California State University Ocean Studies Institute Diving Safety Program

SPECIAL DIVING PROVISIONS DURING COVID19 PANDEMIC -2020

In compliance with CDC, California State University, and State of California directives, and with consideration of the special potential exposure conditions posed by diving and associated auxiliary activity, the CSU/OSI Diving Safety Office on April 1, 2020 adopted the following, effective immediately, for diving activity under OSI auspices:

CSU/OSI DSP COVID19 ADVISORY #1:

- NON-ESSENTIAL DIVING STAND DOWN

CSU/OSI DSP COVID19 ADVISORY #2:

- REQUIREMENTS FOR CONDITIONAL APPROVAL OF ESSENTIAL DIVING UNDER OSI AUSPICES DURING THE COVID PANDEMIC

CSU/OSI DSP COVID19 ADVISORY #3:

- MINIMUM COVID19 EXPOSURE CONTROL GUIDELINES TO BE EMPLOYED DURING ESSENTIAL OSI DIVING ACTIVITY DURING PANDEMIC-CAUSED STAND-DOWN

CSU/OSI DSP COVID19 ADVISORY #4:

- COMMUNICATION GUIDELINES TO BE EMPLOYED DURING ESSENTIAL OSI DIVING ACTIVITY DURING PANDEMIC-CAUSED STAND-DOWN

California State University Ocean Studies Institute Diving Safety Program CSU/OSI DSP COVID19 ADVISORY #1

NON-ESSENTIAL DIVING STAND DOWN

In consideration of the impending impacts of the COVID19 Pandemic on CSU/OSI scientific diving research and education projects, the CSU/OSI Diving Control Board (DCB) is ordering a general stand-down of non-essential diving activity under University auspices until further notice. It is anticipated that as the Pandemic progresses, assuring exposure protection of CSU/OSI divers from COVID19 infection in the field will become increasingly difficult to impossible. As all divers know from experience, diving and its surrounding activities are messy, wet undertakings, commonly requiring close personal contact in a highly variable environment. For these reasons, the DCB finds diving activity (including skin diving work) is an area of special concern for COVID19 exposures.

In compliance with CDC, California State University, and State of California directives, and with consideration of the special potential exposure conditions posed by diving and associated auxiliary activity, the DCB on April 1, 2020 approved the following, effective immediately for diving activity under CSU/OSI auspices:

TRAINING ACTIVITY:

- All practical, face-to-face CSU/OSI diver training is suspended until further notice. This covers all training or proficiency dives, pool swim and dive evaluations, open water skill evaluations, or dives conducted to extend depth ratings or specialized endorsements and lab courses and field schools.
- This suspension also covers emergency responder training such as the CPR/FA/O2 refresher course.
- These suspensions are in effect at least until May 15, by which time a determination will be made whether to rescind, modify or extend them.
- Provisions may be developed to extend "grace periods" for divers whose status is impacted by lack of required dive activity or expiring emergency response training.

RESEARCH DIVE ACTIVITY:

- Project proposal approval applications and dive plan approval applications may continue to be submitted per standard procedures. However,
- No new dive plans or projects will be approved to start prior to May 30. This suspension is in effect until May 30, by which time a determination will be made whether to rescind, modify or extend it.
- □ Effective immediately, a suspension of diving extending through Wednesday, April 1, is ordered for all existing approved dive plans.
 - o The DSO will be working with guidance from the CSU/OSI DCB to fairly and equitably identify specific instances where a delay or cessation of diving would unalterably harm the University's research mission, and where limited short-term activity might be allowed under special circumstances to mitigate these impacts.
 - o PI's and Lead Divers are advised to develop contingency plans to wind down most projects in short order to a stasis point, after which little or no diving might be approved for an extended period.

The DCB very much appreciates the hardship these decisions will place on many of you, our students and investigators. These are in fact issues being addressed in a similar manner by our peer institutions within the AAUS, as well as our partner agencies. In all instances, the overriding consideration will always be the health and safety of our divers and our community. For discussion of specific concerns, please feel free to talk to your DCB representative or the DSO.

