# COAKLEY EXECUTIVE COMMMITTEE MEETING MINUTES

# Wednesday, December 18, 2019

9:00 a.m., Law Library, Portsmouth City Hall
1 Junkins Avenue

The Coakley Executive Committee meeting and Teleconference call commenced at 9:05 a.m.

<u>In attendance</u>: Karen Conard, Acting City Manager, Chairman Eric Spear, Seth Jaffe, Esq., Peter Britz, Robert Sullivan, Esq. and Marian Steimke.

Conferenced in by phone: Curtis Shipley, Esq. Dan MacRitchie and Joe Montello.

<u>Guests in attendance</u>: Mark Chrisos, Councillor Elect Peter Whelan, David Meuse, Susan Moniz, John Tuthill, Mindi Messmer.

Chairman Spear gave the opportunity for introductions.

I. Review the minutes of the November 4, 2019 Coakley Teleconference call.

A motion was made by Attorney Seth Jaffe to approve the minutes of the November 4, 2019 meeting; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

**OU-1** 

All invoices have payment certifications dated:

12/18/2019

II. BILLS

CITY OF PORTSMOUTH: No payment certifications required

A. Invoice # 2900145975

dated

11/25/2019

\$2,750.00

B. Invoice # 2900162855

dated

12/13/2019

\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items II - A & B for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

## CES INC.:

Invoices dated 10/25/2019
Services rendered through 9/29/2019

C.	Invoice #	20194762 General technical assistance	\$1,339.63	(35%)
D.	Invoice #	20194764 Stormwater work plan, Fall 2018 Sampling,	\$9,404.50	(100%)
E.	Invoice #	20194769 Fall Groundwater Report Addendum	\$658.66	(35%)
F.	Invoice #	20194772 2019 Spring Sampling	\$762.83	(35%)
G.	Invoice #	20194780 2019 Fall Sampling	\$681.19	(35%)

Peter Britz explained the CES bills. Item C's technical assistance included support from CES when they joined Peter on a regular coordination call with EPA and DES. Item D included proposed amendments to the completed 2018 annual report. The Addendum in Item E incorporated comments received.

A motion was made by Attorney Seth Jaffe to approve items II – C through G for payment; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

# SANBORN HEAD Invoice dated: 9/30/2019

H. Invoice # 0049375 Services rended thr: 9/21/2019 \$7,124.72
Prelim deep bedrock & understanding; Surface
water assess; Remedy concept analysis

Peter explained that Sanborn Head assisted CES and provided support for HB494 remedial measures.

Seth questioned the allocation of the OU-1 and OU-2 billing (\$7,124.72 for OU-1 and \$135.96 for OU-2), and he asked Peter to verify that allocation.

A motion was made by Attorney Seth Jaffe to approve item II – H for payment, subject to verification by Peter Britz for the OU-1 and OU-2 allocations; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

#### PISCATAQUA SAVINGS BANK

I. Invoices dated: 12/2/2019

Services dated: Aug - Nov 2019 \$840.00 Services dated: 12/1/19 - 11/30/20 \$2,500.00

A motion was made by Attorney Seth Jaffe to table item II – I and to direct Bob Sullivan and Peter Britz to finalize the details with the Bank. This motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

#### III. OU - 1 ACTION ITEMS

There are no action items.

#### IV. OU - 1 RECORD ITEMS

There are no record items.

OU - 1 Balance as of close of business on November 29, 2019: \$166,876.25

OU-2 All invoices have payment certifications dated: 12/18/2019

#### v. BILLS

CITY OF PORTSMOUTH: No payment certifications required

A.	Invoice #	2900145975	dated	11/25/2019	\$2,750.00
В	Invoice #	2900162855	dated	12/13/2019	\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items V – A & B for payment; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

## CES INC .:

Invoices dated 10/25/2019
Services rendered through 9/29/2019

C.	Invoice #	20194762 General techr	nical assistanc	e	\$2,487.87	(65%)
D.	Invoice #	20194763 Bedrock Investand out of sco	•	plan, Packer sampling	\$7,091.71	(100%)
E.	Invoice #	20194769 Fall Groundwa	ater Report Ad	dendum	\$1,223.22	(65%)
F.	Invoice #	20194772 2019 Spring S	Sampling		\$1,416.67	(65%)
G.	Invoice #	20194780 2019 Fall San	npling		\$1,265.06	(65%)
H.	Invoice #	20193282 balance due	dated	7/26/2019	\$300.00	

Peter Britz described the work completed by CES.

A motion was made by Attorney Seth Jaffe to approve items V-C through H for payment; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

# **ADVANCED RADON MITIGATION:**

I. Invoice # PIN138 dated 11/14/2019 \$1,724.00 (100%)
368 Breakfast Hill Road; Carbon Lead / Lag
Exchange Maint. - 1,4-Dioxane Sampling

Peter said the carbon filtration system had been changed and that in a year they will replace the lead carbon tank with the lag carbon tank and install a new lag carbon tank.

A motion was made by Attorney Seth Jaffe to approve item V-G for payment; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

Peter said that Mike Deyling of ČES is planning to retire at the end of January 2020 and has been asked to put together a transition plan. Peter and Joe will be involved in this process. Seth asked for a recommendation from the Technical Committee about whether to stay with CES or not. Peter and Joe to discuss.

# SANBORN HEAD:

J.	Invoice #	0049752 Services rendered	dated	11/15/2019 - 11/9/2019	\$24,522.14	(100%)
				norandum Support		
K.	Invoice #	0049375 Services rended Prelim deep bedr water assess; Re	ock & under		\$135.96	
L	Invoice #	0049084 Prelim deep bedr	dated ock & under	8/23/2019 standing.	\$2,164.03	

Peter said the support for the memorandum in Item J was for the interim report to the EPA and DES.

A motion was made by Attorney Seth Jaffe to approve items V-J, K, L for payment; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

# **PISCATAQUA SAVINGS BANK**

M. Invoices dated: 12/2/2019

Services dated: Aug - Nov 2019 \$840.00 Services dated: 12/1/19 - 11/30/20 \$2,500.00

A motion was made by Attorney Seth Jaffe to table Item V – M and to direct Bob Sullivan and Peter Britz to finalize the details with the Bank. This motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

# VI. OU - 2 ACTION ITEMS

A \$240,000.00 supplemental assessment for 2019 was due on September 30, 2019.

	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$128,522	\$128,522.40	9/24/2019
Town of Newington	5.463%	\$13,111	\$ 13,111.20	9/20/2019
Town of N. Hampton	4.063%	\$9,751	\$ 9,751.20	9/24/2019
Generators	20%	\$48,000	\$ 48,000.00	11/12/2019
Browning-Ferris Inds.	12.308%	\$29,539	\$ 29,539.20	9/11/2019
Waste Management	4.615%	\$11,076	\$ 11,076.00	9/16/2019
TOTALS:	100%	\$240,000	\$240,000.00	

The assessments that were mailed out will be shown in the next meeting.

# VII. OU - 2 RECORD ITEMS

There are no record items.

OU - 2 Balance as of close of business on November 29, 2019: \$342,522.92

### **COMBINED OU-1 & OU-2**

# VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth, dated 12/18/2019.

Peter discussed the details of his Activity Report. The 2020 assessments were mailed out and balances will be reported out at the next meeting. Peter explained that even though Alpha is an approved lab by DES there were some problems with the sampling hold times for the 2019 fall sampling. These issues are being resolved. He said that once the results have been completed by the lab and reviewed by CES, they will put together the annual report. Peter said that we will most likely get comments on the interim report to EPA and DES right before or right after the holidays at which point we will prepare a response to those comments.

It was decided that discussion regarding the website be tabled.

The DOJ invoice for reimbursement went out 11/20/2019. Peter estimated that it takes from one to four months to receive the reimbursement from DOJ, which represents 20% of the OU-2 costs.

# IX. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. Letter to NH Senator Donna Soucy and NH Rep. Stephen Shurtleff from NH DES Commissioner Robert Scott, dated 11/1/2019.
- B. Letter to US DOJ and US EPA from Peter Britz, dated 11/20/2019 RE: Coakley Landfill Superfund Site Bill for Response Costs.
- C. Invoice # 11 to Settling Federal Agencies c/o The United States, in the amount of \$125,130.94.
- D. Certificate of Liability Insurance; Insurec CES, Inc., dated 12/4/2019. Per claim and Aggregate Limits: \$3 million each.

#### OTHER BUSINESS

Request by M. Messmer to hold Coakley Executive Committee meetings in the A. Council Chambers.

The Executive committee will hold meetings in Conference Room A, when it is available.

Online access to Piscataqua OU1 & OU2 bank statements. B.

Bob, Peter and Marian will sort the details of the bank access.

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive meeting will be held on Friday, January 17, 2020 at 9:00 a.m. in Conference Room A in City Hall, Portsmouth.

The meeting adjourned at 9:42 a.m.

Dated: Decay ber

Eric Spear, Chair

Coakley Executive Committee Chair

Respectfully Submitted, Marian Steimke

# COAKLEY EXECUTIVE COMMITTEE MEETING MINUTES

Friday, January 17, 2020

# 9:00 a.m., Conference Room A, Portsmouth City Hall 1 Junkins Avenue. Portsmouth

The Coakley Executive Committee meeting and Teleconference call commenced at 9:01 a.m.

In attendance: Chairman Eric Spear, Seth Jaffe, Esq., Peter Britz, and Marian Steimke.

Conferenced in by phone: Curtis Shipley, Esq. Dan MacRitchie and Joe Montello.

Guests in attendance: Michael Tully, Interim Town Administrator of N. Hampton, John Tuthill, Ted Connors, Town of Newington, Councilor Petra Huda, Susan Moniz, Greenland resident, Mindi Messmer, NHSWA, John Hartley, NHSWA.

I. Review the minutes of the December 18, 2019 Coakley Teleconference call.

A motion was made by Attorney Seth Jaffe to approve the minutes of the December 18, 2019 meeting; this motion was seconded by Attorney Curtis Shipley and the motion was approved unanimously.

Joe Montello joined the meeting at this time.

# **OU-1**

#### II. BILLS

#### DC MacRITCHIE, LLC

Payment Certification dated: Services through: 1/17/2020 12/21/2019

A. Invoice # 205589 dated 1/3/2020 Professional Services \$3,927.25

#### DISCUSSION:

Peter Britz said this was related to work on the budget projection.

A motion was made by Attorney Seth Jaffe to approve item II - A. for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### CES INC.:

Payment Certifications dated: 1/17/2020 Invoices dated: 11/22/2019 Services rendered through 10/27/2019

B. Invoice # 20195251 \$1,201.38
General technical assistance

C. Invoice # 20195252 \$200.00 Stormwater work plan; Fall 2018 sampling; out of scope serv.

D. Invoice # 20195249 \$407.75 2018 Fall Groundwater Report Addendum

E Invoice # 20195250 \$10,030.00 2019 Fall sampling

#### DISCUSSION:

Peter explained that Item B was for work as requested.

The status on Item C is for completion of the Stormwater work.

Peter said he believes this is the last billing for the 2018 Fall Groundwater Report Addendum, Item D. The billing for Item E, 2019 Fall sampling is the most recent sampling that occurred in the fall of 2019.

A motion was made by Attorney Seth Jaffe to approve items  $\Pi$  – B through E for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### CES INC.:

Payment Certifications dated: 1/17/2020 Invoices dated: 12/10/2019 Services rendered through 11/24/2019

F. Invoice # 20195531 \$182.87 General technical assistance

G. Invoice # 20195534 \$151.38 Fall Groundwater Report Addendum; 2018 fall sampling

H. Invoice # 20195533 \$273.87 2019 Spring sampling

I. Invoice # 20195535 \$8,108.45 2019 Fall sampling; Alpha Lab

#### **DISCUSSION:**

These are invoices are for different dates of service, and the discussion is similar to the first set of CES invoices. The 2019 spring sampling was some minor work that had to be done, and Item I was for field work and lab costs. The lab work that had to be re-done will not be billed to us.

A motion was made by Attorney Seth Jaffe to approve items II – F through I for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### PISCATAQUA SAVINGS BANK

Invoices dated: 12/2/2019

J. Services through: 11/30/2019 \$840.00
 K. Services through: 11/30/2020 \$2,500.00

#### **DISCUSSION:**

Peter said Bob, Marian and himself met with the Bank and agreed to this amount per year. The Bank had not been charging us account management fees in the past which was a remnant of when the account balances were well over \$1 million. With this billing format there will be no transaction fees. Item K is for the year forward (12/1/2019 - 11/30/2020).

A motion was made by Attorney Seth Jaffe to approve items II – J and K for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### III. OU - 1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and will be due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00		
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00		
Browning-Ferris	12.308%	\$38,155.00	\$38,155.00	12/30/2019
Waste Management	4.615%	\$14,307.00		
TOTALS	100%	\$310,000.00		

#### DISCUSSION:

Seth said he authorized the transfer on the Generator assessment funds and they should come through shortly. Ted Connors of Newington said theirs will be in shortly as well.

### IV. OU - 1 RECORD ITEMS

There are no record items.

OU-1 Balance as of 1/13/2020: \$358,737.65

# <u>OU-2</u>

#### V. BILLS

# DC MacRITCHIE, LLC

Payment Certification dated: 1/17/2020 Services through: 12/21/2019

A. Invoice # 205589 dated 1/3/2020 Professional Services \$3,927.25

#### **DISCUSSION:**

Peter said the OU-2 portion was 50% of the bill and pointed out to Dan that he under charged us by a dollar.

A motion was made by Attorney Seth Jaffe to approve item V-A. for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### CES INC.:

Payment Certifications dated: 1/17/2020 Invoices dated: 11/22/2019 Services rendered through 10/27/2019

B.	Invoice#	20195251	\$2,231.12
	Gene	ral technical assistance	

C.	Invoice #	20195340	\$7,377.50
	New	well install; out of scope services	
	Inter	im bedrock investigation report	

D.	Invoice #	20195249	\$757.25
	2018	Fall Groundwater Report Addendum	

E.	Invoice #	20195250	\$18,627.14
	2019 F	all sampling	·

#### **DISCUSSION:**

Peter said the discussion around Items B, D and E were the same as for OU-1. Item C was for work related to the completion of the new monitoring wells

A motion was made by Attorney Seth Jaffe to approve items V-B through E for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### CES INC.:

Payment Certifications dated: 1/17/2020 Invoices dated: 12/10/2019 Services rendered through 11/24/2019

F. Invoice # 20195531 \$339.63 General technical assistance

G. Invoice # 20195532 \$15,896.25 New well installation; interim bedrock invest report.

H. Invoice # 20195534 \$281.12

Fall Groundwater Report Addendum; 2018 fall sampling

I. Invoice # 20195533 \$508.63 2019 Spring sampling

J. Invoice # 20195535 \$15,058.55 2019 Fall sampling; Alpha Lab

#### **DISCUSSION:**

Peter said the discussion around Items F, I and J were the same as for OU-1 item G. was similar to the invoice from the previous moth 20195340 the completion of new wells.

A motion was made by Attorney Seth Jaffe to approve items V – F through J for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### PISCATAQUA SAVINGS BANK

Invoices dated: 12/2/2019

K. Services through: 11/30/2019 \$840.00 L. Services through: 11/30/2020 \$2,500.00

#### **DISCUSSION:**

Peter said the discussion around Items K. and L. were the same as for OU-1.

A motion was made by Attorney Seth Jaffe to approve items V-K and L for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

DES

Payment Certifications dated:

1/17/2020

Invoice dated:

11/13/2019

\$1,966.86

6

Services through:

6/30/2019

M.

Invoice # 198712001-10

Monitor / sample / data collection / residential wells

#### DISCUSSION:

Peter said this was DES cost recovery from two separate sampling rounds for three wells. These wells are located at: 25 September drive and 192 Breakfast Hill Road Breakfast Hill Road located to the West of the Groundwater Management zone for the site. Seth sated that the Executive Committee is paying this but do not believe these wells are within the zone of influence of Coakley. The Executive Committee reserves the right to not pay these invoices. Seth asked Peter to draft another letter that reflects the Group's position and add that we are hopeful that bedrock investigation confirm this understanding for NHDES.

A motion was made by Attorney Seth Jaffe to approve item V - M for payment; this motion was seconded by Attorney Curtis Shipley, and the motion was approved unanimously.

#### VI. OU - 2 ACTION ITEMS

Assessments were sent out on 11/26/2019 and will be due by 1/31/2020.

PRP	Percentage	Requested	Amount	Date
PKP	rercentage	Amount	Received	Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019
Town of Newington	5.463%	\$34,144.00		
Town of N. Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00		
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00		
TOTALS	100%	\$625,000.00		

#### VII. OU - 2 RECORD ITEMS

There are no record items.

#### OU-2 Balance as of 1/13/2020: \$572,752.58

#### COMBINED OU-1 & OU-2

#### VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth, 1/17/2020

#### Fall Sampling

This is complete. Alpha Lab was re-running some samples. They will insert the data into tables, and validate the data before finalization. We should get that within 1 and ½ to 3 months and will then send the tables to the residents after the data validation is complete.

#### Deep Bedrock Study

The interim report was submitted with review and comments expected from the EPA by the end of January.

#### Surface Water & Stormwater Report

CES is working on a response to agency comments and preparation of a scope of work for next steps on work.

#### Financial Assurance

The report has gone out to the EPA as described in the OU-1 Consent Decree.

#### **CES Transition**

After Mike Deyling's retirement, Chris Buckman will take over lead technical staff for CES on this project. CES staff will continue their work on annual monitoring. Joe and Peter believe CES has the depth to support future work. Joe and Peter believe it is best to stay with CES and evaluate performance over time.

Seth supports that recommendation, but asked what an alternative would be. For instance, if it were Sanborn Head, they would perform the actual work, and not just the oversite. He also asked if there was an advantage to having a second set of eyes on it. Peter said that Sanborn Head does not get involved with onsite sampling. Peter also stated that Chris has been the lead for the past year, with Mike's role having been the review off reports and providing input. Peter said they had not yet seen Chris's present at public meetings. Because of the volume of work in

progress, it would be a tough time to switch to another vendor. Another point that Peter raised was that they have not yet established requirements on deciding a successful transition.

