

# AGENDA REQUEST FORM

**Return completed form and complete agenda item to the Clerk of the Board  
Yakima County Commissioners' Office, Room 232**

Prepared by:  
Teresa Ishizaka - Accountant

Department: Public Services-Solid Waste

Requested Agenda Date: 07/06/2021

Presenting: Karma Suchan

Document Title:

*Board of County Commissioners Record Assigned*  
BOCC Agreement  
#  
**172 - 2021**  
*Yakima County, WA*

APPROVED FOR AGENDA:  
 Consent       Regular  
*Board of County Commissioners Determined*

**Design Support for Terrace Heights Transfer Station Tipping Floor Crane. Task order #8 to SCS Engineers Task Order Agreement BOCC226-2017, dated 10/3/2017.**

Action Requested: *Check Applicable Box*

PASS RESOLUTION       EXECUTE or AMEND **AGREEMENT** CONTRACT or GRANT  
 ISSUE PROCLAMATION     PASS ORDINANCE     OTHER \_\_\_\_\_

Describe Fiscal Impact:

Time & Materials in an amount not to exceed \$56,100.

Background Information:

The Solid Waste Division recently purchased through a sole source bid process a Bultrite Crane to aid in the loading of transfer trailers for transport to the Cheyne Landfill. Solid Waste Division has need for Structural Engineering expertise for the pad that a Bultrite Crane will sit on at the transfer station and also for assistance in bid documents for needed construction if pad reinforcement is necessary.

Summary & Recommendation:


Yakima County Solid Waste recommend approval of Task Order # 8 for Design Support for the Terrace Heights Transfer Station Tipping Floor Crane.

Motion:

Department Head/ Elected Official

  
\_\_\_\_\_  
Signature

**AGREEMENT** Attached Is Approved as to Form  
Corporate Counsel Initial

      *ctb*

*Late Agenda Requests Require BOCC Chairman Signature:*  
\_\_\_\_\_

June 17, 2021  
File No. 040117221

Ms. Karma Suchan  
Yakima County Department of Public Works  
Solid Waste Division  
7151 Roza Hill Drive  
Yakima, WA 98901

BOCC Agreement

172-2021

Yakima County, WA

Subject: **Proposal for Task 8**  
Design Support for Transfer Station Tipping Floor Crane  
Terrace Heights Station

Dear Karma

In accordance with our previous phone calls and emails, we have prepared this proposal to prepare design documents to help you install tipping floor cranes at the Terrace Heights Transfer Station located at 7151 Roza Hill Drive, Yakima, Washington.

## **BACKGROUND**

The County owns and operates the Terrace Heights Transfer Station (facility) which is co-located at the Terrace Heights Landfill, in Yakima, Washington. The facility was built to accommodate residential traffic to keep these users off of the landfill working face. Commercial traffic typically goes directly to the landfill.

The main goal for the installation of the tipping floor crane is to facilitate waste handling operations and loading into waste transfer trailers at the transfer station.

## **PROJECT UNDERSTANDING**

The Project generally consists of the installation of Bultrite™ Cranes over the two hoppers located at the back of the tipping floor. At this time it is not known whether the existing structure will be able to support the additional operating weight of the crane support structure, the crane, its payload, and impact forces additional without reinforcing.

## **SCOPE**

We will provide you with the following services related to this project:

### **Kickoff Meeting**

We will begin this project by attending a kick-off meeting with County staff. We anticipate that our design team lead designer (Michael Kalish) and that our structural engineer (Hernan Montoya) will attend via a video conference call.



## Review of As-Built Plans

We have already reviewed as-built plans provided by you. Attached with this proposal are some concept sketches for the crane installation.

## Design Report/ Structural Calculations

The initial part of the this Project (Tasks 1 & 2) will consist of evaluating the load capacities of the existing building and floor structure, and prepare recommendations regarding the extent of the reinforcement work to the existing chute structure, which may be required to support the proposed cranes. A draft and final report of the required modifications to the chute structures will be prepared for your review before proceeding with the final design.

