# SALEM COUNTY IMPROVEMENT AUTHORITY

#### **RESOLUTION 2020-60**

June 11, 2020

RESOLUTION OF THE SALEM COUNTY IMPROVEMENT AUTHORITY AUTHORIZING AN AMENDMENT TO THE CONTRACT WITH CORNERSTONE ENVIRONMENTAL GROUP, LLC FOR PROFESSIONAL ENGINEERING SERVICES FOR DESIGN AND CONSTRUCTION ADMINISTRATIVE SERVICES IN CONNECTION WITH THE EXPOSED GEOMEMBRANE COVER

WHEREAS, in accordance with Resolution 2018-88, dated December 13, 2018, the Salem County Improvement Authority ("SCIA") gave authority to Cornerstone Environmental Group, LLC ("Cornerstone") to prepare an Addendum to the Closure Plan in support of an Exposed Geomembrane Cover ("EGC") for the portions of the landfill where operations have essentially ceased; and

WHEREAS, in accordance with February 13, 2020 Res 2020-39 authorized Cornerstone to prepare an Addendum to the Closure Plan in support of an EGC for the portions of the landfill where operations have essentially ceased; and

WHEREAS, the New Jersey Department of Environmental Protection has approved installation of a Rain Cover on landfill cells that are not at final grade and will not receive waste for an extended time while new cells are being filled; and

WHEREAS, the Authority requested Cornerstone to provide engineering and consulting services for the Rain Cover; and

WHEREAS, the Salem County Improvement Authority Executive Director, as advised by the SCIA Project Engineer, have deemed the additional work described in the amended contract is deemed to be necessary to control order and leachate, and to reduce maintenance; and

WHEREAS, this necessary, additional work resulted in an increase to the cost of the contract in the amount of one hundred, twenty-three thousand, two hundred, thirty dollars (\$123,230.00) for a total contract amount of four hundred, twenty-three thousand, one hundred twenty dollars (\$423,120.00).

WHEREAS, the professional engineering services to be provided by Cornerstone are highly specialized and unique to the project in question; and

WHEREAS, N.J.S.A. 40A:11-5 of the Local Public Contracts Law provides that an agreement for professional services of this character may be made without public advertising for bids and bidding (without competitive bidding); and

WHEREAS, N.J.S.A. 40A:11-5 of the Local Public Contracts Law requires that a brief notice of such agreement must be publicly advertised in a newspaper authorized by law to publish its legal advertisements and that the resolution authorizing such agreement must be on file and available for inspection; and

WHEREAS, this contract is being awarded under a non-fair and open process, with the Contractor having filed the required campaign contribution disclosure forms with SCIA and the Contractor being eligible thereunder for the award of the contract.

WHEREAS, funds are available in the full amount of this amended contract.

NOW, THEREFORE, BE IT RESOLVED by the Salem County Improvement Authority Board as follows:

1. The Salem County Improvement Authority Board Authorizes execution of an amended contract as noted above to increase the overall contract amount of one hundred, twenty-three thousand, two hundred, thirty dollars (\$123,230.00) for a total contract amount of four hundred, twenty-three thousand, one hundred twenty dollars (\$423,120.00).

2. The Salem County Improvement Authority authorizes its Executive Director to execute said amended contract.

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 June 11, 2020.

Barry Davis, Secretary



May 29, 2020

Julie Acton Executive Director Salem County Improvement Authority 286 Welchville Road, PO Box 890 Alloway, NJ 08001

Re:

Proposal for Engineering and Consulting Services Exposed Geomembrane Cover, Supplemental

#### Dear Julie:

As requested, Cornerstone Environmental Group, LLC, a Tetra Tech company (Tetra Tech), is submitting this proposal for supplemental engineering and consulting services for the phased closure of the Salem County Landfill (Landfill, Site). This proposal amends our February 12, 2020 Exposed Geomembrane Cover (EGC) proposal, which the Salem County Improvement Authority (SCIA, Authority) approved on March 9, 2020 (Contract). The Contract provides for engineering and consulting services for the Phase 1 18-acre EGC as depicted on plans provided by the Alaimo Group to the New Jersey Department of Environmental Protection (NJDEP, Department) via email on August 2, 2019.

