



SURVIVAL FACTORS GROUP

CHAIRMAN FACTUAL REPORT

**ATTACHMENT 12
GLOBAL DIVING SITE SPECIFIC SAFETY PLAN**

Redacted

**Bridge Collapse
Mount Vernon, WA; 05/23/2013**

**HWY-13-MH-012
(29 Pages)**



GLOBAL
Diving & Salvage, Inc.



SITE SPECIFIC SAFETY & DIVE PLAN

UNDERWATER SURVEY AND RECOVERY OF SKAGIT RIVER BRIDGE

Location: I-5 Skagit River Bridge, Mt. Vernon, Washington

Submitted To:

Atkinson Construction
NORTH WEST DIVISION
707 South Grady Way, Suite 500
Renton, WA 98057

Submitted By:

Global Diving & Salvage, Inc.
3840 West Marginal Way SW
Seattle, Washington 98106

GLOBAL DIVING AND SALVAGE, INC.

The following personnel have reviewed and prepared this Site Specific Health and Safety Plan:

[REDACTED]

Claims and Compliance Manager – Global Diving & Salvage

[REDACTED]

HSE Program Manager - Global Diving & Salvage

[REDACTED]

Project Superintendent – Global Diving & Salvage

[REDACTED]

Project Manager - Global Diving & Salvage

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1 Introduction

The following document is prepared for Atkinson Construction and concerns the work to be performed on the Interstate 5 Skagit River Bridge and associated site specific safety requirements. Global Diving & Salvage will follow Global's Injury and Illness Prevention Plan, Manual of Safe Diving Practices, the Site Specific Health and Safety Plan and all applicable state federal and industry health and safety guidelines. Global's safety manuals are available at any time upon request. Global has a designated Health and Safety Representative.

1.1 Regulatory Compliance

As a rule, Global Diving and Salvage performs all diving related work to the standards set forth by the governing body of the Association of Diving Contractors International (ADCI). If there is any conflict between operational standards set forth by the ADCI and another organization such as OSHA, Global Diving and Salvage will follow whichever rule is the most strict when applied to the safety of any person working at the site.

All site activities will also comply with the following regulations and industry guidance publications Global personnel and their subcontractors will follow the strictest requirement on the work site:

- Occupational Safety and Health Administration (OSHA) Construction Industry Standards, 29 CFR 1926
- Occupational Safety and Health Administration (OSHA) General Industry Standards, 29 CFR 1910
- Occupational Safety and Health Administration (OSHA) Commercial Diving Standards 29 CFR Part 1910, Subpart T
- Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response, 29 CFR 1926.65 or 29 CFR 1910.120
- United States Coast Guard (USCG), 46 CFR 197, Subpart B
- ADCI (Association of Diving Contractors International), Industry Standards, 6th Edition

Additional Global policies and procedures will be adhered to that exceed Federal, State and ADCI requirements.

Any other applicable client requested industry standards or requirements may be applicable. For this project Global will also follow:

- OGP Industry Standards

1.2 Personnel Requirements

Manning requirements will meet Global's industry and client's requirements to ensure the project is completed in a safe manner, whichever is the strictest. All crew will have the specific

certifications and training required for the project. All Global personnel receive new hire orientations, mandatory training, and specific training to their position. All certifications or proof of training are kept electronically and are available upon request.

Global considers anyone that has been employed with Global less than 90 days a Short Service Employee (SSE). SSE's are identified with a lime green vest/and or lime green band on their hard hat. A mentor is assigned to any SSE's at the tailgate safety meeting daily. All crews are to be aware of and watch for any SSE's. There are no SSE's identified for this project.

1.3 Job Specific Personnel Requirements

Crew will receive an overview of Site Specific Health and Safety Plan
Daily safety topics and JSA's reviewed at Tailgate Meetings

1.4 Personnel Certification Requirements

- First Aid, CPR, AED, BLS, O2 Provider
- 24hr Initial Hazwoper with current 8hr Hazwoper refresher
- Current Fit to Work, if diving personnel must have ADCI and Global compliant physical

All diving personnel have ADCI Certification for the position in which they are filling, if personal owned diving equipment will have a current certification (Commercial Dive Hat – Annual Inspection by authorized technician, Bailout- must have gauge, current visual, current hydro (5 years), and have a diving harness).

1.5 Personnel Training Requirements

- Mandatory Training (Required annually, meets requirements of 8hr refresher, Global programs and regulatory requirements)
- 8hr Hazwoper Refresher
- Incident Reporting
- Lock Out Tag out
- Hazard Communication
- Personal Protective Training
- Marine Debris Training
- Emergency Action Plan & Procedures
- Hearing Loss Prevention
- O2 Provider
- CPR and First Aid
- Blood Borne Pathogens
- Behavior Based Program (BBS)
- Rigging & Signal Person Training

Supervisors must have ADCI Supervisor Card, Global's Supervisors Training and Letter of Appointment on file.

