ADDENDUM NO. 1
Issued December 16, 2010

TO

"REQUEST FOR BIDS
FOR
PURCHASE AND INSTALLATION OF A NEW
INSTRUMENT AIR COMPRESSOR
AND ASSOCIATED EQUIPMENT FOR THE
MID-CONNECTICUT POWER BLOCK FACILITY"
(RFB Number 11-OP-005)
(RFB Issued November 22, 2010)

Note: **Bidders are required to acknowledge this and all Addenda in Section 5(a) of the Bid Form.**

This Addendum consists of the Connecticut Resources Recovery Authority's (CRRA) changes to two items in the RFB Package Documents and CRRA's responses to questions that were posed at the pre-bid conference and site tour on Wednesday, December 8, 2010 and written questions that were received by CRRA by 3:00 p.m., Friday, December 10, 2010, the deadline specified in the Instructions To Bidders for the submission of written questions.

1. CHANGES TO RFB PACKAGE DOCUMENTS

The following two changes are being made by CRRA to the RFB Package Documents.

1.1 Instructions to Bidders

In Section 10, "Bid Submittal Procedures," the second paragraph is modified as follows:

> "**Each bidder must submit one (1) original and two (2) copies of its bid**. The original bid shall be stamped or otherwise marked as such."

1.2 Agreement

Section 1.1.6, "Engineer," of the Agreement is modified as follows:

> "'Engineer' means Covanta or any successor engineering firm thereto selected by CRRA to act as its representative in various matters concerning the Project."

1.3 Technical Specifications

Exhibit A, "Technical Specifications," to the Agreement is modified to include the picture at the end of this Addendum depicting the layout of the air tie-in. This picture has also been posted on CRRA's web site on the "Business Opportunities" page.

2. RESPONSES TO QUESTIONS

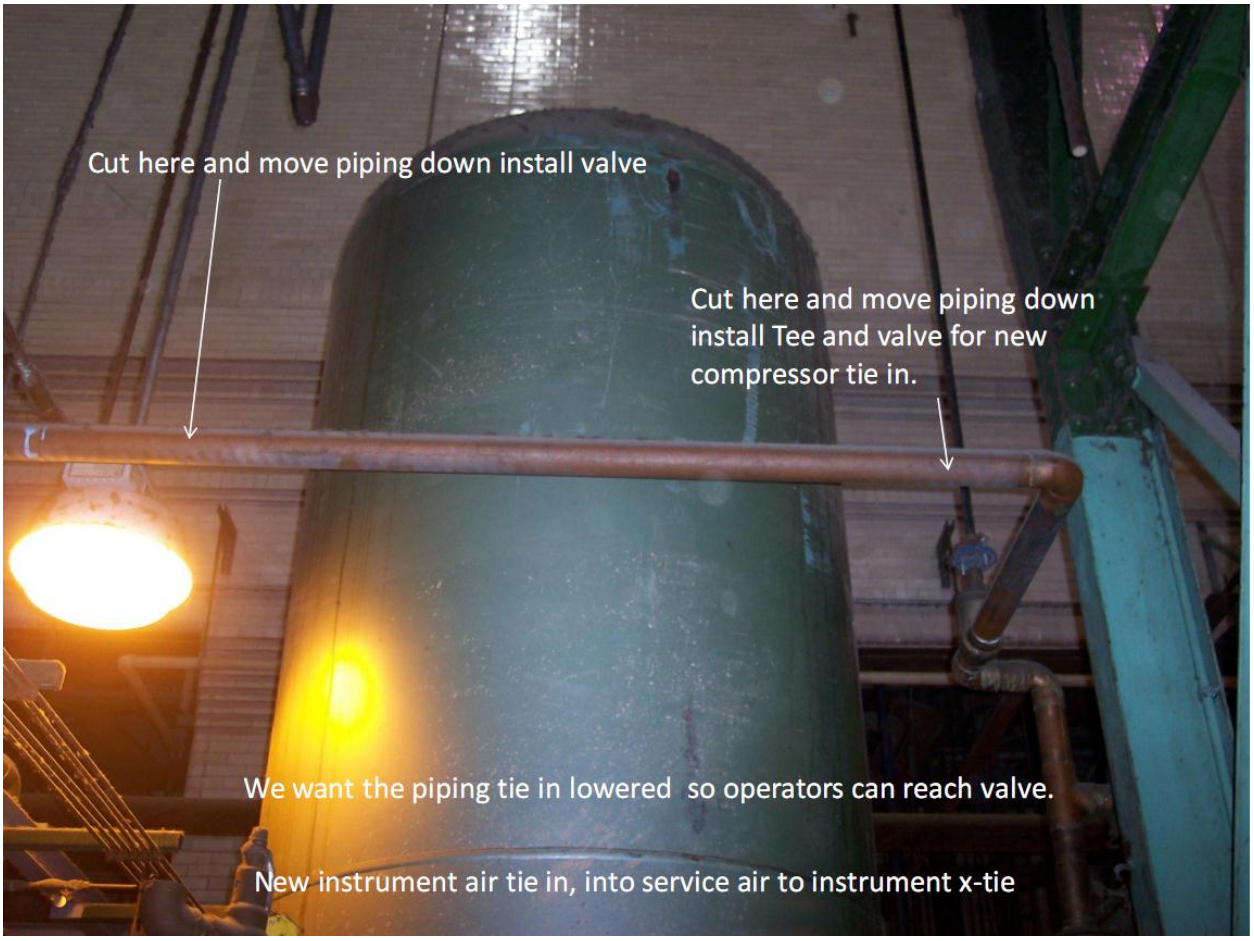
2.1	Question	Clarify the responsibilities for the off-loading and rigging down to the basement floor of the new air compressor, dryer, and 3,800 gallon tank. We were told at the pre-bid conference that there is an existing crane in place at the facility that Covanta Energy employees may be able to operate to perform this task. If that is the case, does that relieve all bidders of the responsibility to hire an outside professional rigging company to deliver and set the equipment in place?
	Answer	Bidders will be responsible for hiring professional riggers and setting the equipment into place. Covanta will operate the overhead crane under the direction of the riggers only.