Joe said that CES is more cost effective, and they are capable of doing the work. The Sanborn Head work will continue. If we switch it would mean getting another consultant up to speed and likely higher costs.

Seth said there was a benefit to keeping the structure we have now and asked that we asses over time how this is working.

He asked if the bulk of the bedrock investigation was complete, and Peter said there were some areas the regulators would be looking at and that they'd find out by end of February what additional work would be required.

#### Piscataqua bank

This topic was already discussed above.

#### IX. COMBINED OU – 1 & OU – 2 RECORD ITEMS

- A. Certificate of Liability Insurance dated 11/26/2019
- B. Letter to Eric Spear, from Thomas Queeney, Piscataqua Savings Bank, dated 1/6/2020, Re: Coakley Landfill Superfund Site Trusts OU1 & OU2 Fiduciary Billing.
- C. Letter to Piscataqua Savings Bank, from Curtis Shipley, dated 1/13/2020; Re: CLSS Trust Funds OU1 & OU2; documenting how he sent USA Patriots Act Form (For Non-Present Account Signer) and PAL forms directly to Piscataqua Savings Bank.

Seth asked to view Item IX-A

#### X. OTHER BUSINESS

- A. Signing of Piscataqua Savings Bank forms for Trust Account:
  - 1. Organizational Resolution OU-1
  - Organizational Resolution OU-2
     Eric, Seth sign beneath Curtis on each form.
     Eric, Seth fill out & sign page 2 on each form.

	,		

3. USA Patriots Act Form (For Non-Present Account Signer)

Eric, Seth sign. Notary will be present. Curtis' is complete.

- 4. Portfolio Account Link (PAL) Registration Forms
  Eric to sign Peter & Marian's forms.
  Seth's & Curtis's are complete.
- B. Signing of Disbursement forms for OU-1 & OU-2 bill payment.

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive meeting will be held on Wednesday, March 4, 2020 at 9:00 a.m. In a location to be determined.

The meeting adjourned at 9:30 a.m.

## XII. NON-PUBLIC SESSION

There was not a non-public session.

Dated: Jan 21, 20

Eric Spear, Chair

Coakley Executive Committee Chair

Respectfully Submitted, Marian Steimke

# COAKLEY EXECUTIVE COMMMITTEE Tuesday, April 7, 2020, 10:00 a.m. Teleconference MEETING MINUTES

Remote Meeting via Teleconference Call

The Coakley Executive Committee Teleconference call commenced at 10:02 a.m.

Conferenced in by phone: Chairman Eric Spear, Seth Jaffe, Esq., Curtis Shipley, Esq., Robert Sullivan, Esq. Peter Britz, Dan MacRitchie, Joe Montello and Marian Steimke.

Guests conferenced in by phone: Michael Tully, N. Hampton,

Chairman Spear read the following:

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8 and Executive Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

I. Review the minutes of the January 17, 2020 Coakley Teleconference call.

The following corrections were suggested:

- a) Page 7, under "DISCUSSION" section, paragraph 2:
  Sentence 1, change "sated" to "stated"
  Sentence 2, add the words "in the future" to the end of the sentence.
  Sentence 3, change "confirm" to "confirms"
- b) Page 8, under "CES Transition" section, paragraph 2: Sentence 2, correct the spelling of "oversight" Sentence 5, change "off" to "of" and "Chris's" to "Chris"
- c) Page 9,
  Paragraph 2, change "cost effective" to "cost-effective"
  Paragraph 3, change "asses" to "assess"

A motion was made by Attorney Seth Jaffe to approve the corrected minutes of the January 17, 2020 meeting; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the January 17, 2020 corrected minutes.

#### **OU-1**

#### II. BILLS

#### CITY OF PORTSMOUTH: Services of Peter Britz

A.	Invoice#	2900222907	dated	1/27/2020	\$2,750.00
B.	Invoice #	2900249523	dated	2/19/2020	\$2,750.00
C.	Invoice #	2900289298	dated	3/16/2020	\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items  $\Pi$  – A, B and C for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - A, B and C for payment.

CES, INC.	Payment Certifications dated:	4/7/2020
· · · · · · · · · · · · · · · · · · ·	Invoices dated:	1/24/2020
	Services rendered through:	12/29/2019

D.	Invoice # 20200344		\$455.00
		General technical assistance	

E. Invoice # 20200346 \$1,125.00

Stormwater work plan; Fall 2018 sampling;

out of scope services

F. Invoice # 20200347 \$687.75 2019 Fall sampling

#### **DISCUSSION**:

Peter explained that item D included lab coordination; item E did not actually include out of scope services; and item F involved review of preliminary results that were coming in.

A motion was made by Attorney Seth Jaffe to approve items  $\mathbf{H} - \mathbf{D}$ ,  $\mathbf{E}$  and  $\mathbf{F}$  for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - D, E and F for payment.

CES, INC.	Payment Certifications dated:	4/7/2020
<del>&gt;</del>	Invoices dated:	2/22/2020
	Services rendered through	1/26/2020

G.	Invoice#	20200739 General technical assistance	\$588.91
H.	Invoice#	20200887 Stormwater work plan; Fall 2018 sampling; out of scope services	\$5,427.50
I.	Invoice #	20200717 2019 Fall sampling	\$314.56

#### **DISCUSSION:**

Peter explained that item G included technical meetings, and preparation for calls with agencies. Item H included work on the Stormwater Report response to comments. Item I included the updating of data tables.

A motion was made by Attorney Seth Jaffe to approve items II – G, H and I for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - G, H and I for payment.

#### **NORDSTROM TRUST:**

J. Invoice #13-30687 dated: 6/30/2019 \$5,790.00 Mowing the Landfill Cap Payment Certification dated: 4/7/2020

#### **DISCUSSION:**

Peter explained this bill is for mowing that was done last summer. The vendor sent the bill very late due to their computer problems. Peter will check in with them to contract for this summer's work.

Seth asked if there was any activity coming up that will be affected by COVID-19 and if any plans needed to be updated to address health and safety. He asked if DES or EPA were looking at any of the CLG's plans.

Peter said they talked about residential sampling but have not formalized any safety plans. Peter will follow up on that to update health and safety plans and scope.

A motion was made by Attorney Seth Jaffe to approve item II – J for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – J for payment.

#### US DEPARTMENT OF TREASURY

K. Form #1120-SF for tax year 2019 \$87.00IRS Form 1120-SF Tax Return for Settlement Funds (Under Section 468B)

L. First Installment Tax Payment 4/15/2020

\$100.00

#### **DISCUSSION**:

Peter will follow up to get more information about these items.

A motion was made by Attorney Seth Jaffe to table approval of items  $\mathbf{H} - \mathbf{K}$  and  $\mathbf{L}$  for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to table items II - K and L for payment.

#### III. OU-1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested	Amount	Date
PRP	Percentage	Amount	Received	Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00	\$16,932.00	1/21/2020
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00	\$62,000.00	1/15/2020
Browning-Ferris	12.308%	\$38,155.00	\$38,155.00	12/30/2019
Waste Management	4.615%	\$14,307.00	\$14,307.00	1/21/2020
TOTALS	100%	\$310,000.00	\$310,000.00	

#### IV. OU-1 RECORD ITEMS

There were no record items.

**OU-1** Balance as of 4/3/2020:

\$425,450.30

#### OU-2

#### V. BILLS

CITY OF PORTSMOUTH: No payment certifications required

A.	Invoice #	2900222907	dated	1/27/2020	\$2,750.00
B.	Invoice #	2900249523	dated	2/19/2020	\$2,750.00
C.	Invoice #	2900289298	dated	3/16/2020	\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items V-A, B and C for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - A, B and C for payment.

CES, INC.	Invo	Payment Certifications dated: Invoices dated: Services rendered through		
D.	Invoice #	20200344 General technical assistance	•	\$845.00
E.	Invoice #	20200345 Interim Bedrock Investigati	on Report	\$2,300.00
F.	Invoice#	20200347 2019 Fall sampling		\$1,277.25

#### **DISCUSSION**:

Peter explained that item D is the same as that of OU-1. Item E involved finalization of the report specific to OU-2, and item F is the same as that of OU-1.

A motion was made by Attorney Seth Jaffe to approve items V-D, E and F for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - D, E and F for payment.

CES, INC.	Payment Certifications dated:	4/7/2020
) <del></del>	Invoices dated:	2/22/2020
	Services rendered through	1/26/2020

G. Invoice # 20200739
 General technical assistance

 H. Invoice # 20200717
 2019 Fall sampling
 \$1,093.69

#### **DISCUSSION**:

Peter said that items G and H were the same as OU-1.

A motion was made by Attorney Seth Jaffe to approve item V-G and H for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - G and H for payment.

#### **SANBORN HEAD**:

I.	Invoice #0050274 dated: 1/24/2020 Services rendered through 1/18/2020 Deep Bedrock Technical Memorandum Support	\$7,998.77
J.	Invoice #0050706 dated: 3/20/2020 Services rendered through 3/14/2020 Deep Bedrock Investigation Tech Support	\$8,696.91

#### DISCUSSION:

Peter explained that item I related to helping CES with the technical memo and item J was for preparation for the agency meeting.

A motion was made by Attorney Seth Jaffe to approve item V-I and J for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V-I and J for payment.

#### VI. OU-2 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019
Town of Newington	5.463%	\$34,144.00	\$34,144.00	1/24/2020
Town of N. Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00	\$125,000.00	2/11/2020
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00	\$28,844.00	1/21/2020
TOTALS	100%	\$625,000.00		

Partial payment

Peter explained the partial payment – the City did not have that amount authorized for the fiscal year. Seth asked if this raises budget authority issues regarding Coakley expenditures for FY21. Bob said we were not at that point yet, and Seth asked for news earlier rather than later.

#### VII. OU-2 RECORD ITEMS

There were no record items.

OU-2 Balance as of 4/3/2020:

\$692,396.52

#### COMBINED OU-1 & OU-2

#### VIII. COMBINED OU-1 & OU-2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 4/7/2020

#### Fall Sampling 2019:

The sampling is complete except for the one issue/holdup being that the data has not come back from the data validator. The last data packet is mostly residential data, and that should be back within a week. Once all of the validated data is received, CES can provide the data to the residents and finalize the annual report.

Seth asked if the data got to the data validator late, and Peter said there was a delay in processing all of the results due to an issue with the new lab where some of the samples had to be recollected in the field and re-run at the lab.

Seth expressed concerns that this work was done six months ago. This is work that matters. It is relevant to additional work that we are doing at the site. We have to figure out a way to not have delays.

#### Spring Sampling 2020:

Peter said they are preparing for spring sampling and are planning for May  $11-22^{\rm nd}$ . While the field work for monitoring wells will go ahead as planned, there may be some delay in residential sampling. The proposed approach is to contact the drinking water supply wells properties before sampling is conducted. This sample collection will be done in coordination with EPA and DES to ensure we follow all recommended COVID-19 protocols. Seth asked if samples are collected from the tap or from the well, and Peter said it depended on the property. There was a mix of locations where samples were taken from depending on how each site is configured and where the most appropriate access point is.

#### Deep Bedrock Study:

Peter said CES met with DES and the EPA in March regarding follow-up to work done previously. CES put together a work plan which was submitted on Monday. Peter will talk to them to finalize the final work plan for the study.

#### Surface Water and Stormwater Report:

Peter said CES provided comments to the report.

#### HB 494:

Working with CES to come up with an approach for doing this work. When we have an approach we are comfortable with it will be reviewed by NHDES and USEPA to make sure it satisfies the intent of HB494. At the present time the best estimate is that an approach will be completed soon with a goal of installing something in the field in September. Likely this first installation will be a pilot which will be monitored to determine the success of the effort.

B. Proposal from Sanborn Head for 2020 Services (ref Record Item IX-C)

#### DISCUSSION:

Peter said he approved this proposal which was under \$10,000. They have been the consulting engineer with CES. Peter said they had a meeting with the EPA. They had not contracted to follow up with the EPA, so that piece has been addressed.

# IX. COMBINED OU-1 & OU-2 RECORD ITEMS

A. Organizational Resolutions for Piscataqua Savings Bank for OU-1 and OU-2 Trust Accounts signed by the Executive Committee January 2020.

- B. Email from Kelsey Dumville, EPA dated 1/29/2020 Re: EPA Update on the Coakley Landfill Site with links to two reports:
  - B (1) Link 1: Letter from CES to Richard Hull, US EPA dated 1/22/2020. Re: Stormwater Investigation Report Response to Comments; Coakley Landfill with January 2020 Surface Water Evaluation Scope of Work attached (On Disc and pages 1-15 printed).
  - B (2) Link 2: Deep Bedrock Investigation Interim Report, November 25, 2019. Prepared by CES Inc. (On disc and pages 1-13 printed).
- C. Proposal from Sanborn Head, dated 2/24/2020; Re: Proposal for 2020 Services Deep Investigation Technical Support accepted by Peter Britz on 3/6/2020. Attached Terms and Conditions dated 1/11/2019; Attached Sanborn, Head & Associates, Inc. Schedule of Fees.

A motion was made by Attorney Seth Jaffe to approve record items IX – A, B and C; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve record items IX - A, B and C.

#### X. OTHER BUSINESS

There was no other business.

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive Committee meeting was scheduled for Wednesday, May 6, 2020 at 10:00 a.m. It is planned to be held in Conference Room A in City Hall at Portsmouth.

The meeting adjourned at 10:42 a.m.	
Dated:	Eric Spear, Chair Coakley Executive Committee Chair

Respectfully Submitted, Marian Steimke

		٠

# Memo

To: Coakley Executive Committee From: Peter Britz, Coakley Coordinator

Date: May 6, 2020 Re: Activity report

## **Spring Sampling Proposal 2020**

CES will be conducting the Spring sampling round later this month. This sampling includes 12 field days which will begin on May 11. Attached please find a spring sampling contract for review and approval. The sampling contract for Spring 2019 was a total cost of \$125,300 versus this year's proposal for \$125,040 attached as (*Spring 2020 Sampling Proposal.pdf*).

### **Surface Water and Stormwater Proposal**

The proposal for ongoing surface water and stormwater work addresses the items following comments provided by the EPA in its April 2, 2020 letter as a response to the scope of work provided to EPA on the January 22, 2020. The total amount for this proposal is \$50,000 and included ongoing investigation of surface water and stormwater at and around the site attached as (10424020-04\_Surface Water Evaluation\_Contract Amend.pdf).

#### **HB 494**

CES is exploring approaches to move ahead with a design that can be reviewed by the agencies. Once and approach has been selected it will be reviewed by NHDES before implementation occurs. To develop the proposal for a treatment approach CES has provided the following proposal which will provide an implementation that outlines an approach for treatment and technical assistance to assist with the implementation. The total proposed contract amount is \$9,250 and attached as (10424020-03\_Coakley Landfill Professional Scope of Services\_HB494).

#### **Deep Bedrock Study**

CES has been developed a draft workplan as a follow-up to a meeting with the regulators that we have been going over with them to zero in on the specific work needed to complete the deep bedrock study.



April 8, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Proposal for Spring 2020 Sampling and Reporting | Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire Contract No. 10424025

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following proposal for sampling and reporting services to the Coakley Landfill Group (CLG). The Scope of Services for this proposal is based upon correspondence between the CLG, United States Environmental Protection Agency (USEPA), and New Hampshire Department of Environmental Services (NHDES) regarding the Bi-Annual Sampling event scheduled for Spring 2020.

The following tasks and associated costs are based on previous biannual sampling events completed in accordance with the Sampling and Analysis Plan (SAP) and incorporates USEPA comments (made via email correspondence on August 22, 2019) to recommendations included with the Draft 2018 Annual Summary Report and USEPA response to the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo (received on March 27, 2020 via email correspondence).

#### **SCOPE OF SERVICES**

The Coakley Landfill SAP requires the following scope of sampling services be completed during the Spring 2020 Bi-Annual long-term monitoring event with revisions made to the scope based on USEPA correspondence on August 22, 2019 and March 27, 2020. Sampling activities will be completed in accordance with the SAP with changes to the sampling frequency and list of proposed sample analysis noted accordingly. It should be noted that all PFAS analysis will include an expanded list of 26 PFAS compounds versus

Mr. Peter Britz | 04.08.2020 | 10424.000.028 | Page 1





those completed during Spring 2019 (UCMR3 - 6 compound list). A list of PFAS compounds included for analysis is provided as **Attachment A**.

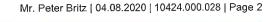
Task 1A | Bi-Annual Water Quality Sampling - Private Water Supply Well Sampling: A total of 26 offsite private water supply wells are sampled as part of the current groundwater monitoring program. Sampling of private water supply wells remains in accordance with the current SAP; however, sampling analysis was reduced to only include per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and general water quality field parameters. This reduction in analytes (arsenic and manganese removed) was implemented during Fall 2019, in accordance with USEPA approval on August 22, 2019. It should be noted that due to being in closer proximity to the Coakley Landfill to the west, 14 Pinewood Circle (14PWC) was added to the sampling program in the Fall of 2019 and 67 Ridgecrest Drive (67RCD) was removed. 14 PWC is approximately 800 feet closer to the Landfill than 67RCD.

- The physical condition and security of all private water supply sampling locations will be evaluated at the time of sample collection. This evaluation will be documented on field sheets and include water treatment systems, if any, sampling location within the property, and any other observations made at the time of sample collection [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect samples from 26 private water supply wells as included on Table 1.
   Analysis will be reduced to include only 1,4-dioxane and PFAS in accordance with USEPA approval.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP. These include two duplicate samples, a matrix spike/matrix spike duplicate (MS/MSD), and equipment rinsate blank.

