Lee County Board Of County Commissioners
Agenda Item Summary

Blue Sheet No. 20050914

1. ACTION REQUESTED/PURPOSE: Approve award of formal quotation (RFP B&R 2661-SM126) and issuance of a purchase order to Compressed Air Company, Inc. (Comairco), the low price proposer, meeting all specification requirements for two air compressors and related equipment, in an amount of $114,796.00, plus a not-to-exceed allowance of $5,000 for field service start-up assistance.

2. WHAT ACTION ACCOMPLISHES: Provides the necessary air compressor equipment for the waste to energy expansion project.

3. MANAGEMENT RECOMMENDATION: Staff recommends approval of the requested motion.

4. Departmental Category: 8 C8J		**5. Meeting Date:** 06-28-2005
6. Agenda:	**7. Requirement/Purpose:** *(specify)*	**8. Request Initiated:**
X **Consent**	**Statute**	**Commissioner**
Administrative	**Ordinance**	**Department** Public Works
Appeals	X **Admin. Code** 4-1	**Division** Solid Waste
Public	**Other**	**By:** Lindsey J. Sampson
Walk-On		

9. Background: Sealed quotes were received by the County's design engineer, Burns & Roe, on behalf of the Solid Waste Division on April 22, 2005. On that date three (3) responses were received. After review, recommendation was made to award to the low-priced proposer meeting all specification requirements. Note, evaluated pricing includes a factor for energy consumption during normal operation. Although Comairco has a penalty of $10,198.00, it is still the low priced vendor.. Backup documentation refers to an adder of $1,225 for an optional performance bond. The Solid Waste Division does not want to make use of this option.

Funds are available in account string: 200923 40102.506540

Attachments: Burns & Roe bid evaluation dated 5/20/2005
Tabulation sheet
Covanta Comments on the B&R bid evaluation dated 6/3/2005

10. Review for Scheduling:

Department Director	Purchasing or Contracts	Human Resources	Other	County Attorney	Budget Services: Analyst	Risk	Grants	Mgr.	County Manager/P.W. Director
[signature] 6-15-05	N.A.	N/A			[illegible]	[initials]	[initials]	[initials]	[signature] 6-15-05

11. Commission Action:

_____Approved
_____Deferred
_____Denied
_____Other

RECEIVED BY COUNTY ADMIN: 6/15/05 2:30
COUNTY ADMIN FORWARDED TO: [illegible]

Rec. by CoAtty
Date: 6/15/05
Time: 1:45
Forwarded To: Admin 6/15/05

May 20, 2005

LEE COUNTY
WTE EXPANSION PROJECT
FORT MYERS, FLORIDA

RFP 2661-SM126
AIR COMPRESSORS

BID EVALUATION

Burns and Roe Enterprises, acting on behalf of Lee County issued Request for Proposal No. 2661-SM 126 "Air Compressors" on March 22, 2005 to the following pre-approved bidders: Atlas Copco; Comairco; Gardner Denver; and Scales. Gardner Denver declined to bid.

On April 22, 2005 bids were received from:

-Atlas Copco proposal #4545/0405/6BMRC3 dated 4/22/05

-Scales Air Compressor proposal dated $/20/05

-Comairco (Sullair) proposal dated 4/22/05

Bids were opened and recorded on the Proposal Opening Form included here as Attachment A. Attachment B is the Bid Abstract comparing bid prices and adjustments made thereto.

RECOMMENDATION:

The recommended award of the contract is to Compressed Air Company (COMAIRCO). Recommended award price is $114,796 FOB Jobsite, Freight Prepaid and Allowed and excludes cost of Bonds and Sales or Use Tax.

Base Price, as bid	$103,865
Adjust to comply with Specifications	$ 10,931.
Recommended Award Price:	**$114,796.**

BID EVALUATION 2661-SM126 "Air Compressors" (cont'd...)

COMMERCIAL EVALUATION:

Two (2) of three (3) bids were reviewed based on bidder's compliance with the Scope of the RFP and Contract terms and conditions and price. Engineering determined

Atlas Copco's... After an initial review and questions, engineering determined bid does not meet the specifications, incomplete, and non-competitive. No further consideration or commercial review was conducted.

Scales Air... Extensive questions were requested of Scales for equipment to comply with the specifications. As a result, Scales bid was deemed technically unacceptable by engineering. In addition, Scales pricing with adjustments is 29% higher than the low bidder.

Comairco...base price was low. Technical adjustments to Comairco's submittal increase bid by $10,931. This included combination starter/breaker, larger dryer to meet requirements and a third air receiver. Including these adjustments Comairco is approximately 29% low. Power consumption factor of $10,198 was applied to Comairco's pricing. Comairco offered a Performance/Payment Bond at a $2,650 additional cost. Field Service rate is $680 per day plus out of pocket (travel, subsistence) costs. Submittal of approval drawings/documents is 21 days after receipt of order. Delivery is May 15, 2006 consistent with project schedule.

Commercially, Comairco has proposed the following terms:

Payment Terms: 25% - engineering and approved drawings complete
25% - upon release to manufacture (Feb. 2006)
50% - delivery at site

Delivery: May 15, 2006

Comairco pricing is valid till June 15, 2005.