We will also prepare structural calculations for the Project to determine the extent of the modifications to the existing chute structure that may be required to support the proposed cranes, and prepare concept detail sketches to be included in the Design Report.

## Structural Plans

Structural plans and details will be prepared for the reinforcing of the hoppers coordinated with the as-built plans for the existing facility and any other drawings. 60 percent level, 100 percent level, and final design plans will be provided for your review and comment. The following general and structural sheets are anticipated for the Project:

- G1 Cover Sheet (Location Map, Vicinity Map, Drawing List)
- G2 General Legend
- G3 Site Plan
- S1 Structural General Notes & Details
- S2 Existing Tipping Floor Plan
- S3 Load Out Pit Foundation & Framing Plan
- S4 Structural Details
- S5 Structural Details

## Review of Structural Specifications

We will prepare structural notes that will be incorporated into the Project plans for compliance with intent of the structural design.

## Coordination Meetings/ Plan Check Process

We will attend telephone or video conference coordination meetings during the development of the Project, including communications and product coordination with vendors of construction products which may be incorporated in the Project. We will also address and answer comments issued by the reviewing agencies, and modify the plans as appropriately required to obtain a building permit.

## Assistance with Bidding for Selecting a Contractor

SCS will provide Bidding Support to the County for selection of a contractor for the construction of the necessary structural support for the installation of the crane support structure. We will provide the following services:

- Preparation of Bidding Documents.
- Assist with issuing the Construction Drawings and Specifications to prospective Contractors.
- Attend Pre-bid conference virtually (via Teams or Zoom) to present the project to the prospective Contractors.
- Provide responses to questions from Contractors regarding the Construction Drawings and Specifications prior to the Bid Date.
- Prepare and issue addenda, if necessary.
- SCS will review proposals (bids) submitted to the County to assist with the selection of a qualified Contractor.

### Assumptions

- Our senior structural engineer will attend the pre-bid conference meeting virtually.
- Yakima County bidding instructions, procurement forms and contracts will be used.
- Submittal of the Construction Drawings and Specifications to Contractors will be performed by Yakima County, or a service used or selected by the County.
- We will provide one (1) round of responses to questions from Contractors regarding the Construction Drawings and Specifications no later than 5 calendar days prior to the Bid Date.
- SCS will review quotes submitted to the County to assist with selection of a Contractor.

### Construction Support

We will review shop drawings and submittals, respond to structural related RFI's, review Contractor's field change requests, and provide reasonable telephone construction support during construction. One reviewed copy of the submittals will be returned to you for reproduction and distribution to the appropriate parties involved.

### Record Drawings

At the completion of the construction, we will revise the project plans to match known as-built conditions resulting from changes reported during construction.

## PROJECT SCHEDULE

We are prepared to commence the work efforts identified as described above upon receiving authorization to proceed. The design is generally planned to be completed by the summer of 2021 calendar year with construction beginning in either in the fall or winter 2021 with full project completion in 2022.

Ms. Karma Suchan  
June 17, 2021  
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## **COMPENSATION**

SCS will perform the above services on a time and materials, not to exceed basis. SCS requests a budget of \$56,100 to perform these services.

## **CLOSING**

Please feel free to contact either of the undersigned if you have any questions and we appreciate the opportunity to provide these services.

Sincerely,



Michael Kalish, PE  
Vice President  
SCS Engineers



John M. Richards, PE  
Project Director  
SCS Engineers

mak/jmr

**BOARD OF YAKIMA COUNTY COMMISSIONERS  
AGREEMENT**

**Agreement Number**

BOCC Agreement

**172 - 2021**

Yakima County, WA

**BOARD OF COUNTY COMMISSIONERS**

\_\_\_\_\_  
Ron Anderson, Chairman

\_\_\_\_\_  
Amanda McKinney, Commissioner

\_\_\_\_\_  
LaDon Linde, Commissioner

**DATED:** JUL 06 2021

*Attest:*

\_\_\_\_\_  
Julie Lawrence, Clerk of the Board  
Linda Kay O'Hara, Deputy Clerk of the Board