# Task 1B | Bi-Annual Water Quality Sampling: OU-1/OU-2 Groundwater Sampling:

The CLG currently samples a total of 11 OU-1 wells and 38 OU-2 wells. These wells include the addition of 9 wells installed as part of the Deep Bedrock Investigation in 2018/2019 and the addition of FPC-2A/-2B during the Fall 2019 biannual sampling event (August 22, 2019 USEPA correspondence). The groundwater sampling efforts within OU-1/OU-2 will include the following:

 Collect groundwater samples from 49 groundwater monitoring wells as included on Table 2. FPC-2A and FPC-2B were added in Fall 2019 to further assess 1,4dioxane concentrations to the area south of the Coakley Landfill in overburden and







bedrock aquifers, respectively. Analysis during the Spring 2020 event will be conducted in accordance with the SAP.

- Measure depth to water level at 63 monitoring wells.
- The physical condition and security of all sampling locations will be evaluated, and this evaluation will be documented on field sheets [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP. These include four duplicate samples, three MS/MSD samples, and one equipment rinsate blank.

# Task 1C | Bi-Annual Water Quality Sampling: Surface Water/Sediment Sampling:

The CLG currently samples a total of eight surface water, seven sediment, and one landfill seep as part of its biannual sampling event. Sampling locations have not changed since 2017; however, sampling frequency and analysis have been modified since Fall 2019.

- Collect surface water samples from eight sampling locations (SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2), if sufficient water is present. Analysis during the Spring 2020 event will be conducted in accordance with the SAP, with the exception VOC's, which were removed as per CLG recommendation and approved by USEPA via its email dated March 27, 2020.
- Collect a sample from the L-1 seep sampling location, if sufficient water is present.
   Analysis during the Spring 2020 event will be conducted in accordance with the SAP.
- Collect Sediment sampling from seven sampling locations (SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2). Analysis during the Spring 2020 event will be conducted in accordance with the SAP.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP. These include three duplicate samples and two matrix spike/matrix spike duplicates, and one equipment rinsate blank.

All water quality samples will be analyzed for field parameters using portable field instrumentation. Field instruments will be calibrated in accordance with requirements contained in the SAP.

Eastern Analytical, Inc. (EAI) of Concord, New Hampshire will provide the required analytical laboratory services for VOCs, 1,4-dioxane, metals, and general landfill parameters. Vista Analytical laboratory of El Dorado Hills, California (Vista) will provide the required analytical laboratory services for PFAS analysis. EAI and Vista will provide





the laboratory data in standard PDF report and in a Microsoft Excel database format with supporting documentation to complete data validation following receipt of laboratory reports.

# Task 2 | Spring 2019 Bi-Annual Sampling Event: Data Validation:

A Tier 1 data validation process will be completed by Quality Assurance Associates based in College Station, Texas and will invoice CES directly for data validation services completed. Data validation services will be completed in accordance with the SAP and QAPP.

#### Task 3 | 2019 Bi-Annual Data Report Preparation:

CES will prepare a 2020 Bi-Annual Data Report that will include a review of analytical data, preparation of summary tables a report for review by the CLG, USEPA, and NHDES. CES will provide the CLG with a "universal" database file including analytical laboratory results and results of the Tier 1 Plus data validation.

## **IMPLEMENTATION AND SCHEDULE**

It is estimated that up to 12 field days with two field staff will be required to complete the Spring 2020 monitoring event. Time is also included for scheduling sampling at residences, calibration of field equipment prior to the sampling event (as required by the SAP), mobilization and demobilization. Sampling costs include all labor, expenses, instrument rentals, and associated supplies.

The Bi-Annual Sampling event is tentatively scheduled to start on May 11, 2020 and end on May 22, 2020. It should be noted that due to ongoing travel restrictions and executive orders issued by both the State of New Hampshire and State of Maine in their respective responses to COVID-19, private water supply well sampling may be postponed until clear directives have been issued. A request for postponement will be issued to the NHDES as per its email correspondence of March 25, 2020.

"All requests for postponement of sampling or for an alternative sampling schedule must be submitted to NHDES in writing, either by email or by letter, and approved by NHDES." (NHDES email correspondence March 25, 2020).





#### **COMPENSATION**

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.

TASK	DESCRIPTION	COST ESTIMATE
1A	Private Water Supply Well Sampling  Collect drinking water samples from 26 private water supply wells.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses \$10,600.00 Analytical Costs: \$12,800.00
1B	OU-1/OU-2 Groundwater Sampling  Analyze groundwater, surface water, water supply well, sediment, and seep samples.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses \$26,700.00 Analytical Costs: \$35,200.00
1C	<ul> <li>Surface Water/Sediment Sampling</li> <li>Collect surface water samples from SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2.</li> <li>Collect sediment samples from SED-5, SED-103, SED-110, SED-111, SED-LR, SED-BB1, and SED-BB2.</li> <li>Collect a sample from the L-1 seep location.</li> <li>Collect requisite QA/QC samples.</li> <li>Provide laboratory report of results with full QA/QC data.</li> </ul>	CES Labor/Expenses \$3,050.00 Analytical Costs: \$17,930.00
2	<ul> <li>Data Validation</li> <li>Complete data validation on 24 private water supply samples with expanded list of PFAS compounds and 1,4-dioxane.</li> <li>Perform data validation on 48 OU-1/OU-2 groundwater monitoring wells.</li> <li>Complete data validation of 8 surface water, 7 sediment, and the L-1 seep sample results.</li> </ul>	Subcontractor Costs \$8,250.00
3	<ul> <li>2020 Bi-Annual Report Preparation</li> <li>Review laboratory data.</li> <li>Prepare summary tables and groundwater contour figures.</li> <li>Prepare draft and final reports for review by the CLG, USEPA, and NHDES.</li> </ul>	CES Labor/Expenses \$10,510.00
	TOTAL	\$125,040.00



The not-to-exceed budget listed above includes costs associated with sampling equipment/meters and consumables (filters, tubing, etc.), sub-contractors, labor, report preparation, and reimbursable expenses.

Costs for this project will be invoiced monthly, based upon the work completed during the invoice period with updates to project budget and remaining scope provided when 25 percent of the budget remains. CES is prepared to initiate work on this project upon receipt of a signed copy of the attached Service Agreement Attachment B.

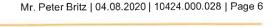
#### **ASSUMPTIONS**

The following assumptions were used in the development of the cost estimate provided above and are based on the authorization by USEPA of recommendations provided in the 2018 Annual Summary Report and the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo. This authorization was provided via email correspondence by Mr. Richard Hull of the USEPA to the CLG on August 22, 2019 and March 27, 2020, respectively.

- The completion of sediment sampling during Spring 2020 qualifies as the single annual event requested by the CLG and authorization provided by the USEPA in its correspondence of August 22, 2019.
- The completion of Spring 2020 sampling at OU-1 and OU-2 groundwater monitoring wells for all parameters (i.e. PFAS, VOCs, 1,4-dioxane) will qualify as the single annual event for the sampling of all parameters with Fall 2020 sampling comprised only of sampling/analysis for 1,4-dioxane and an expanded list of PFAS compounds.
- Offsite water supply wells (i.e. residential wells) will only be sampled/analyzed for 1,4-dioxane, PFAS, and field parameters.
- Analysis of surface water samples will not include VOCs in accordance with USEPA approval provided on March 27, 2020.

#### **AUTHORIZATION**

If this proposal is acceptable to CLG, please sign in the approval block and return a signed copy for our files. CES will return a signed and executed copy of this authorization for CLG files. CES is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Out of scope services will not be performed without prior written approval of CLG.







Certificates of insurance are included as Attachment C.

If you have any questions concerning this proposal or if additional services are needed, please contact any of the undersigned at (207) 795-6009. We appreciate this opportunity to be of service to the CLG.

Sincerely, CES, Inc.

Christopher Buckman, P.G. Senior Project Manager Environmental Division

chizz

John Pond, Principal
Executive Vice President
Environmental Division Director

CFB/JAP/rlt Enc.

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:



Table 1 - Private Water Supply Sampling Analyses and Locations
Coakley Landfill Superfund Site - Breakfast Hill Road, North Hampton & Greenland, NH
Spring 2020 Sampling Event

	Spring	g 2020 Sampling Event		
MATRIX	PRIMARY OR QA/QC	SAMPLE ID	PFAS (List of 26)	1,4-Dioxane (EPA 522)
AQUEOUS	EQUIP BLANK	DW-EB-APPARATUS	X	Х
DRINKING WATER	PRIMARY	DW-R-3	X	X
DRINKING WATER	MS	IDW-R-3-MS	X	X
DRINKING WATER	MSD	DW-R-3-MSD	×	×
DRINKING WATER	DUPLICATE	DW-R-3-DUP	X	X
DRINKING WATER	PRIMARY	DW-R-5	Х	Χ
DRINKING WATER	PRIMARY	DW-R-346BHR	X	X
DRINKING WATER	PRIMARY	DW-R-339BHR	X	X
DRINKING WATER	PRIMARY	DW-R-415BHR	X	Χ
DRINKING WATER	PRIMARY	DW-R-340BHR	X	Х
DRINKING WATER	PRIMARY	DW-R-463BHR	X	Χ
DRINKING WATER	PRIMARY	DW-R-4ROD	X	X
DRINKING WATER	PRIMARY	DW-R-10ROD	X	X
DRINKING WATER	PRIMARY	DW-R-25FW	Х	X
DRINKING WATER	PRIMARY	DW-R-14PWC*	X	X
DRINKING WATER	PRIMARY	DW-R-5BFL	X	Χ
DRINKING WATER	PRIMARY	DW-R-9BFL	X	X
DRINKING WATER	PRIMARY	DW-R-15BFL	X	X
DRINKING WATER	PRIMARY	DW-R-4SMW	X	X
DRINKING WATER	PRIMARY	DW-R-9SMW	X	X
DRINKING WATER	PRIMARY	DW-R-10SMW	X	X
DRINKING WATER	PRIMARY	DW-R-16SMW	X	X
DRINKING WATER	PRIMARY	DW-R-19SMW	Х	X
DRINKING WATER	PRIMARY	DW-R-21SMW	X	Χ
DRINKING WATER	DUPLICATE	DW-R-21SMW-DUP	X	X
DRINKING WATER	PRIMARY	DW-R-25SMW	X	Χ
DRINKING WATER	PRIMARY	DW-R-7WKD	X	X
DRINKING WATER	PRIMARY	DW-R-8WKD	X	X
DRINKING WATER	PRIMARY	DW-R-67NR	X	X
DRINKING WATER	PRIMARY	DW-R-178ALR	X	X
DRINKING WATER	PRIMARY	DW-R-27BR	X	Х
		TOTALS	31	31

<sup>\*14</sup> Pinewood Circle (14PWC) replaced previous sampling at 67 Ridgecrest Drive (67RCD) beginning Fall 2019.

Table 2 - Groundwater and Surface Water Sampling Analyses Coakley Landfill Superfund Site - Breakfast Hill Road, North Hampton & Greenland, NH

MATRIX AQUEOUS	PRIMARY OR QA/QC EQUIP BLANK EQUIP BLANK EQUIP BLANK FIELD BLANK PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	SAMPLE ID SW-EB-FILTER SYRINGE GW-EB-METAL FILTER S-EB-SEDIMENT GW-EB-WATER LEVEL FB-DI WATER GW-AE-1A GW-AE-1B GW-AE-2A	SED-Motals 6020	X SW-L-Metals 200.8	GW-Metals ≥00.8	VOC-8260B	1,4-Dioxane (8260B SIM)	PFAS (Modified EPA 537) List of 26	ch 8000	Ammonia SM 4500 NH3-D	sp.
AQUEOUS	EQUIP BLANK EQUIP BLANK FIELD BLANK FIELD BLANK PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	GW-EB-METAL FILTER S-EB-SEDIMENT GW-EB-WATER LEVEL FB-DI WATER GW-AE-1A GW-AE-1B		X			÷. ®	PF.	COD	Amm SM 4	%Solids
AQUEOUS EQUEOUS EQUEOUS EQUEOUS EQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS	EQUIP BLANK EQUIP BLANK FIELD BLANK PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	S-EB-SEDIMENT GW-EB-WATER LEVEL FB-DI WATER GW-AE-1A GW-AE-1B									
AQUEOUS	EQUIP BLANK FIELD BLANK PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	GW-EB-WATER LEVEL FB-DI WATER GW-AE-1A GW-AE-1B		_							
AQUEOUS	FIELD BLANK PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	FB-DI WATER GW-AE-1A GW-AE-1B			_						
AQUEOUS	PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY	GW-AE-1A GW-AE-1B	1				X	X		_	
AQUEOUS	PRIMARY PRIMARY PRIMARY PRIMARY	GW-AE-1B		Х	-		X	X			
AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS	PRIMARY PRIMARY PRIMARY				_		X	x			
AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS AQUEOUS	PRIMARY PRIMARY	GW-AE-2A	-	-	_		X	×		_	
AQUEOUS AQUEOUS AQUEOUS AQUEOUS	PRIMARY	GW-AE-2B	_	-			x	x			
AQUEOUS AQUEOUS AQUEOUS	DUPEICATE	GW-AE-3A	+		_		x	X			
AQUEQUS AQUEQUS AQUEQUS AQUEQUS		OW-AE-SA-DUP					- y -	- V			
AQUEOUS AQUEOUS AQUEOUS	MS MSD MS MSD	10 A C O C O C O C O C O C O C O C O C O C					×				
AQUEQUS AQUEQUS	PRIMARY	GW-AE-3B					X	Х			
AQUEOUS	PRIMARY	GW-AÉ-4A					X	X			
	PRIMARY	GW-AE-48					X	Х			
	PRIMARY	GW-BP-4					Х	Х			
AQUEOUS	PRIMARY	GW-FPC-11A					Х	Х			
AQUEOUS	PRIMARY	GW-FPC-11B					Х	Х			
AQUEOUS	PRIMARY	GW-FPC-2A					Х	Х			
AQUEOUS	PRIMARY	GW-FPC-2B					X	X			
AQUEOUS	PRIMARY	GW-FPC-3A					X	X			
AQUEOUS	PRIMARY	GW-FPC-3B	1				X	X			
AQUEOUS	PRIMARY	GW-FPC-3C					X	X			
AQUEOUS	PRIMARY	GW-FPC-4B	_				X	X		-	
AQUEOUS	PRIMARY	GW-FPC-5A	-	-	-		X	X			
AQUEOUS	PRIMARY	GW-FPC-5B					x	X			
AQUEOUS	PRIMARY	GW-FPC-6A	-		_		X	x		-	
AQUEOUS	PRIMARY	GW-FPC-6B	+	-			x	X			
AQUEOUS AQUEOUS	PRIMARY PRIMARY	GW-FPC-7B	1				X	X			
AQUEOUS	PRIMARY	GW-FPC-8A	1				X	x			
AQUEOUS	PRIMARY	GW-FPC-8B					X	Х			
AQUEOUS	PRIMARY	GW-FPC-9A					X	Х			
AQUEOUS	PRIMARY	GW-GZ-105					X	Х			
ADLIECUIE	DUELIDATE	SWIGZ-TOFIGUE			V		Y	- 9-			
AQUEOUS	PRIMARY	GW-MW-10					X	Х			
AQUEOUS	PRIMARY	GW-MW-11					X	Х			
AQUEOUS	PRIMARY	GW-MW-20S					X	Х			
AQUEOUS	PRIMARY	GW-MW-20D1					X	Х			
LOUEDUE	MEMED.	DWWW-200H-DUF					×	X.			
(QVEX)US	MEMEN	THE WATER STREET	4		-		Х	Х			
AQUEOUS	PRIMARY	GW-MW-20D2	_	_			x	x			
AQUEOUS	PRIMARY	GW-MW-21S	1		-		X	x			
AQUEOUS	PRIMARY PRIMARY	GW-MW-21D1 GW-MW-21D2	1	<del>                                     </del>			X	X			
AQUEOUS AQUEOUS	PRIMARY	GW-MW-22S					X	X			
AQUEOUS	PRIMARY	GW-MW-22D1					X	X			
AQUEOUS	PRIMARY	GW-MW-22D2					X	X			
AQUEOUS	PRIMARY	GW-MW-4					Х	Х			
ME BOUR	BUREIBATE	TOWNWANDSERVER					×	(20)			
AQUEOUS	PRIMARY	GW-MW-5D					Х	Х			
AQUEOUS	PRIMARY	GW-MW-5S					X	Х			
AQUEOUS	PRIMARY	GW-MW-6					X	X	_		
AQUEOUS	PRIMARY	GW-MW-8					X	Х			
	118 118 P			-	1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- 40			
ADDEQUS	MaMan						5	-			
AQUEQUS	PRIMARY	GW-MW-9	-		1		X	X		_	
AQUEOUS	PRIMARY	GW-OP-2	1	-	-	_	X	X			
AQUEDUS	PRIMARY	GW-OP-5	_				X	x			
AQUEOUS AQUEOUS	PRIMARY	GW-GZ-109 GW-GZ-117					x	x			
AQUEOUS	PRIMARY	GW-GZ-11/		X	-	X	X	X	Х	Х	
AUGEOUS	Districtures	DESCRIPTION OF THE PROPERTY OF		75		- y -	у.	7	, y	- 9	
AQUEQUS	MS VISO	LUCKS.		×			[ X ]				
	MSWSC			J				_ F_	li ====	1	
AQUEOUS	PRIMARY	SW-SW-103		Х		Х	X	Х		Х	
AQUEOUS	PRIMARY	SW-SW-4		Х		X	X	Х		X	
AQUEOUS	PRIMARY	SW-SW-5		Х		X	X	Х		X	
AUDERNO MUNERNO	HSANSO Distriction	SWEWSELL		X		100	×	- 2		×	
		TARREST STATE		1	-	170	W	127			
AQUEOUS	PRIMARY	SW-SW-110		X		X	X	X		X	
AQUEOUS	PRIMARY	SW-SW-111		X	-	X	X	X		X	
AQUEOUS	PRIMARY	SW-SW-LR	1	X	-	X	X	X		X	
AQUEOUS	PRIMARY	SW-SW-BB1	_	X		X	X	X		X	
AQUEOUS	PRIMARY	SW-SW-BB2	1 0	17	0	15	75	76	4	15	0