NJDEP approved the installation of Rain and Exposed Geomembrane Covers as part of the Solid Waste Facility permit renewal (Permit) issued May 15, 2020. The Permit authorizes the installation of Rain Covers over "areas that will not receive waste for extended periods of time", while Exposed Geomembrane Covers were approved for "areas that have reached final grade and as part of the phased closure of the Landfill". Tetra Tech has mapped areas that are at final grade, totaling nominally 36.0 acres as shown on Attachment 1 (The area is inclusive of the 18-acre subject of the Contract). In accordance with the closure plan, all areas that are at final grade may be considered for the installation of an Exposed Geomembrane Cover (EGC). A nominally 8-acre tract, located on the north facing slopes, will remain inactive for a period in excess of 6 years until such time that Cell 10 is filled to elevations comparable to those in Cells 8, 9, and 11. The area meets the permit criteria for the installation of a rain cover.

In accordance with the Authority's request, Tetra Tech is submitting this supplemental proposal for comprehensive and integrated engineering and consulting services for expanding the scope of the EGC Contract to the entire 36-acre tract. This supplemental proposal includes an option for providing engineering design and construction administration services for the 8-acre tract depicted in Attachment 1. These services will be provided in conjunction with and concurrent to the design, bid support, and construction administration for the Exposed Geomembrane Cover. It is Tetra Tech's understanding that the Authority plans to award construction of the entirety of the project in one bid to one contractor.

### 1.0 BACKGROUND

Rain covers are used to primarily control leachate generation by reducing infiltration into the landfill body. Rain covers are installed over areas that will not receive waste for extended periods of time, generally five to ten years. Due to the expected limited service life, rain covers are frequently constructed from materials that are thinner than geomembranes used in baseliners and final covers and from a wider range of materials. Lower design windspeeds and relatively thinner material are contributing to shorter service lives of rain covers compared to EGCs. Rain covers are constructed using sewn and taped-over seams, secured by anchor trenches along the perimeter, and weighted down throughout to protect against wind uplift, and snow accumulation. Repetitive wind-induced movement can cause material fatigue and may eventually cause failure. Partly due to the material properties of products used for rain cover construction, the use of hidden anchor trenches is less feasible. Instead, ballast systems are more frequently used, generally consisting of sandbags or tires tied together and placed over the rain cover. Alternatively, dedicated products are available, such as Wind Defender (<a href="http://wind-defender.com/">http://wind-defender.com/</a>).

The Permit, Condition 94, specifies a 20-mil scrim reinforced geomembrane for use as rain cover that will "be replaced at least every 10-years to ensure functional integrity" without reference to a ballast system. According to the permit, the EGC is to be constructed from a 40-mil linear low-density polyethylene (LLDPE).

# 1.1 Exposed Geomembrane Cover

Based on the Site's Closure and Post-Closure Plan (Alaimo Group, August 2015, revised 2018), the Permit authorizes SCIA to install approximately 18 acres of EGC and 20 acres of rain cover. Even though the 20-acre section is at final grade and qualifies for EGC installation, the Plan proposes the installation of a rain cover to remain in place for about 20 years. Subject to Permit conditions and contingent upon material performance, the rain covers would need to be replaced two to three times during that time period. The replacement cost would eliminate the cost advantage rain covers may have compared to a one-time EGC construction using a 40-mil textured linear low-density polyethylene (LLDPE) geomembrane.

Expanding EGC coverage into areas that are at final grade and are proposed for rain cover installation would not require permit action as the change constitutes an environmentally beneficial improvement. Were the Authority to direct Tetra Tech to use a 40-mil LLDPE for the 36-acre parcel instead of a 20-mil scrim reinforced material, Tetra Tech will advise the Department in writing. Tetra Tech will document the change in the Certification Report and on record drawings.

