## ADDENDUM No. 1

# ITB No. 4384

# Carbon Replacement in Odor Control Units at the WWTP

# Due: May 11, 2015 by 2:00 p.m.

The following changes, additions, and/or deletions shall be made to the Invitation to Bid for Carbon Replacement in Odor Control Units at the WWTP, ITB No. 4384, on which proposals will be received on/or before May 11, 2015 by 2:00 p.m. (changed from May 4 by 2:00 P.M.)

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. This Addendum includes 4 pages and no drawing(s).

Bidder is to acknowledge receipt of this Addendum No. 1, including all attachments (if any) in its Bid by so indicating on page ITB-1 of the Invitation to Bid Form. Bids submitted without acknowledgement of receipt of this addendum will be considered nonconforming.

## I. CORRECTIONS/ADDITIONS/DELETIONS

Changes to the Bid documents which are outlined below are referenced to a page or Section in which they appear conspicuously. The Bidder is to take note in its review of the documents and include these changes as they may affect work or details in other areas not specifically referenced here.

## Section/Page(s) Change

Multiple Pages Bid Due Date

All references to the due date and time for bids has been changed from May 4, 2015 at 2:00 P.M. to May 11, 2015 at 2:00 P.M.

Page 6 Contract Time

Change "indicated on Page C-1, Article III of the Contract" to "98 calendar days from Notice to Proceed. Once equipment and materials arrive on site the work must be completed within fourteen (14) calendar days."

## Page 24 Removal and Disposal

At the end of the first paragraph add "The three units can be off at the same time for carbon removal if immediately followed by carbon installation. Use of City equipment other than the elevator is strictly prohibited. The elevator has a capacity of 10,000 lbs. and shall be protected with blankets to prevent any damage No vacuum hoses (if needed) can be placed in stairwells; they must be placed outside of the building to reach from the ground level to the third floor."

## Page 24 To Remove Media:

At the end of item 4. add "Inform the City of Ann Arbor WWTP staff and the manufacturer of any failures, issues, or damages found in the carbon vessels."

Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

# **II. QUESTIONS AND ANSWERS**

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the ITB.

## Question #1:

On page 27 of the ITB, there is contradictory information. It says the bidder is to supply 7,600 lbs (235.6 cubic feet) of High Capacity carbon per vessel, but it lists the Carbon volume as 345.4 cubic feet in the "vessel design calculations". We were able to get the submittal drawings from the equipment manufacturer, and have verified that the capacity is 345.4 cubic feet through calculations. We believe the correct amount of media per vessel is 345.4 cubic feet which is approximately 11,000 lbs per vessel (assuming the Jacobi Carbon at 32 lbs/ft).

### Answer #1:

During construction, the size of each carbon vessel was changed to a capacity of 345.4 cubic feet.

## Question #2:

What quantity is delivered per bulk load 20,000 or 40,000 lbs?

### Answer #2:

There shall be a single delivery for this project and 31,500 lbs were delivered originally to fill all three vessels.

### Question #3:

What is the capacity of the receiving vessel(s)?

### Answer #3:

The correct amount of media per vessel is 345.4 cubic feet.

### Question #4:

Is there any spent carbon to be collected from the site?

#### Answer #4:

The three odor control vessels combined have approximately 31,500 lbs of carbon that is to be removed and disposed properly off-site (see page 21 of the Detailed Specifications section).

## Question #5:

Is the carbon pressure blown into empty filters or some other receiving vessel?

## Answer #5:

The carbon is to be added to the three vessels per the manufacturer's specifications (see page 25 of the Detailed Specifications section).

### Question #6:

What frequency of deliveries is expected?

#### Answer #6:

A single delivery of carbon is required for this project.

#### Question #7:

What safety equipment will the City supply for this?

#### Answer #7:

None. The contractor shall be responsible to supply any equipment needed to complete the project, which includes any and all safety equipment. All personnel working on the project will be required to wear hard hats, high visibility safety vests, safety glasses and steel toes boots.

#### Question #8:

We also would like to get pre-approval of an alternate "equal" carbon.

#### Answer #8:

See page 17 of the ITB Bid Form Section 2: Material and Equipment Alternatives for proposing alternative products. There will be no pre-approvals. Lab data to verify the alternative meets the carbon specification for absorption rate must be included with any proposed alternative and the following test method shall be used: ASTM D 6646 - Test Method for Determination of the Accelerated Hydrogen Sulfide Break Through Capacity of Granular and Pelletized Activated Carbon.

#### Question #9:

Is dust mitigation necessary during carbon addition/removal?

### Answer #9:

The contractor is required to provide any engineering controls necessary to mitigate carbon dust at all times during the project.

#### Question #10:

Work hours? Saturday work?

### Answer #10:

Work hours are Monday through Friday from 7:00 a.m. to 6:30 p.m. for any work that requires outdoor equipment (i.e., vactors and other noisy equipment). Saturday outside work hours require pre-approval by the City and would be from 10:00 a.m. to 5:30 p.m. All work that can be done inside the building with minimal noise and no equipment running outdoors may be done outside of the hours indicated previously with pre-approval by the City.

#### Question #11:

Since the material has been installed for 4.5 years, there may be concern over the material "clumping", which may make it impossible to remove through the observed 8" entry ports on top

of the vessels. Can the lid be removed? If the lid is removed, will the City remove it, and any surrounding ductwork to gain access?

### Answer #11:

The City will remove the lid and ductwork for access, only if the means, methods and equipment recommended by the manufacturer fail to work. The manufacturer recommends removing the lid only if absolutely necessary and utilizing the 8" ports for carbon replacement.

## Question #12:

If the unit lids are not removed, how will the screens and vessel be inspected properly?

## Answer #12:

The manufacturer has indicated that the screens and vessel can be inspected through the 8" ports located on the lid.

## Question #13:

What would be the impact on taking the systems out of service? (That is to say, how much time would elapse between closing up one unit for operation, and taking the next unit out of service?)

## Answer #13:

All three vessels could be taken out of service so that removal could proceed from one to the other, provided that refilling immediately begins once the last vessel is empty.

## Question #14:

We have a question about the bulk density, on the walk thru today it was stated that the activated carbon currently in the filters is 32 lbs a cubic foot, which would mean its density is much higher than the spec that is listed in the bid: .39 - .41 which equals near 25 lbs a cubic foot. Can you confirm the acceptable range for a bulk density or does it not matter as long as the absorption specs and volume requirements are met?

### Answer #14:

The absorption specification and volume requirements shall take precedence over the bulk density. The absorption specification is:

Minimum of 0.28 grams of H2S removed per cc of carbon.

Bidders are responsible for any conclusions that they may draw from the information contained in the Addendum.