

## ADDENDUM NO. 1 Issued March 3, 2008

TO

## "REQUEST FOR BIDS FOR OPERATION AND MAINTENANCE OF THE SHELTON LANDFILL GAS COLLECTION SYSTEM AND THERMAL OXIDIZER STATION" (Bid Number FY08-EN-005) (RFB Issued February 4, 2008)

**Note:** Proposers 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) responses to questions that were raised at the pre-bid conference and site tour on February 14, 2008 and to questions that were submitted in writing to CRRA by February 22, 2008, the deadline for questions specified in the RFB Package Documents. Attached to the Addendum is a list of the individuals that attended the pre-bid conference and site tour.

1.	Question	Would it be possible to extend the bid date one week to complete the bid preparation after the addendum is issued and leave enough time to acquire the bid bond?
	Answer	CRRA is hereby changing the <b>Bid Due Date</b> from Friday, March 7, 2008 to <b>Friday, March 14, 2008</b> .

2.	Question	Who is the current contractor for operation and maintenance of the Shelton Landfill gas collection system and thermal oxidizer station?
	Answer	The current contractor is SCS Field Services.
3.	Question	Can the routine work be broken up so that the perimeter system is maintained one week and the central system the following week?
	Answer	No, the central system must be maintained on a weekly basis.
4.	Question	In reference to the auto-dialer for alarms associated with the system, what organization is called first?
	Answer	The auto-dialer calls the contractor first.
5.	Question	Clarify the two-hour limit on the dispatch time.
	Answer	The contractor must have someone on site within two hours of receiving the call.
6.	Question	How frequently must the gas condensate be pumped from the storage tanks?
	Answer	While the frequency varies based on many factors, pumping frequency averages about once per month.
7.	Question	What is the largest size polyethylene pipe in the system?
	Answer	The largest size polyethylene pipe in the gas collection system is 12-inch diameter pipe.
8.	Question	Does CRRA have equipment for emergency repairs to the polyethylene pipe?
	Answer	No, CRRA does not have such equipment. The successful bidder will be required to provide such equipment.
9.	Question	Is there a separate pressure monitor for the perimeter system?
	Answer	No, there is not a separate pressure monitor for the perimeter system.
10.	Question	How much maintenance is required on the system?
	Answer	The gas collection system at the Shelton Landfill is a very dynamic system. It requires frequent adjustment and maintenance.
11.	Question	How many people are needed to provide the services required by the Contract Documents?

	Answer	Each bidder must determine on their own the number of people that will be
		needed to provide the services required by the Contract Documents.
12.	Question	In Item 1 under the heading "Contractor's General Responsibilities" in Exhibit A, "Scope of Services," to the Agreement, the following appears:
		"Contractor shall be familiar with all applicable regulations, statutes, orders, permits and any other requirements to which the facility is subject and shall have responsibility for maintaining continuous compliance with all applicable environmental and operational requirements."
		The statement is very broad and could be construed to include compliance with environmental requirements not applicable to the gas collection and control system. Only "Permit to Construct and Operate" No. 0091 issued on April 26, 2002 by the Connecticut Department of Environmental Protection Bureau of Air Management is listed. Provide a list of all other applicable regulations, statutes, orders, permits and other requirements that apply to this project.
	Answer	The statement referenced from Exhibit A is included in the Scope Of Services to remind the contractor of its responsibility to maintain compliance with other applicable regulations, statutes, orders, permits or other requirements. The contractor is responsible for determining which of those is applicable.
13.	Question	Does Permit No. 0091 have a periodic compliance testing requirement and is this work included in the Scope Of Services for this RFB?
	Answer	Part IV. D. of Permit No. 0091 specifies a compliance demonstration test be conducted every five years. This work is <u>not</u> included in the Scope Of Services for this RFB.
14.	Question	The phrase "Contractor shall, not less than weekly" first appears in the description of Task 1 of the Scope Of Services and is used again in Task 1.1 and 1.2 to characterize the frequency of the routine services described in those sections. This statement is vague and does not define what is expected of the Contractor with regard to the number of visits included in the scope of routine operation and maintenance services. Since the routine services described in these sections are part of the lump sum bid prices contained in Item 1 of the Bid Price And Payment Rate Schedule Form, please clarify the exact number of routine visits that CRRA wishes the Contractor to include in its lump sum bid price for Routine Operation and Maintenance. Since CRRA has many years of operational history with the current system, the number of visits it expects to be included in the Routine Operation and Maintenance should be well established.
	Answer	CRRA expects the contractor to visit the site a minimum of once per week. It is up to the contractor to decide how many hours it will need to perform the work, and how those hours are distributed throughout the week.