California State University Ocean Studies Institute Diving Safety Program CSU/OSI DSP COVID19 ADVISORY #2

REAUIREMENTS FOR CONDITIONAL APPROVAL OF ESSENTIAL DIVING UNDER CSU/OSI AUSPICES DURING THE COVID PANDEMIC

While the CSU/OSI Diving Safety Office's COVID Pandemic stand-down orders are in effect, no dive plan will be considered for approval by the DSO excepting under following conditions:

- Verification and Approval must be obtained at the Department Chair Level, after consultation with the appropriate senior campus administrator that the specific diving activity is highly time-critical, absolutely essential to the University's research mission, and meets the following criteria:
- The diving activity proposed is of a small scale and short duration intended to:
 - Wind down ongoing research infrastructure to a point of stasis, after which a nondiving period can been sustained; or
 - Recover previously deployed equipment or instruments which would be damaged, or data lost by a lengthy delay in recovery (deployment of additional equipment is not approved); or
 - Prevent serious injury or significant environmental damage.
- The dive team must consist of no more than one buddy pair, one standby diver/support staff and one vessel operator.
- The dive plan for the specific task must include measures approved by the DSO for prevention of COVID transmission between any participants or support personnel during diving, and during ancillary activities such as vehicular and boating transits and operations.
- The dive plan, risk assessment, and COVID mitigation procedures must be approved by the Diving Control Board (DCB).

All approvals by the DCB will be contingent on the logistic feasibility of the proposed activity under current conditions and are subject to change as events dictate.

California State University Ocean Studies Institute Diving Safety Program CSU/OSI DSP COVID19 ADVISORY #3

MINIMUM COVID19 EXPOSURE CONTROL CUIDELINES TO BE EMPLOYED DURING ESSENTIAL CSU/OSI DIVING ACTIVITY DURING PANDEMIC-CAUSED STAND-DOWN

The following are considered minimum requirements as of the date of this document. Additional measures may be required by the DSO based upon specific characteristics of the planned operations, environmental conditions, current community public health situation, or further guidance from the CSU/OSI DCB.

- No diver will participate who feels ill or has reasonable cause to believe they have been exposed to COVID-19.
- All diving operations must be conducted under the assumption that at least one unknown member of the operations is currently asymptomatic, infected, and contagious.
- Dive teams and auxiliary personnel must be kept to a minimum.
 - o At maximum, this must be no more than two divers, one standby diver/topside assistant, and one vessel operator.
- During all aspects of the operation, adequate interpersonal distancing must be maintained unless appropriate PPE are employed. Minimum surface interpersonal distances must not be less than 6 feet. It must be recognized that the 6-foot distance is generally specified for indoor, land-based conditions. In a windy and moisture-laden environment such as on a dive boat, downwind positions require greater distancing. Interpersonal distancing procedures apply to all surface activities associated with the dive including:
 - o Vehicular and vessel transit to dive s i t e s
 - Vessel and vehicle sizing must be planned to allow adequate interpersonal distancing and will be reviewed by the DSO as part of dive plan evaluation.
 - At a minimum all personnel while on the surface must wear a covering over their mouth and nose in order to reduce respiratory droplet dispersal from coughs and sneezes into the air and onto vehicle and vessel surfaces and discourage inadvertent face touching.
 - If standard PPE equipment is not available, all team members must use the best available substitute, such as sunglasses, and balaclavas, neck gaiters/buffs, etc., which cover the mouth and nose.
 - All associated surfaces will be wiped down with sanitary wipes or liberally sprayed with 10% bleach or other sterilizing solutions before and after occupation.
 - o Pre-and post-dive briefings and debriefings
 - Primary dive team operational planning and briefing should be conducted prior to departing for the dive site.
 - On site discussions and prep must be minimized to essential items.
 - o Buddy and equipment checks
 - Each diver must only handle and test their own equipment.
 - Each diver will perform functional testing and demonstrate operation of his/her equipment while observed by the buddy.
 - During pre-dive checks, divers must not breathe from their own alternate second stage. Pre-dive functional testing must be accomplished via depressing the purge and listening for free flows.