#### 1.2 Rain Cover

Tetra Tech identified the nominally 8-acre parcel on the north facing slope of portions of Cells 5 and 6 that are not at intermediate grade and will not receive waste for an extended period. In accordance with permit conditions, the tract qualifies for the installation of a rain cover. The area is called out as "Rain Cover" on Attachment 1. For consistency and to facilitate design and construction, Tetra Tech recommends that a 40-mil LLDPE be used for the rain cover.

In coordination with the Authority, Tetra Tech prepared a Cost/Benefit Analysis estimating the time when construction cost for a 40-mil LLDPE rain cover would equal the savings from reduced leachate generation rates (i.e., breakeven point or simple payback). While the analysis was performed for 25%, 50%, and 75% reductions of the leachate generation rate, the highest reduction is consistent with expectations and experience for a 40-mil LLDPE. Results were communicated to the Authority via email (April 29, 2020) and are summarized here:

Julie Acton May 29, 2020

	75% Reduction	50% Reduction	25% Reduction
Time to breakeven (years)	8.0 - 9.0	11.9 – 13.4	23.5 – 26.5

Pursuant to a discussion of these results, Alaimo was directed to estimate the time to removal of the rain cover based on landfilling to various elevations along the north facing slope of Cells 5 and 6. Alaimo calculated the Time-to-Fill assuming the site-specific waste density of 1,200 lb per cubic yard (CY) and a waste acceptance rate of 100,000 tons per year (tpy). Results were provided by email on May 21, 2020. Using the same approach and parameters, Tetra Tech calculated the Time-to-Fill for a waste acceptance rate of 90,000 tpy, a value Tetra Tech considers more appropriate based on historic trends. The combined results are summarized in the following table:

Elevation	Waste Volume to	Tilme to Fill (years)	
	Elevation (CY)	90,000 tpy:	100,000 tpy
70 ft	643,880	4.3	3.86
100 ft	1,104,628	7.4	6.62
150 ft (max. height)	1,584,950	10.6	9.51

<sup>\*</sup> Time to Fill for annual tipping rate of 90,000 tpy calculated by Tetra Tech.

The payback period for a 75% reduction in leachate generation rate is only slightly larger than the time to fill Cells 10 and 11 to elevation 100 ft, about 0.6 to 1.6 years (7 to 19 months), which indicates the economic benefit to be marginally deficient. Not reflected in the analysis are increases in leachate management cost, the ability to partially remove the Rain Cover, and the reduction in marginal construction cost using one liner and anchoring system throughout the site. As an additional advantage constructing the entirety of the EGC and Rain Cover from one material (i.e., 40-mil LLDPE) would eliminate a transition requiring joining two dissimilar materials: LLDPE is generally welded whereas 20-mil scrim reinforced liners are sewn and taped over. A transition detail from 40-mil LLDPE to the 20-mil scrim reinforced material located along the ridge line exposed to the elements and wind shear would thus be especially vulnerable to failure.

While the economic benefit is slightly deficient, engineering, constructability, and construction management add non-quantifiable advantages for constructing the Rain Cover from 40-mill LLDPE. Any cost increases in leachate management would increase the economic benefit, shifting the breakeven point to within the time frame before removal of the Rain Cover is anticipated. Based on the quantifiable and non-quantifiable analyses, Tetra Tech recommends that the Authority selects a 40-mil LLDPE as the construction material for the Rain Cover in the 8-acre parcel. It is our understanding that the Authority will select the cover material for the 8-acre tract.

#### 2.0 SCOPE OF WORK

# 2.1 Exposed Geomembrane Cover

Tetra Tech will provide supplemental engineering design for extending the Exposed Geomembrane Cover to areas at final grade as identified on Attachment 1. The areal extent of the area encompasses a total of 36 acres. The area is inclusive of the 18-acre parcel subject of the Contract. The area is generally consistent with the area of the proposed Exposed Geomembrane Cover ('Phase 1 Permanent 40-mil Geomembrane') and the two tracts of 10 acres each of Rain Cover ('Phase 1 Temporary 20-mil Geomembrane') as shown on the plan entitled "Approximate Limits of Phase 1 Closure" prepared by Alaimo and submitted to the Department on August 2,

Julie Acton May 29, 2020

2019. Tetra Tech's engineering design will consist of calculations, reports, and plans for the 36-acre contiguous parcel.