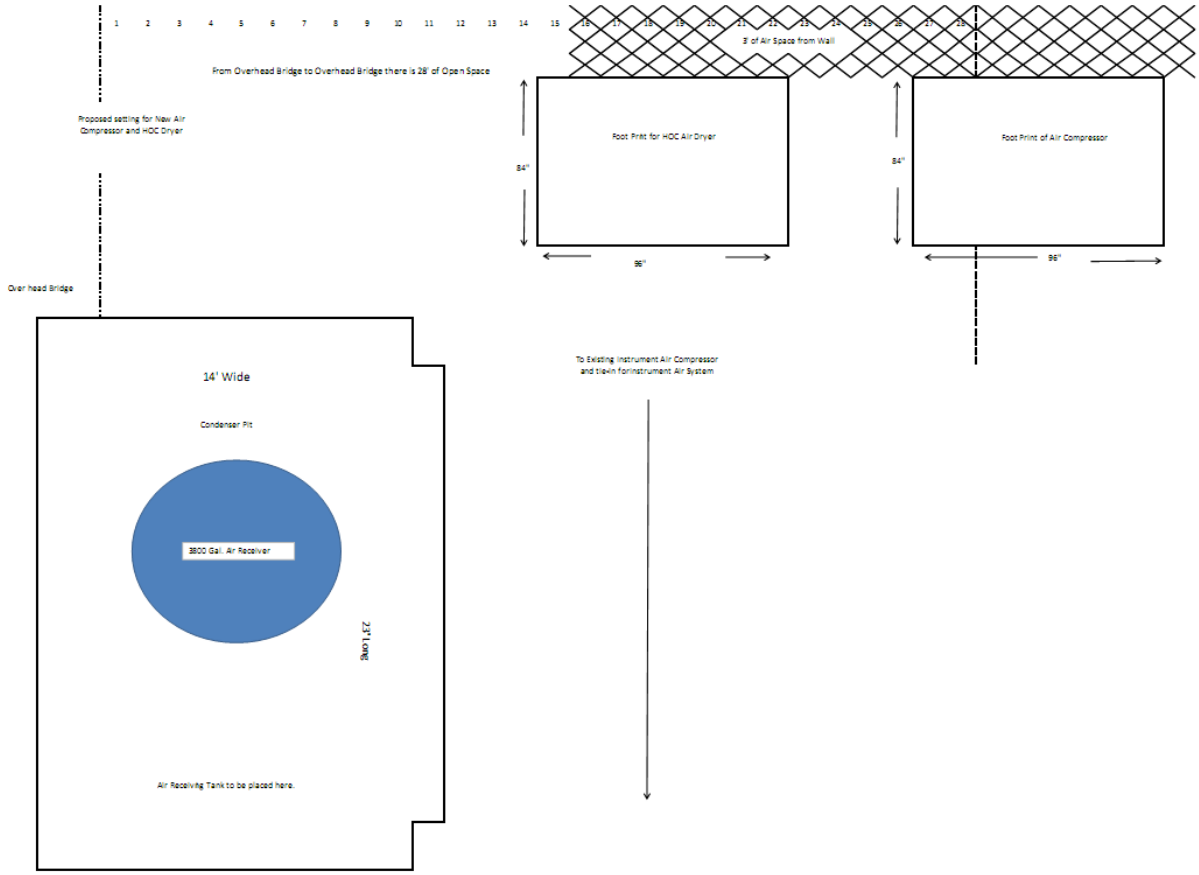
2.2	Question	Clarify the intent and scope for concrete housekeeping pads for the floor mounted equipment. One large pad? Multiple smaller pads? How thick?
	Answer	Concrete base and pads are not necessary if the new equipment is mounted, packaged, vibration isolated, leveled, contained on its own elevated sub-base and bolted to the floor.
2.3	Question	List acceptable means and methods for compressed air piping with material types. Existing piping was mostly copper with soldered joints. Also state the air pressure (psi) that the pipe and fittings would need to handle for this project
	Answer	The air pressure requirement is 100 psi, the relief valve on the receiver shall not exceed 165 psi at 450°F, and the piping shall be rated for 150 psi. The piping from the compressor to the dryers must be capable of handling 350°F temperatures and be made of stainless steel and insulated. The remaining fitting connecting the new compressor instrument air dryer to the new receiver and to the existing system will be L-Type copper soldered piping and joints, or grooved pipe with Victaulic fittings. A pulsation dampener must be installed. All piping and valves will conform to ASME B31-1 and B31-9 of the ASME Code. All pipe hangars and supports shall conform to ASME B31-9 and MSS SP-58 and shall be placed in accordance with MSS SP-69 recommendations or local codes, whichever is more stringent. Electrical conduit shall be rigid conduit.
2.4	Question	Provide a schematic diagram of the intended equipment layout and interconnecting piping and associated devices between the compressor-dryer-tank, as well as the tie-in to the existing instrument air pipeline.
	Answer	See the attached sheet, which is made a part of the Technical Specifications. The attached sheet has also been posted on the CRRA web site on the "Business Opportunities" page.
2.5	Question	Is this a prevailing wage job? It would seem to me that you are replacing equipment. This is not really classified as new work, is it?
	Answer	The Connecticut prevailing wage requirements pertain to rehabilitation, remodeling, refinishing, refurbishing, alternation or repair of any project where the total cost of all work performed by contractors and subcontractors is $100,000 or more. Therefore, the requirements apply to this project.