Comairco accepts the Services/Goods Purchase Conditions.

LEE COUNTY, FLORIDA
PROPOSAL OPENING FORM

RFP NUMBER 2661-SM-126

DATE 4-25-05

TITLE Air Compressor

TIME 2:30 pm

	Bidder	Proposal Date	Date Received	Unevaluated Price	Remarks
1	Scales Air	4-20-05	4-21-05	$106,236.-	
*					
*2	Comairco (Sullair)	4-22-05	4-22-05	$103,866.-	
*					
*3	Atlas Copco	4-22-05	4-22-05	$156,010.	
6					
7					
8					

OPENED BY: [signature] 4-25-05

WITNESSES: _____

_____

_____

BID ABSTRACT

Burns and Roe Enterprises, Inc.

W/O: 2661 Lee County Expansion Project
RFP 2661-SM126 Air Compressors

AIR COMPRESSORS

ITEM	QTY	UNIT	DESCRIPTION	1 Scales	2 Comairco	3 Atlas Copco	4	5
1	2	ea	Air Compressors:					
			No. 1 w/air dryer & Receiver,					
			Aftercooler, mist eliminator	$ 64,868	$ 58,756	$ 92,315		
			No.2 - Compressor only	$ 38,868	$ 43,309	$ 63,695		
			Total Freight	$ 2,500	$ 1,800	included		
			As Bid Total	**$ 106,236**	**$ 103,865**	**$ 156,010**		
			Tech Adjustment - see Tech Eval	$ 42,290	$ 10,931	not evaluated		
			Recommended Award Price	$ 148,526	**$ 114,796**	---		
				+33,730	base			
				+29%				
			Power Consumption Cost	0	$ 10,198	---		
			Total Evaluated Cost	$ 148,526	$ 124,994			
			PERFORM./PAYMENT BONDS	$ 2,650	$ 1,225	--		
			Sales/Use Tax	none	none			
			Bid Validity	n/a	6/15/2005	n/a not evaluated		
			Drawings Submitted	3-4 wks	21 days	--		
			Jobsite Delivery	5/15/2006	5/15/2006	--		
			PAYMENT TERMS	net 30	Milestones	Milestone		
			F.O.B. Delivered DESTINATION	Ft. Myers	Ft. Myers	Ft. Myers		
			TECHNICALLY ACCEPTABLE	no	yes	no		

AWARD RECOMMENDATION: **COMAIRCO**

REASON FOR RECOMMENDATION:

PREPARED BY: **D'Amico**

REVIEWED BY: **DATE:**

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

Date: May 18, 2005
By: J.Ferrero

TECHNICAL BID EVALUATION
REQUEST FOR PROPOSAL No. 2661-SM-126
AIR COMPRESSORS

SUMMARY

Request for Proposal was sent to four bidders: Garden Denver, Comairco Equipment (Sullair compressors), Scales Air Compressor (Quincy compressors) and Atlas Copco. Garden Denver declined to bid. Proposals from the other three bidders were received and evaluated.

A preliminary evaluation was performed on all proposals received. The preliminary evaluation indicated that the proposals from Comairco and Scales were substantially complete. The proposal from Atlas was incomplete. Based on the preliminary evaluation, a list of questions/comments was sent to each Bidder. The equipment initially proposed by Atlas was considerably oversized. Therefore, as a result of this, and the fact that the proposal was incomplete, Atlas needed to re-bid the entire proposal.

The full evaluation indicated that the equipment offered by Comairco was technically acceptable, and the one from Scales and Atlas was not acceptable.

TECHNICAL DISCUSSION

GENERAL

After receiving the proposals it was concluded between Covanta and BREI that a third "wet" air receiver upstream of the dryer would be advantageous for the installation. This approach provides additional surge capacity and assures a more steady flow through the dryer circuit. Therefore, bidders were requested to provide optional price for a third air receiver, identical to the two initially included in the proposal. The third receiver is included as a recommended option in this evaluation.

The compressors will be installed inside the turbine building. The specification, under project specific requirement 3.8, indicates that the source of air is from outside the turbine building. This requires ducting the outside air up to the compressors' inlet. This requirement was discussed with Covanta, and it was concluded that since the turbine building is a relatively clean area, the compressors could take suction directly from inside the building without the need of any ductwork. Refer to D. Anacker e-mail of 4/29/05 for more details. Therefore, the project specific requirement 3.8 was not taken into consideration in this evaluation, and the same should be deleted from the specification.

Similarly, since the compressors would be installed in the turbine building, Covanta indicated that, unless required for sound attenuation purposes, a compressor enclosure would not be required. BREI agrees with this approach. Comairco and Scales were requested to quote an option for the removal of the enclosure if not needed to meet

noise limits. The two bidders indicated that the enclosure was required to meet sound levels.

Both, Comairco and Scales, proposed the compressors with inlet valve modulation for flow control capability. The equipment from Atlas did not provide this feature; it would operate in a load/unload mode only.

Comairco Proposal:

The original proposal required some clarifications. With the additional clarifications, it was found that the equipment proposed by Comairco included some exceptions. After evaluating all exceptions, it is BREI's recommendation that they be accepted. For details on the exceptions refer to Attachment 2.