Tetra Tech has expanded the limits of the ground-based survey to include existing stormwater channel downslope of Cells 1 through 7, including the segment discharging into the stormwater basin. The survey includes regular cross sections at 100 ft intervals and additional cross section at hydraulics relevant elements, such as structures, culverts, and turns of the channel orientation. Observations from the ground-based survey will be incorporated into the 2020 topographic survey to create a three-dimensional model of the landfill for use in the hydraulic design of the stormwater management system.

Tetra Tech will design stormwater management features along the perimeter of the EGC and the landfill access roadway on Cells 2, 5, 6, and 7. Stormwater management will provide these functionalities depending upon on location:

- Collect stormwater run-off with discharge to the existing perimeter stormwater channel. This functionality
  will be provided for the downslope slope areas of Cells 9, 8, 3, 1, 2, 5 (southeast), 6 (southeast), and
  most of Cell 7; and,
- 2. Divert stormwater run-off from active landfill cells located upslope of areas proposed for cover. This functionality will be required along the upslope cover limit for Cells 8 and 9.

For a comprehensive engineering design of the stormwater management system, Tetra Tech will determine the stormwater contribution from each area and design adequately sized conveyance features for the design storm event. The incremental contribution from diversion features will be included in the hydraulic calculations and engineering design. Tetra Tech will prepare the engineering report detailing the stormwater calculations and demonstrating the ability of the proposed design to convey stormwater run-off from the areas comprising the Cover.

Tetra Tech will coordinate with SCS Engineers (SCS) the design of the gas collection and conveyance system (GCCS) as it effects the Cover. The engineering design for the Cover will include details to accommodate GCCS features such as extraction wells, condensate sumps, and buried headers and laterals.

The increase in project area to 36 acres will require additional sheets to account for the larger areal extent and additional design elements.

Extending the EGC to 36 acres is anticipated to increase the construction phase by eight (8) weeks to twenty-four (24) weeks.

## 2.2 Rain Cover (optional)

Tetra Tech will provide engineering services for the design and construction of a cover in the nominally 8-acre parcel shown on Attachment 1. The design will be incorporated into the engineering plans and specifications. Specific to this area is the diversion of stormwater run-off from active landfill cells located downslope of the ridgeline. Tetra Tech will prepare stormwater calculations and engineering plans for diversion structures which will be incorporated into the perimeter stormwater management system.

Contingent upon the Authority's decision, Tetra Tech will design the cover either specifying a 40-mil textured LLDPE (recommended) or a 20-mil scrim reinforced geomembrane.

Construction of the rain cover in the 8-acre parcel is expected to increase the construction phase by one (1) week.

### 3.0 SCHEDULE AND BUDGET

### 3.1 Exposed Geomembrane Cover

As a result of the expansion of the Exposed Geomembrane Cover to 36 acres, Tetra Tech is submitting this Change Order request for \$123,230.00, excluding the optional 8-acre rain cover (refer to Section 3.2, below). The increased budget is requested for additional engineering work, construction administration services, and reporting requirements.

Tetra Tech does not anticipate changes to the Bid Support task as a result of the additional scope of work. However, the near doubling of the covered area is expected to lengthen the construction period from sixteen (16) weeks to twenty-four (24) weeks. Consequently, preparation of the Certification Report is also affected. Tetra Tech is experiencing a greater need for coordination with the Authority and its consultants than anticipated and is therefore also requesting an increase in the On-call Services task and authorization to charge for meetings with the Authority and Board and coordination with other consultants.

The following table presents the additionally requested budget for expanding the coverage of the Exposed Geomembrane Cover to 36 acres:

cation Report	\$17,110.00 \$10,000.00	\$4,780.00 \$10,000.00	\$21,890.00
cation Report	\$17,110.00	\$4,780.00	
			7200,000
ruction Administration Services	\$179,600.00	\$75,430.00	\$255,030.00
upport	\$22,410.00		\$22,410.00
eering Design	\$70,770.00	\$33,020.00	\$103,790.00
	eering Design upport	eering Design \$70,770.00 upport \$22,410.00	upport \$22,410.00

Cornerstone will provide the services subject of this supplemental proposal in conjunction with the Authority's authorization dated March 9, 2020 and subject to the same terms and conditions.

