Date and time of collision;
- Speed and heading of the vessel at the time of collision;
- Observation conditions (e.g. wind speed and direction, swell height, visibility in miles or kilometers, and the presence of rain, fog) at the time of collision;

- Species of marine wildlife contacted (if known)
- Whether an observer was monitoring wildlife at the time of collision, and;
- Name of the vessel, owner/operator, and captain officer in charge of the vessel at the time of collision.

After a collision, the vessel shall stop, but will continue with operations if it is deemed that no further damage will result to the animal by doing so. The vessel is not obliged to stand by and may proceed after confirming that it will not further damage the animal by doing so. The vessel shall then communicate by radio or telephone all details to the vessel's base of operations. From the vessel's base of operations, a telephone call shall be placed to the Stranding Coordinator, NMFS, Southwest Region, Long Beach. Alternatively, the vessel captain may contact the NMFS Stranding Coordinator directly using a cell phone.

It is unlikely that the vessel will be asked to stand by until NMFS or California Department of Fish & Game (CDFG) personnel arrive, but this shall be determined by the Stranding Coordinator. Under the Marine Mammal Protection Act, the vessel operator is not allowed to aid injured marine wildlife or recover the carcass unless requested to do so by the NMFS Stranding Coordinator.

Collisions with marine wildlife will be reported promptly to the NOAA Fisheries Stranding Coordinator. The Stranding Coordinator will then coordinate subsequent action, including enlisting the aid of marine mammal rescue organizations, if appropriate.

Although the NOAA Fisheries has primary responsibility for marine mammals in both state and federal waters, CDFG should also be advised that an incident has occurred in state waters affecting a protected species. Reports should be communicated to the federal and state agencies listed below:

FEDERAL

Justin Viezbicke
California Stranding Network Coordinator
National Marine Fisheries Service
(562) 980 3230 office
(808) 313 2803 cell
justin.viezbicke@noaa.gov

STATE

California Department of Fish & Game
Long Beach, CA 90802
(562) 590-5132

California State Lands Commission
Division of Environmental Planning and Management
Sacramento, CA
(916)574-1938
slc.ogpp@slc.ca.gov

5.0 MARINE PROTECTED AREAS

The proposed survey area does not fall into a designated marine protected area (MPA). The Dana Point Marine Conservation Area (Figure 2) is the closest MPA, and is located approximately 4 miles north of the survey area.

6.0 REFERENCES

California Department of Fish and Game (CDFG). 2013. Guide to southern California marine protected areas. 120 pp.

National Oceanic and Atmospheric Administration (NOAA), 2013a. Pinniped rookeries and haul-out sites, Southern California. Coastal Response Research Center.

National Oceanic and Atmospheric Administration (NOAA), 2013b. Gray whale (*Eschrichtius robustus*) http://www.nmfs.noaa.gov/pr/species/mammals/cetaceans/graywhale.htm.

National Park Service, 2015. Whales at Cabrillo National Monument. http://www.nps.gov/cabr/learn/nature/whales.htm

Ocean Institute, 2008. California gray whale. http://www.ocean-institute.org/visitor/gray_whale.html

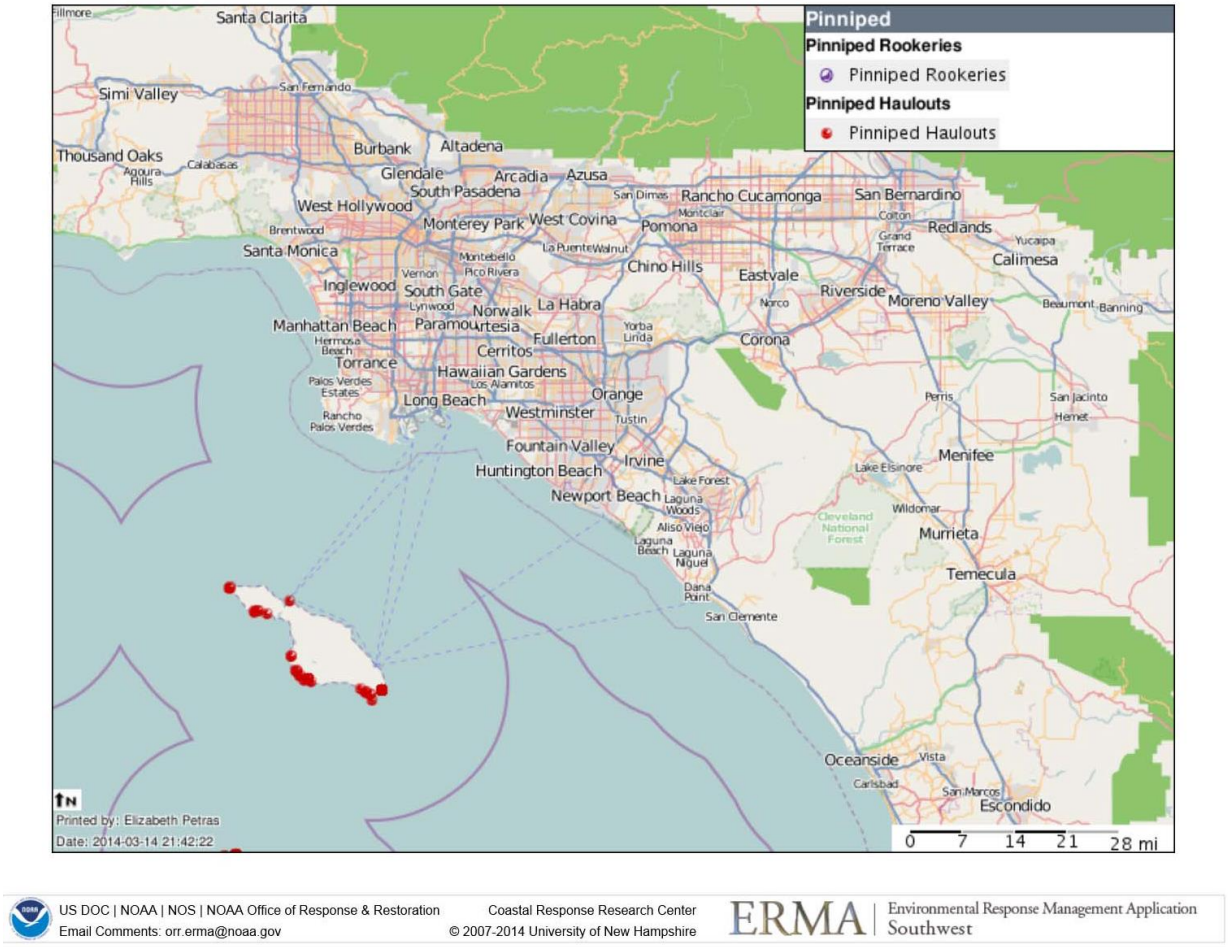

Figure 1. Location of the known pinniped haul out sites and rookeries in the project vicinity (NOAA, 2013a).