A combination motor starter/breaker, as required per the specification, was not included in the original proposal. It was offered subsequently as an option (considered as a price adjustment in Attachment 4).

The original mist eliminator proposed did not meet efficiency requirements. Subsequently, Comairco offered a Hankinson mist eliminator, at no extra cost, that meets the efficiency requirements. Similarly, the original dryer did not meet capacity requirements and Comairco offered a larger one, at an extra cost, to meet capacity. The mist eliminator is identical to the one proposed by Scales.

The cooling water flow required was slightly larger than the one required by Scales (66 gpm vs. 50 gpm). However, it shall be pointed out that, with 50 gpm, Scales does not meet specification requirements and BREI calculated that Scales' compressors would need approx. 75 gpm to meet specification requirements. In any case, this differential in water flow is negligible from the operating cost point of view; therefore, it has not been included as an evaluated cost in this evaluation.

The combined power consumption of compressor motor plus electric heater is 114 Kw.

Scales Proposal:

The original proposal required some clarifications. With the additional clarifications, it was found that the equipment proposed by Scales included some exceptions. After evaluating all exceptions, BREI deemed two of them as not acceptable. For details on all the exceptions refer to Attachment 2.

The original compressor proposed did not meet capacity requirements. Subsequently, Scales proposed a larger compressor that did not meet capacity either. However, it was approximately 2% short in capacity (492 scfm proposed vs. 500 scfm specified). BREI did not consider this deficiency a reason to disqualify this bidder.

The originally proposed dryer did not meet capacity requirements (600 scfm @ 110 psig and 120 °F). Scales was notified of this shortcoming. Subsequently, Scales proposed a larger dryer, at an additional cost, that still did not meet capacity. The larger dryer had a capacity of approximately 450 scfm at design conditions.

The design of the compressor's coolers is such that the cooling water outlet temperature is 125 °F. Per the specification, the maximum allowable temperature is 115 °F. If the water flow were to be increased to maintain the outlet temperature below 115 °F, it is BREI's estimate that the pressure drop throughout the coolers would exceed the maximum 10 psi specified. Consequently, BREI concluded that the coolers are not large enough.

The initial motor proposed by Scales was not from an approved manufacturer as listed in the specification. Subsequently, Scales proposed a different motor, at an additional cost, manufactured by Siemens. This is an approved manufacturer. However, Scales did not submit the corresponding motor data sheet.

Considering the above, the equipment proposed by Scales, was deemed not acceptable.

Atlas Copco Proposal:

The initial proposal from Atlas was incomplete and included an oversized compressor. Therefore, Atlas was asked to provide a complete revised proposal based on the correct compressor capacity. A preliminary review of the revised proposal submitted by Atlas revealed that it was still incomplete, filled-in Attachment 2 of SM-126 was never submitted and attachment 2 of SE-211 was submitted blank. The revised proposal included an undersized compressor and the proposed mist eliminator did not meet the maximum oil carry over limit. Further, the quoted price ($141,665.00) was approximately 25 % higher than the lowest bidder. As a result of this it was decided not to give further consideration to the Atlas proposal and concentrate in the remaining two bidders. Consequently, a full evaluation of the Atlas proposal was not performed, a summary of Atlas' exceptions and resolution was not prepared, and the total adjusted equipment cost shown in Attachment 4 shall be considered approximate.

PERFORMANCE EVALUATION

The proposals submitted indicate that the proposed equipment from Comairco would meet the required performance, which includes:

- Minimum air flow capacity at compressor discharge rated pressure of 125 psig
- Air dew point downstream of dryers
- Air pressure at outlet of after-filter
- Mist eliminator efficiency
- Pre-filter and after-filter efficiency
- Compressor's oil/hydrocarbon carryover

The equipment offered by Comairco meets the above with an additional use of power of approximately 2.8 Kw over the equipment offered by Scales (114 Kw vs. 111.2 Kw). This additional power has been taken into consideration as an evaluated cost in the pricing summary.

PRICING EVALUATION

Refer to Attachment 4 – Pricing Summary. Comairco is the lowest bidder for the equipment with the corresponding required options and the BREI's recommended options included. The total adjusted equipment cost of Comairco's equipment with the recommended options is approximately 30% less than the equipment offered by Scales. Comairco is also the bidder with the lowest evaluated cost (19% less than Scales). This difference in price between Comairco and Scales would be larger had Scales been asked to re-bid the equipment to include larger dryer and compressor coolers to meet the specification.

Although not indicated in the specification, the use of a third "wet air" receiver upstream of the dryer has been discussed between Covanta and BREI. The price of this receiver is included as a "recommended option" in Attachment 4.

RECOMMENDATION

The equipment proposed by Comairco, with the required options offered, was found technically acceptable. The equipment proposed by Atlas and Scales was found not acceptable. Although the non-conformance components of the equipment proposed by Scales could be revised to bring the entire package up to specification; considering the current price differential, it was concluded that this exercise was not necessary at this point, unless formal commercial evaluation dictates otherwise.

Comairco is the recommended bidder as the only one with technically acceptable equipment and with the lowest total adjusted equipment cost.

