APPENDIX G

Contract Surface-Supplied Air (SSA) Diving Operation Quality Assurance Checklist

If for any reason the dive mission is altered, the District Diving Coordinator (DDC) shall be contacted and a revised dive plan will be reviewed and accepted by the DDC prior to continuing the operation. This review may be conducted electronically and confirmed in writing after completion of the dive operation. (30.A.22)

A. General Checks

Does the dive supervisor have the following documents that have been accepted by the DDC on the dive site? (30.A.14, 30.A.15, 30.A.16)

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<tr>
<th>Document</th>
<th>YES</th>
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<tbody>
<tr>
<td>b. Dive Operations Plan</td>
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<td>c. Activates Hazards Analysis</td>
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<td>d. Emergency Management Plan</td>
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<td>e. Dive Personnel Qualifications</td>
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<td>f. Breathing Air Certification. (30.F.05)</td>
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B. Dive Team Members Checks

1. Are the dive team members of the same personnel specified in the accepted Dive Operation Plan? (30.A.16)

2. Does the dive team meet the minimum manning levels as required in 385-1-1, Appendix G? (30.B.02)

3. Does each dive team member have the following:
   a. CPR certification (30.A.08)
   b. First aid certification (30.A.08)
   c. Emergency oxygen systems certifications (30.A.08)
   d. Licensed physician letter certifying diving fitness (30.A.09)
e. Driver training certification (30.A.05, 30.A.06, 30.A.07)  

C. Equipment Checks  
SSA equipment components shall be type specifically designed to be used in diving support systems (30.D.02)

1. Does each diver have three sources of air as follows? (30.C.06)  
   a. A primary air supply  
      (i.e. cylinder or compressor)  
      YES NO  
   b. A reserve breathing air supply integral or in-line  
      with the primary air  
      YES NO  
   c. A bailout bottle with no less than 30 c.f. that can be  
      turned on by the diver  
      YES NO  
   d. Does the bailout bottle have a minimum of 90%  
      pressure capacity available (30.C.02)  
      YES NO

2. Does each tank and bailout bottle meet the following requirements?  
   (30.C.02)  
   a. Seamless steel or aluminum that meet DOT 3AA  
      and DOT 3AL specifications  
      YES NO  
   b. An identification symbols stamped into the shoulder  
      of the tank  
      YES NO  
   c. A hydrostatically test stamp in the shoulder of each  
      tank, which is no older than 5 years  
      YES NO

3. Does each diving helmet have the following?  
   a. Two-way electronic communication system and does  
      the surface unit have a required external speaker?  
      (30.C.05, 30.F.09)  
      YES NO  
   b. A check valve in the primary air line and an exhaust  
      valve? (30.F.07)  
      YES NO  
   c. Connections for a bailout bottle, which can be immediately  
      turned on by the diver in event of loss of air (30.F.08)  
      YES NO
**NOTE:** The use of Jack Brown masks is prohibited unless it incorporates electronic communication and a means of incorporating a driver carried bailout system

4. Does each diver **umbilical** have the following? (30.F.06)
   a. Connections made of corrosion resistant material, that are not easily disconnected
   b. Markings in 10 ft. increments to 100 ft. (beginning at the divers end) and in 50 ft increments thereafter
   c. Umbilical’s shall have a nominal breaking strength of 1000 lb (453.6 kg) and shall be made of kink resistant materials.
   d. When hoses are not in use, are their opens ends closed by trappings or by other means?

5. Does each diver have a **wet suit or dry suit with gloves and booties**, if in cold water or other environmental hazards exist.

6. Does each diver have a **safety harness** with the following (30.F.10)
   a. A positive buckling device
   b. Attachment point for the safety line
   c. A lifting point that keeps the diver’s head up

7. Does the dive supervisor have certifications on all hand held electric power tools? (30.E.13)

8. Air Compressor Systems
   a. Is the compressor’s supply intake located away from the exhaust or other contaminants? (30.F.04)
   b. Does the compressor have a volume tank with a check valve on the inlet side, a pressure gauge, a relief valve, and a drain valve? (30.F.02)
   c. Does the compressor have approved regulator, in-line Sorbent beds, and filters in the supply line? (30.F.04)
d. If it is an oil lubricated compressor, does it have high-temperature, equipment failure, and carbon monoxide continuous monitoring alarm systems?  

