

**Subject:** Authorize the City Manager to Execute a Contract for the purchase of a customized, diesel fired, Pennram model TRU-1100 thermal reduction unit rated 1100 lbs/hr. and equipment for loading it

Agenda of: **March 13, 2013**

Council Action:

Manager: Recommend approval.

City Manager: Rose Loera  
Rose Loera

Route To:	Department / Individual	Initials	Remarks
X	Finance / Carol Shade	CS	
X	Public Works Director / Francisco Garcia		
X	City Clerk / Janice Williams	JW	

Fiscal Note: Yes X No \_\_\_\_\_ Funds Available: Yes X No \_\_\_\_\_

**Other Attachment(s):**

- Technical Supporting Information
- Spreadsheet Comparing Bids

**Summary Statement.**

The purpose of this Action Memorandum is to authorize the Mayor or City Manager to execute a contract for the purchase of a customized, diesel fired, Pennram model TRU-1100 thermal reduction unit rated 1100 lbs/hr. and equipment for loading it to be used to incinerate municipal waste at the Dillingham Landfill. The cost for the system, equipment, technical support plus the freight is approximately \$613,181. The execution of the contract is contingent upon a site visit to the Pennram factory in Williamsport, Pennsylvania and a satisfactory inspection of the equipment. The site visit will be done by the City Manager, Council Member and an engineer from CH2M Hill. The site visit is a prudent thing to do, before the expenditure of these funds.

The thermal conversion system project had two Requests for Proposals (RFP) that was advertised in November and the RFP was re-advertised in January and we received three bidders. The first RFP had one responsive bidder with a fuel consumption that was not acceptable. The second RFP required fuel consumption less than 75 gallons a burn and we had three responses from this RFP. The responses are included in the "Other Information" section of your packet.

According to City of Dillingham Ordinance the RFP's were publically advertised for 30 days and five individuals, including one council member, reviewed and ranked the proposals. The companies responding to the bids included Eco Waste Solutions, Penram and Inciner8. Copies of their initial bids are in the packet.

The criteria that was used to rate the bids is as follows:

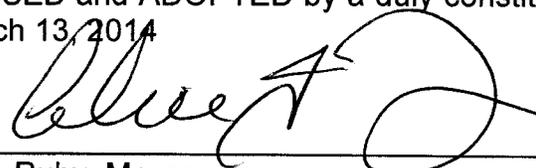
- **5-year cost** – included in the 5 year cost was Capital, technical services, diesel fuel and spare parts.
- **Emissions** – Capability to meet ADEC requirements.
- **Materials of Construction** – Steel shell thickness, refractory type and thickness
- **Ease of Operation** – Method of loading waste and removing ash, method of operation and automatic control system
- **Delivery Schedule** – Lead time prior to shipping to include engineering, queue time and fabrication. Did not including shipping
- **Service Capabilities** – Perceived ability to provide technical support and replacement parts.

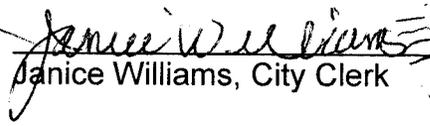
The initial review was done on 2/19 and final on 2/21. After the initial review there were questions that needed to be clarified from each of the bidders and a set of questions were sent to them to explain areas that were not clear in their response. Following was the initial scoring from the committee.

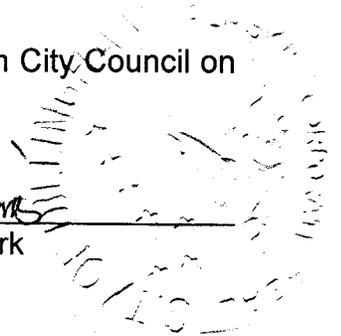
Criteria	Eco Waste	Penram	Inciner8
5 year Cost	65	60	125
Emissions	69	69	63
Materials of Constr.	45	72	54
Ease of Operation	80	68	88
Delivery Schedule	42	33	75
Service Capabilities	40	42	40
<b>Total</b>	<b>341</b>	<b>344</b>	<b>445</b>

Inciner8 received the highest score initially but did not provide the performance guarantees. Once they provided the performance their fuel consumption changed from 75 gallons to 200 gallons a burn. So we started to negotiate with Penram and they were able provide us a 2<sup>nd</sup> bid with a smaller unit and less fuel consumption. Attached is spreadsheet showing the cost comparison for all the bidders over a 10 year time frame.

