I. Purpose

To ensure diving and snorkeling activities under the Auspices of the State University of New York College at Buffalo (BSC)/Great Lakes Center (GLC), are conducted in a safe manner that:
1. Protects divers and snorkelers from accidental illness and injury; and
2. Complies with applicable diving regulations established by the Occupational Safety and Health Administration (OSHA).

II. Scope

This Policy and Procedure identifies the qualifications, safety protocols, and oversight responsibilities for Scientific Diving and Snorkeling operations and instructional/certification diving activities for obtaining “Scientific Diving” authorization from the BSC/GLC Diving Control Board (DCB). In particular, this policy and procedure governs Scientific Diving and Snorkeling associated with research into aquatic environmental conditions. Commercial diving activities are not authorized by this policy or the BSC Environmental Health and Safety (EH&S) Office and are therefore prohibited.

III. Applicability and Responsibilities

This policy and procedure applies to individuals conducting Scientific Diving or Snorkeling activities under the Auspices of BSC/GLC. The requirements and equipment protocols herein shall be observed and apply to equipment rented, BSC/GLC owned, or privately owned, anywhere Scientific Diving or Snorkeling is performed under the Auspices of BSC/GLC. Responsibilities for ensuring safe diving operations are identified as follows:

1. DCB - The DCB has absolute authority over the Scientific Diving and Snorkeling activities conducted under the Auspices of the BSC/GLC. The DCB is responsible for setting protocols for performing Scientific Diving and Snorkeling, including:
   A) Identifying and implementing changes to this policy;
   B) Recommending and approving training programs for applicants to obtain diving certification;
   C) Approving locations where diving and snorkeling may be conducted;
   D) Approving new scuba equipment or techniques for use;
   E) Recommending and approving facilities and services for inspection and maintenance of scuba and associated equipment;
   F) Issuing, denying, and revoking certifications that authorize individuals to perform Scientific Diving under the Auspices of the BSC/GLC;
   G) Referring names of BSC employees with revoked certifications due to non-compliance with the protocols of this policy to Human Resources for further disciplinary action;
   H) Reviewing and auditing in advance all programs where Scientific Diving is conducted under BSC/GLC auspices and certifying that each program meets applicable diving requirements;
   I) Selecting appointees to the DCB and a Diving Safety Officer (DSO);
J) Serving as the point of contact for regulatory agency safety inspections of the BSC/GLC Scientific Diving program; and
K) Meeting at least once per year.

2. **DSO** – Is a certified diver and member of the DCB, who is selected by the DCB to implement and enforce safety responsibilities of the DCB. The DSO is authorized to suspend diving and snorkeling operations that he/she considers unsafe or unwise.

3. **GLC Director** – The GLC Director or their designee is responsible for A) ensuring that diving activities performed for the GLC are limited to Scientific Diving and conducted in accordance with this policy; B) providing an adequate number of representatives, who are properly trained and qualified divers, to the DCB; and C) Maintaining and storing records as identified in Section XIII of this policy.

4. **BSC Environmental Health and Safety (EH&S) Office Director** – The EH&S Office Director or their designee is responsible for:
   A) Monitoring regulations and disseminating information to the DCB on new or modified requirements for Scientific Diving;
   B) Providing representatives and consultative guidance to the DCB;
   C) Recording and reporting occupational illnesses and injuries in accordance with the applicable labor regulations;
   D) Maintaining this policy and procedure in accordance DCB recommendations and overarching EH&S policies;
   E) Maintaining “fit for duty” records generated by physicians performing medical examinations.

5. **All Supervisors or Advisors** - All BSC and GLC faculty, staff, researchers, and visitors are responsible for ensuring those individuals, who are under their supervision or advisement and involved with Scientific Diving or Snorkeling activities for the GLC or BSC, review and adhere to this policy procedure.

6. **All Divers and Snorkelers** - All individuals, including faculty, researchers, scientists, staff, students, or visitors performing Scientific Diving or Snorkeling activities under the auspices of BSC/GLC are responsible for reviewing and adhering to this policy and applicable regulations.

### IV. References


BSC EH&S Policy and Procedure, No.CGC-007-001, "Compressed Gas Cylinders"

1. **Certifications Required** – Anyone proposing to perform Scientific Diving under the Auspices of the BSC/GLC shall possess a valid SCUBA diver certification from a recognized SCUBA organization, such as NAUI, PADI, SSI, and PDIC, and must obtain certification from the DCB prior to conducting diving activities.