## 3.2 Rain Cover (Optional)

If authorized by SCIA, Tetra Tech will provide services for the design, construction, and documentation of the Rain Cover for the 8-acre tract as an integral part of the overall engineering and consulting services for the Exposed Geomembrane Cover. The incremental costs are summarized in the table below and are contingent upon acceptance of the Change Order for the Exposed Geomembrane Cover above.

Tasl		Optional Rain Cover Increase
1.	Engineering Design	\$7,500.00
2.	Bid Support	
3.	Construction Administration Services	\$9,450.00
4.	Certification Report	\$1,500.00
5.	On-call Services	
	Total	\$18,450.00

### 3.3 PERMISSIBLE CHANGES

Under normal circumstances, Tetra Tech would not have expected the additional scope to significantly affect the project schedule. However, due to COVID-19, Tetra Tech is accommodating staff to protect their health and provide care for family members. This is likely to have minor impacts on schedules due to alternative availabilities. Tetra Tech estimates the cumulative impact on the engineering phase schedule to be two (2) weeks.

Tetra Tech remains responsible for and is committed to ensuring the health and safety of its employees. We also have an obligation to you as our Client to perform a service in a cost-efficient manner. Tetra Tech affirms it will comply with the law and the applicable job site safety rules and other procedures established by governing authorities and our Clients. While Tetra Tech will continue to make a conscientious, good faith effort to honor the pricing and schedules detailed herein these challenging times necessitate that Tetra Tech reserve the right to make pricing and schedule adjustments as necessary. While not an exhaustive list of when an adjustment may be expected some examples are: Acts of God, terrorist acts, acts of local, municipal or federal governments, fires, floods, epidemics, quarantine restrictions, embargoes, supply chain interruptions or unusually severe weather. These adjustments will in all likelihood vary in nature due to the geographic location of the project and local conditions. We welcome conversations on what the above potentially entails and what can be done in mitigation.

#### 3.4 CLOSING

This work will be governed in accordance with the Cornerstone General Terms and Conditions.

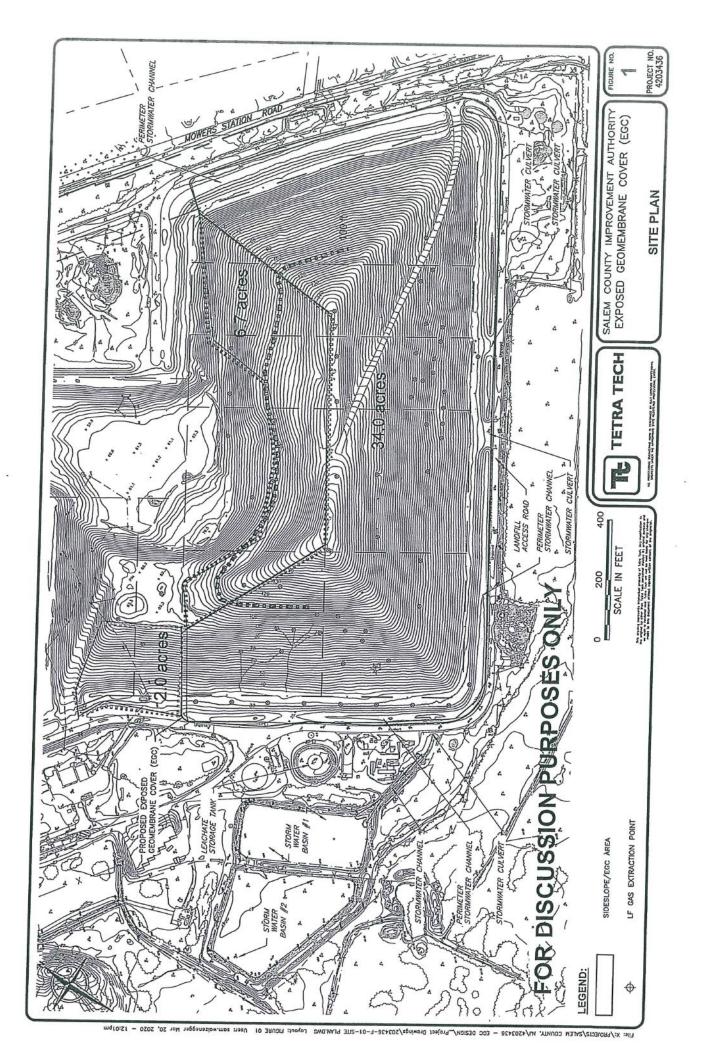
We appreciate the opportunity to present this proposal for your review and approval and trust the information presented herein will meet your expectations. Any changes to the proposal must be accepted in writing by both parties. Please indicate your authorization of the proposal by signing in the space provided below. Upon signing, return a complete copy to our office, and retain the original for your records. Please contact us if you have any questions or comments or require additional information.