DMT's are required to maintain current refresher and a National Board of Hyperbaric Medical Technology certification.

1.6 Stop Work Authority

Global authorizes anyone on the job site to call an “all stop” if there is a safety concern so it can be addressed immediately. Anyone can stop work, make a hazard observation, or fix an unsafe condition. Employees may stop work with fellow co-workers or go to their Supervisor, Superintendent, Project Manager and/or Regional Manager, then to the Health, Safety, Environmental (HSE) and Compliance & Claims for additional support. The safety concerns/hazards shall be discussed prior to restarting work.

1.7 Management of Change (MOC)

Management of Change is utilized when deviations from processes and procedures must occur. The purpose of the MOC is to maintain acceptable level of safety and quality to Global’s standards, while satisfying the operational needs. In addition, MOC is utilized for safety policies, procedures, and regulations as well as internal personnel and process changes. The MOC is initiated onsite by the Diving Supervisor and routed to shore side management for final approval prior to implementation.

2 Scope of Work

Global Diving and Salvage Inc. presents the Site Specific Health and Safety Plan for the following project:

Title: Underwater Survey and Recovery of Skagit River Bridge

Location: Skagit River Bridge, Skagit County Washington

Date: May 25, 2013

Client: Atkinson Construction

The current scope of the work to be performed includes an underwater survey to provide a visual inspection of the submerged portions of the Skagit River Bridge utilizing Divers. Divers will work as directed to facilitate rigging and recovery of vehicles and the disassembly, rigging and recovery of bridge structural components. Global crewmen will deploy and maintain oil containment and sorbent boom during the vehicle recovery operations.

2.1 Site Background

A portion of the I-5 bridge passing over the Skagit River collapsed into the Skagit River. The location of the collapse is on the north bank of the river between the towns of Mt. Vernon and Burlington, WA. It is anticipated that the diving operations will initially be conducted from the shore line with dive vessel/skiff support. Plans provide for a possible shift to dive operations being conducted from the crane barge. Operation is planned for 12 hour days.

2.2 Visitors

Visitor access to the regulated project area (the dive station and area above or around where the diver will be working) will be restricted. The following criteria must be met for visitors to gain access to this area:

Visitors will be limited to Global Diving & Salvage employees, representatives of Atkinson Construction and Federal and State agencies. All visitors must wear appropriate PPE, including approved life jacket if necessary, hardhat, safety glasses and safety shoes.

Visitors must read the SSHP and sign the Safety Plan Acknowledgement Sheet. By signing the form, visitors agree to comply with all specifications contained in the Site Specific Health and Safety Plan and agree to comply with all applicable requirements.

Visitors who do not adhere to these requirements will not be allowed access and/or will be requested to leave the regulated work area.

2.3 Diving Operations

All Diving Operations fall under Global's Manual of Safe Diving Operations. For this project the following considerations and site specific information shall be reviewed, and additional hazards are to be identified and addressed prior to diving operations.

2.4 Dive Station

Diving will occur from the north shore line of the river downstream of the Skagit River bridge pier. The Diving Supervisor directs the diving operations maintaining full visibility of diving operations: tending operations, diver entry and exit, and other concurrent operations. Communication is maintained by the Diving Supervisor with deck crew via a two way comms system, as well as a separate two way communication system with the diver. In addition, the Diving Supervisor monitors the diver's work and movements with video on the diver's hat.

Ingress and egress from the water will be a ladder attached to the side of the float abutting the shore.

3 Diving Work and Work Assignments

For each dive, a dive log will be filled out completely. In addition the Diving Supervisor shall keep a running log of the day's events both on deck and in the water.

The Diving Supervisor is ultimately responsible for the safety of all personnel and equipment working on the project. He is responsible for working with the Project Superintendent, Project Manager and the HSE and Compliance & Claims Group on all matters concerning safety of the operation.

The Diving Supervisor will conduct a pre-dive conference with all members of the dive team and on site customer personnel prior to commencement of diving operations. Items of discussion will include the day's activities and development and discussion of JSA's that may be pertinent to the activities.

The Diving Supervisor will conduct a safety inspection of the worksite, equipment and materials prior to commencing dive. Any noted items brought up by crew, client or otherwise identified will be mitigated prior to work.

The Diving Supervisor will conduct frequent safety inspections of the worksite, equipment and materials. Any deficiencies will be corrected immediately and discussed at the next Tailgate Safety Meeting

After the completion of each dive the Diving Supervisor shall:

- Question each Diver as to his physical condition
- Instruct Divers to report any physical problems or adverse physiological effects, including symptoms of decompression sickness or gas embolism
- Advise the Diver of the nearest location of an operational decompression chamber
- Alert each Diver to the potential hazards of flying after diving, or undergoing a change in elevation

3.1 Dive Team Assignments

3.1.1 Diving Supervisor

The Diving Supervisor is responsible for safe and efficient conduct of the entire job.