# ATTACHMENT A EXPANDED 26 COMPOUND PFAS LIST

# Attachment A EXPANDED PFAS ANALYTE LIST

	ANALYTE	CAS No.
PFPeA	Perfluoropentanoic Acid	2706903
PFBS	Perfluorobutane Sulfonic Acid	375735
PFBA	Perfluorobutanoic Acid	375224
PFUnA	Perfluoroundecanoic Acid	2058948
PFTrDA	Perfluorotridecanoate	862374876
PFTeDA	Perfluorotetradecanoic Acid	376067
PFOSA	Perfluorooctane Sulfonamide	754916
PFOS	Perfluorooctane Sulfonate	1763231
PFOA	Pentadecafluorooctanoic Acid	335671
PFNA	Perfluorononanoic Acid	375951
PFHxS	Perfluorohexane Sulfonate	355464
PFHxDA	Perfluorohexadecanoic Acid	67905195
PFHxA	Perfluorohexanoic Acid	307244
PFHpS	Perfluoroheptane Sulfonic Acid	375928
PFHpA	Perfluoroheptanoic Acid	375859
PFDS	Perfluorodecane Sulfonate	67906427
PFDoA	Perfluorododecanoic Acid	307551
PFDA	Perfluorodecanoic Acid	335762
MeFOSE	N-Methyl Perfluorooctane Sulfonamidoethanol	24448097
MeFOSAA	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355319
MeFOSA	N-Methyl Perfluorooctane Sulfonamide	31506328
EtFOSE	N-Ethyl Perfluorooctane Sulfonamidoethanol	1691992
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991506
EtFOSA	N-Ethyl Perfluorooctane Sulfonamide	4151502
8:2 FTS	8:2 Fluorotelomer Sulfonate	39108344
6:2 FTS	6:2 Fluorotelomer Sulfonic Acid	27619972



# ATTACHMENT B SERVICE AGREEMENT



# STANDARD CONDITIONS OF AGREEMENT BETWEEN CES, INC. AND ITS CLIENTS

The terms and conditions contained in this Service Agreement will govern the services described in contract 10424025 dated April 8, 2020, prepared by CES, Inc. (CES) and submitted to:

The Coakley Landfill Group C/o City of Portsmouth One Junkins Avenue Portsmouth, New Hampshire 03801

(referred to as "Client" in this agreement)

#### **SECTION 1 | SCOPE OF SERVICE**

1.1 CES agrees to perform the scope of services contained in the proposal, subject to unanticipated contingencies (as presented in part 7 of this Agreement)

#### **SECTION 2 | PAYMENT TERMS**

2.1 Unless specified in the proposal, services shall be charged on a time and material basis in accordance with the Fee Schedule included with the proposal. CES shall submit invoices on a monthly basis or as presented in the proposal and Client agrees to pay invoices within 60 days of the invoice date. If Client disputes any portion of the invoice, Client will notify CES of the disputed costs and will pay that portion not in dispute. For charges not disputed and not paid by the Client within 60 days, CES reserves the right to charge interest to the unpaid amount at a rate of 1-1/2% per month or up to the maximum allowed by law.

#### **SECTION 3 | PROFESSIONAL RESPONSIBILITY**

3.1 CES shall perform services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CES makes no other warranties or guarantees in the proposal or agreement.

#### **SECTION 4 | LIMITATION OF LIABILITY**

4.1 CES' liability shall be limited to injury or loss caused by the negligence, intentional misconduct or breach of contract by CES employees in the performance of the services described in the proposal. Liability shall be limited to the aggregate amount not to exceed the lesser amount of: a) the damages suffered by the Client as a direct result of negligence, intentional misconduct or breach of contract, or b) the limits of the respective insurance policy.



#### **SECTION 5 | OWNERSHIP OF DOCUMENTS**

5.1 Copies of plans, specifications and reports prepared under this agreement shall be transferred, upon request, to the Client upon completion of the work. Project deliverables as identified in the Scope of Work will be provided to the Client and shall become the property of the Client. CES shall retain copies of all project documents for a period of 3 years.

#### **SECTION 6 | UNANTICIPATED CONTINGENCIES**

6.1 If CES is unable to perform the services within the schedule set forth in the proposal due to unanticipated contingencies, such as, but not limited to, a) strikes, riots, unavoidable accidents, acts of God, b) lawful orders issued by any federal, state or local government authority, or c) any other cause beyond CES' reasonable control, then CES shall not be liable to Client for failure to perform its obligations hereunder.

#### **SECTION 7 | TERMINATION**

- 7.1 The Client or CES may terminate performance of the scope of services for any reason by sending a written notice of termination to the other. The termination shall: (1) be effective no sooner than ten (10) working days after receipt of the notice, (2) be without prejudice to any claims unresolved between CES and the Client, and
  - (3) be subject to the other provisions of this Agreement.

In the event of termination, the Client and CES shall maintain their legal rights and obligations as spelled out in this Agreement.

#### **SECTION 8 | THIRD PARTY RIGHTS**

8.1 Client and CES agree that the services performed pursuant to this Agreement are solely for the benefit of the Client and are not intended to benefit any other person or entity. This agreement shall not create any rights or benefits for a third party.

#### **SECTION 9 | ASSIGNMENTS**

9.1 Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.



#### **SECTION 10 | CONFIDENTIALITY**

- 10.1 CES and Client shall hold confidential all business or technical information obtained from the other for a period of three (3) years after obtaining such information, and during that period shall not disclose such information without the others consent except to the extent required to:
  - (1) Perform the services governed by this Agreement,
  - (2) Ensure public safety, health and welfare,
  - (3) After providing the other party with written notice, comply with any court order or other governmental directive, and/or
  - (4) Comply with applicable State and Federal Laws.

The parties' obligations do not apply to information in the public domain.

#### **SECTION 11 | INSURANCE**

During the performance of activities covered by this Agreement, CES agrees to maintain the following insurance coverage:

INSURANCE	LIMITS
(1) Workers Compensation (2) General liability including leased	Statutory \$2,000,000 each occurrence
or hired automobile liability (3) Professional liability	\$1,000,000 each claim



#### **CLIENT**

Coakley Landfill Group Robert P. Sullivan, Esq. Counsel to Coakley Landfill Group Portsmouth Municipal Complex 1 Junkins Avenue Portsmouth, NH 03801

Signature		
Typed Name		
 Title		
 Date		

CES, Inc.

John A. Pond 465 South Main Street Brewer, ME 04412

Signature

John A. Pond

Typed Name

Environmental Division Director

Title

04/08/2020

Date



# ATTACHMENT C CERTIFICATES OF INSURANCE



### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on

this certificate does not confer rig	hts to the certificate holder in lieu of su	ch endorsement(s).		
PRODUCER	0	CONTACT Molly Alley		
Cross Insurance		PHONE (A/C, No, Ext): (207) 947-7345	FAX (A/C, No):	
491 Main Street		E-MAIL ADDRESS: malley@crossagency.com		
P.O. Box 1388		INSURER(S) AFFORDING O	OVERAGE	NAIC#
Bangor	ME 04401	INSURER A: The Phoenix Ins Co		25623
INSURED		INSURER B: The Charter Oak Fire Ins Co		25615
CES, Inc.		INSURER C: Travelers Property Casualty C	company of America	25674
Po Box 639		INSURER D: Maine Employers Mutual Ins C	Co	11149
		INSURER E: MEMIC Indemnity Company		11030
Brewer	ME 04412	INSURER F:		
COVERAGES	CERTIFICATE NUMBER: CL19112607	7390 <b>REVI</b> S	SION NUMBER:	
INDICATED. NOTWITHSTANDING ANY	ES OF INSURANCE LISTED BELOW HAVE BEE REQUIREMENT, TERM OR CONDITION OF AN' PERTAIN, THE INSURANCE AFFORDED BY TI	Y CONTRACT OR OTHER DOCUMENT WITH R	ESPECT TO WHICH THIS	

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

NSR TR	TYPE OF INSURANCE	INSD	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMIT	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	\$ 1,000,000
	CLAIMS-MADE X OCCUR						PREMISES (Ea occurrence)	s 100,000
					1		MED EXP (Any one person)	s 5,000
Α	Inc. blkt Cont	Y		P-630-8L253856	01/01/2020	01/01/2021	PERSONAL & ADV INJURY	\$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:				1 1		GENERAL AGGREGATE	\$ 2,000,000
ĺ	POLICY X PRO- LOC						PRODUCTS - COMP/OP AGG	\$ 2,000,000
	OTHER:						Employee Benefits	\$ 1,000,000
	AUTOMOBILE LIABILITY						GOMBINED SINGES LIMIT (Ea accident)	s 1,000,000
1	MANY AUTO	1 8			1		BODILY INJURY (Per person)	\$
3	OWNED SCHEDULED	Υ		810-8L295085	01/01/2020	01/01/2021	BODILY INJURY (Per accident)	\$
	AUTOS ONLY HIRED AUTOS NON-OWNED			i i	1		PROPERTY DAMAGE (Per accident)	\$
1	AUTOS ONLY AUTOS ONLY					Medical payments	\$ 5,000	
7	X UMBRELLA LIAB X OCCUR			<del></del>			EACH OCCURRENCE	s 10,000,000
:	EXCESS LIAB CLAIMS-MADE	Y		CUP-8L300794	01/01/2020	01/01/2021	AGGREGATE	\$ 10,000,000
ł	DED RETENTION \$ 10,000							\$
	WORKERS COMPENSATION						➤ PER STATUTE OTH-	(
- 1	AND EMPLOYERS' LIABILITY  ANY PROPRIETOR/PARTNER/EXECUTIVE	1			10/01/0010	40/04/2000	E.L. EACH ACCIDENT	s 1,000,000
וי	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A		5101801109	12/31/2019	12/31/2020	E.L. DISEASE - EA EMPLOYEE	s 1,000,000
- 1	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$ 1,000,000
1							Each Accident	1,000,000
	Workers Compensation			3102806829	12/31/2019	12/31/2020	Disease-EA Employee	1,000,000
							Disease-Policy Limit	1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The Coakley Landfill Group are named as additional insureds.

Refer to policy for exclusionary endorsements and special provisions.

CERTIFICATE HOLDER		CANCELLATION
The Coakley Landfill Group C/O City of P	rortsmouth	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
One Junkins Avenue		AUTHORIZED REPRESENTATIVE
Portsmouth	NH 03801	Wolly b. alley

CJOHNSON



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/5/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED DEPORTS OF THE PROPERTY OF THE

REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on

tnis RODU	certificate does not confer rights to	o me cel	inicate notice in nea of st	CONTACT NAME:		- 4		
mes	& Gough			PHONE (A/C, No, Ext): (617)	328-6555	FAX (A/C, No):	(617) 3	328-6888
59 W Suite	illard Street 320			E-MAIL ADDRESS: boston@	amesgoug	jh.com		
	y, MA 02169					RDING COVERAGE		NAIC #
						Specialty Insurance Co	mpany	22276
NSURE	D			INSURER B:				
100112				INSURER C :				
	CES, Inc. 465 South Main Street			INSURER D :				
	Brewer, ME 04412			INSURER E :				
				INSURER F :			_	
00//	RAGES CER	TIEICAT	E NUMBER:	INSURENT .		REVISION NUMBER:		
THIS	S IS TO CERTIFY THAT THE POLICIE CATED. NOTWITHSTANDING ANY R TIFICATE MAY BE ISSUED OR MAY LUSIONS AND CONDITIONS OF SUCH	ES OF IN EQUIREN	SURANCE LISTED BELOW MENT, TERM OR CONDITIO I. THE INSURANCE AFFOR	N OF ANY CONTRA DED BY THE POLIC	CT OR OTHER IES DESCRIE	RED NAMED ABOVE FOR T R DOCUMENT WITH RESP BED HEREIN IS SUBJECT	ECT TO	WHICH THIS
		ADDL SUB		POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMI	rs	
SR TR	TYPE OF INSURANCE COMMERCIAL GENERAL LIABILITY	INSD WVI	POLICT NUMBER	(MM/DD/YYYY)	(MM/DD/YYYY)			
	CLAIMS-MADE OCCUR					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	
						MED EXP (Any one person)	\$	
						PERSONAL & ADV INJURY	\$	
G	EN'L AGGREGATE LIMIT APPLIES PER:					GENERAL AGGREGATE	\$	
	POLICY PRO- JECT LOC					PRODUCTS - COMP/OP AGG	\$	
	OTHER:					COMPINED CINCLE LIMIT	\$	
Α	UTOMOBILE LIABILITY					(Ea accident)	\$	
	ANY AUTO					BODILY INJURY (Per person)	\$	
	OWNED SCHEDULED AUTOS ONLY					BODILY INJURY (Per accident)	\$	
	HIRED NON-OWNED AUTOS ONLY					PROPERTY DAMAGE (Per accident)	\$	
	THE STATE OF THE S						\$	
	UMBRELLA LIAB OCCUR					EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE					AGGREGATE	\$	
	DED RETENTION\$						\$	
W	ORKERS COMPENSATION ND EMPLOYERS' LIABILITY					PER OTH- STATUTE ER		
	NY PROPRIETOR/PARTNER/EXECUTIVE FICER/MEMBER EXCLUDED?					E.L. EACH ACCIDENT	\$	
()	FFICER/MEMBER EXCLUDED?	N/A				E.L. DISEASE - EA EMPLOYEE	\$	
If D	yes, describe under ESCRIPTION OF OPERATIONS below					E.L. DISEASE - POLICY LIMIT	\$	
	rof. Liability		47EPP30451003	12/8/2019	12/8/2020	Per Claim Limtit		3,000,00
4			47EPP30451003	12/8/2019	12/8/2020	Aggregate Limit		3,000,00
ESCRI I Cov	PTION OF OPERATIONS / LOCATIONS / VEHICI verages are in accordance with the po	LES (ACOR	D 101, Additional Remarks Scheduns and conditions.	ule, may be attached if mo	re space is requi	red)		
ERT	IFICATE HOLDER			CANCELLATION				
The Coakley Landfill Group c/o City of Portsmouth One Junkins Avenue Portsmouth, NH 03801				AUTHORIZED REPRESE	N DATE TH	DESCRIBED POLICIES BE C HEREOF, NOTICE WILL CY PROVISIONS.	ANCELL BE DEI	ED BEFORE LIVERED IN
				DANG S				
001	RD 25 (2016/03)			© 19	88-2015 AC	ORD CORPORATION.	All rial	nts reserv

# **COAKLEY EXECUTIVE COMMMITTEE**

# Wednesday, May 6, 2020 AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-08, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

# Please use the following to call in to the meeting:

Conference Call Dial-in Number: #: 855-880-1246

Conference ID: 617 832 1203

Review the minutes of the April 7, 2020 Coakley Teleconference call.

# <u>OU-1</u>

#### II. BILLS

#### **CITY OF PORTSMOUTH:**

A. Invoice # 2900318909 dated 4/13/2020 \$2,750.00

Services of Peter Britz

B. Invoice# INV18222227 dated 4/16/2020 50%: \$150.00

DocuSign 1 Year Service - eSignature Standard Edition.

Reimburse City for use of credit card.

**CES, INC.** Payment Certifications dated: 5/6/2020

Invoices dated: 3/29/2020 Services rendered through: 2/23/2020

C. Invoice # 20201486 \$459.38

General technical assistance

D. Invoice # 20201488 \$1,917.50

Work Plan, Fall 2018 Sampling; OOS Services

E. Invoice # 20201490 \$247.19 Spring 2019 Sampling Event

F. Invoice # 20201489 2019 Fall Sampling \$7,794.05

### **US Department of Treasury**

G. Form # 1120-SF For tax year 2019 \$87.00
IRS Form 1120-SF Tax Return for Settlement
Funds (Under Section 468B)

H. First Installment Tax Payment 4/15/2020

\$100.00

#### III. OU - 1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

DDD	Davaantaga	Requested	Amount	Date
PRP	Percentage	Amount	Received	Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00	\$16,932.00	1/21/2020
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00	\$62,000.00	1/15/2020
Browning-Ferris	12.308%	\$38,155.00		12/30/2019
Waste Management	4.615%			1/21/2020
TOTALS	100%	\$310,000.00	\$310,000.00	

#### IV. OU - 1 RECORD ITEMS

There are no record items.

OU – 1 Balance as of 4/28/2020: \$402,624.58

#### OU-2

# V. BILLS

**CITY OF PORTSMOUTH**: No payment certifications required

A. Invoice # 2900318909 dated 4/13/2020 \$2,750.00

Services of Peter Britz

B. Invoice # INV18222227 dated 4/16/2020 50%: \$150.00

DocuSign 1 Year Service - eSignature Standard Edition.

Reimburse City for use of credit card.

**CES, INC.** Payment Certifications dated: 5/6/2020

Invoices dated: 3/29/2020 Services rendered through 2/23/2020

C. Invoice # 20201486 \$853.12

General technical assistance

D. Invoice # 20201487 \$2,157.50

Bedrock Investigation Work Plan; Downhole Geophysics Packer

Sampling, OOS Services

E. Invoice # 20201490 \$459.06

Spring 2019 Sampling Event

F. Invoice # 20201489 \$14,474.66

Work Plan, Fall 2018 Sampling; OOS Services

SANBORN HEAD Payment Certification dated: 5/6/2020

Invoice dated: 4/16/2020 Services rendered through 4/11/2020

G. Invoice # 0050943

Deep Bedrock Investigation Tech Support \$2,688.71

#### VI. OU - 2 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019
Town of Newington	5.463%	\$34,144.00	\$34,144.00	1/24/2020
Town of N. Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00	\$125,000.00	2/11/2020
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00		1/21/2020
TOTALS	100%	\$625,000.00		

Partial payment

## VII. OU - 2 RECORD ITEMS

There are no record items.

OU-2 Balance as of 4/28/2020:

\$661,350.71

# **COMBINED OU-1 & OU-2**

### VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 5/6/2020

#### IX. COMBINED OU - 1 & OU - 2 RECORD ITEMS

There are no record items.

