



**ADDENDUM
CITY OF AUSTIN, TEXAS**

Solicitation: CAK0006

Addendum No: 2

Date of Addendum: 06/30/2016

This addendum is to incorporate the following changes to the above referenced solicitation:

I. **Questions:**

1. What is historical Anhydrous Ammonia usage as lb. per day for SCR injection at both Decker and at Sand Hill?

Decker does not have any Selective Catalytic Reduction. The annual usage of 19% Aqueous Ammonia is approximately 145,000 gallons = 1,123,750 lbs.

2. Where is the location of ammonia injection point(s) for SCR application at both Decker and at Sand Hill?

Decker does not have any Selective Catalytic Reduction. The injection points for 19% Aqueous Ammonia is located: at the vaporizer heater unit of the Simple Cycle and it is injected before the blowers on the Combined Cycle.

How is chemical injected and controlled?

The 19% Aqueous Ammonia is controlled by flow control valves.

3. Confirm the design pressure of Decker Boiler 1 at 2000 psig and Boiler 2 at 2600 psig.

Decker 1 = 2000psig, Decker 2 = 2400psig

4. Confirm that the 2600 psi unit has full flow mixed bed ion exchange polishing and therefore the steam and CPD has degassed cation conductivity less than 0.20.

The 2400psig unit does not have mixed bed condensate polishing.

5. Confirm the design pressure of Sand Hill HP drum at 1800 psig, IP drum at 380 psig, and LP drum at 50 psig.

Confirmed.

6. Confirm internal treatment (phosphate) injection location is to HP drum at Sand Hill with cascade blowdown to IP drum.

Confirmed

On HRSG, confirm LP is make-up to HP & IP drums and HP drum cascades to IP drum.

Confirmed

Confirm that LP chemistry is solely ammonia for FW and LP BW pH control.

Confirmed

What is the target pH control level in FW to the LP?

The target pH for feed water for the Combined Cycle unit is 9.65 pH.

7. Confirm LP blow down is used as make-up to HP and IP drums. (See #5)

It does not.

Does HP & IP drums have separate chemical injections points and by what set up (day tank/neat feed)?

The HP & IP Drums do have separate injection points but the IP is rarely used.

8. Confirm make-up water source(s) to Decker RO system and at what ratios if multiple waters for intake. If lake water, what upstream filtration equipment is used and chemical treatments required? Please provide recent analysis for lake water.

Currently, City of Austin Municipal Water is used as makeup to the Decker R/O system.

9. Confirm make-up water source(s) and/or combinations of /to Sand Hill RO system.

Currently, City of Austin Municipal Water is used as makeup to the Sand Hill Energy Center R/O system.

10. What bulk water treatment chemical storage tanks with volumes are available at Decker and Sand Hill locations?

Caustic is currently used at Decker for degasification between RO passes.

Are tote and drums packages allowed at these sites.

Yes.

11. Is current supplier providing all commodity water treatment chemicals such as:

Anhydrous Ammonia, Bleach, Bromine, Sulfuric Acid, Caustic, and Sodium Bisulfite?

The current Specialty Chemical provider does not supply: 19% Aqueous Ammonia, Bleach, Sulfuric Acid, Caustic or Sodium BiSulfite. The current provider does supply Alum, Bromine (in the form of 3 inch tablets and Ammonia for pH control.

If so, is this a firm requirement for this RFP or is the City of Austin willing to consider purchase direct from commodity supplier with the water treatment company managing the inventory, scheduling and delivery of products?

To be determined.

12. For the Table 1, Group A Work sites, what is the run factor in days and % load for the Chillers?

This is based on seasonal load and the addition of clients

13. Please clarify the equipment configuration for the Parks and Recreation locations listing

Chillers with no Cooling Towers. Locations are Mexican American Cultural Center, Gus Garcia Rec. Center, Givens Rec Center, Turner Roberts Rec Center, Old Bakery Emporium and Conley Guerrero Senior Center.

See attached equipment list included with the published solicitation.

14. Please clarify the equipment configuration for the Parks and Recreation locations listing Cooling Towers with no Chillers. Locations are Dove Springs, City of Austin Municipal Bldg., and DeWitty Bldg.

See attached equipment list included with the published solicitation.