**Approved as to Form:**

  
\_\_\_\_\_  
*Deputy Prosecuting Attorney*

## **AGREEMENT FOR PROFESSIONAL SERVICES**

**THIS AGREEMENT** for professional engineering services is herein entered between the Yakima County Department of Public Services, Solid Waste Division (hereinafter referred to as the "COUNTY") and SCS Engineers, a licensed civil engineering firm registered with the State of Washington (hereinafter referred to as "ENGINEER)", whose contact and licensing information is as follows:

**CONSULTANT:** SCS ENGINEERS,  
Greg Helland  
SCS Engineers  
2405 140<sup>th</sup> Ave. NE, Suite 107  
Bellevue, WA 98005  
Federal Tax ID No/Social Security No.  
Washington State Department of Revenue No.

**COUNTY:** YAKIMA COUNTY,  
Yakima County Public Services  
Attn: Karma Suchan  
128 N. 2nd Street  
Yakima, WA 98901

**SECTION 1. PURPOSE:** County seeks to retain the services of a professional engineer to provide civil engineering services to the County for the county's solid waste facilities. The purpose of this agreement is to establish a master agreement to set forth the general agreed contract terms, including the provisions for compensation, scheduling, insurance, indemnification and nondiscrimination, and other items as set forth below.

Specific duties and the scope of work will be assigned pursuant to individual task orders for each project and assignment. This master agreement's specific terms will control over any conflicting term in a task order. An example of a generic task order is attached to this agreement as Exhibit A.

### **SECTION 2. THE CONTRACT TERMS**

**A. Amendments:** This agreement contains all terms and conditions agreed upon by the parties. No change or addition to this Agreement shall be valid or binding upon either party unless such change or addition is in writing and executed by both parties.

**B. Compensation:** The County shall compensate Engineer at the negotiated not to exceed amount for all task orders completed under this agreement. Payment Schedule shall be described in each Task Order, e.g., either to be paid on a monthly basis, payment after completion of each task, or completion of all the tasks in the Task Order. The Engineer shall maintain a written record

of billing and submit a detailed invoice. The County shall pay the Engineer within 45 days of invoice receipt.

Direct Labor Cost shall mean salaries and wages (both basic, and overtime) paid to all personnel engaged directly on the project and as provided in the attached "SCS Engineers, Inc.- FEE SCHEDULE." Reimbursable Expenses shall mean the actual expenses incurred directly or indirectly in connection with the project for transportation, sub-consultants, subcontractors and other incurred expenses. The Engineer will add no more than three percent (3%) to invoices received by Engineer from sub-consultants and subcontractors to cover administrative expenses. All other costs shall be the Engineers responsibility.

**C. Insurance:** At all times during the life of this contract, Engineer agrees to maintain, on a primary and non-contributory basis and at its sole expense, the insurance coverages, limits, and endorsements noted below. All such insurance shall not be subject to any deductible or self-insured retention (SIR). There shall be no cancellation, material change, reduction in limits or intent not to renew the insurance coverage(s) without 30 days written notice from the Engineer or its insurer(s) to Yakima County. The requirements contained herein, as well as Yakima County's review or acceptance of insurance maintained by Engineer is not intended to and shall not in any manner limit or qualify the liabilities or obligations assumed by Engineer under this contract.

Commercial General Liability insurance at a limit of liability not less than \$2,000,000 Each Occurrence, and \$5,000,000 General Aggregate. Insurance shall be written on ISO occurrence form CG 00 01 or an alternate form providing equal or broader liability coverage. Such coverage shall not contain any endorsement(s) excluding or limiting Products Completed, Operations, or Contractual Liability Cross Liability. Yakima County, its officers, employees, agents, and volunteers shall be named as Additional Insureds under the coverage with respect to the work performed under this agreement.