Figure 2. Location of MPA's from Point Dume to the U.S. Mexico Border (CDFG, 2013.).

APPENDIX A

MARINE WILDLIFE OBSERVER CERTIFICATION

CERTIFICATE OF TRAINING

This is to certify that

Kelsey Hall

Of

Geomotive / The Marine Team OffShore

has on this date, *August 26, 2007* completed a course in

PROTECTED SPECIES OBSERVER TRAINING

(conducted in accordance with NTL No. 2007-G02 issued by the MMS, effective February 7, 2007)

RHONI LAHN, INSTRUCTOR

Marine Team Offshore
Rose Barton Rose Ash South Molton North Devon
EX36 4RQ United Kingdom
Limited Company: 5947675
Tel: +44 (0) 798 355 6741 T

Figure A-1. Marine wildlife monitor certification

ECOSYSTEMS MANAGEMENT ASSOCIATES, INC.

OIL SPILL CONTINGENCY PLAN

Submitted to

California State Lands Commission
Mineral Resources Management Division
200 Oceangate, 12th Floor
Long Beach, CA 90802-4331

by

EcoSystems Management Associates, Inc.
2166 Avenida de la Playa, Suite E
La Jolla, CA 92037

23 May 2016

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ECOSYSTEMS MANAGEMENT ASSOCIATES, INC.

MANAGEMENT OF ACCIDENTAL DISCHARGE AND VESSEL PROBLEMS DURING OFFSHORE/ONSHORE GEOPHYSICAL SURVEY

1.0 INTRODUCTION

At the initiation of each project or project phase, a spill management review will be conducted by the vessels captain who is in all cases the responsible authority. It should be pointed out that any oil spill in United States (U.S.) marine waters shall be reported immediately (on the same day). Reporting information is stated in Section 8.0.

2.0 OPERATIONAL SPILLS

Operational spills might involve one or more of the following substances carried on board the vessel: (i) fuel; (ii) lube oil; (iii) hydraulic oil; or (iv) waste oil. The vessel is equipped with a Buffalo Quick-Response Oil Spill Kit, which includes socks for fast spill containment (three 4'' socks), woven polypropylene sheets (15 sheets) for rapid absorption of surface oil and protective gear, protective gloves (1 pair), disposal bag (1), and a set of instructions. This oil spill kit is located in the forward cabin of the vessel. This spill kit is rated to clean up 5 gallons of liquid. All of the liquids (listed below) that could cause a hazardous spill are either in the fuel tank or are located in the engine room of the vessel. Thus, if a spill occurred, these would be contained in the engine room, or if a grounding or instance occurred that punctured the gas tank, this would leak into the water, which is beyond the scope of our cleanup efforts. In the event a spill occurred in the engine room, the oil spill kit would be used to contain the hazardous liquids and the bilge would not be emptied until it could be pumped out at a hazardous waste facility. We do not anticipate a spill of greater than 5 gallons.

(i) Fuel:

A spill kit shall be available for use in the event of a spill. If the fuel is spilled on the deck, it shall be immediately removed, bagged and disposed of at an appropriate hazardous waste reception facility. In the event of spillage in the water, the vessel foreman shall notify the Coast Guard and port facility.

(ii) Lube oil:

A spill kit shall be available for use in the event of a spill. If the oil is spilled on deck or in the machinery space, it shall be immediately removed, bagged and disposed of at an appropriate hazardous waste reception facility. In the event of spillage in the water, the vessel foreman shall notify the Coast Guard and port facility.

(iii) Hydraulic oil:

A spill kit shall be available for use in the event of a spill. If the oil is spilled on deck or in the machinery space, it shall be immediately removed, bagged and disposed of at an appropriate hazardous waste reception facility. In the event of spillage in the water, the vessel foreman shall notify the Coast Guard and port facility.

(iv) Pipe leakage:

The vessel foreman shall check the piping and rubber hose daily for leakage. Where leakage is found, it shall be repaired immediately. In the event of leakage, the vessel deck engineer shall secure valve(s) at the appropriate tank before repairing the leak. Spilled fuel on the vessel shall be immediately removed, bagged and disposed of at an appropriate hazardous waste reception facility. In the event of spillage in the water, the vessel foreman shall notify the Coast Guard and port facility.

3.0 EMPLOYEE TRAINING ON OIL SPILL CONTINGENCY PLAN

Prior to the launching of the vessel for any activities, all captain and crew members on the vessel will have read the Oil Spill Contingency Plan, understand procedures to be implemented in the event of an oil spill, and know where the oil spill kit is located on the vessel.

4.0 SPILLS RESULTING FROM CASUALTIES AND VESSEL PROBLEMS

In the event of a casualty, the vessel foreman's first priority is to ensure the safety of the vessel's personnel and to initiate actions that may prevent escalation of the incident and marine pollution.

(i) Grounding:

The likelihood of grounding, although remote, could occur when the vessel is working near shore. Should an unforeseeable grounding event occur that causes a spill, the vessel foreman shall immediately report the accident to the Coast Guard and port facility. It is mandatory that the survey company immediately report the incident to the California Office of Emergency Services ("OES").

(ii) Fire or explosion:

If a fire or explosion occurs, the Coast Guard and port facility will be notified immediately by the vessel foreman. While awaiting a response from the USCG or local fireboat agencies, all crewmen shall report to the foreman for a head count. In the event that one or more crewmen are missing, the vessel foreman shall so notify the site safety officer and direct a search for the missing crew where practical. If one or more crewmen are injured, the foreman shall render first aid with the assistance of available crewmen. The foreman shall also notify the site safety officer of any injuries sustained as a result of the fire or explosion.