2. **Forms** - To obtain approval from the DCB to conduct Scientific Diving, the diving candidate must prepare and submit the appropriate documentation as identified in Appendices 2, 3, and 4.

3. **Medical Exam** - All certified divers shall submit to a medical exam and secure a fit-for duty-determination report from the examining physician that must be provided to the DCB or DSO before undertaking diving activities.
4. **Medical Exam Frequency** - Medical examinations are required at 3-year intervals up to age 40 and every 2 years thereafter. More frequent examinations may be required and shall be obtained if conditions exist that require more frequent monitoring.

5. **Illness or Injury** - After any major illness or major injury the diver shall submit to a medical examination before resuming the diving activity. This requirement may be addressed by the physician treating the illness by his stating whether the diver can resume diving activity.

6. **Depth Limitation** - The certification will authorize the diver to a depth not to exceed 130 feet. For depths exceeding 130 feet, proof of current deep diving (i.e., within an 8 month time frame) is required. Written pre-approval from the DCB or DSO must be obtained prior to each dive exceeding 130 feet.

7. **Right to Deny or Revoke** - The DCB reserves the right to deny or revoke certification of any candidate who violates any regulation or diving procedure identified in this guide or does not appear to possess the emotional stability necessary for the safety of the diver and their partner under diving conditions, even if he or she possesses the necessary physical skills.

8. **Expiration and Revocation** - Diving certifications shall be renewed annually and may be revoked by the DCB or DSO at any time. Temporary certifications not exceeding eight (8) months may be issued to divers from other originating institutions provided the diver holds equivalent certification, as determined by the BSC DCB or DSO, from the originating institution.

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**VI Equipment Requirements**

1. **Approval and Standards** – All equipment shall meet standards as determined by the DCB and DSO. Only those makes and models approved by the DCB and DSO shall be used. The use of diving equipment, such as hookah, rebreathing apparatus, mixed gas, etc., shall require special training and approval by the DSO prior to each planned dive.

2. **Alternate Air Source** - A DCB or DSO-approved alternate air source must be part of the air delivery system on each diver. This alternate second stage must be visible and accessible to any member of the dive team.

3. **Breathing Masks and Helmets** – Breathing masks and helmets shall have: a) a non-return valve at the attachment point between the mask and the hose, which shall close readily and positively; b) an exhaust valve; and c) a minimum ventilation rate capable of maintaining the diver at depth to which he/she is diving.

4. **Buoyancy Compensators (BC)** - All BC used for diving shall be vest style with integrated scuba cylinder harness. They must have oral and auto-inflate capability and must be properly fitted to the individual performing the diving. Any BC with an integrated weight system must be approved by the DCB or DSO prior to use. All BC’s shall be examined by the diver prior to each dive. Inspection and testing of each BC shall be done annually with records kept in accordance with Section XIII.

5. **Dive Computers** - During scuba dives exceeding 100 ft, repetitive to lesser depths that cause maintenance of high nitrogen levels in the body, and in waters of unknown depths, each diver shall have with them a dive computer to monitor tissue nitrogen levels.
6. **Electrical Instruments** – Electrical instruments used underwater shall be designed/approved for this purpose.

7. **First Aid Kit** – A first aid kit should be readily available at the dive site, whether a boat or shore location.

8. **Flotation Systems** – Each diver shall have the capability of achieving and maintaining positive buoyancy with equipment designed to perform this function. All personal flotation systems, including buoyancy compensators, dry suits, or other variable volume buoyancy compensation devices shall be equipped with an exhaust valve. These devices shall be functionally tested at intervals not to exceed twelve months with test records maintained in accordance with Section XIII.

9. **Gauges** - On every dive each diver shall have gauges measuring cylinder air pressure and depth, a compass, and a watch or similar timekeeping device.

10. **Inspection** – All diving equipment shall be regularly examined and functionally checked by the person using it prior to each dive. The examination and check shall be performed in the presence of the diving buddy or tender.

11. **Scuba Regulators** - All scuba regulators shall be inspected and tested by the diver before each use. All regulators shall be subjected to complete inspection and annually tested by a DCB or DSO-approved repair and maintenance company. The manufacturers recommended service policy shall be followed in determining necessary maintenance. Proof of annual testing shall be provided to DSO. Any diver using their own regulator shall provide proof to the DSO that their regulator has been tested at an interval not exceeding 12 months. Records of inspections and maintenance shall be kept in accordance with Section XIII.

