PO Box 568 Albuquerque, NM 87103-0568 505-289-3100 www.abcwua.org

EMERGENCY PURCHASE REPORT

To:

Jonathan Daniels, Purchasing Officer

From:

Kris Johnson, Principal Engineer - Surface Water

Date:

3/9/2020

Emergencies which occur during the course of the normal working day must be reported to the Purchasing Officer who will make a determination as to the necessity of an emergency purchase. Report of Emergency Purchase after normal working hours must be reported within 48 hours after actual purchase. Requisition for purchase must be completed and attached.

1. Date Emergency situation first noted/occurred (time and date):

Acuren Inspection Inc. was contracted to perform pilot chemical storage tank inspections at SJCWTP. They inspected one sodium hypochlorite tank, one ferric chloride tank, one SeaQuest polyphosphate tank, and one sulfuric acid storage tank. The company completed their inspection of the sodium hypochlorite tank on Monday 3/2/2020 and recommended immediate repairs or re-lining of that tank the same day, at 5:00 PM.

- 2. Describe emergency situation Be very specific (attach additional pages, if required):
 - a) The overall visual inspection noted the presence of internal wide spread shell liner defects. The inner layer corrosion barrier in lower two-thirds of the vessel has dried out and is badly degraded.
 - b) There was one 1" threaded nipple near the bottom of the vessel that was originally designed as a site gauge has severely degraded internally. The presence of a large amount of raw fibers were observed in the nipple's interior. The nipple has been capped off on the exterior but with the amount of degradation a leak is imminent through the neck of the nipple.
 - c) Wide spread pitting in the inner surface was observed indicating that the chemical service has indeed breached the corrosion barrier.
 - d) The FRP fill pipe's corrosion barrier on the interior of the vessel has completely eroded away and was laying on the vessel bottom.
 - e) We need to hire a company to perform the tank repairs and relining as soon as possible to be properly prepared for high water production later this year. The selected vendor performed the tank inspections as a sub-contractor to Acuren and is already knowledgeable about what needs to be repaired on the tank.
- 3. Impact/consequences had purchase not been made immediately:

The plant requires all 4 sodium hypochlorite storage tanks to reliably operate through the high water demand & production season. Consequently, we must return Tank 1 to service. Continued use of the tank will likely compromise the structural integrity of the tank. If the structural integrity of the tank is compromised, relining will no longer be feasible, and we risk a sudden catastrophic tank failure.

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4.	Item(s) purc	nasea:

This purchase includes the full relining of the compromised interior of the tank (Bottom 2/3 of the tank). They will also repair damage identified in their inspection report, including:

- a) Replacement of internal chemical fill pipe
- b) Removal and patching of the failing 1" nipple.
- 5. Price: \$59,920
- 6. Vendors contacted to obtain best available price (preferably three Attach quotations): Hudson Fiberglass
- 7. Name and address of actual supplier: Hudson Fiberglass

198 NE Ruskin Way, Lake City FL 32055

Emergency purchases less than \$10,000 require review and acknowledgement from the Division Manager.

Charles A. Leder
Division Manager

Date

Emergency Purchases greater than \$10,000 but less than \$20,000 require review and acknowledgement from the Chief Operating Officer and Chief Financial Officer.

Chief Operating Office

Chief Financial Officer

Date \

Emergency Purchases greater than \$20,000 require review and acknowledgement from the Executive Director.

Mark S. Sanchez, Executive Director

3/14/2020 Date



198 NE RUSKIN WAY LAKE CITY, FL 32055 (386)758-0057 phone (386)758-0066 fax March 09, 2020

Kris Johnson, P.E. Albuquerque Bernalillo County Water Utility Authority 6000 Alexander Blvd NE Albuquerque, NM

After performing the inspection on T-7511-01 sodium hypochlorite tank, we have determined that the following repairs are necessary for the continued service of the vessel. The quote is as follows:

A. Perform full reline to the lower 2/3 & bottom of the vessel.

Derakane 411 Signia NSF 61 certified epoxy vinyl ester resinutilizing a DMA / BPO cure shall be used, the use of MEKP & Cobalt Naphthenate 6% shall not be permitted. The original construction utilized Hetron FR992 epoxy vinyl ester resin, this resin was manufactured by Ashland Chemical (which is now lneos) which also manufacturers Derakane resins. Although the two resins go by different trade names the resins will bond to one another as long as the proper prep or primer is utilized. We will be prepping & utilizing primer. The lneos recommended resin for sodium hypochlorite service up 15% @ 120° F or less is Derakane 411 Signia.

- 1. Prepare Surface
- 2. Abrade surface with 36 16 grit abrasive grinding disc
- 3. Remove all degraded corrosion barrier to expose non-degraded fiberglass and achieve a 2-3 mil profile for secondary bonding.
- 4. Apply secondary bonding agent, Atprime II or Derakane 8084. The secondary bonding agent must be applied within 8 hours after surface prep, if 8 hours is exceeded, the surface must be abraded again prior to application. Allow secondary bonding agent to cure in accordance with manufacturer's recommendation. Prior to application of liner an acetone sensitivity test shall be conducted to ensure the surface is sensitive to acetone.

- 5. Apply a minimum of 2 layers 1 ½ oz. ECR chopped strand fiberglass with two layers of C veil. Allow liner to cure until the surface is tack-free.
- 6. Apply paraffinated Derakane 411 Signia utilizing a DMA / BPO cure system resin top coat to the newly laminated corrosion barrier. If top coat is applied within eight hours of liner completion no surface prep is required. If eight hours is exceeded, a light surface abrasion is required prior to application of top coat.
- 7. Allow top coat to fully cure. Top coat cure shall be verified using ASME RTP-1 2017, sec 6-910, para b, sub sec 7 acetone sensitivity test.
- 8. Post Cure:
- 9. The completed liner shall be post cured in accordance with Derakane Corrosion Guide. The post cure will be 4-6 hours at 180° F.
- 10. After post cure is complete, Barcol hardness readings shall be taken in accordance with ASTM D 2583 to ensure resin system has achieved a minimum of 90% of the resin manufacturer's recommended minimum cure for. If minimum Barcol hardness has not been achieved, additional post cure will be required until minimum average is achieved.
- 11. Replace the 3" fill pipe & elbow that has badly degraded.
- 12. Warranty:

A one year warranty on materials & labor.

Cost:

The quote for the work described herein will be \$59,920.00

- 13. Other Contractor Responsibilities:
 - A. The above quote includes all scaffolding rental & installation, all materials, lodging, & labor.

The above cost includes all labor, materials, rental equipment, travel, & lodging to perform the described project. Our terms are NET 30 days. As it stands today, we are available April 10 – 17. If you have any further questions please call me at 386-758-0057 office or 386-623-3166 cell and I can always be reached at blaine.hudsonfiberlass@yahoo.com

Sincerely,

Blaine K Hudson

Blaine K Hudson