YES  NO

e. Can the dive supervisor see and/or hear the alarms while in the diving mode? (30.F.04)

YES  NO

f. Are all the systems being calibrated daily or before use if not used daily? (30.F.04)

YES  NO

g. Are records of the testing being maintained? (30.F.04)

YES  NO

h. Are the results of the mandatory six-month air purity test available? (30.F.05)

YES  NO

F. Safety and Emergency Checks

1. Is a first-aid kit meeting the requirements of Section 30 of 385-1-1 on the dive site? (30.F.11, 30.A.26c)

YES  NO

2. Is an oxygen resuscitation system capable of delivering oxygen for a minimum of 30 minutes on the dive site? (30.F.11, 30.A.26c)

YES  NO

3. Is a stokes litter or backboard, with attached floatation device on the dive site? (30.F.11, 30.A.26b)

YES  NO

4. Are both dive flags, international alpha code and recreational with minimum dimension of 23 inches square, displayed at least 3ft above the water? (30.F.12, 30.A.26b)

YES  NO

G. Pre-Dive Actions Checks

1. Did the dive supervisor conduct a pre-dive conference with all the dive team present? (30.A.26)

YES  NO

2. Was a responsible employee of the floating plant or facility present at the pre-dive conference? (30.A.26)

N/A  YES  NO

3. Were the following discussed as a minimum? (30.A.20)

N/A  YES  NO

a. The mission or scope of work.

b. The location
c. Drawing and/or photographs

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d. Equipment and materials that are to be installed as part of the mission.

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e. Diving apparatus/equipment and craft to be used

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f. Diving procedures

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g. Maximum working depth with estimated bottom times

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h. Water temperatures

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i. Water velocity, currents

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j. Visibility

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k. Names and duties of personnel on the dive team

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4. Were the following operational procedures discussed? (30.D.05)

a. All dives shall be terminated if voice communications are lost

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b. That each diver should have a tender

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c. Will there be an underwater tender/diver stationed at the underwater point of entry for enclosed or physically confining spaces?

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d. Is there a standby diver for each diver?

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**NOTE:** A standby dive will be dressed out and readily available when a diver is in the water (the standby diver may remove his or her head gear after it is tested for proper operations) (30.B.03, 30.D.05)

5. Was the **Activities Hazards Analysis** discussed? (30.A.20, 30.A.26)

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7. Were the following pre-dive checks performed? (30.A.26)
   a. Were lockout/tagout procedures discussed and followed and was the clearance holder identified and was a copy of the clearance/permit signed that identified the hazards. (30.A.17) N/A
   b. Crane signals or radio communication with the crane operator are reviewed
   c. Welding or cutting procedures are reviewed
   d. Blasting procedures are clearly reviewed
   e. All diving equipment was checked for proper function prior to diver entry

8. Do the dive logs on site contain the following information? (30.A.24)
   a. Full Name
   b. Date and location of dive
   c. Maximum depth and bottom time
   d. Surface interval between dives
   e. Breathing medium and type of equipment used
   f. Group classification at the beginning and end of each interval
   g. Water and ambient air temperature
   h. Depth(s) and duration(s) of any decompression stops
   i. Date and time of last previous dive
   j. Name of Dive Supervisor(s) during dive;
   k. General description of work performed; and
H. Post Dive Action Checks

1. Did the dive supervisor have a dive team debriefing that covered the following as a minimum? (30.A.18)  
   a. The location of the nearest recompression chamber (if not located on site)  
   b. A discussion of post dive activities including repetitive dives and flying?  
   c. Location, directions to and phone number(s) of nearest hospital(s) or available physicians capable of treating dive injuries;  
   d. Location and phone number of nearest USCG Rescue Coordination Center, where appropriate;  
   e. Description of an emergency victim transport plan including phone numbers of appropriate emergency transport services;  
   f. Procedures and phone numbers or other means of communications to activate emergency services at the facility where the work is being performed;  
   g. Diver rescue procedures conducted by the dive team, including responsibilities of team members, best location(s) where injured divers may be removed from the water, and best location(s) for performing first aid/ stabilization prior to emergency medical assistance arrival.

   NOTE: Divers will wait at least 12 hours before flying after any dive: this interval should be extended to 24 hours following multiple days of repetitive dives (30.A.10)

2. If decompression sickness and/or pulmonary barotraumas are suspected or symptoms are evident, were the following recorded and maintained? (30.A.25)  
   a. Descriptions of signs and symptoms (including depth and time of onset)  
   b. Descriptions and results of treatment
c. Name, address, and phone number of attending physician


IF THE ANSWER TO ANY OF THE ABOVE QUESTIONS IS NO, SUSPEND THE DIVE OPERATION AND RESOLVE THE ISSUE BEFORE PROCEEDING
Dive Inspector ___________________________    Date __________
Project ________________________________
Dive Contractor ________________________    W912HP-_______ -  -
Pre-dive Meeting Comments __________________

Dive Team Debriefing Comments __________________