#### X. OTHER BUSINESS

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING





May 1, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Proposal for Surface Water Evaluation

Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire

Contract Amendment No. 10424020-04

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment and description of services to the Coakley Landfill Group (CLG) for the implementation of a Surface Water Evaluation for the Coakley Landfill Superfund Site (Site). The Scope of Services for this proposal is based upon the Surface Water Evaluation Scope of Work (Scope of Work) developed by CES on behalf of the CLG and submitted to United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on January 22, 2020. The Scope of Work was developed as per USEPA request on November 22, 2019 in its response to the Stormwater Investigation Report submitted on September 24, 2019. The USEPA and NHDES provided comments to the Scope of Work in a letter dated April 2, 2020 (provided via email correspondence on April 6, 2020). The following proposal is designed as an amendment to the existing Stormwater Investigation contract (10424020) and associated amendments 10424020-01, 10424020-02, and 10424020-03 provided to the CLG on October 17, 2019, December 17, 2019, and April 2, 2020, respectively.

#### **SCOPE OF SERVICES**

The following scope of services includes those items provided in the January 22, 2020, Scope of Work and in comments provided by the USEPA in its April 2, 2020 letter. Items identified by the USEPA in their review of the Stormwater Investigation Report, as identified in the Response to Comments provided with the January 22, 2020 Scope of Work, will be included within each task accordingly.

**Task 1 | Piezometer Installation and Gauging:** A total of twelve piezometers will be installed at several existing surface water sampling locations (SW-BB2, SW-4, SW-103, and SW-110) and in areas where surface water is not currently being monitored, as illustrated on **Figure 2**. The installation of piezometers at SW-BB2, SW-4, SW-5, SW-103, and SW-110 will allow for the monitoring of shallow groundwater at locations where historical analytical data on surface water is available and allow for the monitoring of both surface water and shallow groundwater elevations at a single location.

Mr. Peter Britz | 05.01.2020 | 10424020-04 | Page 1





Additional locations include areas immediately north of the landfill boundary, west of the landfill and MW-21S (USEPA recommendation), and in an area west of the railroad easement between SW-BB1 and SW-BB2. The newly installed piezometers will supplement those installed as part of the Stormwater Investigation (PZ-1/-2/-3) completed in September 2019. A piezometer is not planned for installation at surface water sampling location SW-BB1; however, a piezometer will be installed at an alternate location west of the railroad easement. Data from a piezometer in this location will be used in conjunction with data from several existing monitoring locations within the wetland complex west of the railroad easement and with data obtained from proposed porewater sampling efforts discussed below. In addition, the installation of piezometers at locations immediately north of the landfill and in areas adjacent to existing wetlands (Figure 1) will provide a more comprehensive network of monitoring to develop a better understanding of interaction between shallow groundwater and surface water at areas of interest.

Prior to installation, the most recent surface water and overburden groundwater elevations will be reviewed relative to high resolution ground surface topography obtained from exiting Light Detection and Ranging (LiDAR) data for the site and used in an effort to determine suspected areas where groundwater discharge to surface water may be occurring. These areas will be additionally investigated at the time of piezometer installation using temperature profiling to identify where cooler groundwater may be mixing with warmer surface water. Piezometers will be installed in these identified areas of mixing. In addition, locations where groundwater discharge to surface water is observed or suspected will be identified for the installation of seepage meters as described in **Task 2** for an initial qualitative assessment of groundwater discharge (positive/gaining, negative/losing, or neutral).

Piezometers will be constructed using either 1.25-inch diameter stainless steel drive point well screens or 1-inch diameter Schedule 40 PVC well screen and riser. Soils will be logged and recorded to ensure information is obtained on the stratigraphic unit where the piezometer will be screened. Piezometer construction will be based on field conditions at the time of installation and on soils logged using a hand auger. If the hand-augered boring remains open, a PVC well screen will be installed with filter sand and bentonite seal, otherwise, a stainless-steel drive point screen will be driven to the desired stratigraphic interval. Following installation, piezometers will be developed and subsequently surveyed relative to existing surveyed locations that include survey pins, staff gauges, or monitoring wells surveyed during the Stormwater Investigation. This will allow for water level comparisons to existing surveyed monitoring wells in the vicinity of the piezometers.

Monitoring of water levels within these piezometers will be performed on a monthly basis in accordance with **Task 3**, below.

Task 2 | Stormwater, Piezometer, and Porewater Sampling: To minimize duplication of sampling effort, surface water locations that are part of the routine semiannual sampling program, as outlined in the project Sampling and Analysis Plan (SAP), will continue to be sampled during regularly scheduled semiannual events, separate from stormwater and shallow groundwater (piezometer) sampling outlined below. However, efforts will be made to schedule stormwater and shallow groundwater sampling efforts in conjunction with routine sampling events to allow for a more direct correlation of analytical results.





#### Task 2a: Stormwater Sampling

Based on results of stormwater sampling completed during the 2018/2019 stormwater investigation, select locations have been identified for continued sampling to establish a more extensive database of results. Due to similarities in PFAS composition and concentrations between samples from the northeast and northwest retention basins, locations proposed for continued sampling will be primarily from the northwest basin (SB-2). SB-2 is also near the primary area of investigation (i.e., wetland complex and Berry's Brook). Shallow groundwater within PZ-1 and surface water within SB-1 (located in the northeast retention basin) will continue to be sampled due to the contribution of stormwater to the wetland area located immediately north of SB-1. Analytical data from these locations will be correlated with past results and data from shallow groundwater samples.

Sample designations (STM) will be consistent with those used for stormwater samples during the 2018/2019 stormwater investigation. Samples related to the Northeast Stormwater Basin will have the designation of 1 while samples related to the Northwest Stormwater Basin will have the designation of 2. Stormwater samples will be collected from a total of six locations as illustrated in **Figure 1** and include:

- Landfill Seep (L-1)
- Northeast Stormwater Retention Basin (STM-SB-1)
- Northwest Stormwater Retention Basin (STM-SB-2)
- Northwest Outfall Pipe (STM-OFP-2)
- Northwest Perimeter Ditch (STM-PD-2)
- Northwest Underdrain Piping (STM-UP-2)

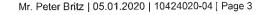
These locations will continue to be sampled for comparison with past and future analytical results. This analytical information will aid in the continued assessment of water quality of the landfill seep at L-1. Samples from L-1 will be collected during conditions where there is minimal or no discharge from the adjacent SB-2 outfall pipe (STM-OFP-2) or when the seep at L-1 is not visibly influenced by other stormwater discharge. These conditions ensure that the samples at L-1 are isolated and representative of the discharge of shallow groundwater to surface water. It should be noted that the sample at L-1 will be a singular event and scheduled to be performed coincident with the regular Spring biannual sampling event (May 2020).

The potential exists for some locations (e.g. STM-OFP-2) to be dry during sampling events based on the absence or presence of water within the stormwater basin; however, these conditions will be noted and reported accordingly.

Surface water locations, as stated above, will continue to be sampled during regularly scheduled groundwater monitoring events, with the next sampling event scheduled for Spring 2020 (May 2020). Surface water locations SW-5 and SW-103 are locations in closest proximity to the stormwater control system locations in the northwest portion of the landfill and are approximately 75-ft and 300-ft north of L-1, respectively.

#### Task 2b: Piezometer Sampling

Shallow groundwater samples will be collected from proposed piezometer locations as identified in **Task 1** and will also include piezometers previously installed as part of the 2018/2019 stormwater







investigation. These samples are designed to be representative of groundwater water that is in direct communication with surface water. Results will be compared to co-located surface water sample results for a more direct comparison of surface water analytical results with shallow groundwater analytical results. These locations include PZ-1/-2/-3, which were installed as part of the 2018/2019 Stormwater Investigation and PZ-4/-5/-6/-7/-8/-9/-103/-110, which are locations proposed as part of the Scope of Work outlined in **Task 1**.

In addition to groundwater samples collected from piezometers, overburden groundwater samples obtained from monitoring wells sampled during regular biannual sampling events will be used during data evaluation.

#### Task 2c: Porewater/Seepage Meter Sampling

In an effort to obtain samples representative of the interaction between shallow groundwater and surface water (Berry's Brook), porewater or seepage meter samples will be completed at up to 10 locations, as illustrated on Figure 2. These locations will be identified based on the expected groundwater discharge to surface water as determined in Task 1. These locations are designed to provide information between locations monitored by piezometers (existing and proposed). These sampling techniques were selected to reduce the number of locations where permanent installations would be needed requiring landowner approval. Porewater samples will be collected using a push point sampler with water withdrawn using a syringe or peristaltic pump in accordance with Standard Operating Procedure #16 (SOP-16): Groundwater/Surface Water Interface Sampling Using A Pore Water Sampler. Seepage meter samples will be collected in accordance with the SAP and best management practices as outlined in the Use of Monitoring Wells, Portable Piezometers, and Seepage Meters to Quantify Flow Between Surface Water and Ground Water as developed by the United States Department of the Interior and United States Geological Survey. During piezometer installation, as outlined in Task 1, seepage meters will be installed where surface water depths allow to qualitatively evaluate areas where groundwater is discharging to surface water. These areas will be recorded and seepage meters will be left in place for future monitoring and sampling efforts, if any. It should be noted that due to changes in surface water elevation during the removal of beaver dams, as discussed in Task 5, some areas may not support continued monitoring through the use of seepage meters. These areas will be selected for sampling using a drive point porewater sampler.

#### Sampling Schedule

The sampling of locations will be completed in conjunction with the semiannual sampling events completed during the Spring and Fall; however, stormwater locations will be sampled based on the presence of a precipitation event sufficient to generate flow at selected stormwater locations. It is anticipated the sampling event will occur in the Spring 2020 with the installation and development of piezometers occurring prior to the sampling event to allow for the monitoring of water levels prior to spring precipitation. The Spring event will be completed during May 2020, based on weather conditions and coincide with the period of seasonal high groundwater flow and recharge, as reported in the Assessment of Ground-Water Resources in the Seacoast Region of New Hampshire (Mack, 2009). A second sampling event will occur during the Summer 2020 at a subset of piezometer and porewater locations based on results obtained during the Spring sampling event. The Summer sampling will be completed during July 2020 to coincide when the effective groundwater recharge in the area could be zero or negative based on precipitation and evapotranspiration rates. Additionally, this time period will





coincide with base flow conditions within Berry's Brook when there is the greatest likelihood for direct contribution of groundwater to surface water. These conditions (depth of surface water present) will determine whether porewater or seepage meter samples will be collected.

## Laboratory Analysis

Stormwater, porewater/seepage meter, and shallow groundwater (piezometer) samples (**Figure 1**) will be submitted for analysis of PFAS, 1,4-dioxane, and general landfill parameters (alkalinity, ammonia, nitrate, and iron) as shown on **Table 1**. Analysis of PFAS compounds will include an expanded list of analytes (i.e. 26 parameters) analyzed in previously completed sampling events at the Site. Samples will be submitted to Alpha Analytical of Westborough, Massachusetts (Alpha) following collection and in accordance with sample collection, handling, and chain of custody procedures documented in the project SAP.

Task 3 | Water Level Measurements: Water level measurements will be recorded from surface water staff gauges, piezometers, and select overburden groundwater monitoring wells on a monthly basis to account for seasonal water level fluctuations. Several piezometers will be instrumented with continuously recording water level transducers to assess the rate and duration of influence on shallow groundwater levels following precipitation events and to monitor short term effects of beaver dam removal as discussed in Task 5. Some locations where piezometers are instrumented may receive a pressure transducer to monitor surface water elevations to facilitate continuous comparison of groundwater/surface water elevations during precipitation events. The correlation of this information with historic overburden and bedrock groundwater elevations will allow for a more comprehensive understanding of the interaction between groundwater and surface water.

In addition to providing surface water elevations at previously gauged locations, as detailed in the Stormwater Investigation Report, steel survey pins will be installed and used to monitor surface water elevations in wetland areas east of SW-103, south of GZ-114/GZ-115, east of MW-21S, and east of FPC-6A/6B. These steel pins will allow monitoring of surface water elevations in areas where shallow overburden groundwater is monitored and/or sampled as part of routine groundwater monitoring events. Surface water elevations will also be measured at piezometers installed at current surface water sampling locations (e.g. SW-4, SW-5, etc.) and referenced from the measuring point of the piezometer (top of riser). These locations will be in addition to those included as part of the Deep Bedrock Investigation Work Plan Addendum submitted to the USEPA on April 6, 2020.

Task 4 | Stage Discharge Curve Development: The relationship between the depth of water within Berry's Brook and the Brook discharge rate will be established through the development of a rating curve. Water depths will be recorded during periods of base flow (dry conditions when groundwater is a primary source of water to the stream), periods of peak flow (immediately following precipitation events), and during seasonal periods (spring recharge periods) in conjunction with Brook flow rates measured with stream flow meters and channel configuration.

Stage discharge measurements will be completed using the velocity area method pursuant to USGS protocols. A minimum of 6-8 measurements will be recorded at a range of flow rates to adequately evaluate changes in flow during the monitoring period. It is proposed that these measurements be recorded during a minimum of three separate events at up to three locations along Berry's Brook





located between the headwaters south of Breakfast Hill Road and SW-111. The coordination of these events will coincide with the measurement of water levels detailed in **Task 3** and provide information required in the further evaluation of passive treatment options for fulfillment of House Bill 494 (HB 494).

Task 5 | Beaver Dam Removal: The presence of two beaver dams within the survey area has created localized ponded areas north and west of the landfill. These areas had previously been monitored and/or controlled by the railroad easement due to the flooding conditions that resulted on the railroad bed and subsequent rail trail due to beaver dams. The ponding caused by beaver dams may be affecting the fate and transport of contaminants within the wetland complex serving as the headwaters to Berry's Brook due to an altered distribution of contaminants being discharge via both groundwater and stormwater discharges. The removal of these dams will allow for the establishment of more defined surface water drainage conditions within the existing wetland complex and allow for better evaluation of groundwater and surface water interaction. It should be noted that the railroad easement is currently under the management of the New Hampshire Department of Transportation (NHDOT) with plans for conversion to a recreational trail for use by the public. Beaver dam removal will aid in eliminating seasonal flooding observed along the trail. The establishment of more defined surface drainage conditions (hydraulic gradients and flow patterns) will be valuable in the assessment and monitoring of remedial alternatives evaluated/implemented as part of HB494. CES will provide assistance to the CLG in helping with the procurement of easement access from the NHDOT and may include the generation of site maps, listing of parcels where access is needed, and provide written and photo documentation of proposed and completed activities within the easement (i.e. beaver dam removal, brush clearing, etc.).

Task 6 | Stormwater Investigation Report Preparation: Data transmittals, memoranda, and/or brief task-specific reports will be generated during the investigation as part of consultation with USEPA and NHDES regarding interpretations of data and subsequent modifications to investigation scope of work or schedule. Upon completion of the Scope of Work, a Final Stormwater Investigation Report will be prepared for review by the Agencies. This final report will include revisions to the September 24, 2019 Stormwater Investigation report, inclusive of comments received by the USEPA on November 22, 2019, and provide analysis of data collected as part of the outlined Scope of Work. The report will include a narrative of activities completed, analytical data collected, interpretation of results, associated tables, figures and appendices, and recommendations for future activities, if any. The report will also provide an analysis of the system mass flux based on recommendations provided by the Agencies in its April 2, 2020 letter.

#### **IMPLEMENTATION**

The Surface Water Evaluation is tentatively scheduled to start during the Spring 2020 with activities scheduled concurrent with proposed Deep Bedrock Investigation and Spring 2020 Biannual Groundwater Sampling efforts.





#### COMPENSATION

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.

TASK	DESCRIPTION	COST ESTIMATE
1	Piezometer Installation  Evaluate locations for proposed piezometer installation based on existing surface water, surface topography, and overburden groundwater elevations.  Perform temperature gradient profiling. Installation of twelve piezometers for the monitoring of shallow groundwater quality.  Development of piezometers following installation. Preparation of piezometer construction diagrams. Complete surveying of installed piezometers relative to existing surveyed monitoring point elevations.  Installation of seepage meters at select locations to evaluate groundwater to surface water discharge.	CES Labor: \$5,250.00  Installation Materials and Expenses: \$1,000.00
		Task Total: \$6,250.00
2a	Stormwater Sampling Sample five existing stormwater locations for comparison to historical data. Laboratory analysis of collected water samples. Note: Costs assume that the samples will be collected	CES Labor: \$800.00  Laboratory Analytical Costs: \$3,400.00
4-15-7	during Spring 2020 Groundwater Sampling Event.	Task Total: \$4,200.00
2b	Piezometer and Porewater Sampling – Spring 2020 Collection of shallow groundwater samples from ten piezometers. (Two piezometers not proposed for sampling) Collection of samples from ten porewater locations. Laboratory analysis of collected water samples.	CES Labor: \$4,200.00  Sampling equipment and Expenses: \$500.00  Laboratory Analytical Costs: \$11,200.00
		Task Total: \$15,900.00
2c	Piezometer and Porewater Sampling – Summer 2020 Collection of shallow groundwater samples from ten piezometers. Collection of up to 10 porewater and/or seepage meter samples during late summer 2020 to coincide with base flow conditions. Laboratory analysis of collected water samples.	CES Labor: \$2,100.00  Sampling equipment and Expenses: \$350.00  Laboratory Analytical Costs: \$5,400.00
		Task Total: \$7,850.00
3	Water Level Measurements     Collect water level measurements from existing surface water staff gauge locations on a monthly basis.     Collect water level measurements from piezometers and surface water gauging locations monthly from May through September.	CES Labor: \$3,725.00  Rental Equipment Costs and Expenses: \$775.00



	<ul> <li>Collect water level measurements from select groundwater monitoring wells as noted above on a monthly basis.</li> <li>Download water level transducers, where deployed, on a monthly basis.</li> </ul>	Task Total: \$4,500.00
4	Stage Discharge Curve Development Collect stream flow measurements during a minimum of three events at three locations between wetland complex and SW-111. Prepare stage discharge curve for the section of Berry's Brook monitored by stream flow measurements. *Costs to complete stream flow measurements were included in contract amendment 10424020-02 on 10/21/19 and have not been included in the scope of work total below.	CES Labor: \$3,000.00  Rental Equipment Costs and Expenses: \$600.00  Task Total: \$3,600.00*
5	Beaver Dam Removal Assistance     Coordinate and oversee the removal of two beaver dams within the project area.     Document and aid with the monitoring of water quality (e.g. turbidity) during dam removal.     Aid in development of property access agreement between the CLG and New Hampshire Department of Transportation.	CES Labor: \$1,200.00  Task Total: \$1,200.00
6	Stormwater Investigation Report Preparation  Generate a report detailing completed stormwater system investigation results.  Prepare summary tables and accompanying support figures (e.g. cross sections) for stormwater sampling locations and analytical results.  Submittal of draft report to USEPA and NHDES.  Address regulator comments and issue Final Stormwater Investigation Report  Calculation of mass flux through shallow groundwater/surface water system.	CES Labor: \$10,100.00  Task Total: \$10,100.00
	TOTAL*	\$50,000.00

<sup>\*</sup>Total does not include costs for Task 4. Costs for Task 4 were included in Stormwater Contract Amendment 10424020-01 dated October 17,2019.