The equipment from Comairco must be purchased with the following required and recommended options:

- One additional air receiver (total 3 receivers. Recommended option)
- Combination starter/breaker (required option with price adjustment)
- Hankinson mist eliminator (required option, no price adjustment)
- Larger dryer (TWP1000. Required option with price adjustment)

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

Date: May 18, 2005
By: J. Ferrero JBF

TECHNICAL BID EVALUATION
REQUEST FOR PROPOSAL No. 2661-SM-126 AIR COMPRESSORS
ATTACHMENT 1 – APPLICABLE DOCUMENTS

Lee County RFP No. 2661-SM126

Burns and Roe Documents:

E-mail form D. D'Amico to Comairco, dated 4/30/05; initial questions/comments
E-mail form D. D'Amico to Comairco, dated 5/6/05; follow-up questions/comments
E-mail form D. D'Amico to Comairco, dated 5/10/05; additional questions/comments (breaker requirements and dryer size)
E-mail form D. D'Amico to Comairco, dated 5/16/05, request for revised electrical diagram

E-mail form D. D'Amico to Scales, dated 5/2/05; initial questions/comments
E-mail form D. D'Amico to Scales, dated 5/6/05; follow-up questions/comments
E-mail form D. D'Amico to Scales, dated 5/10/05; additional questions/comments (breaker requirements)

E-mail form D. D'Amico to Atlas, dated 5/2/05; initial questions/comments (request for requite

Covanta Documents:

E-mail from D. Anacker to BREI, dated 4/29/05, source of inlet air
E-mail from D. Anacker to BREI, dated 5/4/05, overall comments to proposals
E-mail from D. Anacker to BREI, dated 5/4/05, flow control comments
E-mail from D. Anacker to BREI, dated 5/6/05, comments on revised proposal from Atlas
E-mail from D. Anacker to BREI, dated 5/6/05, comment on oil/water removal requirements

Comairco Documents:

Proposal dated April 22, 2005.
E-mail to BREI, dated 5/5/05; response to initial BREI's questions/comments
E-mail to BREI, dated 5/9/05; response to follow-up BREI's questions/comments
Fax to BREI, dated 5/9/05, motor data sheet
E-mail to BREI, dated 5/11/05; response to breaker and dryer questions
Fax to BREI, dated 5/17/05, revised electrical diagram
email to BRE data sheet
Scales Documents:

Proposal dated April 20, 2005
Fax to BREI, dated 5/4/05; response to initial BREI's questions/comments
Fax to BREI, dated 5/13/05; response to follow-up BREI's questions/comments

Atlas Copco Documents:

Original Proposal dated April 20, 2005
Revised Proposal dated May 6, 2005

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

Date: May 18, 2005
By: J. Ferrero

TECHNICAL BID EVALUATION
ATTACHMENT 2 - SUMMARY OF TECHNICAL EXCEPTIONS AND CLARIFICATIONS
RFP No. 2661-SM-126 - AIR COMPRESSORS

BIDDER: COMAIRCO

Technichal Exception/Clarification	BREI Response/Resolution
The male rotor speed of proposed compressor is 2100 rpm. The specification requires maximum 1800 rpm.	Sullair air compressors are of proven reliability and should not be disqualified on the ground of exceeding the specified maximum rpm. BRE recommends this exception be accepted.
Coolers proposed are not ASME Code coolers nor have removable tube bundles.	Considering the size of the coolers, ASME Code is not required, Also, for this size coolers BREI considers that the removable tubes does not have to be a must.The entire cooler could be removed, cleaned and reinstalled without major work. BREI recommends this exception be accepted.
Purge air is approx. 7%. The Specification requires maximum 4%.	The 4% is too stringent. Available standard air purge rate for heated dryers is typically 15%, with upgraded models requiring 6%-7%. BRE recommends this exception be accepted.
The mist eliminator would be shipped loose for field installation by Others in the piping between compressor skid and air receiver.	This is an exception taken by all Bidders. The compressor skids are of a compact design and do not have extra room for additional/optional equipment. BREI recommends this exception be accepted.
Mist eliminator proposed, Sullair ME600 doer not meet efficiency requirements	Exception not acceptable. Subsequently, Comairco offered as an option mist eliminator Hankinson MM3. This eliminator meets efficiency requirements. Therefore, this exception would be resolved by exercising the option.

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 2 - SUMMARY OF TECHNICAL EXCEPTIONS AND CLARIFICATIONS
RFP No. 2661-SM-126 - AIR COMPRESSORS