12. **Scuba Air Cylinders** - All scuba cylinders used for diving shall bear a valid hydrostatic test date and shall be tested in accordance with applicable Department of Transportation (DOT) requirements. Before initial use and at not more than 12-month intervals thereafter, the cylinder shall be inspected internally (“VIP”) by a DCB-approved repair and maintenance company. Hydrostatic tests shall be performed every five (5) years as required. Records of cylinder inspection, tests, and maintenance shall be kept in accordance with Section XIII.

13. **Weight Belts** - All weight belts shall have quick-release devices designed to permit immediate jettisoning. The quick release device shall operate easily with either hand. Weight belts shall be regularly examined by the persons using them and any defective geared shall be repaired or replaced before further use.

**VII. Breathing Air Supply Requirements for Diving**

1. **Air Quality** - Supplied breathing air for scuba shall meet the specifications in Table 1

   **TABLE 1**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen</td>
<td>Atmospheric (20% to 22% typical)</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>Less than 10 ppm</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>Less than 500 ppm</td>
</tr>
<tr>
<td>Hydrocarbons</td>
<td>Less than 25 ppm</td>
</tr>
<tr>
<td>Dust, Oil droplets, and Water</td>
<td>Absent</td>
</tr>
<tr>
<td>Odors</td>
<td>Absent</td>
</tr>
</tbody>
</table>

2. **Compressors** - All air compressors used for supplied breathing air shall meet the following installation and operating requirements:
A. Low-pressure compressors used to supply air to the diver shall be equipped with a volume tank with a check valve on the inlet side, a pressure gauge, a relief valve, and a drain valve or equivalent safety features provided by the manufacturer. All diving air compressors shall be inspected and maintained in accordance with the manufacturer's service policy. Records of service shall be maintained in accordance with Section XIII.

B. Air intakes shall be provided with a filter and be located to ensure a supply of clean air, free from contamination by fumes, smoke, etc.

C. Discharged compressed air shall be passed to the compressed air holder (container) through frequently cleaned and recharged filters designed to: 1) remove dusts, oil droplets, and water; and 2) minimize other contaminants.

D. Compressed air systems over 500 psig shall have slow-opening shut-off valves.

E. Oil lubricated compressor cylinders and coolers shall be well ventilated or otherwise cooled, or the operation cycled to ensure against high temperatures at which carbon monoxide is formed from the oil.

F. A log shall be kept by the compressor operator showing operational hours, repair, overhaul, and filter maintenance. Completed logs shall be maintained and kept in accordance with Section XIII.

G. Output of air compressor systems shall be tested for air purity at intervals not to exceed 100 hours or 6 months, whichever comes first, by means of samples taken at the connection to the distribution system. A log records for these tests shall be kept in accordance with Section XIII.

3. Cylinders - Compressed air storage cylinders shall be designed, constructed, and maintained in accordance with DOT standards and the EH&S Policy # CGC-007-001, “Compressed Gas Cylinders”.

4. Oxygen Systems – Equipment used with oxygen or mixtures containing over 40% oxygen shall be designed and maintained for oxygen service. Components exposed to oxygen or mixtures exceeding 40% oxygen shall be cleaned of flammable materials before placement into service. Oxygen systems over 125 psig shall have slow-opening shut-off valves.

5. Tanks - Breathing air for air tanks used by divers shall be obtained from DCB- or DCB designee-approved sources and meet the specifications in Table 1.

VIII. Pre-Dive Requirements

1. Hazard Evaluation and Control - Prior to the diving operation, a safety hazard evaluation of the task(s) and site environmental conditions shall be completed and hazard controls identified for implementation. This action shall be documented in logbook and shall address the objectives and anticipated hazards during the planned underwater diving activities.
Scientific Diving, or instructional/certification diving to obtain Scientific Diving authorization by the DCB. As such, diving operations shall be limited to those underwater tasks, which are scientific research-related and meet all of the following:

A. All divers are scientists or scientists-in-training;

B. Underwater tasks involve no more than manually accessing, securing, positioning, moving, or retrieving small scientific instruments and equipment needed for data gathering and does not involve construction or troubleshooting;

C. Aside from diving qualifications, the underwater tasks would not typically require an acquired skilled craft or trade, such as welding or electrical wiring, to complete;

D. There will be negligible energy generation (e.g., heat, electrical, mechanical, etc) hazard to the divers and electrical instruments used underwater shall be specifically approved for this purpose;

E. The task is light and short in duration and requires handling nothing more than simple, hand-held tools or instruments, which do not require mechanical lifting assistance;

F. Based on the known conditions, there is negligible potential to compromise the diver’s safety equipment or harm when performing the task.

