

October 31, 2019
BOARD OF COUNTY COMMISSIONERS
ORANGE COUNTY, FLORIDA
INVITATION FOR BID (IFB) Y20-147-MV; ADDENDUM #1

ALUMINUM SULFATE

This Addendum is hereby incorporated into the bid documents of the project referenced above. The following items are clarifications, corrections, additions, deletions, and/or revisions to and shall take precedence over the original documents. Additions are indicated by underlining and deletions via ~~strikethrough~~.

A. The Bid Opening Date remains November 14, 2019 at 2:00PM.

B. CHANGES:

1. Page 39, Delivery shall be not later than ~~ten (10)~~ five (5) calendar days After Receipt of Order (ARO) per Special Terms and Conditions.

C. Questions and Answers

- a. **Question 1** – Please provide the previous bid tab, delivery locations and annual delivered quantities for each if possible.

Answer – Attachment 1 of this Addendum #1 contains the bid tabulation for the current contract. Delivery of alum maybe be required at any lake within Orange County jurisdiction for full-lake alum treatments. Alum deliveries are routinely expected at:

Lake Anderson ATS: 3880 Anderson Rd Orlando, FL

- 2,000gal tank, up to 10,000gal used annually.
- Potentially monthly deliveries in the wet season.

Lake Down ATS: 10850 Wonder Lane, Windermere FL

- 5,000gal tank, up to 150,000gal annually.
- Potentially weekly full deliveries during the wet season.

Eastern Water Reclamation Facility: 1621 S. Alafaya Trail, Orlando FL

- 6,000gal tank, up to 140,000gal annually.
- Normally receives 1-2 loads of alum per week.

Full lake alum treatments: One to two locations (lakes) within Orange County annually. Quantities vary but could be between 100,000 and 300,000+ total gallons delivered to a location. The total alum delivered is spread out in treatments of several days to weeks at approximately quarterly intervals, typically over a year's time. Please see the table below for an example of a full lake treatment conducted at Lake Killarney. Additionally a written description of a recent project on Lake Jennie Jewel is provided below. To be clear: this contract only covers providing and delivering the alum to the sites specified.

TABLE 2-4

**ALUM REQUIREMENTS FOR SEDIMENT INACTIVATION
AND GROUNDWATER SEEPAGE CONTROL IN LAKE KILLARNEY**

PARAMETER		UNITS	TOTAL
Alum Requirements	Alum	gallons	380,316
	Number of Tankers	--	84.5
	Water Column Dose	mg Al/liter	19.3
	Areal Dose	g Al/m ²	86.9
Chemical Requirements per Treatment	Number of Treatments	--	4
	Alum Required per Treatment	gallons tankers	95,079 21.1
	Applied Alum Volume	tankers gallons	22.0 99,000
	Dose per Treatment	mg Al/liter	5.0

“Task 3 - Alum Application: Using the application plan, ERD will perform 4 separate wholelake alum treatments to Lake Jennie Jewel. Liquid aluminum sulfate will be pre-mixed with water and applied to the surface of the lake. During each treatment, ERD will apply 4 tankers of alum to the West Lobe and 2 tankers to the East Lobe (6 tankers total). In the event of extreme weather conditions, the application will be halted and the effects of the delay will be evaluated before re-initiating the treatment.

The proposed alum treatment to Lake Jennie Jewel would add sufficient alum to control internal recycling of phosphorus from the bottom sediments in the west lobe. As indicated on Table 7-13, sediment inactivation in the west lobe would require approximately 66,558 gallons of alum or approximately 14.8 tankers carrying 4,500 gallons each. For

purposes of evaluating sediment inactivation requirements and costs, the number of tankers is rounded up to a whole number of 15 tankers which is equivalent to 67,500 gallons of alum. Assuming that a total of 67,500 gallons of alum are added to the west lobe during three separate treatments, the amount added to the west lobe during each individual application would be approximately 22,500 gallons (5.0 tankers). [...] [...]

As indicated on Table 7-14, a total of 24,556 gallons (5.5 tankers) of alum are needed for sediment inactivation in the east lobe. For estimation of chemical requirements and application costs, the number of tankers is rounded up from 5.5 to 6.0, equivalent to 27,000 gallons of alum or approximately 9,000 gallons (2 tankers) for each of the three proposed applications.”

Question 2 – The pricing sheet on page 38 is only one line however, the delivery size requested ranges from 1,000 gallons to 5,000 gallons. Will price adjustments be allowed for less than full truckload deliveries?

Answer – Please use the “Delivery” line item to cover costs of shipping. The cost per gallon will always be flat rate. The intent of the “Delivery” line item is to cover costs associated with mobilization and delivery. Contract users endeavor to minimize excessive orders of small quantities. Typically the Lake Anderson system (see answer to question 1) is the only location expected to routinely need less than a 5,000 gal each delivery due to the tank size.

Question 3 - The pricing sheet on page 38 references an item marked “Delivery” (200 each). Please provide information as to what delivery means. If this is the freight costs to deliver the material. Can this line item be adjusted yearly?

Answer – Delivery is defined on Page 21, Item 7. Delivery, also on page 32, Specifications, Delivery of the Invitation for Bid. Price adjustments can only be made in accordance to page 28, Item 19. Price Escalation/De-escalation in the Invitation for Bid.

Question 4 - The pricing sheet on page 38, it states we will have 10 days to deliver. However on pages 21 & 32 this bid is stating 5 days for delivery. What is the delivery time we will be allotted for this contract?

Answer – The delivery time is five (5) calendar days. **Please see Item B.1 Changes of this Addendum #1.**

D. ACKNOWLEDGEMENT OF ADDENDA

- a. The bidder shall acknowledge receipt of this addendum by completing that applicable section in the solicitation or by completion of the acknowledgement information on the addendum. Either form of acknowledgement must be completed and returned no later than the date and time for receipt of the bid.
- b. All other terms and conditions of the IFB remain the same.
- c. Receipt acknowledge by:

Authorized Signature

Date

Title

Name of Firm

BIDTABULATION IFBY18-1129-MV
ALUMINUMSULFATE

	Description	Estimated Annual Quantity	Unit of Measure	THATCHER CHEMICAL OF FLORIDA, INC.		C & S Chemicals		CHEMTRADE CHEMICALS US, LLC.	
				Unit Cost	Estimated Total	Unit Cost	Estimated Total	Unit Cost	Estimated Total
1	Aluminum Sulfate	800,000	Gallons	\$0.53	\$424,000.00	\$0.730	\$584,000.00	\$0.300	\$239,920.00
2	Delivery	200	Each	\$ 575.00	\$ 115,000.00	\$ -	\$ -	\$ 850.00	\$ 170,000.00
3	Demurrage	40	Hours	\$ -	\$ -	\$ -	\$ -	\$ 65.00	\$ 2,600.00
	Total Bid				\$539,000.00		\$584,000.00		\$412,520.00