Business Automobile Liability insurance at a combined single limit of liability for bodily injury and property damage not less than \$1,000,000 Each Occurrence covering all Owned, Non-owned, Hired, and leased automobiles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equal or broader liability coverage. In the event Engineer does not own automobiles, Engineer agrees to maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Liability policy. If necessary, the policy shall be endorsed to provide contractual liability coverage.

Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Professional Liability, and Commercial General Liability insurance. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington is also required. The Engineers' insurance coverage shall be primary insurance as respects those who are Additional Insureds under this agreement. Any insurance, self-insurance or insurance pool coverage maintained by the County shall be in excess of the Engineer's insurance and shall not contribute to it.



The Engineer's insurance shall be endorsed to state that coverage shall not be canceled by either party except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the County.

Verification of Coverage. Prior to execution of this agreement, Engineer shall furnish the County with original Certificates of Insurance and a copy of any amendatory endorsement, including without limitation, the Additional Insured endorsement, evidencing the insurance requirements.

**D. Indemnification:** To the fullest extent permitted by law, Engineer shall defend, indemnify, and hold the County and its officers, officials, employees, agents, and volunteers harmless from and against all claims, damages, losses, or expenses including without limitation attorney fees, court costs, or other alternate dispute resolution costs arising out of or resulting from the performance of work under this Agreement, provided any such claims, damages, losses or expenses are attributable to bodily injury, sickness, disease, death, personal injury, or property damage caused in whole or in part by the negligent acts, errors, or omissions of Engineer, Engineer's sub-engineers or employees, anyone directly or indirectly employed or hired by Engineer, or anyone for whose acts Engineer may be liable.

**E. Engineer's Waiver of Employer's Immunity under Title 51 RCW.** Engineer intends that its indemnification, defense, and hold harmless obligations set forth in this contract shall operate with full effect regardless of any provision to the contrary in Title 51 RCW, Washington's Industrial Insurance Act. Accordingly, with respect to any action brought by any employee of the Engineer against the County and its officers, employees, agents, and volunteers, Engineer specifically and to the fullest extent allowed by law waives any immunity granted under Title 51 RCW. The parties have mutually negotiated this waiver. Engineer shall similarly require that its subcontractors, and anyone directly or indirectly employed or hired by Engineer, and anyone for whose acts Engineer may be liable in connection with its performance of this Agreement to comply with the terms of this paragraph, waive any immunity granted under Title 51 RCW, respect to any action brought by any employee of the sub-engineer against the County or any of its officers, employees, agents, and volunteers. The provisions of this section shall survive the expiration or termination of this Agreement.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Engineer and the County, its officers, officials, employees, and volunteers, the Engineer's liability hereunder shall be only to the extent of the Engineer's negligence.

**SECTION 3: INDEPENDENT CONTRACTOR:** The parties agree that, for the purposes of this agreement, the Engineer is an independent engineer and neither the Engineer nor any employee of the Engineer is an employee of the County. Neither the Engineer nor any employee of the Engineer is entitled to any benefits that Yakima County provides its employees. The

Engineer is solely Responsible for payment of any statutory worker's compensation or employer's liability insurance as required by state law. Engineer shall perform its services hereunder in accordance with that degree of care and skill exercised by reputable members of Engineer's profession performing similar services in the State of Washington. Engineer shall perform its duties using all necessary and properly licensed professionals and other Engineers it deems necessary to perform its obligations.

**SECTION 4. NONDISCRIMINATION:** The Engineer agrees that it shall not discriminate against any person on the grounds of race, creed, color, religion, national origin, sex, sexual orientation, veteran status, pregnancy, age, marital status, political affiliation or belief, or the presence of any sensory, mental or physical handicap in violation of the Washington State Law Against Discrimination (RCW chapter 49.60) or the Americans with Disabilities Act (42 U.S.C. 12101 et seq.) or any other applicable state, federal or local law, rule or regulation. The Engineer and sub-contractors shall abide by the requirements of 41 CFR §§ 60-300.5(a) and 60-741.5(a). These regulations prohibit discrimination against qualified individuals because of their protected veteran status or a disability, and require affirmative action by covered prime engineers and sub-contractors.