It should be noted that costs associated with Spring 2020 stormwater sampling were provided in the Anticipated Scope of Services to the CLG on October 21, 2019; however, this was not a contract amendment document and were estimated costs prior to the development of a sampling Scope of Work.

The not-to-exceed budget listed above includes costs associated with document review, sampling equipment/meters and consumables, sub-contractors, labor, report preparation, and reimbursable expenses. The work will be conducted based upon previously executed and agreed upon terms and conditions with the CLG under contract 10424020.





Costs for this project will be invoiced monthly, based upon the work completed during the invoice period. CES is prepared to initiate work on this project upon receipt of a signed copy of this contract amendment.

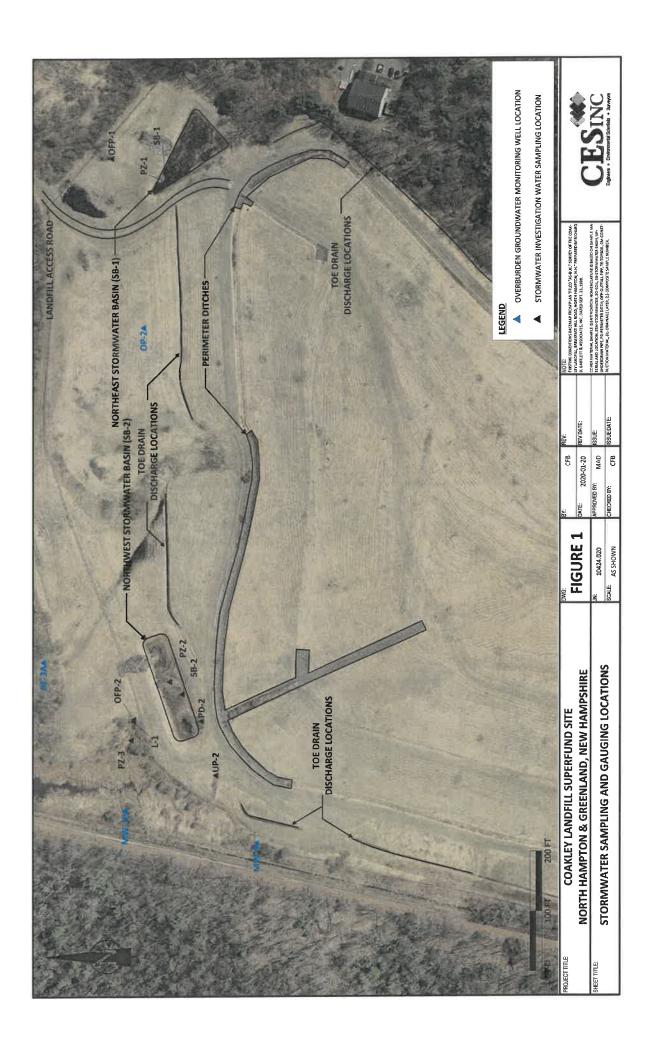
#### **AUTHORIZATION**

CES is prepared to initiate work on this project upon authorization by the CLG. Work will be performed in accordance with the contract Terms and Conditions and Rate Schedule previously executed by CLG and CES under contract 10424020. The proposed costs, upon approval by the CLG, will be added to the Stormwater Investigation project budget (10424.020). An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and an evaluation of any additional items requested or approved by the CLG.

If you have any questions concerning this proposal or if additional services are needed, please contact any of the undersigned at (207) 795-6009. We appreciate this opportunity to be of service to the CLG.

Sincerely, CES, Inc.	
Christopher Buckman, P.G. Senior Project Manager	
CFB/rlt Enc	
Acceptance and Authorization to Proceed on beha	alf of Coakley Landfill Group:
Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	





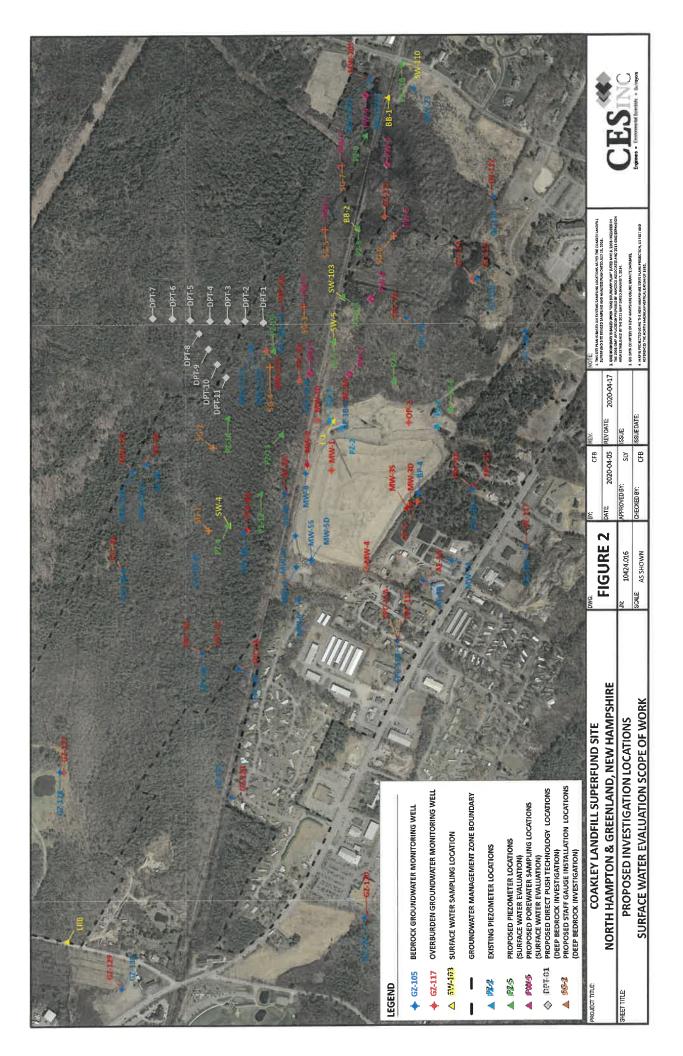


TABLE 1
Summary of Proposed Analytical Parameters
Coakley Landfill Superfund Site - North Hampton and Greenland, New Hampshire

SAMPLE LOCATION ID	PFAS	1,4-DIOXANE	WATER LEVELS	GENERAL LANDFILL PARAMETERS
		STORMV	VATER	
L-1	Х	Х		Х
SB-1	Х	Х		Х
SB-2	Х	Х		Х
OFP-2	Х	Х		Х
PD-2	Χ	Х		X
UP-2	Х	Х		X
		PIEZON	IETER	
PZ-1	Х	Х	Х	X
PZ-2	Х	Х	Х	Х
PZ-3	Х	Х	Х	X
PZ-4	Х	Х	Х	
PZ-5	Х	Х	Х	Х
PZ-6	Х	Х	Х	
PZ-7	Х	Х	Х	
PZ-8	Х	Х	Х	Х
PZ-9	Х	Х	Х	
PZ-12			Х	
PZ-13	Х	Х	Х	
PZ-14			Х	
PZ-15			Х	
PZ-103	Х	Х	Х	
PZ-110	Х	Х	Х	Х
		POREW	ATER	
PW-1	Х	Х		Х
PW-2	Х	Х		
PW-3	Х	Х		Χ
PW-4	Х	Х		
PW-5	Х	Х		
PW-6	Х	Х		Χ
PW-7	Х	Х		Х
PW-8	Х	Х		
PW-9	Х	Х		Х





April 2, 2020

Mr. Peter Britz
Coakley Project Coordinator
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Anticipated Scope of Services - House Bill 494

Coakley Landfill - North Hampton and Greenland, New Hampshire

Contract Amendment 10424020-03

#### Dear Peter:

CES, Inc. (CES) has prepared the following scope and estimated costs on behalf of the Coakley Landfill Group (CLG) to provide services related to the support and implementation of House Bill 494 (HB 494). These services are based on current understanding of HB 494 requirements and includes items as discussed between the CLG and CES via telephone and email correspondence. The following proposal is designed as an amendment to the existing Stormwater Investigation contract (10424020) and associated amendments 10424020-01 and 10424020-02 provided to the CLG on October 17, 2019 and December 17, 2019, respectively. HB 494 assistance prior to the development of this proposal was covered with remaining available budget under contract amendment 10424020-02 developed in response to a request from the United States Environmental Protection Agency (USEPA), via a letter to the CLG dated November 22, 2019, to provide response to comments to the Stormwater Investigation Report (submitted September 24, 2019) and develop a scope of work to further investigate the extent of contaminant loading to Berry's Brook and groundwater from the landfill cap materials and stormwater runoff (submitted January 22, 2020).

#### **SCOPE OF SERVICES**

Tasks outlined below are those anticipated, based on current understanding of HB 494 requirements, to be completed in support of remedy implementation. It should be noted that cost estimates are based on current site conditions and scopes of work as defined between CES and the CLG. Individual tasks and associated budgets are not inclusive of revisions to the Surface Water Evaluation scope of work provided to the Agencies on January 22, 2020. Comments to the scope of work had not been received at the time of this proposal. The scope of services, as provided, do not include costs associated with the implementation of the selected remedy or items that may be requested by the New Hampshire Department of Environmental Services (NHDES) prior to, during, or following the remedy implementation (e.g. remedy evaluation reports).

**TASK 1 | HB 494 Implementation Memorandum:** As per email correspondence between the CLG and CES on March 25, 2020, an HB 494 Implementation Memorandum (Memorandum) will be generated that outlines the proposed remedy implementation strategy selected by the CLG. This Memorandum will include the following:

Mr. Peter Britz | 04.02.2020 | 10424020-3 | Page 1





- Description of Passive Treatment Approach
  - Conceptual Design Ideas
- Treatment Considerations
  - Location of Treatment
  - Access
  - Infrastructure Requirements and Site Preparation
  - Ongoing Investigation Activities
- Required Additional Information Specific to Implementation Options
  - Surface Water Flow Rate
  - Anticipated Volume of Surface Water Requiring Treatment
  - Static/Seasonal Surface Water Elevations
- Remedy Performance Evaluation
  - Conceptual Evaluation of Performance
  - Pre-Implementation Sampling
  - Post-Implementation Sampling
- Schedule of Implementation
- Design Considerations
  - Seasonal
  - Overflow

The Memorandum will be submitted to the NHDES for review and comment following review by the CLG. The Memorandum is designed to provide the conceptual design and implementation plan for a selected remedy and may be used by the NHDES to document the CLG's response to HB 494.

**TASK 2 | HB 494 General Technical Assistance:** Ongoing technical assistance in support of HB 494 is anticipated throughout the implementation process. This technical assistance is designed to address changes in the selected remedy implementation, if any, that may result from comments provided by the NHDES following the completion and submittal of the Memorandum as outlined in Task 1. These comments may also include considerations relative to sampling and/or reporting that the NHDES may request in fulfillment of HB 494 requirements.

#### **COMPENSATION**

The budgetary estimates provided below are based on completing the scope of services related to HB 494 as outlined above. Actual costs to perform remedy implementation are not included as part of this proposal and will require a defined scope of services based on tasks as requested by the CLG. CES proposes the following not-to-exceed costs for the above-mentioned tasks.

TASK	DESCRIPTION	COST ESTIMATE
1	HB 494 Implementation Memorandum CES Labor and Expenses	\$4,250.00
2	HB 494 General Technical Assistance CES Labor and Expenses	\$5,000.00
	BUDGET ESTIMATE TOTAL	\$9,250.00





#### **AUTHORIZATION**

CFB/SLY/rlt Enc

Costs for this project will continue to be invoiced monthly, based upon the work completed during the invoice period. CES is prepared to initiate work on this project upon authorization by the CLG. Work will be performed in accordance with the contract Terms and Conditions and Rate Schedule previously executed by CLG and CES under contract 10424020. The proposed costs, upon approval by the CLG, will be added to the Stormwater Investigation project budget (10424.020). An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and an evaluation of any additional items requested or approved by the CLG.

If you have any questions concerning this proposal or if additional services are needed, please contact any of the undersigned at (207) 795-6009. We appreciate this opportunity to be of service to the CLG.

Sincerely,	
CES, Inc.	
Dy Jan	angs
Suzanne Yerina, P.G.	Christopher Buckman, P.G.
Senior Project Geologist	Senior Project Manager

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:



Mr. Peter Britz | 04.02.2020 | 10424020-3 | Page 3

# COAKLEY EXECUTIVE COMMMITTEE Tuesday, April 7, 2020, 10:00 a.m. Teleconference MEETING MINUTES

Remote Meeting via Teleconference Call

The Coakley Executive Committee Teleconference call commenced at 10:02 a.m.

Conferenced in by phone: Chairman Eric Spear, Seth Jaffe, Esq., Curtis Shipley, Esq., Robert Sullivan, Esq. Peter Britz, Dan MacRitchie, Joe Montello and Marian Steimke.

Guests conferenced in by phone: Michael Tully, N. Hampton, Ted Connors, Newington.

Chairman Spear read the following:

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8 and Executive Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

I. Review the minutes of the January 17, 2020 Coakley Teleconference call.

The following corrections were suggested:

- a) Page 7, under "DISCUSSION" section, paragraph 2:
  Sentence 1, change "sated" to "stated"
  Sentence 2, add the words "in the future" to the end of the sentence.
  Sentence 3, change "confirm" to "confirms"
- b) Page 8, under "CES Transition" section, paragraph 2: Sentence 2, correct the spelling of "oversight" Sentence 5, change "off" to "of" and "Chris's" to "Chris"
- c) Page 9,
  Paragraph 2, change "cost effective" to "cost-effective"
  Paragraph 3, change "asses" to "assess"

A motion was made by Attorney Seth Jaffe to approve the corrected minutes of the January 17, 2020 meeting; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the January 17, 2020 corrected minutes.

# <u>OU-1</u>

## II. BILLS

## **CITY OF PORTSMOUTH**: Services of Peter Britz

A.	Invoice #	2900222907	dated	1/27/2020	\$2,750.00
B.	Invoice #	2900249523	dated	2/19/2020	\$2,750.00
C.	Invoice #	2900289298	dated	3/16/2020	\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items II - A, B and C for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - A, B and C for payment.

CES, INC.	Invoic	ent Certifications dated: es dated: es rendered through:	4/7/2020 1/24/2020 12/29/2019	
D.	Invoice #	20200344 General technical assistance		\$455.00
E.	Invoice #	20200346 Stormwater work plan; Fall 2 out of scope services	.018 sampling;	\$1,125.00
$\mathbf{F}_{*}$	Invoice #	20200347 2019 Fall sampling		\$687.75

### DISCUSSION:

Peter explained that item D included lab coordination; item E did not actually include out of scope services; and item F involved review of preliminary results that were coming in.

A motion was made by Attorney Seth Jaffe to approve items  $\mathbf{H} - \mathbf{D}$ ,  $\mathbf{E}$  and  $\mathbf{F}$  for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II – D, E and F for payment.

CES, INC.	Payment Certifications dated:	4/7/2020
	Invoices dated:	2/22/2020
	Services rendered through	1/26/2020

G.	Invoice #	20200739 General technical assistance	\$588.91
Н.	Invoice#	20200887 Stormwater work plan; Fall 2018 sampling; out of scope services	\$5,427.50
I.	Invoice#	20200717 2019 Fall sampling	\$314.56

#### **DISCUSSION:**

Peter explained that item G included technical meetings, and preparation for calls with agencies. Item H included work on the Stormwater Report response to comments. Item I included the updating of data tables.

A motion was made by Attorney Seth Jaffe to approve items II – G, H and I for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - G, H and I for payment.

## **NORDSTROM TRUST:**

J. Invoice #13-30687 dated: 6/30/2019 \$5,790.00 Mowing the Landfill Cap

Payment Certification dated: 4/7/2020

#### DISCUSSION:

Peter explained this bill is for mowing that was done last summer. The vendor sent the bill very late due to their computer problems. Peter will check in with them to contract for this summer's work.

Seth asked if there was any activity coming up that will be affected by COVID-19 and if any plans needed to be updated to address health and safety. He asked if DES or EPA were looking at any of the CLG's plans.

Peter said they talked about residential sampling but have not formalized any safety plans. Peter will follow up on that to update health and safety plans and scope.

A motion was made by Attorney Seth Jaffe to approve item II – J for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – J for payment.

# US DEPARTMENT OF TREASURY

K. Form #1120-SF for tax year 2019 \$87.00IRS Form 1120-SF Tax Return for Settlement Funds (Under Section 468B)

L. First Installment Tax Payment 4/15/2020

\$100.00

#### **DISCUSSION**:

Peter will follow up to get more information about these items.

A motion was made by Attorney Seth Jaffe to table approval of items II – K and L for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to table items II - K and L for payment.