15.	Question	Task 1.1c of the Scope Of Services states that "The target value for CH <sub>4</sub> in the perimeter wells 0%." This statement appears to be contradicted in the instructions provided later in the same section that seems to indicate that a range of 2% to 10% is the desired target range. Please clarify what is required of the Contractor. It appears that, if the perimeter wells were operated down to 0%, it may be difficult to sustain the flare operation.
	Answer	The target concentration for methane in the perimeter wells is 0%. Based on previous experience, a concentration of between 2% and 10% in the perimeter wells generally does not result in off-site gas migration issues, which is why no adjustment to vacuum is recommended in those instances. Although CRRA has provided these guidelines for well adjustment, the priority is preventing off-site landfill gas migration. Contractor shall make whatever adjustments are necessary to the perimeter wells to ensure no landfill gas migrates off-site. At the same time, Contractor must be cognizant of the landfill gas quality to the flare and make adjustments to optimize flare operation so vacuum can be maintained on the wellfield while continuing to combust the gas.
16.	Question	Task 1.3, "Routine Maintenance," of the Scope Of Services is part of the Gas Collection System Operations and Maintenance – Routine Services section. The section states the following:
		"Contractor shall complete any routine maintenance to the system as needed to assure optimum system performance at all times."
		This is a very broad statement and is not supported by any examples or list of what may be included in this section. The collection system does not have any moving parts or equipment associated with it so there would generally not be any routine maintenance that might be required to keep it operational. The types of maintenance issues that generally arise with landfill gas collection systems are generally considered non-routine repairs to hoses, wellheads, valves, heat tracing and pipe damage. Please provide specific work items that CRRA wishes to include in the routine maintenance of the gas collection system, if any.
	Answer	Routine Maintenance listed in Task 1.3 is for work such as tightening pipe connections or replacing sampling ports.
17.	Question	The Scope Of Services does not describe any services that may be required that are associated with gas header pipe condensate drains and pumps. Are these features present in the Shelton Landfill gas collection system?
	Answer	Required work is described in Attachment 4 to the Scope of Services, "Shelton Landfill Blower Flare Station Routine Maintenance Schedule/Log." This document lists in its "Component" column "Condensate Knockout", "Sump Pump", and "Condensate Tanks". These components are part of the condensate drainage system and are located at the flare station. The knockout is located

	Answer	Yes.
19.	Question	In Task 2 of the Scope Of Services, the term "repair" is introduced to describe some of the services in this section along with operation and maintenance requirements, such as in items "f," "g" and "h." Can we assume that repairs that can normally be completed within the course of routine visits are included in the lump sum price and that repairs that require extra days on-site and the purchase of parts and supplies or require outside contractors are not included in the lump sum bid price for Item 1 in the Bid Price And Payment Rate Schedule Form?
	Answer	CRRA is aware that both the flare and the blowers are operating at the low end of their respective ranges. CRRA is working with a consultant to develop a long-term plan to manage the gas system, which may involve the modification of the flare, blowers, or some other aspect of the system. The Operation and Maintenance Contractor may or may not be involved with analyzing, planning or implementing a course of action. Any such work performed by the Contractor would be paid by CRRA as a Non-Routine service.
		"The thermal oxidizer can operate with a broad range of central and perimeter gas flows, but may require adjustments as those flows vary over time."  This statement appears to be inconsistent with our understanding of the current actual operating conditions. It is our understanding that the blower is throttled down to approximately 300 scfm, from a maximum design flow rate of 900 scfm. This would indicate that the blower is currently operating at the lower end of its safe operating range based on our experience. The flare is rated for a maximum of 17 MMBtu/hr and is currently operating around 3 MMBtu/hr, which is very close to the low operating condition of around 2.8 MMBtu/hr for this unit. It is clear from both of these conditions that there is very little margin for error with the collection system balancing and operation. As gas production continues to decline, the ability to maintain the current blower/flare configuration will become less routine and more reactive to system shutdown and alarm conditions. In the event that this becomes an issue, will CRRA be requesting that the Contractor provide recommendations to correct the problem of the non-routine services covered by this contract?
18.	Question	Task 2, "Thermal Oxidizer Station Operations and Maintenance – Routine Services," of the Scope Of Services contains the following:
		just upstream of the LFG blowers. Liquid drains from the knockout into a sump. The sump contains a pneumatic pump that is driven by an air compressor. The pump discharges the condensate into the flare station condensate tank. Another condensate tank exists in the northwest corner of the site near perimeter well 32. Condensate from a portion of the perimeter collection system drains to that tank.