Dive Supervisor 0000 - 1200: [REDACTED]

Dive Supervisor 1200 -2400: [REDACTED] (Diver Medic Technician)

3.1.2 Diver

The Diver's duty is to perform tasks as required and directed by Diving Supervisor, including the following specific tasks:

- Inspect bridge as directed.
- Perform underwater disassembly, rigging and recovery work as directed.
- Act as Standby Diver when directed to do so.

While acting as Standby Diver the Diver will:

- Be suited up and ready to dive during all diving operations.
- Remain at his station throughout the entire dive, including any in-water decompression that may be required.
- Monitor dive radio to constantly remain abreast of events of the dive.

3.1.3 Tender

Tend Diver's umbilical, assist Diver in and out of water, operate deck equipment, and assist in topside work as required or directed.

0000 - 1200

Diver/Tender:
Diver/Tender:
Diver/Tender:
Diver/Tender:



1200 - 2400

Diver/Tender:
Diver/Tender:
Diver/Tender:
Diver/Tender:



3.1.4 Time Keeper

Direct Diver through planned task, monitoring life support, depth, and time.

Timekeeper Diving Supervisor

Diving personnel shall be assigned their duties prior to the start of any dive. These duties are to be assigned by the Diving Supervisor and may be changed from time to time as required.

3.2 Diving Mode

Diving mode shall be surface supplied air. Air compressors will supply primary air along with high pressure air backup.

Two (2) each 350-foot diving umbilical's will be used for providing breathing medium to the Divers. All breathing hoses will be manifolded to allow for cross connection of supply to the Diver(s) with the primary and secondary breathing air as required. Divers will utilize lightweight diving helmets fitted to accept a bailout bottle supply. Each Diver will use a minimum 30 cubic foot bailout bottle. Bailout bottles will be filled with air and will be checked for pressure before the Diver leaves the surface. A hardwire communication system will provide voice communication between the Divers and the dive station. CC Television will provide video of the entire Divers' actions via a camera mounted on the Divers' hats.

3.3 Ambient Conditions

Divers may encounter limited visibility 0-5' and lighting will be limited. The Diving Supervisor on site will determine safe working conditions. Limited visibility should not hinder the work to be performed.

Water temperature will range between 40 and 50 degrees F. Divers will wear dry suits for thermal protection. Current is expected to be a concern during operations with observed water current estimated to vary between 2.5 - 4.0 knots.

3.4 Maximum Anticipated Depth and Bottom Times

Depths are expected to be shallow, between 0- 20 ft. Bottom times will be conducted as per Global's diving tables.

Dives will be conducted as no decompression dives.

4 Site Specific Safety

4.1 Project Health and Safety Representatives

Global's onsite Health and Safety Representative for the project is identified as the Diving Supervisor's Pete Guidry (0000 – 1200) and Sterling Ulrich (1200 - 2400). The designated Health and Safety Representative has alternate duties and does not need to be dedicated pursuant to Global policy. Responsibilities of the Health and Safety Representative are as follows:

- Ensure that all Global site personnel have read and are familiar with the Job Safety Analyses (JSAs) and the Site Specific Health and Safety Plan
- Ensure that all Global site personnel rigorously follow requirements of the Job Safety Analyses, the Site Specific Health and Safety Plan, and the company wide Injury and Illness Prevention Plan
- Ensure that all necessary personal protective equipment, safety equipment, health and safety training and supplies are available to the site personnel
- Initiate contact with the local emergency response agencies, if necessary
- Ensure that subcontractors are informed of applicable provisions of the Site Specific Health and Safety Plan and that they have an adequate health and safety program that will protect their employees and those of Global
- Initiate corrective action for observed safety violations, and report unsuccessful attempts to correct a violation to the Project Manager so further action can be taken according to company policy
- Utilize Global's HSEC Group as a resource and comply with any safety audit findings

All onsite personnel as well as the Health and Safety Representative have stop work authority. All work may be stopped if it is determined or perceived that site conditions are unsafe. The Health and Safety Representative has the authority to suspend operations until the problem is corrected. If necessary, the Health and Safety Representative can modify the JSAs or the Site Specific Health and Safety Plan procedures to meet field expediencies, provided such modifications are in accordance with all applicable safety regulations and such modifications are communicated to all parties in writing. The Health and Safety Representative will provide adequate time for review to the affected parties, namely the prime contractor.

4.2 Project Safety Meetings

All personnel involved in the project and on the site will receive the initial project overview information included in this Site Specific Health and Safety Plan to ensure all personnel are familiar with the regulatory and contractual requirements of the project and the intended operations during the execution of the project.