2.6	Question	All new equipment will be mounted, packaged, vibration isolated, leveled, and contained on its own elevated sub base. Are additional "housekeeping pads warranted?" They are not needed, but do you wish them fabricated anyway?
	Answer	Concrete base and pads are not necessary if the new equipment is mounted, packaged, vibration isolated, leveled, contained on its own elevated sub-base and bolted to the floor.
2.7	Question	Will the dryer require a 3 valve piping bypass ?" The dryer bypass will allow CRRA to perform any normal, recommended maintenance on the new dryer while it is "bypassed" and the new piping configuration allows compressed air flow from the new compressor unit to "bypass" the new dryer & be redirected to your existent dual tower dryers thus guaranteeing the required -40 deg. F. pressure dewpoint at all times (also useful in the unanticipated event of a new dryer mechanical issue). For this operational change to occur the hot air discharge from the new compressor must be valved accordingly so that it is redirected internally within the new compressor package through the unit's prepackaged air cooled aftercooler (the hot air, 350 deg. F, must be cooled to approx. 100 deg. F.) to be acceptable in inlet temperature for your existent dual tower dyers. Your existent dryers are rated for a -40 deg. F. pressure dewpoint at the conditions of 100 deg. F. ambient, 100 deg. F. inlet compressed air temperature, (not 350 deg. F.) and 100 psig. The project scope of design & and the estimate we are basing it on is interpreted as just afore explained. We have anticipated that CRRA requires the install to be as the above outline. Simply put, the new heat of compression dryer requires & will operate with the new compressor in a compressed " hot " air discharge configuration as required to the new dryer, and if the new dryer requires bypassing to the existent dryers the new compressor will operate in a compressed & "aftercooled" air discharge configuration. This is the only way CRRA can have the option to operate either/or dryer system. Please advise. All hot air discharge piping & valves must be high temperature rated & insulated for personnel protection and to retain the heat of compression from the compressor outlet to the new dryer inlet. We shall supply this.
	Answer	Yes, this will allow the PBF to have flexibility for the old and new system.