**SECTION 5. LAWS, VENUE JURISDICTION:** This Agreement shall be governed by the laws of the State of Washington. Any action, suit, or judicial proceeding for the enforcement of this Agreement shall be brought in the Superior Court for the State of Washington in Yakima County, Washington.

**SECTION 6. Term:** *The term of this agreement will be for a period of one year from the effective date.* The County may, at its option, extend the contract on a year to year basis for up to four additional years provided however, that either party may at any time during the life of this contract, or any extension thereof, terminate this contract by giving thirty (30) days' notice in writing to the other party of its intention to cancel. Contract extensions shall be automatic, and shall go into effect without written confirmation, unless the County provides advance written notice of the intention to not renew. Prices shall remain firm for the first twelve-month period of the contract unless an exception is stated in the bid. **Any price change after the first twelve months will need to be negotiated and approved by both parties.** If the funds Yakima County relied upon to establish this Agreement are withdrawn, reduced or limited, or if additional or modified conditions are placed on such funding, Yakima County may immediately terminate this Agreement by providing written notice to the Engineer. The termination shall be effective on the date specified in the termination notice.

**SECTION 7. Confidentiality:** The parties shall use Personal Information and other confidential information gained because of this Agreement only for projects under this Agreement. The County and the Engineer shall not disclose, transfer, or sell any such information to any other party, except as provided by law or, in the case of Personal Information except as provided by law or with the prior written consent of the person to whom the Personal Information pertains. The parties shall maintain the confidentiality of all Personal Information and other confidential information gained due to this Agreement and shall return or certify the destruction

of such information if requested in writing by the party to this Agreement that provided the information.

**SECTION 8. Records:** The Engineer agrees to maintain records and documents which accurately reflect all direct and indirect costs related to the delivery of contracted services. The Engineer further agrees to retain all fiscal and program records and other material relevant to this Agreement for at least seven years. Fiscal records must be retained until all audits are resolved.

**SECTION 9. Inspection:** The Engineer shall, at no cost, provide to the County, and the Office of the State Auditor reasonable access to the Engineer's place of business and the Engineer's records. These inspection rights are intended to allow Engineer and the State Auditor to monitor, audit, and evaluate the Engineer's performance and compliance with applicable laws, regulations, and these Agreement terms. These inspection rights shall survive seven years following this Agreement's termination or expiration.

**SECTION 10 Waiver and Severability.** Waiver of any breach or default on any occasion shall not be deemed to be a waiver of any subsequent breach or default. Any waiver shall not be construed to be a modification of the terms and conditions of this Agreement. Only a majority vote of a quorum of the Yakima County Board of County Commissioners has the authority to waive any term or condition of this Agreement on behalf of the County.  
**Severability:** If any term of this Agreement is held invalid by any court, the remainder of the Agreement remains valid and in full force and effect.

DONE this 3rd day of October 2017.

ENGINEER

By: Gregory D Holland  
Printed Name

Signature: Gregory D Holland

Title: Office Director

Tiera L Girard

Attest: Tiera L. Girard  
Clerk of the Board

Approved as to form:

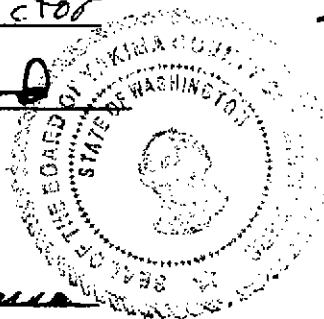
[Signature]  
Deputy Prosecuting Attorney

BOARD OF YAKIMA  
COUNTY COMMISSIONERS

[Signature]  
J. Rand Elliott, Chairman

[Signature]  
Ron Anderson, Commissioner

[Signature]  
Michael D. Leita, Commissioner  
Constituting the Board of County Commissioners  
for Yakima County, Washington