Tailgate Safety Meetings will occur daily which will discuss the specific operational and safety concerns identified for that shift's task and will include all personnel onsite, including non Global personnel.

If necessary, regular weekly safety review meetings will occur on the first day of the work week while onsite to ensure consistent application of Global's JSAs, Site Specific Health and Safety Plan, and the company wide Injury and Illness Prevention Plan. All incidents will be reviewed.

Additional JSAs will be developed as necessary along with any changes to the anticipated schedule. Drills or discussion on emergency procedures, with the extent of the drills and specific items to drill on shall be discussed periodically.

4.3 Daily Safety Meeting

The daily safety meetings are held each day prior to beginning work on all shifts. All workers involved in the work for the day shall attend. The Diving Supervisor shall conduct the meeting, relaying specific tasks planned and assigning duties to individuals.

At the safety meeting the following information shall be reviewed:

- The meeting will be led by the Diving Supervisor who will refer to each team lead to talk about the day's operations.
- The Diving Supervisor will discuss a safety topic and ensure the attendees to the safety meeting have all signed in.
- The work plan and hazards for the day will be reviewed. Hazards for the day is a condition or action that has the potential for an unplanned release of or unwanted contact with an energy source that may result in harm or injury to people, property, or the environment. (Mechanical, Electrical, Pressure, Temperature, Chemical, Biological, Radiation, Sound, Gravity and Motion).

The Diving Supervisor will discuss operations with any other contractors to ensure contractors know what each other are doing so as to not interfere. The Diving Supervisor shall review JSA's to be performed for the shift. The Diving Supervisor should ensure all necessary parties attend each JSA review/pre-task meeting (i.e. crane operator, riggers, and dive crew for critical lift operations). The Diving Supervisor will allow time for crew suggestions or safety concerns or questions pertaining to or about the day's activities.

4.4 Site Specific Safety Considerations

This section addresses the site specific safety considerations for the projects. Additional hazards identified are to be mitigated utilizing a Job Safety Analysis (JSA), and at tailgate meetings. All Global safety policies are to be followed, in addition to the site specific safety concerns.

4.5 JSA's (Job Safety Analysis)

The Job Safety Analysis is an important tool used to identify and analyze all of the hazards associated with each task on a given project, and then formulate a safe working procedure to eliminate or minimize exposure to the potential hazards.

JSA's shall be performed for all heavy lift operations; work tasks with a history of injury/near miss incidents; operations with catastrophic potential such as fire, explosion, toxic atmosphere, or oxygen deficient atmosphere; new personnel performing the task; or work rarely performed

JSA's for diving shall be performed if the following conditions exist:

- Confined or limited access diving
- Where fouling or entrapment hazards exist

- Differential pressure such as suction/pump/airlifts
- Lock out tag or work permit out required
- Chemicals or explosives present

A JSA may be developed and completed at client request, or when directed by the Diving Supervisor, Project Superintendent or Project Manager.

Specific JSA's for this project that shall be utilized are:

- Underwater Burning Operations
- Shallow Surface Spread via Beach Access
- Diver Recovery
- Diver Umbilical Management
- Diving in Strong Current
- Shallow Live Boating

4.6 PPE (Personal Protective Equipment)

PPE should be used as a last line of defense to mitigate safety concerns after all engineering controls have been exhausted. PPE requirements vary project to project, however these are the requirements for this project in particular:

- Hard hat
- Steel toed boots
- Safety glasses
- Gloves to be carried at all times and used during tending, rigging, mooring and as appropriate.

4.7 Lock Out / Tag Out Procedures

Lock Out/Tag Out procedures are planned to address electrical power circuits contained in conduit damaged during the bridge collapse.

In the event that any Lock Out/Tag Out is required, the procedure will be conducted by the Diving Supervisor in conjunction with Atkinson Construction and appropriate agency representatives.

All Global employees are required to comply with the restrictions and limitations imposed upon them during the use of Lock Out/Tag Out, however it is management's/supervisor's responsibility to enforce the standard to make sure that all employees perform the Lock Out/Tag Out in accordance with this procedure. All employees, upon observing a machine or piece of equipment which is locked out or tagged out, shall not attempt to start, energize, or use that machine or equipment. Employees shall not attempt to use a piece of equipment with a red tag on it.

4.8 Differential Pressure/Delta – P

The hazard commonly known in the diving industry as Differential Pressure or Delta – P is not anticipated to exist on this project. This hazard may be present during inspection or repair operations. Differential Pressure is directly related to Hydrostatic Pressure when in relation to diving. It happens when two or more bodies of water become common but have different hydrostatic pressure thus creating suction until all water bodies have equal hydrostatic pressure.

Care should be taken to mitigate any potential Differential Pressure/Delta – P hazards as well as identifying any potential for the hazard.