The crew will fight the fire with portable fire extinguishers if this can be done safely. The foreman shall determine if the fire or explosion warrants abandoning the vessel. If it is determined that the vessel is to be abandoned, the crew shall don life vests and safely enter the water or available life raft.

If there is a spill as a result of the fire or explosion, the vessel foreman shall immediately report the incident to the Coast Guard and port facility. It is mandatory that the survey company immediately report the incident to the OES.

(iii) Collision:

A collision is unlikely to cause a spill unless the vessel sinks or the fuel tank is "holed." If it is determined that the vessel is to be abandoned, the crew shall don life vests and safely enter the water or available life raft.

If the collision causes a spill from the fuel tank, the foreman shall immediately report the incident to the site safety officer, Coast Guard, and port facility. It is mandatory that the survey company immediately report the incident to the OES.

(iv) Vessel submerged/foundered:

If the vessel is submerged or foundered to the extent that it, or parts of it, is submerged, all measures shall be taken to evacuate all persons on board. Avoid contact with any spilled oil. Alert other vessels/vessels and/or the nearest coastal state for assistance in rescuing lives and the vessel as far as possible.

5.0 SPILLS RESULTING FROM VESSEL FUELING

All vessel fueling will be conducted on land at a gas station or at an approved docking facility. No cross vessel fueling will be performed.

6.0 PRIORITY ACTIONS TO ENSURE PERSONNEL AND VESSEL SAFETY

Safety of vessel personnel and the vessel are paramount. In the event that a crewman's injuries require outside emergency assistance, the site safety officer shall be contacted immediately and emergency personnel contacted. While awaiting emergency assistance, the survey company's vessel personnel will render first aid and/or CPR.

7.0 MITIGATING ACTIVITIES

If safety of both the vessel and the personnel has been addressed, the vessel foreman shall care for the following issues:

- Assessment of the situation and monitoring of all activities as documented evidence.
- Care for further protection of the personnel, use of protective gear, assessment of further risk to health and safety.
- Containment of the spilled material by absorption and safe disposal within leakproof containers of all used material onboard until proper delivery ashore, with due consideration to possible fire risk.
- Decontamination of personnel after finishing the cleanup process.

All personnel shall refer to the MSDS's on board for additional information.

8.0 MEASURES TO BE TAKEN IN THE EVENT OF CASUALTY

(i) Response to collision

The vessel foreman and crew shall ensure that the following actions are taken.

- When there is no immediate danger to their own vessel and crew, rescue crew of the other vessel.
- Investigate the damaged area of the vessel and the ingress of water and take emergency measures to prevent the damage from becoming worse.
- When ingress of water is found as a result of damage investigation, take necessary measures to prevent water from coming in, or pump out the water already taken in, according to the position and amount of water taken in. Such measures include the closing of water-tight doors, inserting wooden plugs, use of collision mats, cement box, strengthening of bulkhead, and use of water discharge pumps.
- When water penetration is severe even after countermeasures are taken and there is a danger of the vessel sinking, consider intended grounding on an appropriate shore.

(ii) Response to grounding

If the vessel runs aground, the vessel foreman and crew shall muster and the following steps should be taken immediately.

(1) Eliminate all avoidable sources of ignition and ban all smoking on board.

Further actions:

(1) Carry out a visual inspection of the vessel to determine the severity of the situation.
(2) Take soundings around the vessel to determine the nature and gradient of the seabed.
(3) Check difference in the tidal ranges at the grounding site.
(4) Evaluate tidal current in the grounding area.

Having assessed the damage that the vessel has sustained, and taking into account the effects

of hull stress and stability, the foreman should decide whether any action can be taken to avoid further spillage, such as:

(1) Transfer of cargo and bunkers internally. If the damage is limited—for example, to one or two tanks—consideration should be given to transfer of liquid from damaged to intact tanks.
(2) Review existing and forecasted weather conditions to see if they will adversely affect the vessel.
(3) Evaluate the possibility of transferring cargo to barges or other vessels, and request such assistance accordingly.
(4) Trim or lighten the vessel sufficiently to avoid damage to intact tanks, thereby avoiding additional pollution from spillage of oil or noxious liquid substance.

The foreman should obtain information about the situation, including the following.

(1) Tides and currents
(2) Weather, including wind, state of sea and swell.
(3) Any weather forecast changes.
(4) Nature of the bottom.
(5) Depth of water around the vessel, the calculated buoyancy needed to refloat, draught, and trim after refloating.
(6) Condition of the vessel, including stresses on the hull.

Strict safety precautions should be taken before entering any empty space, in order to avoid any risks from toxic fumes or oxygen deficiency.

Soundings should be taken around the vessel to determine the extent of the grounding/stranding as accurately as possible. If the sea is too rough for accurate sounding, it may be possible to measure the distance from the seabed to the main deck. By marking this on a longitudinal section from the general arrangement drawings, the extent of grounding can be determined.

If the vessel is structurally intact, an immediate attempt may be made to refloat her with or without assistance. In deciding whether to make an immediate attempt to refloat, the foreman should consider the use of the tugs and ground tackle as well as the possible damage that might be caused to the vessel.

Immediate refloating may be the best course to adopt even if the vessel has sustained bottom damage. However, if there are signs of excessive hogging, sagging or of undulations in the sides of the hull, more careful consideration is required before attempting to refloat the vessel. In these circumstances, lightening of the vessel may reduce the risk of further damage and pollution.

(iii) Response to submerged/foundered

The vessel foreman and crew shall muster and ensure that the following actions are taken immediately.

- If the vessel is wrecked to the extent that it or parts of it are submerged, take all measures to evacuate all persons on board.
- Avoid contact with any spilled oil.
- Alert other vessels and/or the nearest coastal state for assistance in rescuing lives.
- All openings in hull and superstructures are to be checked for watertight integrity. Ensure that all water doors, sewage and other relevant damage control valves are closed.
- Fill bottom tanks with ballast low side first.
- Should the situation appear to be deteriorating, urgency or distress messages should be dispatched as appropriate.

The nearest hospital to our survey area is the San Pedro Urgent Care Facility, located at 1499 W. 1st St. San Pedro, California 90732. The number is: 310-241-2590.