15. Confirm City Water as Make-up source to all Cooling and Chilled Water systems except at Sand Hill and Decker Locations.

Confirmed

Please provide recent city water analysis.

<http://austintexas.gov/departments/drinking-water-quality-report>

16. Confirm make-up water source(s) to Sand Hill Cooling Towers and/or combinations of sources with % each source.

The makeup water to the both Simple Cycle cooling towers at Sand Hill Energy Center is City of Austin Municipal Water. The makeup water to the Combined Cycle cooling tower at Sand Hill Energy Center is reuse water from the South Austin Regional treatment plant.

What upstream equipment is used and chemical treatment required.

There is no water upstream water treatment for the Simple Cycle cooling towers. The Combined Cycle cooling tower makeup is treated by an Acti-Flo clarifier.

Please provide recent water analysis from each water source.

See the answer to #16.

17. Please clarify the number of Cooling Towers with detailed name of each system at Sand Hill.

The Simple cycle cooling towers at Sand Hill Energy Center are Evapco towers. The Combined Cycle cooling tower is a Marley.

18. What is current biocide program for the Cooling Tower and Water systems at the Parks and Recreation locations?

Bromine and non-oxidizing biocides.

19. What locations are currently using acid to control pH in Cooling Tower systems?

District Chilling Plant 2, Mueller Energy Center, Domain and Sand Hill Energy Center.

20. Do all of the Cooling Towers systems have automatic conductivity Blowdown control? If not, list the sites using manual control.

The only site with automatic blowdown control is Sand Hill Energy Center.

21. What chemical feed control systems are used at Table 1 Group A sites? Do these systems belong to Austin Energy or City of Austin or are they leased and need replaced if new treatment company is award this business.

Only some sites use the Nalco 3DTRASAR control unit: Sand Hill Energy Center, Austin Convention Center, Town Lake Center, Austin Police Department and Austin Bergstrom International Airport. Other sites use manual control.

22. Please list the sites that do not have corrosion coupons racks installed.

Sand Hill Energy Center, Austin Convention Center, District Cooling Plants, Domain Chilled Water Plant, Mueller Energy Center and Austin Bergstrom International Airport have corrosion coupon racks. BIDDERS SHOULD BID AS IF THEY WE TO INSTALL RACKS AT ALL LOCATIONS.

23. What are your permit restrictions for Cooling Tower blowdown at all sites?

Industrial Waste Water Permit:

LOCAL LIMITS (15-10-44)	
POLLUTANT	CONCENTRATION (MG/L.)
Arsenic, Total	0.2 mg/l
Cadmium, Total	0.4 mg/l
Chromium, Total	2.4 mg/l
Copper, Total	1.1 mg/l
Cyanide, Total	1.0 mg/l
Fluoride, Total	65 mg/l
Lead, Total	0.4 mg/l
Manganese, Total	6.1 mg/l
Mercury, Total	0.002 mg/l
Molybdenum, Total	1.1 mg/l
Nickel, Total	1.6 mg/l
Selenium, Total	1.8 mg/l
Silver, Total	1.0 mg/l
Zinc, Total	2.3 mg/l
Oil and Grease	200 mg/l
	instantaneous
TSS	200 mg/l
BOD	200 mg/l
COD	450 mg/l
pH	6.0-11.5 std units

Please list those items that may limit selection of treatment products.

Bromine, Chlorine, non-Oxidizing Biocides will limit the chemical treatment of cooling towers.

24. Are there any bulk storage tanks available for Water Treatment chemicals at sites other than Decker and Sand Hill?

Yes.

Are there any package type restrictions for use of drums or totes?

Yes, there are restrictions based on available space.

II. ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.

APPROVED BY:

Cheryl A Kaufman, Senior Buyer
Purchasing Office, 512-505-3545

June 30, 2016

ACKNOWLEDGED BY:

Name

Authorized Signature

Date

RETURN ONE COPY OF THIS ADDENDUM TO THE PURCHASING OFFICE, CITY OF AUSTIN, WITH YOUR RESPONSE OR PRIOR TO THE SOLICITATION CLOSING DATE. FAILURE TO DO SO MAY CONSTITUTE GROUNDS FOR REJECTION.