4.9 Umbilical Management

The hazards surrounding Umbilical Management are mitigated by the following processes. The Diving Supervisor has full view of the dive station on the shore line and can observe the tending process. The tender monitors the divers umbilical for direction of the hose in relation to potential hazards (vessel traffic, pinch points etc.) The tender also obeys the Diving Supervisors commands in relation to the amount slack given or taken, as the commands originate from the diver who is in the best position to manage his umbilical. Additionally the stand by diver monitors the dive radio to constantly remain abreast of events of the dive and can assist the Diving Supervisor in Umbilical Management.

4.10 Welding, Burning, & Cutting

Underwater and topside hot work is anticipated in the current scope of work.

If required the following criteria will apply:

- Prepare area for hot work – Please refer to client specific requirements.
- Inspect welding/burning gear prior to each use.
- Ensure oxygen cylinders are free from oil or grease, kept away from flammable substances, and stored separately from acetylene, etc.
- During weld operations
- Utilize a standing welding shield
- Wear a welding shield
- Ensure ventilation and fresh air
- Ensure fire extinguisher is available

Assign fire watch during operations and up to 30 minutes after operations. Remove flammable materials. If a Hot Work Permit is required, use the template included in the attachments.

During dive operations:

- No burning or cutting of any type until the area behind has been vented and inspected to be gas free.
- During burning operations ensure gas created can vent free of any trapped space.
- Diver must maintain comms with the Diving Supervisor.
- There shall be a pre-determined cut plan. Plan all cuts prior to beginning cutting.
- Anticipate and plan for possible trapped gas or stored energy in the area of the planned cut. Diving Supervisor works with Diver to agree on cuts and cut plan.
- Inspect cutting torch prior to sending to Diver, use insulating gloves

5 Environmental Controls Management

There are planned hazardous waste operations anticipated in relation to the rigging and recovery of vehicles entrapped within the bridge structure. Containment and sorbent boom, spill kits with PPE and recovery materials will be available for deployment.

Global Diving & Salvage, Inc. ensures that environmental hazards are addressed to protect site personnel and the environment

5.1 Contaminated Water Management

No contaminants in the water are believed to be present or anticipated.

5.2 Pollution Control Management

In the day to day operations at the job site, personnel will routinely handle chemicals and other materials that may degrade the environment. Global will take proactive measures (such as routine inspections) to mitigate any potential damage that could occur from products released from our inventory or equipment.

5.3 Prevention

Only chemicals used for routine maintenance of equipment is expected on this project. All equipment will be maintained through preventative maintenance and routine visual inspections. During inspections personnel will clean up free floating oils and products from equipment or work area. During preventative maintenance, hoses and fittings will be inspected and repaired as necessary to prevent an unplanned release.

5.4 Control Procedures

Work in well-ventilated areas when working with hazardous chemicals, or where ventilation can be portably installed.

5.4.1 Work Practices

- Handle all hazardous material containers with care.
- Isolate hazardous materials from other materials so that no combining can occur.
- Do not leave hazardous materials unattended for any amount of time.
- Clean up spills promptly.
- Wash hands and face after working with hazardous materials.
- No smoking is allowed around any hazardous chemicals.
- Avoid heat and sparks when working with hazardous materials.
- Store all flammable materials in tightly closed, approved containers, and in a single location.
- Know where fire extinguishers are when you are working with hazardous materials; make certain you have the correct type of extinguisher for the material you are working with.

5.5 Prevention of Exposure

To prevent employee exposure to hazardous chemicals ensure: control procedures, work practices, and personal protective equipment.

5.6 Symptoms of Over-Exposure

The symptoms of exposure are classified into two groups:

Acute: symptoms generally occur during or shortly after exposure to sufficiently high concentration of contaminants.

Chronic: symptoms generally occur after exposure to lower concentrations of contaminants over longer periods of time.

After appropriate emergency and first aid procedures are taken, the incident should be immediately reported to the Diving Supervisor.

6 Emergency Management Plan

6.1 Site Specific Emergency Procedures

In the event of an emergency, during operations crew shall follow the Diving Supervisor's direction. The Diving Supervisor shall follow Global procedures for reporting, caring, and transporting if an injury occurs.

6.2 Incident Investigation, Reporting and Recordkeeping

Global strives to promote and enforce both a safe working environment and safe work habits; however, from time to time, incidents occur. Whether the incident is a near miss, causes property damage or physical harm to the employee Global records and investigates the incident. All employees who witness an incident are required to report it to their immediate supervisor as soon as possible. If the incident is a recordable injury or illness pursuant to OSHA recordkeeping requirements, it will be indicated on the OSHA 300/301 Log. Any injury, illness, or incident will be reported to the Project Owner by the Diving Supervisor as it pertains to the project.

6.3 Activating Emergency Services

The primary means of activating emergency services shall be via phone. The primary means of activating emergency services shall be through the on-site Diving Supervisor.