20.	Question	In reference to Task 3.3, "Off-Site Monitoring Probes," of the Scope Of Ser-
		vices, please describe the probes. What type of surface cap do they have and is there tubing inside the probe that can be connected to a landfill gas analyzer? When the probes are buried under snow and ice from plowing operations along the road, is the Contractor required to excavate the snow and ice to access the probes as part of routine services?
	Answer	The Off-Site Monitoring Probes referenced in Task 3.3 are not all the same. They are generally shallow probes (+/- 36" deep). Some of the probes are simply small diameter piping into the ground with no sample port connection. Others have quick connect couplings compatible with a Gem 2000 landfill gas analyzer. With regard to probes buried under snow and ice, the Contractor is required to excavate the snow and ice to access the probes as part of routing services. However, experience has shown that the probes are not in a position where they are buried because of plowing operations.
21.	Question	Task 3, "On-Site and Off-Site Landfill Gas Migration Monitoring," of the Scope Of Services states the following:
		"Contractor shall perform on and off-site perimeter and structure landfill gas migration monitoring as outlined herein and further detailed in the Ellington Landfill Gas Monitoring Plan by Malcolm Pirnie, April 2000."
		The referenced document appears to be incorrect for this RFB. Should the referenced document be "Landfill Gas Systems Operations and Gas Migration Monitoring Plan by SCS Engineers, PC, February 27, 2002?" Can CRRA provide a copy of this document to all bidders?
	Answer	The referenced document should be "Landfill Gas Systems Operations and Gas Migration Monitoring Plan by SCS Engineers, PC, February 27, 2002." A pdf copy of the monitoring plan is posted on CRRA's website along with this Addendum
22.	Question	In reference to Task 3.5, "Contingency Off-Site Gas Monitoring (if required)," of the Scope Of Services, can we assume that the services described in this task are not included in the lump sum bid price for Item 1 in the Bid Price And Payment Rate Schedule Form?
	Answer	Yes, any services involved in implementing contingency off-site gas migration monitoring would be non-routine.
23.	Question	In reference to Task 4.3, "Emergency Generator Operation and Maintenance," of the Scope Of Services, can we assume that the cost for ultra low sulfur diesel fuel is not included in the lump sum bid price for Item 1 in the Bid Price And Payment Rate Schedule Form?
	Answer	Yes, fuel for the emergency generator would be purchased by the contractor

		and passed through to CRRA in the same way as the flare pilot fuel, with no markup to CRRA.
24.	Question	In reference to Task 5, "Material and Spare Parts Inventory," of the Scope Of Services, can we assume that all of the materials and parts listed in this task are not included in the lump sum bid price for Item 1 of the Bid Price And Payment Rate Schedule Form?
	Answer	Yes, any spare parts would be purchased by the contractor and passed through to CRRA. The markup on such purchases will be provided by each bidder in "Section 3" of the "Bid Price and Payment Rate Schedule Form." The markup rate of the selected bidder will be incorporated into "Exhibit B" of the Agreement.