2. Plan Preparation - At a minimum, a written dive plan log shall be prepared that considers and documents review of the following health and safety aspects:
   A. Dive team assignments, person in charge, physical fitness, and diving mode;
   B. Surface and underwater conditions and hazards;
   C. Diving equipment and systems;
   D. Thermal protection;
   E. Breathing air supply, including reserves, (e.g. locate air intake away from contaminants);
   F. Have current copies of dive tables and plan all dives within no decompression limits;
   G. Communication between divers with immediate support personnel;
   H. Coordination with other diving operations in the vicinity; and
   I. Emergency procedures including air supplies, treatment gas/oxygen on-site where dives are taking place, communications, listings of available rescue facilities, means of transportation, hospitals, and recompression chambers.

3. Briefing - A briefing shall be held by the dive team leader or person-in-charge prior to each diving operation. As part of the briefing, the dive team leader or person-in-charge shall:
   A. Ensure that all individuals associated with the diving operation have read and are familiar with this policy and procedure;
   B. Inquire about the physical fitness of each diving team member;
   C. Review the planned diving operation noting changes in environmental conditions or unusual hazards likely to affect the safety of the diving operation; and
   D. Effect any necessary modifications to the diving plan and protocol to optimize diver safety
   E. Document the above items were completed along with the date, time and location of the dive in a logbook.
4. Final Equipment Inspection - Prior to each diving operation, the dive team leader or person-in-charge, shall satisfy him/herself of the functional operation of each dive team member’s equipment and support system.

IX. Diving Protocols

**ULTIMATE SAFETY**

Ultimate safety rests with the individual diver. It is the diver’s responsibility and privilege to refuse to dive or terminate the dive without prejudice if in his/her judgment, conditions are unsafe or unfavorable, would violate the dictates of his/her training, or would violate the requirements of this policy & procedure.

**EMERGENCY DEVIATIONS**

In emergencies when danger to life or property exists or is probable, the diver at his/her own discretion may deviate from the requirements of this policy and procedure. A written report shall be prepared and submitted to the DCB explaining the circumstances and justifications for actions taken that warranted contravention of this policy and procedure.

1. **Buddy System** – Solo diving is prohibited, except as noted under item E below, and all diving shall be conducted using the buddy system:

   A. Buddy pairs shall be used on all diving tasks unless the task being undertaken dictates use of a third diver.
   B. Divers shall maintain close and continuous contact and be in a position to render assistance in case of need.
   C. If buddy separation occurs, all divers shall check their immediate area. If the buddy is not located within one minute, the diver shall surface within one minute, or at the prescribed ascent rate not to exceed 30 feet per minute, and remain there until contact is re-established.
   D. The buddy system is based upon mutual assistance, especially in case of emergency. Dives shall be planned around the competency of the least experienced diver and the dive terminated when the first dive team member reaches a level that is not less than 500 psi of air pressure in their cylinder.
   E. Solo dives are normally prohibited. If one person dives alone in an emergency or when otherwise authorized by appropriate supervisory personnel he/she shall be under the surveillance of a qualified person on the surface who is prepared to render immediate assistance in the water and be line tended at all times. Surface tended solo-diving shall be subject to variance procedures established or approved by the DCB.

2. **Training/Experience Commensurate to the Task** - Each dive team member shall have the experience and training necessary as evidenced by the DCB certification to perform the assigned tasks in a safe and healthful manner.

3. **Dive Instructor** - There shall be a Dive Instructor and DSO present at all times during any instructional or group diving under BSC or GLC auspices. The Dive Instructor shall designate additional responsibilities to the DSO, to act in authority for him/her at the surface for any period that he/she is underwater. As with the DSO responsibilities for safety enforcement, the Dive Instructor shall also have authority over the conduct of the divers, and at his/her discretion, may prohibit anyone from diving for any reason whatsoever. In all instructional or certification dives, a certified SCUBA instructor must be present.
4. **Safety Flag** - A recreational diving safety flag, red with a diagonal white stripe, shall be prominently displayed at the dive site whenever diving is conducted where boat traffic is possible to warn boaters of the presence of divers in the area. A code flag Alpha may also be displayed in conjunction with the recreational flag.