BIDDER: SCALES AIR COMPRESSORS

Technichal Exception/Clarification	BREI Response/Resolution
Coolers are not ASME Code designed or stamped as per SM-126, 2.4.7.	Because the size of the coolers, ASME Code is not required, not available from the Mfr. BREI recommends this exception be accepted.
Coolers have the water in the shell.	The specification requires the water in the tube side. Considering the size of the proposed coolers, BREI recommends this exception be accepted.
The mist eliminator would be shipped loose for field installation by Others in the piping between compressor skid and air receiver.	This is an exception taken by all Bidders. The compressor skids are of a compact design and do not have extra room for additional/optional equipment. BREI recommends this exception be accepted.
Temperature gauges on dryer skid were not included.	Subsequently, Scales offered the gauges as an option. Therefore, this exception would be resolved by exercising the option.
The proposed compressor has a capacity of approximately 492 scfm at 125 psig disch. and 120 oF inlet temp. (max. temp.)	This is the second unit proposed by Scales. The first one had an approx. capacity of 445 scfm, which did not meet spec. requirement. The second unit proposed does not meet capacity (500 scfm) either; however the defficiency is approximately 2%. BREI recommends this exception be accepted.
Purge air is approx. 7%. The Specification requires maximum 4%.	The 4% is too stringent. Available standard air purge rate for heated dryers is typically 15%, with upgraded models requiring 6%-7%. BRE recommends this exception be accepted.
The temperature of CC water return would be 125 degrees F. The Specification requires maximum 115 degrees F.	This exception is not acceptable. The size of the coolers should be increased. With the proposed coolers, to maintain the maximum 115 degrees F, approximatelly 75 gpm would have to be run throughout the coolers. BREI estimated that this would result in a pressure drop of more than 10 psi, which is the maximum allowed per the Specification.
The inlet air filter is not a two stage type filter.	Scales indicated that the proposed filter, manufactured by Donaldson, is the typical standard heavy duty filter used by Scales with their Quincy compressors. BREI recommends this exception be accepted.
The capacity of the proposed air dryer is 549 scfm at 110 psig and 120 degrees F. The Specification requires the capacity to be 600 scfm.	Scales originally proposed a dryer with a capacity of approx. 370 scfm at design conditions. As a result of the non-conformance, Scales proposed a larger dryer that still does not meet specification requirements. This exception is not acceptable.

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

A. PLANT AND INSTRUMENT AIR COMPRESSOR	COMAIRCO	SCALES
Compressor Data		
Manufacture	SULLAIR	QUINCY
Model	LS200S-125HWC	QSI 540
Rated Capacity at 125 psig, ACFM scfm	587 ACFM / 500 SCFM	(1) 492 SCFM 549 ACFM
BHP at rated capacity and 125 psig	142.9	141
Male Rotor Speed (rpm)/Tip Speed (ft/sec)	(1) 2100 / 22.4	1785 23.8 m/sec
Rotor Construction	STEEL	DUCTILE IRON
Rotor Dia. In.	204 mm	255 MM
Critical Speed, rpm	N/A	3600
Max. Cont. Speed, rpm	N/A	1785
Max. Casing Temp., °F	N/A	N/A
Materials		
Casing	CAST IRON	GREY IRON
Rotor	STEEL	DUCTILE IRON
Shaft	STEEL	DUCTILE IRON
Radial Bearings: Type	ROLLER	TAPERED ROLLER
Thrust Bearings: Type	TAPERED	SPHERICAL
Seals: Type	DOUBLE LIP	TRIPLE LIP
Flange Connections		
Inlet Size/Rating	N/A	2.5" NPT
Inlet Location	PACKAGE MFD.	IN PACKAGE
Disch. Size/Rating	2" NPT	2½"
Disch. Location	PACKAGE	SEE PRINT

REMARKS

(1) EXCEPTION TAKEN. SEE ATTACHMENT 2 FOR DETAILS.

SHT 1/9

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

	COMAIRCO	SCALES
Coupling Manufacturer		REXNORD
Type	FLEX	FLEX
Size	N/A	
Lubrication	NONE.	N/A
Slide Base	N/A	N/A
Coupling Guard, (yes/no)	YES	Yes
Enclosed	YES	Yes
Open		No
Mounting		
Soleplate Compressor		FOOT MOUNT
Driver		FOOT MOUNT
Baseplate Compressor	YES	
Driver	YES	FOOT MOUNT
Foundation Bolts by		
Manufacturer		
Purchaser	X	X
Accessories		
Air Intake Filter	YES	BUILT IN
Manufacturer	SULLAIR	DONALDSON
Model	OPTIMALAIR	(1) DM Type
Type	DRY	POLYESTER
Maximum Capacity (SCFM)	1300	900 cfm 3 ea
Oil Cooler		
Type	SHELL + TUBE	(1) Shell + TUBE

REMARKS

(1) EXCEPTION TAKEN. SEE ATTACHMENT 2 FOR DETAILS.

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

	COMAIRCO	SCALES
Dimensions	N/A	4' x 6'
Weight	N/A	190 #
ASME Code Req'd	(4) NO	(4) No
CW Required (gpm)	35 ~~14 @ 80°F~~ (5)	50 GPM (1)
CW Temp. (Inlet)	~~80~~ 95 (5)	95° (2)
CW Temp. (Outlet)	~~100~~ 110 (5)	125° (4)
Pressure Drop (CW Side)	~~2 PSI~~ 4.3 psi (5)	5
Materials:		
Shell	STEEL	CI
Tube	Copper	Copper
Tube Sheet	STEEL	Al+
After cooler		
Dimensions		3' x 5'
Weight		150 #
CW Required (gpm)	25 ~~10 @ 80°F~~ (5)	(3)
CW Temp. (Inlet)	95 ~~80~~ (5)	(3)
CW Temp. (Outlet)	110 ~~100~~ (5)	(3)
Pressure Drop (CW Side)	1.7 ~~2~~ psi (5)	
Materials:		
Shell	STEEL	CI
Tube	Copper	Copper
Tube Sheet	STEEL	Al+
Moisture Separators - After cooler		
Manufacturer/Model	DH	Wright Austin

REMARKS

(1) TOTAL FOR OIL COOLER & AFTER COOLER.