Should you have any questions regarding this supplemental proposal or require additional information, please feel free to contact me by phone, 845.695.0213, or via email: <a href="mailto:arie.kremen@tetratech.com">arie.kremen@tetratech.com</a>. We are looking forward continuing working with the Salem County Improvement Authority and its staff.

Sincerely,

(please print)

	CORNE	ERSTON	E ENVIRONMENTAL GROUP, LLC – A TE	TRA TECH COMPANY	
			en, Ph. D. Manager		
E	Encl:	EGC	Site Plan, marked 'For Discussion', Te	etra Tech. April 22, 2020	
C	cc:		Swyka		
A	Acce	ptan	ce		
			Improvement Authority nembrane Cover, Supplemental Propo	osal	
P	lease	mark th	ne items and materials as appropriate:		*
			e Exposed Geomembrane Cover Rain Cover, using 20-mil scrim reinforced geomembrar 40-mil textured LLDPE	ne	
T	his pro erms a	posal a and Cor	and all enclosures have been reviewed aditions are accepted and become a b	d and are hereby agreed to and approved inding part of this agreement.	. The enclosed
E	Ву			Date	
			Julie Acton	Executive Director	



#### Certification of Availability of Funds

This is to certify to the AUTHORITY BOARD of the SALEM COUNTY IMPROVEMENT AUTHORITY that funds for the following resolutions are available.

Amount:

\$423,120.00

Resolution Date:

June 11, 2020

Resolution Number:

2020-60

Vendor: Cornerstone Environmental Group LLC

Account Number

Amount

Department Description

60.17.120.000

\$423,120.00

Amendment to Contract-Eng Srvcs

Design/Construction-Geomembrane

Cover

Total

\$423,120.00

Only amounts for the 2020 Budget Year have been certified. Amounts for future years are contingent upon sufficient funds being appropriated.

Chief Financial Officer

# C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Required Pursuant to N.J.S.A. 19:44A-20.26

This form or its permitted facsimile must be submitted to the local unit no later than 10 days prior to the award of the contract.

no later th	nan 10 days prior to the award of the c	contract.	
Part I – Vendor Information			
Vendor Name: Cornerstone Enviro	onmental Group, LLC		
Address: 100 Crystal Run Rd., Suite	101		
City: Middletown	State: NY Zip: 10941		
The undersigned being authorized to co	ertify, hereby certifies that the subm	ission provided	herein represents
compliance with the provisions of N.J.S.A	. 19:44A-20.26 and as represented by	the Instructions a	accompanying this
form.			1 - 78
Piell.	Prentiss Shaw	Vice Preside	nt
Signature	Printed Name	Title	
Part II - Contribution Disclosure	1		
		25	
Disclosure requirement: Pursuant to	N.J.S.A. 19:44A-20.26 this disclosur	re must include	all reportable
political contributions (more than \$30)	0 per election cycle) over the 12 mor	ths prior to sub	mission to the
committees of the government entities	listed on the form provided by the lo	ocal unit.	
5			
Check here if disclosure is provided in	electronic form.		
Contributor Name	Recipient Name	Date	Dollar Amount
None	•		\$
None			

# **Continuation Page**

# C. 271 POLITICAL CONTRIBUTION DISCLOSURE FORM

Required Pursuant to N.J.S.A. 19:44A-20.26

Contributor Name	Recipient Name	Date	Dollar Amoun
		Dute	\$
None			1
		-	
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Check here if the information	n is continued	on subsequent	page(s)
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# List of Agencies with Elected Officials Required for Political Contribution Disclosure N.J.S.A. 19:44A-20.26

County Name: Salem

State: Governor, and Legislative Leadership Committees

Legislative District #3: State Senator and two (2) members of the General Assembly per district.