9.0 REPORTING AN OIL SPILL TO STATE AND FEDERAL AGENCIES

Any oil spill in U.S. marine waters shall be reported immediately (on the same day) to the state and federal phone numbers below:

West Coast Oil Spill hot-line	800-OILS-911, *or*
Department of Fish and Game CalTIP	888-CFG-CALTip
(Californians Turn In Poachers & Polluters)	(888-334-2258). *and*
U.S. Coast Guard National Response Center	800-424-8802
California Office of Emergency Services (OES)	800-OILS-911 or 800-852-7550.

During the phone call, the following information will be given over the phone.

a. Name and telephone number of caller.
b. Where did you see the spill?
c. What do you think was spilled (oil, gas, diesel, etc.)?
d. Can you estimate the size of the spill?
e. The date & time you saw this spill? (PLEASE report on the same day).
f. Did you see any oiled or threatened wildlife?
g. Do you have any information or thoughts about who spilled the material?
h. What, if any, activity did you observe at the spill site?

After taking the necessary actions, the spill will be reported in writing to the Governor's Office of Emergency Services on their forms.

Additionally, California Department of Fish and Game certified wildlife rescue/response organizations will be contacted about the spill. In the Palos Verdes area, these include the following contacts:

Oiled Wildlife Care Network
1-877-UCD-OWCN

Animal Advocates
323-651-1336

California Wildlife Center
818-222-2658

South Bay Wildlife Rehab
310-378-9921

All Wildlife Rescue & Education
562-434-0141

10.0 DIVER CHECKLIST

Prerequisites:

1. Copy of dive manual shall be at work site.
2. Site safety has reviewed work plan.
3. A written pre-job brief has been approved by the manager or designee.
4. All prerequisites required in the dive manual have been met.
5. Verify that a rescue plan is in place.
6. All procedures, drawings, and work documents are available.
7. All video and communication equipment is operable.
8. All diver qualifications are active.
9. Any known hazards have been identified.
10. Verify that all hazard barriers are in place.
11. Verify that waves and tidal conditions will not impact diving operations.
12. A diving supervisor shall be present at all times while the diver is in the water.

Diver Equipment Checkout:

1. Ensure that there are two sources of breathing air available.
2. Ensure that air compressor fuel tank and oil levels are full prior to diving.
3. Ensure that breathing air compressors are not located in an area where the induction of harmful gases is possible.
4. Ensure that the Dive Supervisor inspects the diver's equipment per their daily equipment checklist.
5. Ensure that diver communication equipment checkout is performed.

Placing a Diver in the Water:

1. Notify the control room prior to commencing dive activities. Also:
   a. Verify method of communication to be used with the control room.
   b. Notify control room at conclusion of daily dive activities.
2. Verify that standby divers are in the immediate area and in a state of preparedness to enter the water within two minutes.
3. If SCUBA equipment is used, two divers shall be in the water.
4. Remove the diver from the water if any operational changes are encountered.

EXHIBIT C

ENGINE TUNING, ENGINE CERTIFICATION, AND FUELS

Survey operation will be conducted by the Survey Vessel JAB (Figure 1). This vessel is a 2010 Armstrong marine aluminum jet-powered catamaran measuring 43 feet. This vessel has CARB Tier 2 certified diesel engines (Figures 2 and 3). Survey operations will require a vessel speed of 3 knots, much slower than the cruising speed of 27 knots, therefore it is expected that consumption will be much less than 240 gallons per day. Since this is a Tier 2-certified engine and less than 585 gallons of fuel will be used per day, emissions do not exceed the daily NOx emissions of 100 pounds per day.

Figure 1, S/V JAB

Vessel specifications:

- Overall length: 44 feet
- beam: 15.5 feet
- draft: 3 feet
- main propulsion: (2) cummins qsc 8.3 liter 500 hp commercial diesel engines
- drives: hamilton 322 jet drives
- fuel capacity: 600 gallons diesel
- top speed: 34 knots
- cruise speed: 27 knots

CARB VERIFICATION

MANUFACTURED BY CUMMINS INC. FOR
CUMMINS MERCRUISER DIESEL, LLC
Assembled in the U.S.A

Engine No. 46949786	EPA				
Family 8CEXM0505AAB			NOx+ THC 7.2		NOx+ THC
Catalyst No.			0.20 PM		PM
Date of Mfg. 09–29–08	Model QSC8.3500IDI				
CPL 0906	L / CYL 1.4	C.I.D./L 505 / 8.3	Inj. Set	Advertised HP 500 at 2600 rpm	
Fuel Rate at adv. HP		241 mm³ / Stroke	Firing Order 1 5 3 6 2 4	Valve lash cold 0.012 Int. 0.022 Exh.	
Ref. No. 4019221				IMO Family M14QTA	
E.C.S.		Governed Speed (rpm) 2675		Inj. Timing Code ELECTRONIC	

Figure 2: Main Engine 1

MANUFACTURED BY CUMMINS INC. FOR
CUMMINS MERCRUISER DIESEL, LLC
Assembled in the U.S.A

Engine No. 46949795	EPA				
Family 8CEXM0505AAB			NOx+ THC 7.2		NOx+ THC
Catalyst No.			0.20 PM		PM
Date of Mfg. 09–29–08	Model QSC8.3500IDI				
CPL 0906	L / CYL 1.4	C.I.D./L 505 / 8.3	Inj. Set	Advertised HP 500 at 2600 rpm	
Fuel Rate at adv. HP		241 mm³ / Stroke	Firing Order 1 5 3 6 2 4	Valve lash cold 0.012 Int. 0.022 Exh.	
Ref. No. 4019221				IMO Family M14QTA	
E.C.S.		Governed Speed (rpm) 2675		Inj. Timing Code ELECTRONIC	

Figure 3: Main Engine 2

ROSS Laboratories, Inc.
3138 Fairview Avenue East • Seattle, Washington 98102
(206) 324-3950 (206) 329-0250 Fax

November 19, 2015

Hany Elwany, Ph.D.
President
Coastal Environments, Inc.
2166 Avenida de la Playa, Suite E
La Jolla, CA 92037
Tel. 858-459-0008
Fax 858-459-0107
hany@coastalenvironments.com
www.coastalenvironments.com

Dear Dr. Elwany,

We appreciate the opportunity to checkout your following hydrographic survey systems.

1. Echo-Souder Bathy 500 MF
2. Klein 590 side scan sonar /
3. Custom sub-bottom profiler system with 4T61 Massa Transducer.
4. Multi beam systems Kongsberg EM3002 & Reson.
5. Side scan sonar Klein 590 and Ross 4900.