## III. OU-1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested	Amount	Date
PKP	reiceillage	Amount	Received	Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00	\$16,932.00	1/21/2020
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00	\$62,000.00	1/15/2020
Browning-Ferris	12.308%	\$38,155.00	\$38,155.00	12/30/2019
Waste Management	4.615%	\$14,307.00	\$14,307.00	1/21/2020
TOTALS	100%	\$310,000.00	\$310,000.00	

## IV. OU-1 RECORD ITEMS

There were no record items.

**OU-1** Balance as of 4/3/2020:

\$425,450.30

#### OU-2

## V. BILLS

CITY OF PORTSMOUTH: No payment certifications required

A.	Invoice#	2900222907	dated	1/27/2020	\$2,750.00
B.	Invoice #	2900249523	dated	2/19/2020	\$2,750.00
C	Invoice #	2900289298	dated	3/16/2020	\$2,750.00

A motion was made by Attorney Seth Jaffe to approve items V-A, B and C for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - A, B and C for payment.

CES, INC.	Invo	nent Certifications dated: ices dated: ices rendered through	4/7/2020 1/24/2020 12/29/2019	
D.	Invoice #	20200344 General technical assistan	ce	\$845.00
E.	Invoice #	20200345 Interim Bedrock Investiga	tion Report	\$2,300.00
F.	Invoice #	20200347 2019 Fall sampling		\$1,277.25

## DISCUSSION:

Peter explained that item D is the same as that of OU-1. Item E involved finalization of the report specific to OU-2, and item F is the same as that of OU-1.

A motion was made by Attorney Seth Jaffe to approve items V-D, E and F for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - D, E and F for payment.

CES, INC.	Payment Certifications dated:	4/7/2020
	Invoices dated:	2/22/2020
	Services rendered through	1/26/2020

G.	Invoice #	20200739 General technical assistance	\$1,093.69
H.	Invoice #	20200717 2019 Fall sampling	\$584.19

## DISCUSSION:

Peter said that items G and H were the same as OU-1.

A motion was made by Attorney Seth Jaffe to approve item V-G and H for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V - G and H for payment.

# **SANBORN HEAD**:

I.	Invoice #0050274 dated: 1/24/2020	\$7,998.77
	Services rendered through 1/18/2020	
	Deep Bedrock Technical Memorandum Support	
J.	Invoice #0050706 dated: 3/20/2020	\$8,696.91
	Services rendered through 3/14/2020	
	Deep Bedrock Investigation Tech Support	

#### DISCUSSION:

Peter explained that item I related to helping CES with the technical memo and item J was for preparation for the agency meeting.

A motion was made by Attorney Seth Jaffe to approve item V-I and J for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V – I and J for payment.

## VI. <u>OU-2 ACTION ITEMS</u>

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019
Town of Newington	5.463%	\$34,144.00	\$34,144.00	1/24/2020
Town of N. Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00	\$125,000.00	2/11/2020
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00	\$28,844.00	1/21/2020
TOTALS	100%	\$625,000.00		

Partial payment

Peter explained the partial payment – the City did not have that amount authorized for the fiscal year. Seth asked if this raises budget authority issues regarding Coakley expenditures for FY21. Bob said we were not at that point yet, and Seth asked for news earlier rather than later.

#### VII. OU-2 RECORD ITEMS

There were no record items.

OU-2 Balance as of 4/3/2020: \$692,396.52

# **COMBINED OU-1 & OU-2**

#### VIII. COMBINED OU-1 & OU-2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 4/7/2020

## Fall Sampling 2019:

The sampling is complete except for the one issue/holdup being that the data has not come back from the data validator. The last data packet is mostly residential data, and that should be back within a week. Once all of the validated data is received, CES can provide the data to the residents and finalize the annual report.

Seth asked if the data got to the data validator late, and Peter said there was a delay in processing all of the results due to an issue with the new lab where some of the samples had to be recollected in the field and re-run at the lab.

Seth expressed concerns that this work was done six months ago. This is work that matters. It is relevant to additional work that we are doing at the site. We have to figure out a way to not have delays.

## Spring Sampling 2020:

Peter said they are preparing for spring sampling and are planning for May  $11-22^{\rm nd}$ . While the field work for monitoring wells will go ahead as planned, there may be some delay in residential sampling. The proposed approach is to contact the drinking water supply wells properties before sampling is conducted. This sample collection will be done in coordination with EPA and DES to ensure we follow all recommended COVID-19 protocols. Seth asked if samples are collected from the tap or from the well, and Peter said it depended on the property. There was a mix of locations where samples were taken from depending on how each site is configured and where the most appropriate access point is.

#### Deep Bedrock Study:

Peter said CES met with DES and the EPA in March regarding follow-up to work done previously. CES put together a work plan which was submitted on Monday. Peter will talk to them to finalize the final work plan for the study.

## Surface Water and Stormwater Report:

Peter said CES provided comments to the report.

## HB 494:

Working with CES to come up with an approach for doing this work. When we have an approach we are comfortable with it will be reviewed by NHDES and USEPA to make sure it satisfies the intent of HB494. At the present time the best estimate is that an approach will be completed soon with a goal of installing something in the field in September. Likely this first installation will be a pilot which will be monitored to determine the success of the effort.

B. Proposal from Sanborn Head for 2020 Services (ref Record Item IX-C)

#### DISCUSSION:

Peter said he approved this proposal which was under \$10,000. They have been the consulting engineer with CES. Peter said they had a meeting with the EPA. They had not contracted to follow up with the EPA, so that piece has been addressed.

#### IX. COMBINED OU-1 & OU-2 RECORD ITEMS

A. Organizational Resolutions for Piscataqua Savings Bank for OU-1 and OU-2 Trust Accounts signed by the Executive Committee January 2020.

- B. Email from Kelsey Dumville, EPA dated 1/29/2020 Re: EPA Update on the Coakley Landfill Site with links to two reports:
  - B (1) Link 1: Letter from CES to Richard Hull, US EPA dated 1/22/2020. Re: Stormwater Investigation Report Response to Comments; Coakley Landfill with January 2020 Surface Water Evaluation Scope of Work attached (On Disc and pages 1-15 printed).
  - B (2) Link 2: Deep Bedrock Investigation Interim Report, November 25, 2019. Prepared by CES Inc. (On disc and pages 1-13 printed).
- C. Proposal from Sanborn Head, dated 2/24/2020; Re: Proposal for 2020 Services Deep Investigation Technical Support accepted by Peter Britz on 3/6/2020. Attached Terms and Conditions dated 1/11/2019; Attached Sanborn, Head & Associates, Inc. Schedule of Fees.

A motion was made by Attorney Seth Jaffe to approve record items IX – A, B and C; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve record items IX - A, B and C.

#### X. OTHER BUSINESS

There was no other business.

#### XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive Committee meeting was scheduled for Wednesday, May 6, 2020 at 10:00 a.m. It is planned to be held in Conference Room A in City Hall at Portsmouth.

The me	eting adjourned at 10:42 a.m.	
		DocuSigned by:
D.4. 4.	5/6/2020	Eric Spear
Dated:		EFF1EDCB27B74AC
		Eric Spear, Chair
		Coakley Executive Committee Chair

Respectfully Submitted, Marian Steimke

# COAKLEY EXECUTIVE COMMMITTEE Thursday, June 11, 2020, 10:00 a.m. Teleconference Meeting Minutes

The Coakley Executive Committee (EC) Teleconference call commenced at 10:06 a.m.

**Conferenced in by phone**: Chairman Eric Spear, Seth Jaffe, Esq., Curtis Shipley, Esq., Robert Sullivan, Esq. Peter Britz, Dan MacRitchie, Joe Montello and Marian Steimke.

**Guests conferenced in by phone**: John Tuthill from Acworth, NH, Michael Tully, N. Hampton

## Chairman Spear read the following:

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-09, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

#### I. Review the minutes of the May 6, 2020 Coakley Teleconference call.

The EC clarified a statement in the HB494 paragraph on page 6: It is position of the EC that the work they are doing is work that is mandated by the EPA.

A motion was made by Attorney Seth Jaffe to approve the minutes of the May 6, 2020 meeting; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the May 6, 2020 minutes.

A motion was made by Attorney Seth Jaffe to approve the minutes of the non-public session of the May 6, 2020 meeting; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the May 6, 2020 minutes of the non-public session.

# OU-1

#### II. BILLS

#### CITY OF PORTSMOUTH:

A. Invoice # 2900374574 dated 5/13/2020 Services of Peter Britz \$2,750.00

A motion was made by Attorney Seth Jaffe to approve item II – A for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II - A for payment.

CES,	INC.	Payment Certifications dated: 6/11/2020 Invoices dated: 5/28/2020 Services rendered through: 4/26/2020	
В.	Invoice #	20202227 General technical assistance	\$721.87
C.	Invoice #	20202229 Work Plan, Fall 2018 Sampling; OOS Services	\$3,775.00
D.	Invoice #	20202230	\$633.76

Peter explained that item B was mostly communication between CES, himself and the agencies. Item C involved fall sampling work, revision to figures and preparation for the 2019 report. Item D related to technical work that CES did on the annual report and providing technical assistance. Alpha Lab credited us a little over \$7,000, and this is the area where we offset the cost.

Fall 2019 Sampling

A motion was made by Attorney Seth Jaffe to approve items II - B, C, D for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II – B, C, D for payment.

# Hodgdon, Wilson & Griffin

E. Invoice for OU1 Tax prep Tax Year 2019 \$225.00
Dated: 4/7/2020
Federal corporate 2019 tax return OU-1



Seth and Curtis agreed that taxes should not be owed out of the trust accounts. The Bank had chosen these particular accountants, and there is an ongoing issue of who is doing the taxes. The EC discussed potentially seeking another firm to do the taxes.

Bob said the amounts of taxes we are paying are small, but the amounts could be larger in the future.

A motion was made by Attorney Seth Jaffe to approve item II – E for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – E for payment.

# StoneHill Environmental

Payment Certification dated: 6/11/2020 Invoice dated: 3/31/2020 Services rendered through 4/10/2020

F. Invoice # 1736 \$2,121.47
Gas Monitoring and Reporting

It was noted that the agenda incorrectly described the work done by StoneHill. Peter explained that the landfill gas report / monitoring is the correct thing we are paying.

A motion was made by Attorney Seth Jaffe to approve item II – F for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – F for payment.

# US Department of Treasury

G. Form # 1120-SF For tax year 2019 \$87.00 IRS Form 1120-SF Tax Return for Settlement Funds (Under Section 468B)

H. First Installment Tax Payment 4/15/2020 \$100.00

These two items had previously been paid by Piscataqua Savings Bank at the direction of Tom Queeney of PSB. These were paid without authorization from the EC. Bob pointed out that it becomes an anomaly if there is no authorization regarding payment of these funds.

A motion was made by Attorney Seth Jaffe to acknowledge that these two bills totaling \$187.00 were paid by Piscataqua Savings Bank without authorization from the EC; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the motion.

A motion was made by Attorney Seth Jaffe that the EC take steps to explore options with other accounting firms; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the motion.

A motion was made by Attorney Seth Jaffe that no money shall be spent on our behalf without our authorization; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the motion.

The group suggested that someone from the City talk to the accountants and send a letter to the Bank stating that in the future they should not be sending money out of the trust accounts without authorization.

Marcum is the firm in Boston that does the Coakley generator taxes. Seth will look into their costs.

Curtis will call Sherry Young to ask for her suggestion as well.

#### III. OU - 1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00	\$16,932.00	1/21/2020
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00	\$62,000.00	1/15/2020
Browning-Ferris	12.308%	\$38,155.00	\$38,155.00	12/30/2019
Waste Management	4.615%	\$14,307.00	\$14,307.00	1/21/2020
TOTALS	100%	\$310,000.00	\$310,000.00	

# IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 6/9/2020: \$389,429.51

# <u>OU-2</u>

# V. BILLS

# **CITY OF PORTSMOUTH:**

A. Invoice # 2900374574 dated 5/13/2020 \$2,750.00 Services of Peter Britz

A motion was made by Attorney Seth Jaffe to approve item V – A for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item V – A for payment.

Invoices dated:		Payment Certifications dated: Invoices dated: Services rendered through	6/11/2020 5/28/2020 4/26/2020	
B.	Invoice #	20202227 General technical assistance		\$1,340.63
C.	Invoice #	20202228 Bedrock Investigation Work Plan Geophysics Packer Sampling, O		\$2,290.00
D.	Invoice #	20202230 Fall 2019 Sampling		\$1,176.99

Peter explained that item C involved the work plan addendum and some coordination work with the agencies. Item D also reflects a refund/credit applied regarding the Lab.

A motion was made by Attorney Seth Jaffe to approve items V – B, C, D for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V – B, C, D for payment.

# Hodgdon, Wilson & Griffin

E. Invoice for OU2 Tax prep –Tax Year 2019
Dated:4/7/2020
Federal fiduciary 2019 tax return OU-2

\$450.00

It was noted we did not ask the CPAs why there are different amounts for different returns.

A motion was made by Attorney Seth Jaffe to send an email to HW&G to ask:

- 1) What their fee basis is;
- 2) Why the billed amounts for OU-1 & OU-2 tax preparation are different;
- 3) Why OU-1 was billed as a Federal corporate tax return, but OU-2 was billed as a Federal fiduciary tax return.

Depending on the response, we may designate a committee of the EC to look into what HW&G did and whether the EC should look at other firms for next year. This motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the motion.

A motion was made by Attorney Seth Jaffe to approve item V – E for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item V – E for payment.

#### VI. OU - 2 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019 – partial payment
Town of Newington	5.463%	\$34,144.00	\$34,144.00	1/24/2020
Town of N. Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00	\$125,000.00	2/11/2020
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00	\$28,844.00	1/21/2020
TOTALS	100%	\$625,000.00	\$465,000.00	

Peter explained that the payment from Portsmouth was split into two payments and the second half paid will be paid in the new fiscal year once they encumber the funds for next fiscal year.

Seth asked if there was any concern about whether the municipal budget would have sufficient funds for the new fiscal year, considering that there is currently a \$160,000 shortfall, and we will be spending a lot of money in FY21.

Bob said we hope to have our budget approved next Monday night, but there is another issue. The City has been paying Coakley remediation expenses off a large borrowing authorization and has been relying on that. We have used that up and we'll have to get new authorizations in the future. This will be subject to a meeting and public hearing and a 2/3 vote of the City Council. Then the Council still has to approve the payments each year.

Joe asked what Peter used in his budgeting regarding the work planned. Peter used the estimate that CES gave us before. Peter and Dan are close to the final numbers. Seth asked if we were close on the deep bedrock studies and said he'd rather delay in order to have better numbers. We want final agreement with the EPA on bedrock investigation. We have not yet nailed down the final scope. We have tried to make the agencies sensitive to the COVID issue. There is logic in waiting to do the budget until we get the final scope of work.

Peter and Bob will talk. Borrowing authorization is not part of the budget cycle. It is too late for the current budget.

#### VII. OU - 2 RECORD ITEMS

- A. OU-2 Balance as of 6/9/2020 \$638,018.90
- B. Letter from HW&G, CPAs dated 3/10/2020 to City of Portsmouth regarding Grantor / Agency Report for Coakley Landfill Superfund OU-2 Trust. Attachments: Form 1041; Statement 1: Grantor/Agency Report Dividend Information fiscal year ending: 12/31/2019.

A motion was made by Attorney Seth Jaffe to approve the record items VII –A and B; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve record items VII – A and B.

# COMBINED OU-1 & OU-2

# VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 6/11/2020

#### **Spring sampling:**

CES completed the sampling without issues, but sending the samples via FedEx took four days to arrive – even though it was guaranteed to arrive the next day. The samples are only good for two days, and as a result, the lab said the samples were out of temperature. They are all being recollected since it did not make sense to try to use them. The amended Spring sampling will be completed in the next day or two. We explained to the residents so they would be aware, and they were very understanding. CES agreed to absorb the cost for the amended sampling. The EC expressed their appreciation in stepping up to cover this added expense, and asked Peter to relay that to CES. Getting FedEx to pay the cost of the sampling was impossible – they would not budge, even though the delivery was to be overnight. FedEx only refunded the cost of the shipping.

# **Surface Water and Stormwater Proposal Amendment:**

The Surface/storm water Amendment was to combine all the work into one contract. That has been done and that contract was distributed with the activity report for this meeting. Peter asked the EC to approve the contract/proposal (reference Record Item IX-A).

A motion was made by Attorney Seth Jaffe to approve the CES Proposal dated 5/20/2020 for Surface Water Evaluation and House Bill 494 Assistance; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the proposal.

Seth asked how the money would be allocated between OUI-1 vs OU-2. Peter answered that most surface water work has been OU-1. This is not going to fit the typical split that we've had of 65% / 35%, and we will review that.

# Deep bedrock:

Peter said that we've agreed to do a pump test on a well on the southern part of the boundary/property that looks at fractures. He has consulted with the agencies to confirm this is a good well for the pump test, and so far they agree. They saw some evidence that there is some drawdown possibly due to fractured bedrock. Joe and Peter have gone through the recommendations. Once they approve the packer sampling intervals we will have the work completed. Once we receive the results from this we can confirm that MW-6 is a good well do the pump test on. The deep bedrock work plan is being reviewed by the agencies. We'll have an understanding soon of the additional work needed to complete this phase of the Deep Bedrock Study.

# IX. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. CES Proposal dated 5/20/2020 for Surface Water Evaluation and House Bill 494 Assistance.
- B. Email chain forwarded by R. Sullivan 6/10/2020 re: CL Tax Return and why a tax was due for tax year 2019 but not for previous years. Communication with HWG, CPAs.
  - (1) 2019 & 2011 Forms 1120-SF attachments to Record Item IX B.

A motion was made by Attorney Seth Jaffe to approve the record items IX –A and B; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve record items IX – A and B.

# X. OTHER BUSINESS

Bob spoke about New Hampshire law as it applies to Right-to-Know requests. The law requires that public entities make records available for inspection. It is not a requirement to have to email or mail the requested records. Bob said the City applies that law literally and explained that we make the records available in City Hall or provide the records on a zip drive if the requester pays for the drive.