(2) INLET TEMP. TO A. COOLER.

(3) SEE NOTES (1) & (2). COOLERS ARE IN SERIES, FIRST TO A. COOLER, THEN TO OIL COOLER.

(4) EXCEPTION TAKEN. SEE ATTACHMENT 2 FOR DETAILS.

(5) PER COMAIRCO E-MAIL OF 5/5/05.

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

	COMAIRCO	SCALES
Included with Cooler	YES	Yes
Maximum Capacity	1000 scfm (1)	1100 cfm
Automatic Cond. Trap/Mfr.	YES	Yes - Wright Austin
Capacity (lbs/hr)	750 scfm (1)	Enough
Air Receiver		
Vertical	YES	
Horizontal		X
Diameter	36"	
Length	96"	36"
Volume (~~cu. ft.~~)	400gal	9' ^{3}
Max. Working Pressure (psig)	150	53 FT
Hydrostatic Test Pressure (psig)	225	150
Relief Valve Size	T.B.D.	225
Set Pressure (psig)	150	1"
Drain Size	1"	150 psi
Material:		1"
Corrosion Allowance	N/A	None
Accessories to include 4½" pressure gage relief valve, drain valve, service valve and inspection openings.(yes/no)	YES (1)	Yes
Conditions @:	Capacity - SCFM	Capacity - SCFM
1st Stage Outlet	500	492 SCFM
A/C Discharge	500	(2) 492
Sep. Discharge	500	492
Rec. Discharge	500	Depends on Demand
Dryer Discharge	500	462 cfm

REMARKS

(1) PER COMAIRCO E-MAILS OF 5/5/05 & 5/9/05.

(2) EXCEPTION TAKEN. SEE ATTACHMENT 2 FOR DETAILS.

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18 ,2005
By: J.E.F.

	COMAIRCO	SCALES
Conditions @	Temperature - °F	Temperature - °F
1st Stage Outlet	185	185° F
A/C Discharge	110 ~~95 w/80~~ CW (1)	110°
Sep. Discharge	110 ~~95~~ (1)	110°
Rec. Discharge	95 ~~80~~ (1)	Lower - Depends on Ambient
Dryer Discharge	95 ~~80~~ (1)	125°F
Conditions @:	Pressure - ~~psia~~ psig (1)	Pressure - psia
1st Stage Outlet	125	140
A/C Discharge	125	140
Sep. Discharge	125	140
Rec. Discharge	125	139
Dryer Discharge	127	129
Capacity Control		
Start Stop	YES	No
Continuous Speed	YES	Yes
Dual Control	YES	Yes - Auto Demand
Piloted by		
Receiver Pressure	YES	Compressor Pkg
Purchased Inst.		No
Suction Valve Unloading		
Manual		No
Automatic	YES	No
Accessories to Include:		
Interstage Piping	YES	Yes

REMARKS

(1) PER COMAIRCO E-MAIL OF 5/5/05.

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	COMAIRCO	SCALES	REMARKS
Moisture Separator w/traps	YES	Yes	
After cooler		Yes	
Cooling Water Piping		Yes	
Sight Flow Indicators		NO	
Solenoid Operated Water Valve to Control Cooling		Yes	
Water to comp, A/C		2	
Air Intake Filter		Yes	
Dimensions, Weights			
Compressor and Base,,lbs.	4500	4500 #	
Length, inches	100	102"	
Width, inches	60	56"	
Height, inches	67	60"	
Accessories, lbs		6000	
Driver, lbs	300	750 #	
Erection Weight, lbs	4500		
Maintenance Weight, lbs	4600	1400 #	
Installation			
Indoors	YES	X	
Outdoors	NO		
Motor Starters			
NEMA Size	5	5	
Manufacturer	C-H	SIEMENS	
Acoustic Enclosure, (yes/no)	IN CONTROL PANEL	Yes	

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Date: May 16, 2005
By: J.E.F.

	COMAIRCO	SCALES
Furnish as packaged; compressor(s), after cooler(s), moisture separator(s), driver(s), receiver(s) and dryer(s) including piping interconnecting wiring and controls. (yes/no)	NO	No
Package Unit:		
Weight, lbs		N/A
Floor Space, ft²		
B. INSTRUMENT AIR DRYER		
Manufacturer	AIRTEK	
Model	TWP ~~600EB~~ 1000 (5)	HANKISON
Type	HEATED DESICCANT	EXTERNAL HEATED
Size	~~600CFM~~ 1000 SCFM @ 100psig & 100°F (5)	900 cfm (4)
Flow Circuit of Dryer		
Atmospheric		2
Split Stream		
Maximum Capacity @ given inlet conditions, SCFM	600	549 (4)
Pounds of Water removed per cycle		Depends on Demand
Linear Velocity thru bed, ft/min	455 FT/MIN	
Absorption Cycle (Time), hrs	4 Hr (2)	8 HR Cycle
Time Required for Reactivation		
Heating, hrs	~~7.5 HR~~ 3.5 Hr (2)	3½
Cooling, hrs	~~5 HR~~ 25 min (2)	
Power Required for Reactivation, kW	7.4 ~~4.5~~ AVE. (3)	12
Temperature required for Reactivation, °F	400°C	
Cooling Water Flow Rate, gpm	N/A	N/A
Purge Air or Gas Flow Rate, SCFM	42 ~~600~~ (1)	40 (1)

REMARKS

(1) EXCEPTION TAKEN ON PURGE AIR RATE. SEE ATTACHMENT 2 FOR DETAILS.