County: Freeholders, County Clerk, Sheriff and Surrogate

# Municipalities (Mayor and members of governing body, regardless of title):

Alloway Township

Carneys Point Township

Elmer Borough

Elsinboro Township

Lower Alloways Creek Township

Mannington Township

Oldmans Township

Penns Grove Borough

Pennsville Township

Pilesgrove Township

Pittsgrove Township

Quinton Township

Salem City

Upper Pittsgrove Township

Woodstown Borough

#### Boards of Education (Members of the Board):

Alloway Township

Elmer Borough

Elsinboro Township

Lower Alloways Creek

Mannington Township

Oldmans Township

Penns Grove-Carney's Point Regional

Pennsville

Pittsgrove Township

Quinton Township

Salem City

Upper Pittsgrove Township

Woodstown-Pilesgrove Regional

#### Fire Districts (Board of Fire Commissioners):

Pittsgrove Township Fire District No. 1

Pittsgrove Township Fire District No. 2

Pittsgrove Township Fire District No. 3

STATEMENT OF OWNERSHIP DISCLOSURE
N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name o	of Organization:	Cornerstone Environme	ntal Group, LLC
Organi	zation Address:	100 Crystal Run Rd., S	uite 101, Middletown, NY 10940
-		at represents the type of	
Sole	e Proprietorship (ski	ip Parts II and III, execute	e certification in Part IV)
ALCOHOL:			ecute certification in Part IV)
For-	Profit Corporation (	(any type) X Limited L	iability Company (LLC)
Part	nership	Limited Partnership	Limited Liability Partnership (LLP)
Othe	er (be specific):		
Part II			
1 0 W	0 percent or more wn a 10 percent o	of its stock, of any clas r greater interest therein ent or greater interest the	resses of all stockholders in the corporation who own s, or of all individual partners in the partnership who n, or of all members in the limited liability company erein, as the case may be. (COMPLETE THE LIST
		OR	
in in	ndividual partner in	the partnership owns a ty company owns a 10 p	s 10 percent or more of its stock, of any class, or no 10 percent or greater interest therein, or no member percent or greater interest therein, as the case may be.
Please at	ttach additional she	ets if more space is need	ded):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address
Tetra Tech, Inc.	3475 East Foothill Boulevard Pasadena, California 91107-6024

# Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. Attach additional sheets if more space is needed.

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s
https://investor.tetratech.com/financials/sec-filings/default.aspx	

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II other than for any publicly traded parent entities referenced above. The disclosure shall be continued until names and addresses of every non-corporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. Attach additional sheets if more space is needed.

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address
See attached	
,	

#### Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the *Salem County Improvement Authority (SCIA)* is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with the Authority to notify the Authority in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the Authority to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):	Prentiss Shaw	Title:	Vice President
Signature:	Pat-1	Date:	June 8, 2020

#### Statement of Ownership

- > 10% Owners of Cornerstone Environmental Group, LLC
  - Tetra Tech, Inc., 3475 E. Foothill Blvd. Pasadena, California 91107
- > 10% Owners of Tetra Tech, Inc.
  - BlackRock, Inc., Park Avenue Plaza 55 East 52nd Street, New York City, New York 10055
  - The Vanguard Group, Inc., 100, Vanguard Blvd, Malvern, Pennsylvania 19355
- > 10% Owners of BlackRock, Inc.
  - The PNC Financial Services Group, Inc., ONE PNC PLAZA, 249 FIFTH AVENUE, Pittsburgh, Pennsylvania 15222