

**SALEM COUNTY IMPROVEMENT AUTHORITY**

**RESOLUTION 2020-63**

**July 9, 2020**

**RESOLUTION OF THE SALEM COUNTY IMPROVEMENT  
AUTHORITY AUTHORIZING SCS ENGINEERS TO PLAN AND  
DESIGN THE LANDFILL GAS SYSTEM INFRASTRUCTURE**

**WHEREAS**, there exists a need for the planning and design for a future gas system infrastructure that will be required in Cell 10 and future cells; and

**WHEREAS**, pursuant to Resolution 2020-35, SCS Engineers ("SCS") has submitted qualifications and was approved by the Board through a fair and open process to render the type of engineering services identified in this project; and

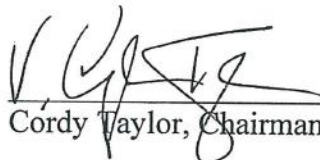
**WHEREAS**, SCS has submitted a proposal outlining and detailing the work to be performed and the cost of same, a copy of which is attached hereto and made a part of this resolution by way of reference as Exhibit A.

**WHEREAS**, funds are available in the full amount of the work to be performed pursuant to the proposal submitted by SCS.

**NOW, THEREFORE, BE IT RESOLVED** by the governing body of SCIA that SCS Engineers is hereby authorized to proceed with the gas infrastructure planning and design as outlined in the proposal attached hereto as Exhibit A.

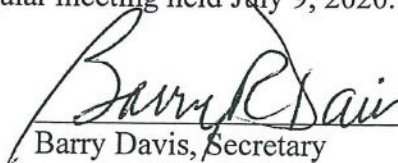
ATTEST:

  
\_\_\_\_\_  
Barry Davis, Secretary

  
\_\_\_\_\_  
Cordy Taylor, Chairman

**CERTIFICATION**

I hereby certify the above to be a true copy of a resolution adopted by the Salem County Improvement Authority Board at their regular meeting held July 9, 2020.

  
\_\_\_\_\_  
Barry Davis, Secretary

June 3, 2020  
File No. 02218820.01

Ms. Julie Acton, Executive Director  
Salem County Improvement Authority  
52 McKillip Road, PO Box 890  
Alloway, New Jersey 08001

Subject: Cell 10 Gas System Infrastructure Planning and Design Proposal

Dear Julie,

As discussed during our call on 5/27/20, we have developed a scope and budget for developing plans for future gas system infrastructure that will eventually be required in Cell 10 and future cells. It was decided during the call that such infrastructure, particularly the perimeter header, will not be included in the Cell 10 construction soon to commence.

## Objectives

The objectives of this work are to identify and plan for the gas collection system infrastructure that will be needed as the landfill grows and ultimately reaches final grades. This includes Cell 10 and also other future cells since a perimeter gas header around the entire landfill is recommended. The focus of the planning design will be for gas conveyance through primary headers piping and liquids management from these headers. Future gas wells and other types of collectors will not be included as the location of these components needs to be developed in conjunction with actual waste filling configuration and waste composition.

## Approach

To accomplish these objectives, we propose to perform the following tasks:

1. Prepare a landfill gas generation model that considers future landfill expansions to confirm the necessary header sizing.
2. Layout perimeter header for existing landfill footprint, including Cells 10, 11, and 12 to complete the circuit around the site.
3. Identify location for larger pipe to carry combined gas flows from the landfill to the flare station. The current pipe under the road by the flare is undersized for future gas flows.
4. Detail location of the header relative to other landfill features (anchor trench, berm, swales, access roads, and leachate pump stations).
5. Identify header low points requiring condensate sumps and to where they will discharge (typically, the nearest leachate management system component). We will run profiles internally to identify approximate low points, but profiles will not be included in the drawings to be submitted.
6. Develop general leachate system connection details for collecting gas from the same.
7. Prepare a cost estimate for the Cell 10 portion of the work.

## Work Products

The work products for this project will include the following:



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- Design Criteria Memorandum to present the basis of design.
- Plans showing the infrastructure layout and details. We anticipate three drawings: the site plan and two sheets for details.

Draft drawing will be submitted to you and the landfill design engineer for review and comment. We will discuss comments and make revisions as appropriate to develop a final set of drawings. Note that these will not be construction level drawings, but sufficient for planning and budgeting purposes. At the appropriate time, the plans would be incorporated as appropriate into a more detailed set of construction drawing required for future phases of gas system installation.

### **Budget**

SCS proposes to perform these services for the fixed fee of \$10,946. This amount is based on the budgetary fee estimate shown Attachment A.

If you have any questions or desire further information, please call Eric at 609-654-4000.

Sincerely,



Christopher Woloszyn  
Project Professional  
SCS Engineers



Eric R. Peterson, PE  
Project Director  
SCS Engineers

**ATTACHMENT A**  
**Salem County Improvement Authority Gas Infrastructure Design**  
**BUDGETARY FEE ESTIMATE**

	Rate (\$/Hr)	Task 1 Gas System Infrastructure	Total
<b>Personnel (hours)</b>			
Project Director	217	20	\$ 4,340
Project Manager	160	0	\$ -
Senior Project Professional	135	4	\$ 540
Project Professional	120	46	\$ 5,520
Staff Professional/Designer	95	0	\$ -
Technician	74	0	\$ -
Administration	55	4	\$ 220
Subtotals (hours)		74	74
Subtotals		\$10,620	\$10,620
<b>Other Direct Costs</b>			
Mileage/Truck		\$0	\$0
Computer/communications		\$296	\$296
Rental Car		\$0	\$0
Field Instruments		\$0	\$0
Subtotals		\$296	\$296
General and Administrative	10%	\$30	\$30
Totals, by task		\$10,946	
<b>TOTAL FEE ESTIMATE, USD</b>			<b>\$10,946</b>