Other important emergency contact numbers will be available and posted at the work site. A list of the contact numbers is provided in this section; Table B. All workers shall be informed of the location of the Emergency Contact List and the location of the nearest telephone.

6.4 Emergency Procedures

Recommended procedures have been developed to deal with accidents and/or emergency situations should they occur. Table A provides a list of potential emergency situations that may arise and suggested actions to be taken in the event of an occurrence.

6.5 First Aid Supplies

First aid supplies shall be provided and kept readily accessible at the work site. In addition, an American Red Cross standard first aid handbook or equivalent, a backboard with straps, medical O2 and a bag type manual resuscitator and tubing shall be available at the dive location. Sufficient personnel will be first aid and CPR trained.

6.6 Emergency Recompression

The diving team shall utilize the recompression chamber on site in the event of a diving emergency requiring recompression. Should a recompression situation arise, all other Divers will be removed from the water immediately.

Should a decompression sickness incident occur, consult be sought from Global's designated Hyperbaric Physician per the Emergency Contact numbers. Treatment will be in accordance with advisement from the Hyperbaric Physician and U.S. Navy Treatment tables. Treatment will be performed on site. Ongoing treatment if necessary may be performed at Virginia Mason's Hyperbaric facility in Seattle, Washington.

7 Emergency Victim Transport Plan

7.1 Diver Hyperbaric Injury

Should a Diver be suspected or diagnosed with Decompression Sickness (DCS) or Arterial Gas Embolism (AGE), he will be recompressed in the chamber which will be located on shore and treated per the US Navy treatment protocols. During treatment of the Diver in the chamber, medical advice will be sought from Global Diving & Salvage Hyperbaric Physicians.

7.2 Mechanical Injury

If there is a mechanical injury, the Diving Supervisor will initiate emergency response protocols for emergency transport. After initial first aid has been rendered on the vessel and the victim packaged for transport, he/she will be transferred to the designated emergency transport vehicle or taken to the nearest helicopter landing zone for transport to a medical facility. A designated person will be sent to the project entry point to meet the ambulance and direct them to the pickup location.

7.3 Other Emergency

If the dive station is notified that a natural or manmade emergency is imminent or exists, every effort will be made to recover the Diver and evacuate personnel, vessel, etc. If a Diver is in the water, he will be instructed to surface or come up to his decompression stop and complete his decompression obligation. The Project Manager will keep the Project Owner and Global Diving and Salvage apprised of the situation concerning the Diver and dive crew.

7.4 Fuel Spill Emergency Response

If a fuel spill occurs, all resources will be devoted to containment and cleanup of the fuel. If a diver is in the water, he will be instructed to surface or come up to his decompression stop and complete his decompression obligation. After the diver and tenders have undergone decontamination procedures, all hands will assist in the containment and cleanup.

The PRIMARY concern during a spill event will always be the safe recovery and decontamination of the diver.

Should Global Diving & Salvage, Inc. have a release from equipment or products on the job site, personnel will follow the Spill Response Action Steps:

- STOP PRODUCT FLOW
- WARN PERSONNEL
- SHUT OFF IGNITION SOURCES
- DON PERSONAL PROTECTIVE EQUIPMENT
- CONTAIN/CONTROL SPILL
- CLEAN SPILL UP
- MAKE NOTIFICATIONS

7.5 Fire

In the event of a fire, notify other surface support personnel for assistance by voice and/or radio communication. If a Diver is in the water, the Diving Supervisor will return the diver to the surface.

- Locate fire extinguisher, water source, etc. and attempt to extinguish the fire
- Use the proper extinguisher for the type of fire
- Use the PASS (Pull Aim Squeeze & Sweep) method when attempting to use a fire extinguisher on a small fire. If you are not familiar with how to use an extinguisher allow trained personnel to fight the fire.

8 TABLE A EMERGENCY PROCEDURES excerpt from MSDP

Recommended procedures have been developed to deal with accidents and/or emergency situations should they occur. Table A provides a list of potential emergency situations that may arise and suggested actions to be taken in the event of an occurrence.