Other than some mechanical repairs to the Ross sub bottom tow fish and a new data cable, all systems are working well and meet the original manufacturer's specifications. This was determined either by in house testing or review of customers data.

All of the systems have been maintained properly according to the manufactures specifications.

I hope we have the opportunity to work with you again. Please let me know if we can answer any questions or be of help.

Sincerely,

James D. Ross
Ross Laboratories. Inc.
206.324.3950
Email: jim@rosslaboratories.com

300 JOULE BOOMER SYSTEM: BOOMER CONTROL BOX, TOWED SONOGRAPHIC DELIVERY SYSTEM

QA/QC PROCEDURES

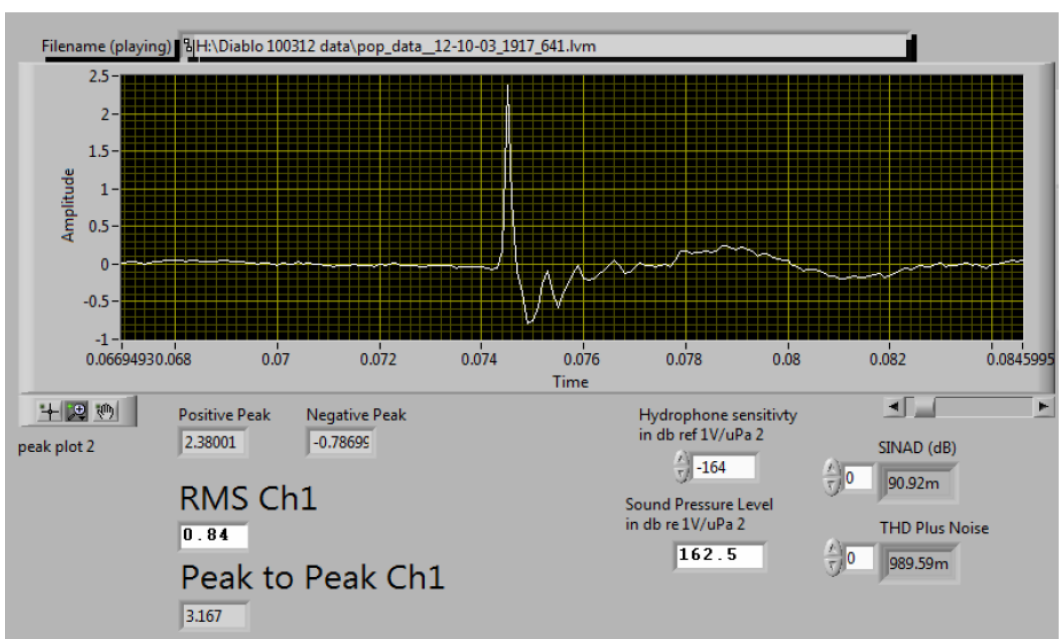
Prior to survey deployment the boomer system will undergo the following inspections:

- During mobilization all cables and connections will be checked for physical integrity before being connected to the sensor. This is assessed by examining the cables for damage and inspecting the connectors for viability.
- All cables will be tested for ground faulting before the cable is connected to the sensor.
- The survey crew upon mobilization will complete the systems self-check and health verification.

SPECIFICATIONS AND SYSTEM PERFORMANCE

Energy Joules	Plates	Distance meters	Spreading loss in dB	Signal P-P volts	rms volts	Receiver Sound Pressure Level re 1 µPa in dB	Source Sound Pressure Level re 1 µPa @ 1m dB
500	1	111	40.9	2.38	0.84	162.5	203.4
750	1	109.8	40.8	2.90	1.03	164.3	205.1

The Table above shows measurements of the Sound Pressure Level (SPL) of the single plate boomer during a signature test. The source was towed over a calibrated hydrophone and distance between boomer and hydrophone recorded in order to compute the SPL at the standard 1-meter offset. The Signal P-P is the peak to peak voltage reported by the hydrophone which acts as the receiver. The Sound Pressure Level at the receiver is computed as SPL= 20Log(Vrms) - (hydrophone sensitivity of -164 dB re 1 v/µPa). The test was performed in October, 2015. A lower source energy (300 joules) is planned for the survey offshore Dana Point.



From 'Emily Callahan'

Subject **Pre-Survey Notification**

To D11LNM@uscg.mil

Reply | Forward | Archive | Junk | Delete | More

10:20 AM

Dear Sir/Ms.

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you of our survey activities between September 28th and October 15th , 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

1 attachment: Notification Letter_DP Desal_CSLC_2016.docx 804 KB

Save

Unread: 0 | Total: 562 | Today Pane

Notification Letter 1: United States Coast Guard

From 'Emily Callahan'
Subject **Pre-Survey Notification // Dana Point**
To d11-dgsectorlalb-wwm@uscg.mil

Reply | Forward | Archive | Junk | Delete | More

2:14 PM

Dear USCG,

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you of our survey activities between September 28th and October 15th , 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

1 attachment: Notification Letter_DP Desal_CSLC_2016.docx 804 KB

Save

Unread: 0 | Total: 557 | Today Pane

Notification Letter 2: Beach Cities Scuba

From 'Emily Callahan'
Subject **Pre-Survey Notification**
To info@beachcitiesscuba.com

Reply | Forward | Archive | Junk | Delete | More

2:15 PM

Dear Beach Cities Scuba,

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you of our survey activities between September 28th and October 15th , 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

1 attachment: Notification Letter_DP Desal_CSLC_2016.docx 804 KB

Save

Unread: 0 | Total: 557 | Today Pane

Notification Letter 3: Lieutenant Mark Alsobrook (Orange County Harbor Master)

From 'Emily Callahan'
Subject **Pre-Survey Notification**
To mlalsobrook@ocsd.org

Reply | Forward | Archive | Junk | Delete | More

2:16 PM

Dear Lieutenant Mark Alsobrook-

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you of our survey activities between September 28th and October 15th , 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

--
Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

1 attachment: Notification Letter_DP Desal_CSLC_2016.docx 804 KB

Save

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Notification Letter 4: Julie Tobin, California Department of Parks and Recreation

From 'Emily Callahan'
Subject **Pre-Survey Notification**
To Julie.tobin@parks.ca.gov

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2:16 PM

Dear Julie-

Attached is a notification for an upcoming geophysical survey offshore of Dana Point. Per our Offshore Geophysical Survey Permit Program (OGPP) requirements, we are sending this notification to inform you of our survey activities between September 28th and October 15th , 2016.