(2) PER COMAIRCO E-MAIL OF 5/9/05.

(3) FROM DRYER MFR'S DATA FOR MODEL TWP1000.

(4) EXCEPTION TAKEN ON CAPACITY: SEE ATTACHMENT 2 FOR DETAILS.

(5) PER COMAIRCO E-MAIL OF 5/11/05.

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COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

	COMAIRCO	SCALES
Type and Quantity of Desiccant in each tower,	ACTIVATED ALUMINA	ACTIVATED ALUMINA
Cross section area of desiccant bed, ft²		
Pressure drop through dryer @maximum flow, psi	≈5 psi	3
Design Pressure, psig	150	150
Overall Dimensions/Weight of Unit		
Height, inches	96"	114
Width, inches	41"	60
Length, inches	74"	87
Weight (of complete unit), lbs	2350	2900 #
Headroom required to remove heater, inches	N/A	See Dwg
Connection Size/Rating		
Gas		3" F
Cooling Water		n/a
Relief Valve Setting, psig	150	150
Remarks:		(1)
C. MIST ELIMINATORS		
Manufacturer	~~SULLAIR~~ HANKISON (2)	HANKISON
Model No.	~~ME600~~ MM3	MM3
Dimension (O.D. x L), inches	~~17.75 x 49~~	20 3/8"
Capacity, SCFM	~~600~~ 500	500
Clean Pressure Drop, psi	~~0.5 PSI~~	less than 1 psi (3)
Removal Efficiency	~~99.1 % to 1.0~~ microns 99.98% to 0.1 μ	99.98% to .1 microns (4)
DP gage, (yes/no)	YES	Yes
Type of Time Cycle Drain	TIMER	ELECTRIC

REMARKS

(1) PACKAGE WITH MOUNTED FILTERS, TOWER INSULATION, FAZ OPTION, DEW POINT MONITOR, 7 VALVE BY PASS.

(2) PER COMAIRCO E-MAIL OF 5/9/05.

(3) PER SCALES FAX OF 5/5/05.

(4) FROM MFR'S DATA.

CUT R/O

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

TECHNICAL BID EVALUATION
ATTACHMENT 3 - TECHNICAL COMPARISON
RFP No. 2661-SM-126 - AIR COMPRESSORS

Date: May 18, 2005
By: J.E.F.

	COMAIRCO	SCALES	REMARKS
D. AIR DRYER FILTERS			
Coalescing Prefilter			
Manufacturer	AIRTEK	HANKISON	
Model No.	JT0600-C	HFS-54-24	
Capacity, SCFM	600	1000	
Clean Pressure Drop, psi	2	1	
Removal Efficiency	99.99% to 0.01 microns	99.9% to .01 microns	
DP gage, (yes/no)	YES	Yes	
Type of Time Cycle Drain	TIMER	ELECTRIC	
Afterfilter			
Manufacturer	AIRTEK	HANKISON	
Model No.	JT0400F	HTA 1200	
Capacity, SCFM	664	1200	
Temperature Rating, ° F	450	450°F	
Clean Pressure Drop, psi	1	1	
Removal Efficiency	99.9% to 1 microns	99.9 % to 1 microns	
DP gage, (yes/ no)	YES	Yes	

COVANTA LEE COUNTY
LEE COUNTY RESOURCE RECOVERY FACILITY
WASTE TO ENERGY EXPANSION PROJECT

Date: May 18, 2005
By: J.Ferrero

TECHNICAL BID EVALUATION
ATTACHMENT 4 – PRICING SUMMARY
RFP No. 2661-SM-126 - AIR COMPRESSORS

	COMAIRCO	SCALES	ATLAS (Revised Bid)
Base Price	$103,866.00 (1)	$106,236.00 (1)	$137,990.00 (2)
Price Adjustments:			
Required Quoted Options:			
Temperature gauge on dryer skid	(Incl. in Base Price)	$400.00	(Incl. in Base Price)
Larger compressor size to meet capacity	(Not required)	$17,100.00	(Not quoted) (3)
Combination motor starter/breaker	$2,465.00	$1,700.00	(Incl. in Base Price)
Larger dryer size to meet capacity	$6,541.00	$7,800.00 (5)	
Motor Mfr. as per Spec.	(Incl. in Base Price)	$13,000.00	
SUBTOTAL (Required Options)	$9,006.00	$40,000.00	$0.00
Recommended Options:			
Third Air Receiver	$1,925.00	$2,290.00	$3,675.00
TOTAL ADJUSTED EQUIPMENT COST (with required and recommended options)	**$114,797.00**	**$148,526.00**	**$141,665.00** (2)
Evaluated Costs:			
Power Consumption (4)	$10,198.00	$0.00	
TOTAL EQUIPMENT EVALUATED COST (with required and recommended options)	**$124,995.00**	**$148,526.00**	
Other Offered Options:			
ASME Code coolers	$11,549.00	(Not offered)	