BOCC226-2017  
October 3, 2017

**Exhibit A**

**TASK ORDER**

This Task Order pertains to an Agreement by and between Yakima County Public Services – Solid Waste Division (“COUNTY”), and SCS Engineers (“ENGINEER”), dated \_\_\_\_\_, 2017. (“the Agreement”). Engineer shall perform services on the project described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

**TASK ORDER NUMBER: 01 – CHEYNE LANDFILL GAS STUDY**

September 12, 2017

File No. 040106217

Ms. Karma Suchan  
Manager, Solid Waste Division  
Yakima County Public Works  
7151 Roza Hill Drive  
Yakima, WA 98901  
(509) 574-2455

Subject: Proposal for Solid Waste Engineering Services for the Cheyne Landfill, Yakima County, Washington

Dear Karma:

Yakima County (County) owns and operates the Cheyne Landfill (or the Landfill). The Landfill accepts/disposes solid waste, including mixed municipal solid waste (MSW); construction, demolition, land clearing (CDL); and wastes from nearby cities, farms, and industries.

The Landfill is located approximately 6 miles north of town of Zillah and has been in operation since the early 1970s. In 2016, over 70,000 tons of waste (approximately 30 percent of the County's MSW) was disposed at the Landfill. The annual waste disposal rate is projected to increase by 1.0 percent per year until the Landfill reaches final capacity in 2053. Currently, the Landfill occupies approximately 75 acres on a 960 acre parcel of land. When fully developed, the Landfill will contain approximately 13.2 million cubic yards (9.4 million tons) of waste. The Cheyne Landfill has been permitted with an arid liner exception under State regulations (WAC 173-351), so there is no engineered bottom liner system or leachate collection system. Inactive areas of the Landfill have an interim soil cover. There are no areas with a final cover system in place at this time.

background

Available data suggest that the Landfill appears to have exceeded subsurface methane concentration limits (greater than 5 percent methane by volume in the soils at the property boundary) at one of the 8 perimeter subsurface gas migration detection wells (gas probes). The gas probe that has the methane exceedance is located on the west side of the Landfill near the property boundary.

A Landfill Gas Migration Remediation Plan (Remediation Plan) was prepared in 2012 to address the elevated methane concentration detected in gas probe (GP-8). The report recommended a tiered approach to mitigating subsurface landfill gas migration near the gas probe. The Remediation Plan included the following Phases:

- Phase 1 – Weekly monitoring of perimeter gas probes.

If another quarterly exceedance is observed, implement weekly monitoring until three consecutive compliant measurements are recorded over the course of an eight week period. If not, implement Phase 2.

- Phase 2 – Update the Remediation Plan.

Notify the local jurisdictional health department and update the Remediation Plan within six months of the exceedance date. The update will include evaluating: 1) a passive ventilation system, 2) modification of the existing gas collection system (if it exists), 3) a gas interception trench, and 4) a soil vapor extraction system.

- Phase 3 – Implementation of the Selected Remediation Plan.

The Remediation Plan was approved by the Yakima County Health District on July 31, 2012.

Based on our recent discussions with you, it is our understanding that there is currently no regulatory requirement for a GCCS; however, the Landfill appears to continue to experience elevated methane concentrations at gas probe GP-8. We further understand that you would like to update the Remediation Plan and include the evaluation of other applicable remediation measures, if deemed appropriate.

#### Regulations

Based on the last Federal New Source Performance Standards (NSPS) Tier 2 testing conducted in 2016, the Landfill is not expected to exceed the non-methane organic compounds (NMOCs) emissions limits within the next 5 years (by 2021). When the Landfill exceeds the NMOC emissions limits, a landfill gas collection and control system (GCCS) will be required within 30 months. Even with the newly revised NSPS regulations (2017) changing the NMOC emission limits from 50 Mg/yr. to 34 Mg/yr., the Landfill is not anticipated to exceed these limits within the next 5 years.