Please feel free to email me if you have any questions about this survey.

Emily Callahan

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Emily Callahan
Project Scientist
Tel: 858-459-7676 (ext. 102)
Mobile: 603-944-7619

1 attachment: Notification Letter_DP Desal_CSLC_2016.docx 804 KB

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Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
Air Quality and Greenhouse Gas (GHG) Emissions (MND Section 3.3.3)						
MM AIR-1: **Engine Tuning, Engine Certification, and Fuels**. The following measures will be required to be implemented by all Permittees under the Offshore Geophysical Permit Program (OGPP), as applicable depending on the county offshore which a survey is being conducted. Pursuant to section 93118.5 of CARB's Airborne Toxic Control Measures, the Tier 2 engine requirement applies only to diesel-fueled vessels.	All Counties: Maintain all construction equipment in proper tune according to manufacturers' specifications; fuel all off-road and portable diesel-powered equipment with California Air Resources Board (CARB)-certified motor vehicle diesel fuel limiting sulfur content to 15 parts per million or less (CARB Diesel).	Daily emissions of criteria pollutants during survey activities are minimized.	Determine engine certification of vessel engines. Review engine emissions data to assess compliance, determine if changes in tuning or fuel are required.	OGPP permit holder and contract vessel operator; California State Lands Commission (CSLC) review of Final Monitoring Report.	Prior to, during, and after survey activities. Submit Final Monitoring Report after completion of survey activities.	
	Los Angeles and Orange Counties: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner; the survey shall be operated such that daily NO_x emissions do not exceed 100 pounds based on engine certification emission factors. This can be accomplished with Tier 2 engines if daily fuel use is 585 gallons or less, and with Tier 3 engines if daily fuel use is 935 gallons or less.		Verify that Tier 2 or cleaner engines are being used. Calculate daily NO_x emissions to verify compliance with limitations.			
	San Luis Obispo County: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner, accomplished with Tier 2 engines if daily fuel use is 585 gallons or less; all diesel equipment shall not idle for more than 5 minutes; engine use needed to maintain position in the water is not considered idling; diesel idling within 300 meters (1,000 feet) of sensitive receptors is not permitted; use alternatively fueled construction equipment on site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.		Verify that Tier 2 or cleaner engines are being used. Inform vessel operator(s) of idling limitation. Investigate availability of alternative fuels.			
	Santa Barbara County: Use vessel engines meeting CARB's Tier 2-certified engines or cleaner, accomplished with Tier 2 engines if daily fuel use is 790 gallons or less.		Verify that Tier 2 or cleaner engines are being used. Investigate availability of alternative fuels.			
	Ventura County: Use alternatively fueled construction equipment on site where feasible, such as compressed natural gas, liquefied natural gas, propane or biodiesel.		Investigate availability of alternative fuels.			

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM BIO-1: Marine Mammal and Sea Turtle Presence – Current Information.	All State waters; prior to commencement of survey operations, the geophysical operator shall: (1) contact the National Oceanic and Atmospheric Administration Long Beach office staff and local whale-watching operations and shall acquire information on the current composition and relative abundance of marine wildlife offshore, and (2) convey sightings data to the vessel operator and crew, survey party chief, and onboard Marine Wildlife Monitors (MWMs) prior to departure. This information will aid the MWMs by providing data on the approximate number and types of organisms that may be in the area.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Document contact with appropriate sources. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder; Inquiry to NOAA and local whale watching operators.	Prior to survey.	
MM BIO-2: Marine Wildlife Monitors (MWMs).	Except as provided in section 7(h) of the General Permit, a minimum of two (2) qualified MWMs who are experienced in marine wildlife observations shall be onboard the survey vessel throughout both transit and data collection activities. The specific monitoring, observation, and data collection responsibilities shall be identified in the Marine Wildlife Contingency Plan required as part of all Offshore Geophysical Permit Program permits. Qualifications of proposed MWMs shall be submitted to the National Oceanic and Atmospheric Administration (NOAA) and CSLC at least twenty-one (21) days in advance of the survey for their approval by the agencies. Survey operations shall not commence until the CSLC approves the MWMs.	Competent and professional monitoring or marine mammals and sea turtles; compliance with established monitoring policies.	Document contact with and approval by appropriate agencies. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	
MM BIO-3: Safety Zone Monitoring.	Onboard Marine Wildlife Monitors (MWMs) responsible for observations during vessel transit shall be responsible for monitoring during the survey equipment operations. All visual monitoring shall occur from the highest practical vantage point aboard the survey vessel; binoculars shall be used to observe the surrounding area, as appropriate. The MWMs will survey an area (i.e., safety or exclusion zone) based on the equipment used, centered on the sound source (i.e., vessel, towfish), throughout time that the survey equipment is operating. Safety zone radial distances, by equipment type, include:	No adverse effects to marine mammals or sea turtles due to survey activities are observed; compliance with established safety zones.	Compliance with permit requirements (observers); compliance with established safety zones. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	

<table>
<tr><th>Mitigation Measure (MM)</th><th>Location and Scope of Mitigation</th><th>Effectiveness Criteria</th><th>Monitoring or Reporting Action</th><th>Responsible Party</th><th>Timing</th><th>Implementation Date(s) and Initials</th></tr>
<tr><td></td><td>
<table>
<tr><th>Equipment Type</th><th>Safety Zone (radius, m)</th></tr>
<tr><td>Single Beam Echosounder</td><td>50</td></tr>
<tr><td>Multibeam Echosounder</td><td>500</td></tr>
<tr><td>Side-Scan Sonar</td><td>600</td></tr>
<tr><td>Subbottom Profiler</td><td>100</td></tr>
<tr><td>Boomer System</td><td>100</td></tr>
</table>

If the geophysical survey equipment is operated at or above a frequency of 200 kilohertz (kHz), safety zone monitoring and enforcement is not required; however, if geophysical survey equipment operated at a frequency at or above 200 kHz is used simultaneously with geophysical survey equipment less than 200 kHz, then the safety zone for the equipment less than 200 kHz must be monitored. The onboard MWMs shall have authority to stop operations if a mammal or turtle is observed within the specified safety zone and may be negatively affected by survey activities. The MWMs shall also have authority to recommend continuation (or cessation) of operations during periods of limited visibility (i.e., fog, rain) based on the observed abundance of marine wildlife. Periodic reevaluation of weather conditions and reassessment of the continuation/cessation recommendation shall be completed by the onboard MWMs. During operations, if an animal's actions are observed to be irregular, the monitor shall have authority to recommend that equipment be shut down until the animal moves further away from the sound source. If irregular behavior is observed, the equipment shall be shut-off and will be restarted and ramped-up to full power, as applicable, or will not be started until the animal(s) is/are outside of the safety zone or have not been observed for 15 minutes.