- o Entries, exits and surface swims
 - Diving must only be conducted under conditions in which normal (non-emergency) entries and exits can be made unassisted and in full gear.
 - These must be accomplished with each diver's mask in place and the divers breathing from their regulators.
- If air sharing is required, refrain from sharing a single second stage unless to refrain would result in injury or loss of life. Responding divers will establish contact and control, and then donate the secondary second stage.
 - o Equipment configurations with auxiliary second stages integrated into a BC inflator are not compatible with this requirement and cannot be used until further notice.
- Diver assist, rescues, and first aid must be approached with extra safety precautions in mind.
 - o Reinforce with all participants the need for standard use of PPE whenever available. This includes face masks and eye shields in all first aid situations, when available
 - If standard PPE equipment is not available, team members must use the best available substitute, such as sunglasses, and balaclavas, neck gaiters/buffs, etc., which cover the mouth and nose.
 - In surface rescue and assist scenarios, unless an immediate assist is necessary to prevent loss of life, responding divers must stop a safe distance (at least two full body lengths, approximately 12 feet) from the distressed diver to perform initial assessment ("Are you OK? Inflate your BC! Drop your weights!").
 - o Where possible, divers should remain on their scuba regulators with their dive masks in place during surface activity.
 - o Surface tows should be performed with the primary objective of expediting extraction without attempting rescue breathing during transport.
- Dive equipment and any personal auxiliary equipment used must be dedicated to an individual diver for the duration of the diving operation.
- Each diver will only prepare, maintain and handle their own diving equipment including during transportation and exit and entry from the water.
- All dive equipment and vehicles and vessels used must be properly disinfected according to CDC procedures before and after use, by the diver using it.
 - o Each diver must be responsible for disinfecting his/her own equipment. All regulator second stages and BC oral inflators must:
 - Receive an initial freshwater rinse, then
 - Be immersed in a 10% bleach solution or other EPA-approved disinfectant, remaining wetted for at least 4 minutes, and then
 - Receive a final freshwater rinse before drying.
 - o Equipment used by one diver will not be used by a different diver without an intervening period of at least 5 days and a re-disinfection prior to use.
 - O2 kits, first aid supplies, etc., must be disinfected and disposed after use, using best available practices.
 - Equipment disinfection must be consistent with recommendations from Diver Alert Network:
 - DAN's Quick Guide and the EPA "N" list for COVID19 approved disinfectants. Quaternary ammonium, the active ingredient in Steramine, commonly used to disinfect rebreather equipment and regulators, is on the list.

- Upon completion of a day's operations, the Lead Diver must communicate a log of the day's dive to the DSO, including
 - o Time, date, location, nature of diving activity.
 - o Names and contact information of all participants, their roles, and dive parameters (number of dives conducted, diver pairings, dive time and depths, and dive modes used);
 - o Any incident or accident, including possible breaches of exposure protocols.

WHILE THE CSU/OSI DCB SETS THESE GUIDELINES AS A MINIMUM FOR RESEARCH DIVING OPERATIONS DEEMED ESSENTIAL TO THE UNIVERSITY'S RESEARCH MISSION, THE DCB ALSO REMINDS RESEARCHERS, PRINCIPAL INVESTIGATORS AND ADMINSTRATORS THAT SIMILAR CONDITIONS AND CONCERNS EXIST IN ALL MARINE FIELD OPERATIONS, INCLUDING BOATING AND SNORKELING/SKIN DIVING. ALL PARTIES ARE ADVISED TO CONSIDER WHETHER A PARTICULAR ACTIVITY IS TRULY ESSENTIAL, AND ENSURE SIMILAR PROCEDURES ARE FOLLOWED IN OTHER ACTIVITIES.