2.8	Question	The "dual tower", regenerative, heat of compression air dryer we believe CRRA requires and expects will provide at least a -40 deg. F. pressure dew points at all times. This means the dryer cannot experience temperature spikes and dewpoint spikes from a tower switching from the regenerating mode to the drying mode. To alleviate these "spikes" the dryer must incorporate a "stripping" period where a small amount of dry and cool purge air is allowed to "strip" the regenerated tower of excess heat and moisture contained in its bed before being put on line as the drying tower. Is the aforementioned part of your anticipated scope of supply?
	Answer	Yes, this is anticipated.
2.9	Question	We would expect CRRA requires the dryer to incorporate dewpoint demand control, a dewpoint monitor with high dewpoint alarm, and a packaged high temperature afterfilter. Is this part of your scope?
	Answer	Yes, this is anticipated
2.10	Question	We believe that "system start-up and training" is part of your required project scope. Please comment.
	Answer	Yes, training of all operators is expected. At a minimum, we would expect at least two (2) four (4) hour classes to incorporate the four (4) shifts at the PBF and the maintenance crew.
2.11	Question	If we provided a Bid security with our proposal of more than the required 10% of the bid price would this be acceptable?
	Answer	Yes, a Bid Security is excess of 10% of the amount of the bid price is acceptable.

2.12	Question	Also, a comment in regard to a topic which came up in a recent job walk thru. The air cooled compressor "package" we will propose has a total normal BTU rejection of 529,000 BTU/HR. We would have no issue with this total heat load being rejected to the proposed ambient. This would not affect our compressor's performance or reliability. However, it is worth noting that this total heat load "will not" be rejected to the ambient. Of the 529,000 btu rejection only <24,000 btu/hr will enter the ambient; this is from the compressor's oil cooler. The remaining heat load of approx. 505,000 from the compressor 1st stage discharge, inter-cooler, & 2nd stage discharge are in the hot air compressor discharge air which is being utilized to regenerate the wet bed of the new heat of compression dryer. After this 505,000 btu passes and regenerates the wet bed it is aftercooled with the air to water heat exchanger packaged on the heat of compression dryer & then reduced to 100 deg. F. the "cooled" compressed air enters the "drying" tower bed of the dryer where it is reduced in dewpoint to design. The heat load is passed to the water, not the ambient air.
	Answer	Yes, the Compressor package is air-cooled and the dryer package will have a have an air to water heat exchanger where the air is cooled prior to entering the dryer.


Cut here and move piping down install valve
Cut here and move piping down install Tee and valve for new compressor tie in.
We want the piping tie in lowered so operators can reach valve.
New instrument air tie in, into service air to instrument x-tie



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