PASSED and ADOPTED by a duly constituted quorum of the Dillingham City Council on March 13, 2014

  
 \_\_\_\_\_  
 Alice Ruby, Mayor

ATTEST:  
  
 \_\_\_\_\_  
 Janice Williams, City Clerk



**City of Dillingham  
Fiscal Note**

Agenda Date March 13, 2014

Request: \_\_\_\_\_

ORIGINATOR: Carol Shade

FISCAL ACTION (TO BE COMPLETED BY FINANCE)		FISCAL IMPACT <input type="checkbox"/> YES <input type="checkbox"/> NO	
AMOUNT REQUESTED: <p align="right">\$ 663,181.00</p>		FUNDING SOURCE <p align="center"><b>State of Alaska Grant</b></p>	
FROM ACCOUNT 4470 7620 30 81 3811 0 <p align="right">\$ 663,181</p>		Project <p align="center">Landfill Regulatory Compliance Improvements (Oxidation System)</p>	
TO ACCOUNT:	VERIFIED BY: Carol Shade	Date:	3/13/2014

**EXPENDITURES**

OPERATING	FY14	FY15	FY16	FY17
Personnel				
Fringe Benefits				
Contract				
Major Equipment				
Land/Buildings				
Miscellaneous				
<b>TOTAL OPERATING</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

CAPITAL	\$ 663,181.00	*		
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\* includes \$50K for 3-Phase Service for the Project

REVENUE				
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**FUNDING**

General Fund				
State/Federal Funds	663,181.00			
<b>TOTAL FUNDING</b>	<b>\$ 663,181.00</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

**POSITIONS**

Full-Time				
Part-Time				
Temporary				

ANALYSIS: (Attach a separate page if necessary)

See Action Memorandum 2014-02

PREPARED BY: Carol Shade

March 13, 2014

DEPARTMENT: Finance Department

March 13, 2014

## Technical Supporting Information

### RFP 14-01 Municipal Waste Thermal Conversion System – 2014

The following table is a summary of technical information compiled by CH2M HILL from vendor responses, to be used by City of Dillingham selection committee for scoring bids.

No.	Evaluation Criterion	Description	Technical Information/ Comments	Reference
1	5-Year Cost	Capital + tech services + diesel fuel + spare parts	Compiled from bids	Bid forms
2	Emissions	Capability to meet ADEC requirements: <ul style="list-style-type: none"> <li>• Clean burn (&lt;20% stack opacity)</li> <li>• No particulate matter criteria because of unit throughput</li> <li>• Does not exceed minor source limits</li> <li>• Two-chamber design with sufficient residence time and temperature in oxidizer to destroy volatile organic compounds (VOCs)</li> </ul>	All three systems are expected to meet these requirements.  EWS: 1 sec @1,562 or 1,800F Pennram: 1 sec @ 1,600-1,800F Inciner8: 2 sec @ 1,562F  Confirm VOC emissions with estimation, modeling, or stack testing as required	18 AAC 50.050, 18 AAC 50.502  Bid technical information
3	Materials of Construction	Steel shell thickness, refractory type and thickness	EWS: 6mm(1/4") steel, 6" refractory, reinforced castable (preferred) on floor, ceramic fiber blocks (inferior) on walls  Pennram: 3/8" steel, 5" castable refractory + 1" board insulation  Inciner8: 5mm anodized steel, 10 cm (4") castable refractory	Bid technical information
4	Ease of Operation	Method of loading waste and removing ash, method of operation, automatic control system	EWS: top load and front ash removal, batch operation  Pennram: front load and ash removal, batch operation  Inciner8: top load hot, top ash removal, semi-continuous operation	Bid technical information, site visit information
5	Delivery Schedule	Lead time prior to shipping. Includes engineering, queue time, and fabrication. Does not include shipping.	EWS: 20-24 weeks Pennram: 26-34 weeks Inciner8: 8 weeks	Bid information
6	Service Capabilities	Perceived ability to provide technical support and replacement parts	EWS: Ontario, Canada  Pennram: Pennsylvania, USA  Inciner8: Southport, United Kingdom	Vendor location and correspondence during bid period