However, the year for the next NSPS Tier 2 test is somewhat ambiguous at the present time until the Washington State Department of Ecology (Ecology) implements the state plan. The timeline for the conducting the next Tier 2 may be re-established when the State Implementation Plan, submitted by Ecology to the US EPA, is approved. Under the current regulations, the next Tier 2 test must be performed within 5 years of the last test, or by 2021.

#### Scope of Work

The following presents our proposed scope of work, which is based on our understanding of site conditions and our recent discussions:

1. Review existing documents, reports and Landfill information.
2. Prepare landfill gas generation estimates for the Landfill.
3. Update the Remediation Plan for Subsurface Methane Mitigation.

#### Task 1 – Review Existing Documents

SCS will review existing documents, reports and site information for the Landfill. The following documents will be reviewed:

- Development and Closure Plan.
- Updates to the Development and Closure Plan (if any).
- Aerial topographic surveys for the landfill site (AutoCAD files, if available).
- Bottom grading plan and final grading plan (AutoCAD files for entire developed landfill with contour lines).
- Site Capacity Analysis.
- NSPS Design Capacity Report.
- NSPS Tier 1 NMOC Emissions Report.
- NSPS Tier 2 NMOC Emissions Report.
- Landfill Gas Migration Remediation Plan.
- Boring logs for groundwater wells and gas probes and test pit logs.
- Hydrogeologic reports.
- Gas probe monitoring data from 2012 to present.
- Procedures for gas probe sampling.
- Design details of gas probes.
- Waste composition studies.
- Other available documents pertinent to landfill gas issues.

SCS will review the above documents to gain insight into conditions related to landfill gas generation, landfill gas subsurface migration, and regulatory status. The review of this information will be used with Task 2 below.

**Assumptions:**

The following assumption was used to form the basis of our fee estimate for this task:

- The County will provide the above documents in digital format, preferably in the original format, if available (including Adobe (pdf), MS Word (doc or docx), MS Excel (xls orxlsx), AutoCAD (dwg), etc.).

**Task 2 – Prepare LFG Generation Estimate**

SCS will prepare an estimate of landfill gas generation using SCS's proprietary modeling techniques to provide a more reasonable gas generation estimate compared to the conservative regulatory gas generation model (which tends to overestimates the amount of landfill gas production).

SCS will rely on the County's records for waste disposal quantities and projected waste disposal quantities, site specific precipitation data, and similar size landfills in arid regions for calibrating the gas generation model. The developed gas generation graph (gas curve) and the review of

other site information (described in Task 1) will aid in assessing the potential for future gas migration along the western portion of the Landfill, and specifically in the area of GP-8.

The developed gas generation curve will be overlaid on the regulatory NSPS Tier 2 gas curve (LandGEM model) for the purpose of comparison. This information will be used to update the Remediation Plan in Task 3, below.

**Assumptions:**

The following assumptions were used to form the basis of our fee estimate for this task:

- The County will provide data on historical and projected future disposal rates and waste composition.

**Deliverables:**

SCS will provide the following:

- A summary letter describing landfill gas generation at the Landfill that will include a table and graph showing the historic and projected landfill gas generation for the site.

Task 3 – Update the Remediation Plan

As described above, the current plan for the mitigation of subsurface landfill gas migration (Remediation Plan) discusses evaluating the following mitigation techniques:

1. A passive ventilation system,
2. Modification of the existing gas collection system (if one exists).
3. Construction of a gas interception trench.
4. Installation of a soil vapor extraction system.

We would propose evaluating the following additional, mitigation options:

5. Installation of additional soil gas sampling in the vicinity of gas probe GP-8.
6. Relocating GP-8 closer to the property boundary.
7. Evaluate a localized gas extraction point near GP-8.
8. Evaluate long-term gas extraction.