NOTES: (1) Includes transportation cost, FOB delivered jobsite.
(2) Price shall be considered approximate since a full evaluation was not performed on this bidder; other costs may be applicable.
(3) The compressor offered in the revised Bid was undersized. The compressor offered with the original Bid was oversized and the total cost was approximately $160,000.00.
(4) The evaluated cost for power has been assesed at $3,642.00 per KW.
(5) Proposed dryer still does not meet specification requirement

Lindsey Sampson - Air Compressor/Bid Evaluation - Selection & Recommendation SM-126

From: "Young,Peter" <pyoung@CovantaEnergy.com>
To: <SAMPSOLJ@leegov.com>, "D'Amico,Don" <ddamico@roe.com>
Date: 6/3/2005 12:06 PM
Subject: Air Compressor/Bid Evaluation - Selection & Recommendation SM-126
CC: "Stuhrke,Steve" <sstuhrke@roe.com>, "Dennis Iavarone" <diavarone@roe.com>, "Anacker,Dennis" <danacker@CovantaEnergy.com>, "Howard,Jody" <Jody_Howard@CovantaEnergy.com>

Gentlemen,

Based on B&R's Air Compressor Bid Evaluation, dated May 20, 2005, received by Covanta on May 23, 2005, Covanta concurs with B&R's selection and recommendation to purchase the subject package from Comairco. The following comments are for your consideration and guidance:

1. Commercial Terms & Conditions – Vendor has accepted the RFP Services/Goods Purchase Conditions, therefore requiring no further negotiations by the County.
2. Price: Covanta concurs with B&R's recommended options/adjustments and Recommended Award Price of $114,797.
3. Bond: Vendor quoted a bond for County's consideration. This is an equipment delivery only order, therefore County does not require a bond and is not included in the recommended award.
4. Payment Terms: 25% for drawings; 25% upon release to manufacturer (Feb. 2006); and 50% upon delivery to site.
5. Schedule: Delivery Date of May 15, 2006 is two weeks later than that required by Project's Master Project Schedule. **Don D'Amico is requested to have Vendor confirm a delivery date of May 1, 2006.**

B&R should proceed immediately in completing and submitting 1) a purchase order term sheet that reflects the final agreements and understandings to be incorporated into the purchase order, and 2) a conformed specification, with all data sheet data filled-in, for inclusion in the purchase order.

B&R's original and current schedule for issuing this PO is May 31, 2005 and June 28, 2005, respectively. **Covanta recommends that the County have this award approved by the BOCC no later than the June 28, 2005 BOCC Meeting to avoid the July BOCC recess.**

Peter

Lee County Resource Recovery Facility Expansion Project
ATTACHMENT A (to equipment purchase orders)
TECHNICAL DOCUMENT REQUIREMENTS

Document	Electronic File in pdf form	Hard copies	Recipient
Review Dwgs	1 *** 0 0		B&R Covanta DC*** Covanta FM County/Purchaser
Final Record Dwgs (Certified) Additionally, Seller shall provide one (1) CD containing all Certified Drawings to Covanta's Facility Manager with a copy of the Transmittal to Covanta's Document Control Department. Such CD files shall allow a complete drawing to be printed without assembling layers.	1 1 1 1 1 0	 1 1 1 0	B&R Covanta DC Covanta CM Covanta FM GC County/Purchaser
Draft Installation, Erection, O&M Manual for Review		1	B&R
Final Installation, Erection, O&M Manuals * (required 4 weeks prior to shipment) Additionally, Seller shall provide one (1) CD containing the O&M Manual (electronic file) to Covanta's Facility Manager with a copy of the Transmittal to Covanta's Document Control Department.		7 1 2 1 1 0	B&R Covanta DC Covanta CM Covanta FM GC County/Purchaser
Packing List – 4 weeks prior to shipment	1 0 1 0 1 1		B&R Covanta DC Covanta CM Covanta FM GC County/Purchaser
Spare Parts List submitted at the same time as Certified Drawings are submitted, complete with prices ** (in addition to those to be supplied w/ O&M Manuals)	1 1 1 3 0 0		B&R Covanta DC Covanta CM Covanta FM GC County/Purchaser

* One print of each certified drawing and a priced spare parts list shall be included in the Operation & Maintenance Manual

** Complete priced spare parts list is to be submitted for one (1) year of operation; prices firm for one (1) year.

***A copy of Seller's/supplier's transmittal document only must be sent to Covanta's Document Control Department simultaneously with all technical documents submitted to others.

DC = Document Control
CM= Covanta's Construction Manager located at the jobsite (Facility site)
FM= Covanta's Facility Manager located at the Facility site

Lee County Resource Recovery Facility Expansion Project
ATTACHMENT A (to equipment purchase orders)
TECHNICAL DOCUMENT REQUIREMENTS

GC=General Contractor located at the jobsite (Facility site)