EMERGENCY SITUATION	RECOMMENDED ACTION
Entrapped or fouled diver	Provide diver a reasonable amount of time to clear himself from entanglement in umbilical or debris. In the event he is unable to free himself, the standby diver will enter the water to assist. If the diver is able to free himself and is rattled, the dive will be terminated. Also, if the stand by diver was required to go to his assistance, terminate dive.
Loss of breathing medium	In case of a loss of gas supply or other breathing medium the diving supervisor will switch to the standby supply at the dive manifold and immediately surface the diver on appropriate decompression schedule. Stand by diver should be alerted immediately and stand ready to assist diver as required. If diver is not receiving gas from the standby supply, he should be instructed to go to bail out and be surfaced immediately using surface decompression schedules to satisfy any decompression commitments.
Equipment failure with diver in the water (Loss of Vital Support Equipment)	Evaluate effect of failure on diver. Inform diver of plan of action. Alert stand by diver and topside crew. When diver acknowledges he/she is ready, activate plan and terminate dive if required.
O₂ Toxicity in water	If supervisor notes signs or diver reports symptoms immediately reduce oxygen partial pressure (switch to air). Surface diver immediately using appropriate decompression schedules.
Loss of communication	Go to line pull signals and surface the diver on appropriate decompression table. If line pull signals cannot be established then standby diver will enter the water and swiftly advance following the primary divers hose to aid the primary diver in his ascent to the surface.
Diver Disoriented or Diver is Lost	Avoid panic and have diver review recent movements to ascertain general vicinity of diver. Have diver turn on mask free flow and look for bubbles to verify position. If position cannot be verified, have diver follow his hose back until he recognizes where he is.

EMERGENCY SITUATION	RECOMMENDED ACTION
Diver blow up/over rapid ascent	<p>If diver exceeds ascent rate on surfacing or decompression, have diver stop and let the time catch up to his position.</p> <p>In the event of a diver blowup, make initial classification of incident (simple or serious).</p> <p>Refer to treatment flow chart of the ADC Guidelines for Treatment of Decompression Incidents.</p> <p>Immediately begin treatment in accordance with guidelines and/or USN manual.</p> <p>Contact hyperbaric medical facility for additional instructions and treatment procedures.</p> <p>Request medical assistance and emergency evacuation as required.</p>
Injured diver	<p>Diver immediately informs topside of the nature and extent of injury.</p> <p>Dive is aborted and diver is surfaced either by himself or with the aid of the standby diver.</p> <p>Proper decompression schedules should be followed except when the severity of the injury indicates a greater risk than omitting decompression.</p> <p>Monitor divers breathing during ascent. If breathing stops overpressure divers regulator, if possible.</p> <p>Request medical assistance and emergency evacuation as required.</p>
Diver Loss of Consciousness	<p>Dive is aborted and diver is surfaced by the aid of the standby diver.</p> <p>Standby diver will enter the water and swiftly advance following the primary divers hose to aid the primary diver in his ascent to the surface.</p> <p>Monitor divers breathing during ascent. If breathing stops, overpressure divers regulator, if possible.</p> <p>Request medical assistance and emergency evacuation as required.</p> <p>First Aid will be administered upon reaching surface by deck crew until consciousness is regained or the arrival of emergency response personnel.</p>

GLOBAL DIVING AND SALVAGE, INC.

EMERGENCY SITUATION	RECOMMENDED ACTION
Injury/ Illness of member of surface crew with diver in the water	Monitor divers breathing during ascent. If breathing stops, overpressure divers regulator, if possible. Request medical assistance and emergency evacuation as required. Inform the diver of the situation and abort the dive. Evaluate the effect of loss of personnel on the diver. The dive may continue if there was no loss to the surface support When diver acknowledges he/she is ready, activate plan and terminate dive if required.
Decompression Incident	Make initial classification of incident (simple or serious). Refer to treatment flow charts of attached Chapter 21 of U. S, Navy Diving Manual. Immediately begin treatment in accordance with referenced guidelines. Contact hyperbaric medical facility for additional instructions and treatment procedures. Request medical assistance and emergency evacuation as required.
Adverse weather conditions.	Evaluate effect of sudden adverse weather on dive operations to determine need to abort dive. Inform diver of plan of action. Alert stand by diver and topside crew. When diver acknowledges he/she is ready, terminate dive using appropriate decompression schedule.
Fire in equipment or aboard dive platform	Extinguish fire and secure equipment. Determine damage and effect on diver. If required, terminate dive using appropriate decompression schedule.