We will update the Remediation Plan to provide a description of site conditions, potential future gas migration, and expanded options for mitigation techniques in the area of GP-8 and the western portion of the landfill. We will develop conceptual plans for each scenario listed above. This will be used to provide a rough order of magnitude (ROM) cost estimate for each scenario. A list of advantages and disadvantages (pros and cons) will be developed for the mitigation



techniques. This information will be summarized in a brief letter report along with our recommendation for the course of action.

**Assumptions:**

The following assumptions were used to form the basis of our fee estimate for this task:

- One on-site meeting with County staff.
- SCS will finalize the updated Remediation Plan based on one set of review comments provided by County staff.

**Deliverables:**

SCS will provide the following:

- An updated Remediation Plan.

**Schedule**

SCS proposes to complete the scope of work within the time limits described below, assuming timely receipt of notice to proceed and review comments from the County.

Description	Duration	Completion
Notice to Proceed	--	Sep 18, 2017
Task 1 - Review Existing Documents	2 weeks	Oct 2, 2017
Task 2 - Landfill Gas Generation Estimate	2 weeks	Oct 16, 2017
Task 3 - Update Remediation Plan	6 weeks	Nov 13, 2017

**Proposed Fees**

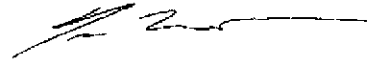
The proposed fees to complete the scope of work are presented on a lump sum basis by task. We expect these proposed fees to be maximum, not-to-exceed fees to provide engineering assistance based on the scope of work outlined above. This budget will not be exceeded without prior approval. The County will be invoiced monthly on a percent complete for the lump sum fee tasks.

Description	Fee Basis	Fee
Task 1 - Review Existing	Lump Sum	2,650
Task 2 - Landfill Gas Generation Estimate	Lump Sum	5,570
Task 2 - Update Remediation Plan	Lump Sum	12,490
<b>TOTAL</b>		<b>20,710</b>

Closing

We thank you for the opportunity to submit this proposal. We hope you find this proposal of value and will not hesitate to contact us if any questions arise.

Sincerely,



Ted Massart  
Sr. Project Engineer  
**SCS ENGINEERS**



John M. Richards, PE  
Project Director  
**SCS ENGINEERS**

cc Don Gatchalian, Yakima County  
Greg Helland, SCS

## FEE SCHEDULE

January 1, 2017

	<u>Rate/Hour</u>
Project Director II .....	\$195
Project Director I .....	\$178
Project Manager I .....	\$164
Senior Project Professional II .....	\$157
Senior Project Professional I .....	\$144
Project Professional II .....	\$125
Project Professional I .....	\$115
Staff Professional II .....	\$97
Staff Professional I .....	\$90
Associate Staff Professional .....	\$85
Designer Drafter .....	\$98
Project Administrator .....	\$92
Secretarial/Administrative .....	\$72

### General Terms:

1. Rates for principals of the firm are negotiated on a project-specific basis and range from \$200 to \$250 per hour depending on experience and qualifications.
2. Scheduled labor rates are effective through December 31, 2017. Work performed thereafter is subject to a new Fee Schedule.
3. Scheduled labor rates include overhead, administration and profit. Costs for outside consultants and subcontractors, for job-related employee travel and subsistence, and for equipment and supplies are billed at actual cost plus a 15 percent administrative fee. Charges for reproduction, telephone, fax, etc. are included in a communications fee.
4. Charges for field equipment and instruments will be in accordance with SCS' Field Equipment Rental Rates Schedule in effect at the time the work is performed plus a 15 percent administrative fee. Company field vehicle use is charged as a daily rate of \$100 for local use, or \$0.70/mile for round trip travel in excess of 150 miles.
5. Invoices will be prepared monthly or more frequently 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.
6. Payment of SCS invoices for services performed will not be contingent upon the client's receipt of payment from other parties, unless otherwise agreed 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.
7. For special situations, such as expert court testimony and limited consultation, hourly rates will be on an individually negotiated basis.