5. **Distance/Separation** - The partner distance range separating one diver from another may vary with time, depth, and circumstance. The distance range shall not exceed the limits of visual contact, or during dives of very low visibility, actual physical contact. If partners should lose visual contact while on a dive, they shall surface within one minute or at the prescribed ascent rate not to exceed 30 feet per minute and regroup.

6. **Decompression Dives** – Planned decompression dives are prohibited. Current repetitive dive tables (e.g. Larick, NAUI, PADI) shall be followed during all diving operations to ensure that all dives are within the no decompression limits. A copy of the NAUI repetitive dive table is provided as Appendix 9.

7. **Electrical Instruments** – Electrical instruments supplied with power from the surface shall be de-energized before being placed or retrieved underwater. Electrical instruments shall not be supplied with power at the dive location until requested by the diver in control of the instrument.

8. **Emergency Procedures** - Each diver shall be held responsible to know and follow emergency procedures as required by the situation and locale.

9. **Flotation Capability** – Each diver shall have the capability of achieving and maintaining positive buoyancy using equipment designed for this function. On every dive, all divers shall wear an approved BC.

10. **Post-Dive Actions:**

    A. After the completion of each dive, the diver shall report any physical problems, symptoms of decompression sickness, and equipment malfunctions to the Dive Master or person in charge.

    B. The Dive Master or person-in-charge shall ensure any malfunctioning equipment is properly labeled and secured to ensure it is not reused until the problem is corrected.

    C. When diving outside no decompression limits, the diver should remain awake for at least one hour after diving, and in the company of a dive team member, who is prepared to transport him/her to a hyperbaric chamber if necessary.

    D. Divers should have a surface interval of at least 24 hours before ascending to altitude (i.e. flying).

X. **Snorkeling Protocols**

1. **Hazard Evaluation and Control** - Prior to the Snorkeling operation, the team leader or person-in-charge shall perform a safety hazard evaluation of the task(s) and site environmental conditions, identify hazard controls for implementation, and ensure implementation of such controls.
2. **Emergency Procedures** - Each Snorkeling team member shall be held responsible to know and follow emergency procedures as required by the situation and locale.

3. **Buddy Pairs** – All Snorkeling operations shall be conducted using the buddy system, with either a second snorkeler or surface tender and the responsible person in charge shall be notified prior to entry of the Snorkeler into the water.

4. **Flotation Capability** – A system or unit to provide flotation, such as an orally inflatable life preserver, shall be attached to the snorkeler when Snorkeling under water at a distance of 100 feet or more from shore or boat.

5. **Safety Flag** - A floating recreational diving safety flag, red with a diagonal white stripe shall be prominently displayed at the site, where Snorkeling is conducted and boat traffic is possible, to warn boaters of the presence of a Snorkeler in the area.

6. **Final Equipment Inspection** - Prior to each Snorkeling operation, the team leader or person-in-charge, shall satisfy him/herself of the functional operation of each snorkeling team member's equipment.

**XI. Injury and Sickness Treatment and Prevention**

1. **Air Embolism and Related Injuries**: Air embolism and related injuries, including Mediastinal, Subcutaneous Emphysema, and Pneumothorax, occur when air is forced by excess pressure into blood vessels or body tissue. **Cause**: These injuries can be caused by: 1) Holding breath during ascent while diving with compressed air; and 2) Past or present lung disease.

   **Symptoms**: Symptoms, which can vary greatly due to many possible locations for air to accumulate, are identified as follows: Embolism – Symptoms sudden and dramatic and occur within 2 to a maximum of 5 minutes within surfacing; can occur during ascent; prior to unconsciousness diver may experience: weakness, dizziness, paralysis; visual disturbances, pain in chest, bloody froth at mouth, convulsions, or blueness of skin, lips, or fingernails (cyanosis); cessation of breathing.

   Mediastinal Emphysema – Pain under breast bone, shortness of breath, faintness, and cyanosis.

   Subcutaneous Emphysema – A feeling of fullness and swelling in the neck, a change in the sound of the voice, difficulty breathing or swallowing, a crackling feeling when light finger pressure is exerted over the area. In some cases can be manually palpitated.

