

**SALEM COUNTY IMPROVEMENT AUTHORITY
RESOLUTION 2022-48
APRIL 14, 2022**

**RESOLUTION OF THE SALEM COUNTY IMPROVEMENT AUTHORITY
AUTHORIZING SCS ENGINEERS CONSULTING SERVICES TO EVALUATE AND
CORRECT SEVERAL OPERATIONAL ISSUES THAT HAVE BEEN REVEALED
REGARDING THE LANDFILL GAS COLLECTION SYSTEM**

WHEREAS, several operational issues have been revealed regarding the landfill gas collection system and same were discussed during a meeting with SCS Consulting on March 24, 2022; and

WHEREAS, pursuant to Resolution 2022-33, 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 Consulting has identified and summarized the technical issues that need to be addressed and same are outlined on the Proposal attached; and

WHEREAS, the cost of the consulting work will not exceed \$14,000; and


WHEREAS, funds are available in the Landfill Gas Flare accounting line item in the full amount of the cost of the replacement and same have been certified by the Certifying Officer;

Vendor: SCS Consulting

Account Number	Amount	Department Description
60-12-125-000	\$14,000.00	Methane Gas Collection System

NOW, THEREFORE, BE IT RESOLVED that the SCS Consulting is hereby authorized to perform the necessary work as outlined in the attached proposal not to exceed \$14,000.


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 April 14, 2022.


Barry Davis, Secretary

April 1, 2022
File No. 02218820.05

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

Subject: Landfill Gas Engineering Consulting Proposal

Dear Julie,

Presented below is our proposal to provide consulting services based on discussions we had during our meeting on March 24, 2022.

BACKGROUND AND OBJECTIVES

A substantial amount of landfill infrastructure work was accomplished over the past 2 years at the landfill. This work included Cell 10 construction, expansion of the gas collection system, replacement and upgrading of the blower/flare control panels, and installation of the exposed geomembrane cap (EGC) final cover system. Since the completion of the EGC and flare controls projects, several operational issues have been revealed that warrant evaluation and corrective measures. The objective of this project is to address those gas-related issues identified herein.

SCOPE OF SERVICES

As noted above, various technical issues have been identified and are summarized below:

1. Loss of vacuum in a portion of the gas collection system on Cell 7 side. Approximately six wells are impacted. A temporary repair was made by Earthres. The location of the problem is near recent repair work was done for the EGC next to the access road. An evaluation needs to be performed and a permanent solution developed.
2. A perimeter methane monitoring well adjacent to Cell 9 has elevated methane since the EGC was installed. We discussed the idea that SCIA's plans to anchor the exposed edge of the EGC may result in the monitoring well being outside the edge of liner, which may solve the problem.
3. The knockout pot (KOP) is experiencing a high pressure drop, possibly due to liquids not draining properly. Additional evaluation and testing is required. Since our meeting, Parker inspected the inside of the KOP and observed that liquids were not accumulating inside.
4. The digital vacuum gauge at the KOP inlet experienced freezing in the connecting tube. SCIA repositioned it to inhibit liquids accumulation in the line. It may be best to relocate the gauge to be next to the pipe and Deerfield Electric is going to estimate the effort to extend the conduit needed for that change. In addition, SCS will look into whether the VFDs can operate in times when the gauge is not functioning or being repaired.

5. Ballooning of the EGC liner is occurring, particularly with windy conditions. Gas collection may also be an issue. Shallow gas collectors were installed and tied into gas system under the liner per the Tetra Tech design. The sufficiency of these collectors needs to be evaluated. Parker has sent to SCS the data from Earthres at these new collector locations.
6. Tearing/Ripping of liner has occurred around the gas well boots. Measures to protect against future tearing need to be evaluated.
7. Concern about design of well boots. Alternative boot design and/or modification to existing boots is needed to control emissions and protect against damage. Options with costs are needed for each alternative identified.
8. Back-up capacity is needed for the blower/flare station. This could be accomplished by having a spare blower/motor assembly onsite. Another option would be to install a blower/flare skid (similar to the one recently rented during the controls upgrade project) so that it could provide redundancy to the existing system. A summary of options and costs to provide backup to the blower/flare station needs to be developed.

SCS will perform the work necessary to address the items listed above. The work products will vary and may include technical memoranda, site visit logs, and/or simply emails to communicate efforts and recommendations. We will submit these work products as they are developed to expedite implementation of solutions.

BUDGET

We proposed to perform the work on a time and materials basis in accordance with the attached fee schedule that was included in our proposal for 2022 services. The fee for these services will not exceed \$14,000 without your prior authorization.

If you have any questions about this proposal or desire further information, please contact me.

Sincerely,



Eric R. Peterson, PE
Project Director/Vice President
SCS Engineers

SALEM COUNTY IMPROVEMENT AUTHORITY
2022 FEE SCHEDULE

January 1, 2022	Rate/Hour
Project Director	\$225
Senior Project Advisor/Regional Manager	\$195
Project Manager.....	\$160
Senior Project Professional	\$140
Project Professional.....	\$120
Designer, Superintendent	\$105
Staff Professional.....	\$95
Senior Project Administrator	\$95
CADD Operator.....	\$90
Senior Technician.....	\$85
Associate Staff Professional.....	\$85
Technician	\$77
Administration.....	\$55

General Terms:

1. The hourly rates are effective through February 28, 2023. Work performed thereafter is subject to a new Fee Schedule.
2. The above rates include salary, overhead, administration, and profit. Costs for outside consultants, laboratory and subcontractors, computer and administration fee (\$4.00 per billable hour for non-field work), rental equipment, supplies, etc., are billed at actual cost plus 10 percent.
3. Charges for SCS-owned equipment usage will be invoiced in accordance with SCS's Equipment Rates schedule without markup.
4. Invoices will be prepared monthly for work in progress, unless otherwise agreed. Invoices are due and payable upon receipt. Invoices not paid within 30 days are subject to a service charge of 1.5 percent per month on the unpaid balance.
5. Payment of SCS invoices for services performed will not be contingent upon the client's receipt of payment from other parties, unless otherwise agreed to in writing. Client agrees to pay legal costs, including attorney's fees incurred by SCS in collecting any amounts past due and owing on client's account.
6. Rates for Senior Executives and Principals of the firm and special situations, such as litigation support and expert testimony, are negotiated on a project-specific basis.