**Dillingham TCS, RFP 14-01 Submittals  
Supplier Cost Comparison**

Supplier	Year 1-1		Year 1-2		Year 1-3		Year 1-4		Year 1-5		Year 1-6		Year 1-7		Year 1-8		Year 1-9		Year 1-10		
	Capital	Diesel*																			
<b>Eco Waste Solutions</b>																					
11 ton system w/1 burner	\$1,045,561	\$61,454	\$64,527	\$67,753	\$71,141	\$74,698	\$78,433	\$82,354	\$86,472	\$90,796	\$95,335	\$99,974	\$104,717	\$109,566	\$114,515	\$119,464	\$124,413	\$129,362	\$134,311	\$139,260	\$144,209
<b>Total All @ 75 gal. diesel</b>	\$1,107,015		\$1,171,542		\$1,239,295		\$1,310,435		\$1,385,133		\$1,463,566		\$1,545,920		\$1,632,392		\$1,723,187		\$1,818,523		\$1,918,859
<b>Pennram 1st Bid</b>																					
2 ea. 5.5 ton system w/ 1 burner 3 phase power telehandler (loading) addl. Tech support	\$610,061	\$90,132	\$94,639	\$99,371	\$104,339	\$109,556	\$115,034	\$120,786	\$126,825	\$133,166	\$139,824	\$146,641	\$153,604	\$160,713	\$167,967	\$175,365	\$182,908	\$190,596	\$198,429	\$206,407	\$214,532
<b>Total All @ 110 gal. diesel</b>	\$990,913		\$1,025,552		\$1,124,922		\$1,229,261		\$1,338,817		\$1,453,851		\$1,574,637		\$1,701,461		\$1,834,627		\$1,974,452		\$2,124,884
<b>Pennram 2nd Bid</b>																					
2 ea. 2.5 ton system w/1 burner telehandler (loading) addl. Tech support 3 phase power Fuel tank spare parts	\$551,461	\$58,177	\$61,086	\$64,140	\$67,347	\$70,715	\$74,250	\$77,963	\$81,861	\$85,954	\$90,252	\$94,750	\$99,349	\$104,048	\$108,847	\$113,746	\$118,745	\$123,844	\$129,043	\$134,342	\$139,741
<b>Total All @ 71 gal. diesel</b>	\$721,358		\$785,197		\$849,337		\$916,684		\$987,399		\$1,061,649		\$1,139,612		\$1,221,473		\$1,307,426		\$1,397,678		\$1,492,930
<b>Inciner8</b>																					
2 ea. 5.5 ton systems w/2 burners 2 ea. hydraulic rams (loading)	\$322,429	\$163,878	\$172,072	\$180,675	\$189,709	\$199,195	\$209,154	\$219,612	\$230,593	\$242,122	\$254,229	\$266,812	\$279,870	\$293,399	\$307,397	\$321,855	\$336,772	\$352,049	\$367,686	\$383,684	\$399,132
<b>Total All @ 75 gal. diesel</b>	\$523,883		\$588,410		\$656,163		\$727,303		\$802,001		\$880,434		\$962,788		\$1,049,260		\$1,140,055		\$1,235,391		\$1,335,523
<b>Total All @ 200 gal. diesel</b>	\$626,307		\$798,379		\$979,054		\$1,168,764		\$1,367,958		\$1,577,113		\$1,796,725		\$2,027,318		\$2,269,440		\$2,523,669		\$2,792,902

\*Diesel calculated @ \$4.29 gal with a 5% increase each year and based on 122 daily burns during the summer season, and 69 burns during the winter season (only 2X a week) = Total 191 burns/year

- summer season is May 15-September 15, a total of 122 days or 122 burns

- winter season is 243 days/7 days a week X 2 burns a week = 69 burns

All meet DEC requirements