   Pneumothorax – Sharp pain in chest, shortness of breath, cyanosis.

   **Treatment**: First aid for shock (low head position very important for embolism): Artificial respiration as required; Administration of oxygen; and seek immediate medical attention.

   **Prevention**: Always breathe regularly when using compressed air. Never hold breath during ascent, exhale continuously when making an emergency ascent. Diving shall not be approved if the individual has a past history of lung disease or present lung infection.

2. **Decompression Sickness**: Decompression sickness is caused by formation of nitrogen or other inert gas bubbles in blood vessels or body tissue as a result of
supersaturation due to releasing pressure too rapidly. It is also called caisson’s disease, bends, chokes, and compressed air sickness.

**Cause:** Inadequate decompression. Factors which increase likelihood are: Age, obesity, excessive fatigue, alcoholic indulgence, old injuries which cause poor circulation, poor physical condition, heavy work during dive, extremes of water temperature and dehydration. Improper use of tables, or inaccurate determination of time or depth can be reason for inadequate decompression.

**Symptoms:** Onset occurs within ½ hour for 50% of cases, 3 hours for 95% of cases, and only 1% after 6 hours but symptoms have known to occur 12 to 24 hours after a dive. In order of frequency local pain in leg or arm, itching, general pain, collapse, unconsciousness, rash, visual disturbances, convulsions. Symptoms vary due to location of bubble formation, and can occur while still under pressure.

**Treatment:** First aid for shock; Artificial respiration when required; Administration of oxygen; and Seek immediate medical attention.

**Prevention:** Avoid dives which require decompression stops, particularly on repetitive dives. Plan dives. Know how to use current tables. When in doubt or some factor increases likelihood, err on the safe side by adding to decompression tables using the next greater time and depth. Be in good physical condition. Ascend at 30 ft/min from all dives when using compressed air.

**XII. Reporting Accidents, Incidents, and Issues**

1. **Immediate Notification and Reporting** – In the event of a fatality, or accident requiring hospitalization, immediate notification shall be made to the DCB and University Police. The DCB shall be responsible for: 1) reporting to jurisdictional agencies, including the Department of Labor; and 2) completing the investigation and preparing a report of the incident independent of other investigations by individuals or agencies.

2. **24-hour Notification** – Within 24-hours, the following accidents and incidents must be reported by the affected diver, his partner or other divers involved with the accident/incident to the DCB for potential follow-up investigation:

   A. Any accident that requires medical attention;
   B. Any incident involving a rescue of an endangered diver; and
   C. Any incident involving a serious malfunction of equipment.

**XIII. Records Management**

1. “Fit-for-duty” reports, generated by the examining physician, shall be maintained in a file cabinet at the Environmental Health and Safety Office for a minimum of five (5) years or until the diver is no longer employed by BSC/GLC whichever is greater.

2. With the exception of “fit for duty” reports, all document records identified in this procedure shall be maintained in a locked cabinet at the GLC field station for a minimum of five (5) years or until the diver is no longer employed by BSC/GLC whichever is greater. In the case of diving equipment, records shall be maintained for a minimum of five years or until the equipment will no longer be used and is dispositioned for disposal or recycling.

3. Upon request, all records shall be made available to the DCB or it’s designee for auditing.
4. At a minimum, an up-to-date copy of this policy and procedure shall be maintained at the GLC Field Station, the EH&S Office, and the vessel(s) or location where diving will occur.

XIV. Definitions

**Auspices of BSC/GLC:** Includes any Scientific Diving or Snorkeling operation in which BSC or GLC is connected because of any equipment used, locations selected, or relationship with the individuals concerned. This includes all cases involving operations of employees of BSC, GLC, or auxiliary organizations where employees are acting within the scope of their employment.

**Diver:** An employee working in water using underwater apparatus, which supplies compressed breathing gas at the ambient pressure.

**Scientific Diving:** means diving performed solely as a necessary part of a scientific, research, or educational activity by individuals whose sole purpose for diving is to perform scientific research tasks. Scientific diving does not include performing any tasks usually associated with commercial diving, such as: Placing or removing large objects underwater, inspection of pipelines and similar objects; construction; demolition; cutting or welding; troubleshooting, or use of explosives.

**Snorkeling:** Means working just below the water surface using a tube that is open to the atmosphere to obtain breathing air from the surface atmosphere. This does not include “diving,” which requires the use of compressed air from a container, tank, compressor, etc.