Attachment 2

Preliminary Report to DWR

CALIFORNIA DEPARTMENT OF WATER RESOURCES (DWR)

INFORMATIONAL PRELIMINARY SUMMARY REPORT OF DWR FATALITIES

San Luis Field Division Dive Fatalities

Date of Accident: February 7, 2007

Date of Preliminary Summary Report: February 15, 2007

By DWR Serious Accident Review Team

This Preliminary Summary Report is intended to inform DWR personnel and to aid in accident prevention pending the completion of this investigation. To that end, this summary is distributed within a short time frame. The information contained herein is subject to revision as further investigation is conducted and additional information is developed.

SUMMARY

On February 7, 2007, two DWR divers lost their lives while inspecting trashracks for invasive mussels at the Dos Amigos Pumping Plant in Los Banos, California.

SITE DISCRIPTION

The incident occurred in the California Aqueduct just upstream of Dos Amigos Pumping Plant. Dos Amigos Pumping Plant is located approximately nine miles south of Los Banos, California (See Figure 1). The plant houses six pumps which lift water 113 feet within the aqueduct. The aqueduct is a lined concrete trapezoidal channel, 110 feet wide at its base with 2:1 side slopes. The aqueduct flares out to the pumping plant which is 388 feet wide. Trashracks protect the pumps at the intake to the plant. A concrete deck crosses the intake above the trashracks (See Figure 2).

SEQUENCE OF EVENTS

A dive was scheduled for February 7, 2007 to investigate the potential presence of mussels on the trashracks of units 1, 2 and 3 at Dos Amigos Pumping Plant. These three units were scheduled to be out of service for transformer testing, while units 4, 5 and 6 could be running.

A Notice to Dive, dated February 1, 2007, identified three divers and a dive tender. The third diver often serves as the dive tender when only two divers are needed in the water.

In the early morning of February 7, 2007, diver 1 (also the dive supervisor), changed the plan to include a substitute dive tender since one of the three divers, who was originally to act as the dive tender, became unavailable.

Divers 1 and 2 and the dive tender met in the parking lot at Dos Amigos Pumping Plant around 9:00 a.m. on February 7, 2007 to prepare for the dive. The divers then met with plant operators inside the plant to discuss the operation of the pumps. As a result of pumping demands, the operators told the divers that pump 5 was the only unit operating and that they would notify the divers if there were any changes to the operation of the units.

The divers suited up and notified the operator around 9:30 a. m. that the dive was about to begin. Both divers checked their equipment. The divers entered the water at 10:10 a.m. by climbing down the east slope of the aqueduct at the corner of the plant (See Figure 2).

The visibility of the water was 1 to 2 feet. The dive tender who was watching from the deck as directed by diver one, noted two distinct bubble patterns

surfaced after the divers submerged for the dive. The dive tender followed the surfacing bubbles starting at unit 1 just upstream of the trashracks. He followed the bubbles while standing on the deck and noticed the bubbles move to the front of units 2 then 3. Once the bubbles surfaced in front of unit 4 or 4 1/2, the dive tender noted the bubbles began to sweep towards unit 5. The bubbles then disappeared and the dive tender presumed the bubbles were being swept into unit 5. After the bubbles disappeared, the dive tender walked across the deck past unit 5 and noted the time at 10:35 a.m. The dive tender then called the plant operators, one of whom came to the deck and assisted the dive tender to look for bubbles, although none were found. Two engineers from the main San Luis Field Division office showed up on the deck of the plant about 11:00 a. m. on unrelated business. After the dive tender explained the situation, one of the engineers called the main office for further assistance. A third diver then arrived and shortly thereafter the Field Division Chief came to the site.

The Field Division Chief ordered unit 5 shut down, while diver 3 prepared for a dive to enter the aqueduct in search of the first two divers. After unit 5 was shut down, a small amount of bubbles were discovered about 30 to 50 feet from the trashrack upstream of unit 5. Diver 3 was tethered from the surface above unit five's trashrack and had surface to water communication. Diver 3 climbed over the deck rail at unit 5 then jumped into the water towards the surfacing bubbles while he was being directed through communication from the surface.

Shortly after diver 3 reached the bubbles, he discovered diver 2 in the face down position towards the bottom of the aqueduct. Diver 2 was unresponsive. Diver 3 held onto diver two's equipment and directed individuals on the deck to pull him towards the deck by the tether.

Diver 3 immediately reentered the water and discovered diver 1, also unresponsive, within a couple feet upstream of the trashrack of unit 5. Staff utilized heavy equipment to assist in the recovery of the divers from the aqueduct onto the deck. Emergency crews were on hand at that point and immediately began resuscitation efforts. Divers 1 and 2 were transported to the hospital where they were pronounced dead.

RECOMMENDATIONS FOR IMMEDIATE CORRECTIVE ACTIONS

All dives by DWR personnel should continue to be suspended until completion of the full investigation and an in depth review of the DWR dive policies and procedures.

The purpose of the full investigation is to gather all relevant information and complete a report. The report will provide a sequence of events, factors contributing to the cause of the accident and findings. The report will also recommend corrective actions to prevent future injuries and modifications to improve the diving safety standards if possible.

Although this investigation will make recommendations for corrective action if necessary, a specialized team of dive experts should be convened immediately to review DWR dive policy and procedures and make any recommendations necessary to prevent future dive accidents.