For nearshore survey operations utilizing vessels that lack the personnel capacity to hold two (2) MWMs aboard during survey operations, at least twenty-one (21) days prior to the commencement of survey activities, the Permittee may petition the CSLC to conduct survey operations with one (1) MWM aboard. The CSLC will consider such authorization on a case-by-case basis and</td><td></td><td></td><td></td><td></td><td></td></tr>
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Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
	factors the CSLC will consider will include the timing, type, and location of the survey, the size of the vessel, and the availability of alternate vessels for conducting the proposed survey. CSLC authorizations under this subsection will be limited to individual surveys and under any such authorization; the Permittee shall update the MWCP to reflect how survey operations will occur under the authorization.					
MM BIO-4: Limits on Nighttime OGPP Surveys.	All State waters; nighttime survey operations are prohibited under the OGPP, except as provided below. The CSLC will consider the use of single beam echosounders and passive equipment types at night on a case-by-case basis, taking into consideration the equipment specifications, location, timing, and duration of survey activity.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Presurvey request for nighttime operations, including equipment specifications and proposed use schedule. Document equipment use. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Approval required before survey is initiated. Monitoring Report following comple-tion of survey.	
MM BIO-5: Soft Start.	All State waters; the survey operator shall use a “soft start” technique at the beginning of survey activities each day (or following a shut down) to allow any marine mammal that may be in the immediate area to leave before the sound sources reach full energy. Surveys shall not commence at nighttime or when the safety zone cannot be effectively monitored. Operators shall initiate each piece of equipment at the lowest practical sound level, increasing output in such a manner as to increase in steps not exceeding approximately 6 decibels (dB) per 5-minute period. During ramp-up, the Marine Wildlife Monitors (MWMs) shall monitor the safety zone. If marine mammals are sighted within or about to enter the safety zone, a power-down or shut down shall be implemented as though the equipment was operating at full power. Initiation of ramp-up procedures from shut down requires that the MWMs be able to visually observe the full safety zone.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Compliance with permit requirements (observers); compliance with safe start procedures. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Imme-diately prior to survey.	

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM BIO-6: Practical Limitations on Equipment Use and Adherence to Equipment Manufacturer's Routine Maintenance Schedule.	All State waters; geophysical operators shall follow, to the maximum extent possible, the guidelines of Zykov (2013) as they pertain to the use of subbottom profilers and side-scan sonar, including: • Using the highest frequency band possible for the subbottom profiler; • Using the shortest possible pulse length; and • Lowering the pulse rate (pings per second) as much as feasible. Geophysical operators shall consider the potential applicability of these measures to other equipment types (e.g., boomer). Permit holders will conduct routine inspection and maintenance of acoustic-generating equipment to ensure that low energy geophysical equipment used during permitted survey activities remains in proper working order and within manufacturer's equipment specifications. Verification of the date and occurrence of such equipment inspection and maintenance shall be provided in the required presurvey notification to CSLC.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Document initial and during survey equipment settings. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Imme-diately prior to and during survey.	
MM BIO-7: Avoidance of Pinniped Haul-Out Sites.	The Marine Wildlife Contingency Plan (MWCP) developed and implemented for each survey shall include identification of haul-out sites within or immediately adjacent to the proposed survey area. For surveys within 300 meters (m) of a haul-out site, the MWCP shall further require that: • The survey vessel shall not approach within 91 m of a haul-out site, consistent with National Marine Fisheries Service (NMFS) guidelines; • Survey activity close to haul-out sites shall be conducted in an expedited manner to minimize the potential for disturbance of pinnipeds on land; and • Marine Wildlife Monitors shall monitor pinniped activity onshore as the vessel approaches, observing and reporting on the number of pinnipeds potentially disturbed (e.g., via head lifting, flushing into the water). The purpose of such reporting is to provide CSLC and California Department of Fish and Wildlife (CDFW) with information regarding potential disturbance associated with OGPP surveys.	No adverse effects to pinnipeds at haul outs are observed.	Document pinniped reactions to vessel presence and equipment use. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Monitoring Report following comple-tion of survey.	

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM BIO-8: Reporting Requirements – Collision.	All State waters; if a collision with marine mammal or reptile occurs, the vessel operator shall document the conditions under which the accident occurred, including the following: • Vessel location (latitude, longitude) when the collision occurred; • Date and time of collision; • Speed and heading of the vessel at the time of collision; • Observation conditions (e.g., wind speed and direction, swell height, visibility in miles or kilometers, and presence of rain or fog) at the time of collision; • Species of marine wildlife contacted (if known); • Whether an observer was monitoring marine wildlife at the time of collision; and, • Name of vessel, vessel owner/operator, and captain officer in charge of the vessel at time of collision. After a collision, the vessel shall stop, if safe to do so; however, the vessel is not obligated to stand by and may proceed after confirming that it will not further damage the animal by doing so. The vessel will then immediately communicate by radio or telephone all details to the vessel's base of operations, and shall immediately report the incident. Consistent with Marine Mammal Protection Act requirements, the vessel's base of operations or, if an onboard telephone is available, the vessel captain him/herself, will then immediately call the National Oceanic and Atmospheric Administration (NOAA) Stranding Coordinator to report the collision and follow any subsequent instructions. From the report, the Stranding Coordinator will coordinate subsequent action, including enlisting the aid of marine mammal rescue organizations, if appropriate. From the vessel's base of operations, a telephone call will be placed to the Stranding Coordinator, NOAA National Marine Fisheries Service (NMFS), Southwest Region, Long Beach, to obtain instructions. Although NOAA has primary responsibility for marine mammals in both State and Federal waters, the California Department of Fish and Wildlife (CDFW) will also be advised that an incident has occurred in State waters affecting a protected species.	No adverse effects to marine mammals or sea turtles due to survey activities are observed.	Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Monitoring Report following comple-tion of survey.	