9 EMERGENCY (GDS) PHONE NUMBERS

EMERGENCY PHONE NUMBERS			
Project Contacts – Report all incidents to:			
GDS, Inc.			Project Manager
GDS, Inc.			Dive Superintendent
Global Diving & Salvage, Inc – HQ Contacts – Report all incidents to:			
Primary		Compliance & Claims Mgr.	
Medical Emergency			
HYPERBARIC EMERGENCY (DCS, diving related)		OTHER INJURY/ILLNESS	
Provide Care Hyperbaric Doctor for Consult	<ul style="list-style-type: none"> ➤ Provide care and first aid ➤ Seek consult if necessary ➤ Seek medical assistance <ul style="list-style-type: none"> ○ Seek care from onsite DMT, Medic ○ Contact ER services if applicable ○ Transport to clinic if applicable ➤ Care consult if applicable/ GDS Claim Manager In house: [REDACTED] [REDACTED] Occupational Clinic of Acadiana, Lafayette, LA [REDACTED] [REDACTED] Occupational Clinic of South Louisiana, New Iberia, LA [REDACTED] Diver Alert Network (DAN) 919-684-8111 or 919-684-4326	Provide Care	<ul style="list-style-type: none"> ➤ Provide care and first aid ➤ Seek medical assistance <ul style="list-style-type: none"> ○ Call 911 if available ○ Seek care from onsite DMT, Medic ○ Transport to clinic/ if applicable ➤ Care consult if applicable/ GDS Safety <ol style="list-style-type: none"> 1. GDS Safety – arrange for clinic/hospital 2. Other consult available 800-927-8770 24hr (Seattle, WA) shipmd@healthforcepartners.com ➤ Once employee to shore, employee will remain in contact with Global Claim Manager.
		Poison Control	➤ 1-800-222-1222
Nearest Chamber Location	Virginia Mason Medical Center 1100 Ninth Ave. Seattle, WA 98117 (206)341-1141 (admissions – MUST CALL FIRST FOR NEW PATIENTS) (206) 583-6543 (hyperbaric) Fax (206) 223-8804 165 fsw max, Multiplace Chamber, 20 patient max [REDACTED] Treatments include but not limited to: carbon monoxide poisoning, diver decompression, intubation, 50/50 nitrox.	Clinic/Hospital	Quick Care Clinic 735 South Burlington Blvd Burlington, WA 98233 (360) 856-5900 Skagit Valley Hospital 1415 E Kincaid Street Mt. Vernon, Washington 98274 (360) 424-4111
Medi-vac	Washington (800) 426-2430, <i>Air Lift North West</i>		
OTHER EMERGENCY			
1. Report to Supervisor/Superintendent who will report to Client. 2. Supervisor reports to Claims (see above contact's)– Claims who will notify the appropriate persons and regulatory agencies (f spill, the National Response Center 1-800-424-8802)			

10 Company Health, Safety and Environmental Mission Statement

The following is Global's Company, Health, Safety and Environmental Mission Statement; that Global strives to ensure is in the forefront of all operations. Crews should be reminded of this mission statement in review of this plan.

Global Diving & Salvage, Inc. has and will continue to place the safety of its employees in the highest regard. Our employees are the very backbone of this company. Global Diving & Salvage, Inc. has developed their company Injury and Illness Prevention Plan to further this aim. Acknowledgment of this commitment is imperative to a sound policy of hazard control and employee safety.

This commitment provides for a safe workplace for all employees by developing a written plan for accident prevention, identifying and eliminating workplace hazards through management and employee cooperation, and implementing proactive training to inform employees of potential hazards associated with their work.

It is the safety policy of this company that no task is so important to put the employee at risk. This is the foundation of an effective safety program. If there is any question regarding proper procedure, wait and ask. Global Diving & Salvage, Inc. will provide the necessary resources needed to implement this program.

With this proactive approach to safety and health come expectations for the concerned individuals who are to participate in the program. Only through group effort and cooperation can the safety program serve its intended purpose: protect employees from workplace hazards. Employees are required to comply with all company safety rules and are encouraged to actively participate in identifying ways to make our company a safer place to work.

Supervisors are responsible for the safety of their employees and as a part of their daily duties must monitor the workplace for potential hazards and eliminate them.

Management will ensure the implementation of this program by devoting the resources necessary to carry out the objectives outlined in this accident prevention plan. These include, but are not limited to, forming a safety committee, developing procedures for identifying and correcting hazards, providing the necessary training for employees and supervisors, providing the forum for open discussion and correction of potential safety concerns, and administering a disciplinary policy to ensure company safety policies are followed.

Safety is always considered to be of the utmost importance; both employee and employer benefit in a safe working environment. Let's keep Global Diving & Salvage, Inc. a safe and healthy place to work.

In addition, Global believes that protection of the environment is of equal importance; we foster a culture of environmental responsibility. It is through managed, proactive efforts that we continue our operations, mindful of the collateral consequences our actions might bring. In continuing this goal, Global provides continued training, and an environment where we attempt to reduce our negative impact on the environment in which we operate.

Endorsed on December, 2007

,
President

11 Forms & Templates (Attach if necessary)

Each project requires documentation for preplanning including hazard mitigations, safety meetings, and pre-work checks to ensure safety. Additional documentation may be warranted based on the project or if an incident occurs.

Standard forms and templates on each project site shall be at a minimum:

- Forms
- Lockout Tag Out Permit
- Diver Attention Sheets
- Job Safety Analysis (blank)
- Management of Change
- General Hot Work Permit
- Daily Tailgate Safety
- Pre-Dive Checklist
- Chamber Checklist
- Dive Log
- Record of Chamber Time
- Neurological Examination
- Incident/Near Miss Report
- Incident Report for Spill Release
- Injury/Illness Report
- Template
- Anticipated Job Safety Analysis