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM BIO-9: Limitations on Survey Operations in Select Marine Protected Areas (MPAs).	All MPAs; prior to commencing survey activities, geophysical operators shall coordinate with the CLSC, California Department of Fish and Wildlife (CDFW), and any other appropriate permitting agency regarding proposed operations within MPAs. The scope and purpose of each survey proposed within a MPA shall be defined by the permit holder, and the applicability of the survey to the allowable MPA activities shall be delineated by the permit holder. If deemed necessary by CDFW, geophysical operators will pursue a scientific collecting permit, or other appropriate authorization, to secure approval to work within a MPA, and shall provide a copy of such authorization to the CSLC as part of the required presurvey notification to CSLC. CSLC, CDFW, and/or other permitting agencies may impose further restrictions on survey activities as conditions of approval.	No adverse effects to MPA resources due to survey activities are observed.	Monitor reactions of wildlife to survey operations; report on shutdown conditions and survey restart. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder; survey permitted by CDFW.	Prior to survey.	
MM HAZ-1: Oil Spill Contingency Plan (OSCP) Required Information.	Permittees shall develop and submit to CSLC staff for review and approval an OSCP that addresses accidental releases of petroleum and/or non-petroleum products during survey operations. Permittees' OSCPs shall include the following information for each vessel to be involved with the survey: • Specific steps to be taken in the event of a spill, including notification names, phone numbers, and locations of: (1) nearby emergency medical facilities, and (2) wildlife rescue/response organizations (e.g., Oiled Wildlife Care Network); • Description of crew training and equipment testing procedures; and • Description, quantities, and location of spill response equipment onboard the vessel.	Reduction in the potential for an accidental spill. Proper and timely response and notification of responsible parties in the event of a spill.	Documentation of proper spill training. Notification of responsible parties in the event of a spill.	OGPP permit holder and contract vessel operator.	Prior to survey.	
MM HAZ-2: Vessel fueling restrictions.	Vessel fueling shall only occur at an approved docking facility. No cross vessel fueling shall be allowed.	Reduction in the potential for an accidental spill.	Documentation of fueling activities.	Contract vessel operator.	Following survey.	
MM HAZ-3: OSCP equipment and supplies.	Onboard spill response equipment and supplies shall be sufficient to contain and recover the worst-case scenario spill of petroleum products as outlined in the OSCP.	Proper and timely response in the event of a spill.	Notification to CSLC of onboard spill response equipment/supplies inventory, verify	Contract vessel operator.	Prior to survey.	

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
			ability to respond to worst-case spill.			
MM HAZ-1: Oil Spill Contingency Plan (OSCP) Required Information.	Outlined under **Hazards and Hazardous Materials** (above)					
MM HAZ-2: Vessel fueling restrictions.	Outlined under **Hazards and Hazardous Materials** (above)					
MM HAZ-3: OSCP equipment and supplies.	Outlined under **Hazards and Hazardous Materials** (above)					
MM BIO-9: Limitations on Survey Operations in Select MPAs.	Outlined under **Biological Resources** (above)					
MM REC-1: U.S. Coast Guard (USCG), Harbormaster, and Dive Shop Operator Notification.	All California waters where recreational diving may occur; as a survey permit condition, the CSLC shall require Permittees to provide the USCG with survey details, including information on vessel types, survey locations, times, contact information, and other details of activities that may pose a hazard to divers so that USCG can include the information in the Local Notice to Mariners, advising vessels to avoid potential hazards near survey areas. Furthermore, at least twenty-one (21) days in advance of in-water activities, Permittees shall: (1) post such notices in the harbormasters' offices of regional harbors; and (2) notify operators of dive shops in coastal locations adjacent to the proposed offshore survey operations.	No adverse effects to recreational divers from survey operations.	Notify the USCG, local harbormasters, and local dive shops of planned survey activity. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	

Mitigation Measure (MM)	Location and Scope of Mitigation	Effectiveness Criteria	Monitoring or Reporting Action	Responsible Party	Timing	Implementation Date(s) and Initials
MM FISH-1: U.S. Coast Guard (USCG) and Harbormaster Notification.	All California waters; as a survey permit condition, the CSLC shall require Permittees to provide the USCG with survey details, including information on vessel types, survey locations, times, contact information, and other details of activities that may pose a hazard to mariners and fishers so that USCG can include the information in the Local Notice to Mariners, advising vessels to avoid potential hazards near survey areas. Furthermore, at least twenty-one (21) days in advance of in-water activities, Permittees shall post such notices in the harbormasters' offices of regional harbors.	No adverse effects to commercial fishing gear in place.	Notify the USCG and local harbormasters of planned survey activity. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Prior to survey.	
MM FISH-2: Minimize Interaction with Fishing Gear.	To minimize interaction with fishing gear that may be present within a survey area: (1) the geophysical vessel (or designated vessel) shall traverse the proposed survey corridor prior to commencing survey operations to note and record the presence, type, and location of deployed fishing gear (i.e., buoys); (2) no survey lines within 30 m (100 feet) of observed fishing gear shall be conducted. The survey crew shall not remove or relocate any fishing gear; removal or relocation shall only be accomplished by the owner of the gear upon notification by the survey operator of the potential conflict.	No adverse effects to commercial fishing gear in place.	Visually observe the survey area for commercial fishing gear. Notify the gear owner and request relocation of gear outside survey area. Submit Final Monitoring Report after completion of survey activities.	OGPP permit holder.	Imme-diately prior to survey (prior to each survey day).	
MM FISH-1: USCG and Harbormaster Notification.	Outlined under **Commercial and Recreational Fisheries** (above)					

Acronyms/Abbreviations: CARB = California Air Resources Board; CDFW = California Department of Fish and Wildlife; CSLC = California State Lands Commission; dB = decibels; kHz = kilohertz; MPA = Marine Protected Area; MWCP = Marine Wildlife Contingency Plan; MWM = Marine Wildlife Monitor; m= meter(s); NOAA = National Oceanic and Atmospheric Administration; NO_x = Nitrogen Oxide; OGPP = Offshore Geophysical Permit Program; OSCP = Oil Spill Contingency Plan; USCG = U.S. Coast Guard