He said we get these kinds of requests all the time, so the City strictly interprets the rule. We have received a request for Coakley records to be emailed out. The question for the Executive Committee that Bob asked was: should we be emailing responses or should we follow the stricter rule that the City follows. It is the EC's decision. Eric said he thinks following the City rule would be appropriate. Seth said the group is a public entity because of the City. The EC would have appealed the lawsuit and would have won. However, Seth indicated that coming in to City Hall to examine records may not be realistic due to the pandemic.

A motion was made by Attorney Seth Jaffe that the group's policy should follow the City's policy in responding to Right-to-Know requests under New Hampshire Law; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to follow the City's policy in responding to Right-to-Know requests under New Hampshire Law.

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive Committee meeting is scheduled for Wednesday, July 15, 2020 at 10:00 a.m. It is planned to be held via teleconference.

The meeting adjourned at 11:06 a.m.

Dated:	Eric Spear, Chair Coakley Executive Committee Chair
Respectfully Submitted, Marian Steimke	

# COAKLEY EXECUTIVE COMMMITTEE

# Tuesday, August 18, 2020 AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-16, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

# Please use the following to call in to the meeting:

Conference Call Dial-in #: 603-766-5646

Conference ID: 393626

I. Review the minutes of the July 15, 2020 Coakley Teleconference call.

# <u>OU-1</u>

## II. BILLS

## CITY OF PORTSMOUTH:

A.	Invoice #	2900472188 dated Peter Britz & Financial service	d 7/17/2020 s - July 2020	50%	\$2,750.00
CES, INC.		Payment Certifications dated: Invoices dated: Services rendered through:	8/18/2020 7/23/2020 6/28/2020		
B.	Invoice #	20203037 General technical assistance		35%	\$645.30
C.	Invoice #	20203038 Fall 2019 Sampling		35%	\$337.75

D.	Invoice #	20203039 Spring 2019 Sampling	35%	\$606.38
E.	Invoice #	20203040 Stormwater Investigation	100%	\$1,630.00
F.	Invoice #	20203190 Spring 2020 Sampling	35%	\$8,617.26

# III. OU - 1 ACTION ITEMS

There were no action items.

# IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 8/11/2020: \$352,848.14

# <u>OU-2</u>

# v. BILLS

# **CITY OF PORTSMOUTH:**

A.	Invoice #	2900472188 date	d	7/17/2020	50%	\$2,750.00
		Peter Britz & Financial se	rvices	- July 2020		
CES, INC.		Payment Certifications da	ated:	8/18/2020		
		Invoices dated:		7/23/2020		
		Services rendered throug	h	6/28/2020		
						04.400.40
B.	Invoice #	20203037			65%	\$1,198.40
		General technical assista	nce se	ervices		
C.	Invoice #	20203038			65%	\$627.25
0.	mivoloc n	Fall 2019 Sampling				,
D.	Invoice #	20203039			65%	\$1,126.12
		Spring 2019 Sampling				

E. Invoice # 20203041 100% \$2,947.94

Bedrock Investigation Work Plan

F. Invoice # 20203190 65% \$16,003.49

Spring 2020 Sampling

# **Advance Radon Mitigation**

Payment Certification dated: 8/18/2020

Invoice dated: 8/5/2020 Service date: 8/5/2020

G. Invoice #: PIN157 100% \$2,963.00

Breakfast Hill Golf Club / 339 Breakfast Hill Rd. 1,4-Dioxane Sampling & lab fees; Service, Re-bed and Dispose Used

Carbon Media

## VI. OU - 2 ACTION ITEMS

There were no action items.

## VII. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 8/11/2020: \$741,949.18

## **COMBINED OU-1 & OU-2**

# VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 8/18/2020

## IX. COMBINED OU - 1 & OU - 2 RECORD ITEMS

A. Letter to R. Hull dated 7/21/2020; signed by Chairman Spear re: Trust Fund and cash flow projections: 1/1/2020 through 6/29/2020.

# X. OTHER BUSINESS

- A. Unauthorized payment of bills by Piscataqua Savings Bank.
- B. Coakley documents: upload to City of Portsmouth website update.

# XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

# Memo

To: Coakley Executive Committee From: Peter Britz, Coakley Coordinator

Date: August 18, 2020 Re: Activity report

# **Spring Sampling**

All work is complete. Should have results back from data validator any day.

## **Annual Report**

The report is complete and has been provided to USEPA and NHDES and uploaded to OneStop.

#### **Surface Water Work**

NHDOT has reviewed the access agreements, forwarded to the Attorney General and word was given that we would receive approval shortly. Once access secured and the beavers have been removed the culverts can be cleared to bring the water levels down so water is not overtopping the railroad berm.

## Deep Bedrock Study

All the work completed on MW-6 has been compiled into a recommendation to USEPA and NHDES and will be submitted to them in the next couple of days. Once the recommendation to use MW-6 has been reviewed by the agencies we can begin planning for the pump test. Before the pump test is conducted a new well near GZ-105 must be installed.

## **DOJ Bill**

We received word from DOJ that they will be sending payment request for Invoice 11 (\$125,130.94) this week. Invoice 12 will go out this week.

# COAKLEY EXECUTIVE COMMMITTEE Thursday, July 15, 2020, 10:00 a.m. Teleconference Meeting Minutes

The Coakley Executive Committee (EC) Teleconference call commenced at 10:02 a.m.

**Conferenced in by phone**: Chairman Eric Spear, Seth Jaffe, Esq., Curtis Shipley, Esq., Robert Sullivan, Esq. Peter Britz, Dan MacRitchie, Joe Montello and Marian Steimke.

Guests conferenced in by phone: Michael Tully, N. Hampton, Mindi Messmer.

## Chairman Spear read the following:

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-10, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

I. Review the minutes of the June 11, 2020 Coakley Teleconference call.

A motion was made by Attorney Seth Jaffe to approve the minutes of the June 11, 2020 meeting; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve the June 11, 2020 minutes.

#### OU-1

## II. <u>BILLS</u>

## CITY OF PORTSMOUTH:

A. Invoice #2900428791 dated 6/22/2020 Peter Britz services - June 2020 \$2,750.00

A motion was made by Attorney Seth Jaffe to approve item II – A for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – A for payment.

## CES, INC.

Payment Certifications dated 7/15/2020 Invoices dated: 6/26/2020 Services rendered through: 5/31/2020

В.	Invoice #20202761 General technical assistance	35%	\$1,026.38
C.	Invoice #20202760 2020 Spring Sampling	35%	\$18,604.53
D.	Invoice #20202763 Fall 2019 Sampling	35%	\$2,616.69

Peter said all the OU-1 CES invoices are all partially billed to OU-2 as well. Item B is for weekly calls with DES and EPA, coordinating contacts and putting together minutes. Item C was for Eastern Analytical charges for field work and sampling and well maintenance. Item D charges related to finalization of the annual report and notification of residents of water quality samples. This work is hopefully all completed at this point. The report will be sent to the agencies any day now.

A motion was made by Attorney Seth Jaffe to approve items II – B, C, D for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items II - B, C, D for payment.

## DC MACRITCHIE, LLC

E. Invoice #205612 50% \$1,380.00

Payment Certification dated: 7/15/2020 Invoice dated: 6/12/2020 Services rendered through 6/11/2020

Peter explained that the charges were for helping with the budgeting and getting a better process together to keep closer tabs on consultants and cash flow reporting to regulators.

A motion was made by Attorney Seth Jaffe to approve item II – E for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item II – E for payment.

Bob Sullivan joined the meeting at this time: 10:06 a.m.

## III. OU - 1 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP	Percentage	Requested Amount	Amount Received	Date Received
City of Portsmouth	53.553%	\$166,014.00	\$166,014.00	12/10/2019
Town of Newington	5.462%	\$16,932.00	\$16,932.00	1/21/2020
Town of N. Hampton	4.062%	\$12,592.00	\$12,592.00	12/16/2019
Generators	20%	\$62,000.00	\$62,000.00	1/15/2020
Browning-Ferris	12.308%	\$38,155.00	\$38,155.00	12/30/2019
Waste Management	4.615%	\$14,307.00	\$14,307.00	1/21/2020
TOTALS	100%	\$310,000.00	\$310,000.00	

## IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 7/13/2020: \$379,218.42

## OU-2

## V. BILLS

## **CITY OF PORTSMOUTH:**

A. Invoice #2900428791 dated 6/22/2020 Peter Britz services - June 2020 \$2,750.00

A motion was made by Attorney Seth Jaffe to approve item V – A for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item V – A for payment.

### CES, INC.

Payment Certifications dated 7/15/2020 Invoices dated: 6/26/2020 Services rendered through: 5/31/2020

B. Invoice #20202761

General technical assistance

65% \$1,906.12

C. Invoice #20202763
 Fall 2019 Sampling
 D. Invoice #20202762
 Bedrock Investigation Work Plan: MW-6
 E. Invoice #20202760
 2020 Spring Sampling
 65% \$4,859.56
 100% \$2,655.35
 65% \$34,551.28

Peter explained Item D as being work to setup borehole geophysics, interval packer sampling and preparation of a hydro graph in preparation for pump test at MW-6.

A motion was made by Attorney Seth Jaffe to approve items V-B, C, D, E for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve items V – B, C, D, E for payment.

Mindi Messmer joined the meeting at this time 10:08.

## DC MACRITCHIE, LLC

F. Payment Certification dated: 7/15/2020 50% \$1,380.00

Invoice #: 205612

Invoice dated: 6/12/2020

Services rendered through 6/11/2020

A motion was made by Attorney Seth Jaffe to approve item V – F for payment; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve item V – F for payment.

## VI. OU - 2 ACTION ITEMS

Assessments were sent out on 11/26/2019 and were due by 1/31/2020.

PRP Percentage Requested Amount		Requested Amount	Amount Received	Date Received
City of Portsmouth	53.551%	\$334,693.00	\$174,693.00	12/10/2019
CoP 2nd payment			\$160,000.00	7/13/2020
Town of Newington	5.463%	\$34,144.00	\$34,144.00	1/24/2020

Town of N.			005 004 00	40/40/0040
Hampton	4.063%	\$25,394.00	\$25,394.00	12/16/2019
Generators	20%	\$125,000.00	\$125,000.00	2/11/2020
Browning-Ferris	12.308%	\$76,925.00	\$76,925.00	12/26/2019
Waste Management	4.615%	\$28,844.00	\$28,844.00	1/21/2020
TOTALS	100%	\$625,000.00	\$625,000.00	

Payments of all assessments are up-to-date.

#### VII. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 7/13/2020: \$790,037.69

#### COMBINED OU-1 & OU-2

## VIII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 7/15/2020

Spring Sampling: The work is complete now, and we should have results soon.

Annual Report: The report is essentially finalized.

<u>Surface Water Work:</u> The railroad got in touch with Peter. CES is going through the process to get the Right of Access Agreement in place. CES has submitted all the required paperwork and now it is back in DOT hands. Water levels need to be brought down below the railroad berm. We should be talking to DES if DOT is not being responsive. DES is aware of our status, and Peter may ask them to follow-up with NHDOT to keep things moving.

<u>Deep Bedrock Study</u>: CES started work for the pump test, and we are waiting for results from samples. Regulators will tell us whether MW-6 is the right well for this pump test. Peter said we should receive the results in about a week. We'll have to put in a new well in the area of GZ105. Once that work is complete the pump test can be conducted.

Cap Mowing: Walter Nordstrom is ready to start depending on weather.

<u>DOJ Bill</u>: Peter has been awaiting payment of Invoice 11 for some time. He just heard back and they are looking into when the payment will be coming. The Invoice has been pending since October, but they had asked for more information and then there was COVID which delayed the payment further. Does not want to wait to send the next invoice, #12 for \$73,144.20. Peter only has one contact at DOJ who has been the one contact for 30 years: Dan Dertke is the contact.

<u>Water Filter Replacement/Re-bed:</u> The filter at the golf course needs to be changed. Peter got a quote for \$2,963. This time they only need to change one tank. Last time they had to do 2. They will take a sample prior to replacement to confirm system is still effective at time of filtration change.

### IX. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. Proposal for Spring 220 Sampling & Reporting from CES dated 4/8/2020 and executed 5/8/2020 by Chairman Spear.
- B. Proposal for Surface Water Evaluation and House Bill 494 Assistance from CES dated 5/20/2020 and executed 6/15/2020 by Chairman Spear.
- C. Proposal to re-bed the carbon for the golf course water supply filtration system and collect and run sample for 1,4-Dioxane from Advanced Radon Mitigation. The proposal for \$2,963 was approved by Peter Britz.

A motion was made by Attorney Seth Jaffe to approve the record items IX –A, B and C; this motion was seconded by Attorney Curtis Shipley.

On a roll call 3-0, the Committee voted to approve record items IX - A, B and C.

#### X. OTHER BUSINESS

An agenda item for next month's meeting relates to the Bank paying bills that were not authorized for payment. Bob and Peter will follow up with the Bank.

Bob discussed the Coakley section on the City of Portsmouth's website vs. creating a standalone website. The group decided that meeting minutes, annual reports and activity reports will initially be uploaded to the website. They suggested that Peter can propose what other items should be included. Marian will investigate getting access to upload the documentation.

### XI. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

The next Coakley Executive Committee meeting is scheduled for Tuesday, August 18, 2020 at 10:00 a.m. It is planned to be held via teleconference.

The meeting adjourned at 10:26 a.m.

	8/18/2020
Date:	

Docusigned by:

Eric Splan

EFF1EDCB27B74AC...

Eric Spear, Chair Coakley Executive Committee Chair

Respectfully Submitted, Marian Steimke

## COAKLEY EXECUTIVE COMMITTEE

## Wednesday, September 30, 2020 AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-18, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

## Please use the following to call in to the meeting:

Conference Call Dial-in #: 603-766-5646

Conference ID: 393626

Review the minutes of the August 18, 2020 Coakley Teleconference call.

## **OU-1**

## II. BILLS

## City of Portsmouth

Α.	Invoice #	2900497584 dat Peter Britz & Financial service	ed 8/18/2020 ces - 8/2020	50%	\$2,750.00
B.	Invoice #	2900530605 dat Peter Britz & Financial service	ed 9/15/2020 ces - 9/2020	50%	\$2,750.00
CES, Inc.		Payment Certifications dated Invoices dated: Services rendered through:	d: 9/30/2020 8/27/2020 7/26/2020		
C.	Invoice #	20203555 General technical assistance	9	35%	\$536.38
D.	Invoice #	20203558 Spring 2020 Sampling		35%	\$6,305.86

CES, Inc. Payment Certifications dated: 9/30/2020

Invoices dated: 4/24/2020 Services rendered through: 3/29/2020 Invoices not received until 8/25/2020

E. Invoice # 20201648 35% \$825.13

General technical assistance services

F. Invoice # 20201647 100% \$1,065.00

Stormwater Work Plan, Fall 2018 Sampling & Out of Scope

G. Invoice # 20201650 35% \$597.63

2019 Spring Sampling

H. Invoice # 20201651 35% \$3,416.57

2019 Fall Sampling

NE Lock and Safe Payment Certification dated: 9/30/2020

Invoice dated: 9/21/2020 Service dated: 9/21/2020

Invoice # 335xx 50% \$149.80

Long & regular shackles

## III. OU - 1 ACTION ITEMS

There were no action items.

## IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 8/31/2020: \$338,261.45

## <u>OU-2</u>

## V. BILLS

## City of Portsmouth

A. Invoice # 2900497584 dated 8/18/2020 50% \$2,750.00

Peter Britz & Financial services - 8/2020

E	3.	Invoice #	2900530605 dated Peter Britz & Financial services	9/15/2020 - 9/2020	50%	\$2,750.00
CES	<u>, Inc.</u>		Invoices dated:	9/30/2020 8/27/2020 7/26/2020		
(	O.	Invoice #	20203555 General technical assistance se	ervices	65%	\$996.12
[	O.	Invoice #	20203558 Spring 2020 Sampling		65%	\$11,710.89
E	≣.	Invoice #	20203557 Bedrock Investigation Work Pla	n & Services	100%	\$20,745.04
CES	<u>, Inc.</u>			4/24/2020 3/29/2020		
F	F.	Invoice #	20201648 General technical assistance se	ervices	65%	\$1,532.37
C	Э.	Invoice #	20201649 Interim Bedrock Investigation R	eport & Services	100%	\$8,345.00
ŀ	Ⅎ.	Invoice #	20201650 2019 Spring Sampling		65%	\$1,109.87
1	l.	Invoice #	20201651 2019 Fall Sampling		65%	\$6,345.06
Adva	ance l	Radon Mit		9/30/2020		
	J.	Invoice #:	PIN157 Breakfast Hill Golf Club / 339 Br Sampling & lab fees; Maintenar		100% ie	\$2,963.00

NE Lock and Safe Payment Certification dated: 9/30/2020

Invoice dated: 9/21/2020 Service dated: 9/21/2020

K. Invoice # 335xx 50% \$149.80

Long & regular shackles

## VI. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 8/31/2020: \$714,332.98

## **COMBINED OU-1 & OU-2**

## VII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 9/30/2020 with attachments:

- \* Fall 2020 Sampling proposal 9/23/20 needs approval
- \* Water supply results: cover letter 9/22/2020 & results table
- \* Surface geophysics proposal needs approval
- \* Deep bedrock surface geophysics proposal 8/27/2020 executed 9/28/2020 This is Record item IX-B below - **needs formal approval**
- \* Deep bedrock: MW6 installation proposal 9/9/2020- needs approval

## VIII. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. Letter from R. Hull of USEPA dated 9/1/2020 to J. Fitzgerald; Re: Request for Access to Property at 65 North Road, N Hampton, NH; and Enclosure: Consent for Access to Property for J. & Y. Fitzgerald.
- B. CES Contract Amendment Proposal for Surface Geophysical Surveying dated 8/27/2020 and signed by Chair Spear on 9/28/2020.

## IX. OTHER BUSINESS

- A. Update from Bob re: the meeting on 8/25/2020 with Tom Queeney of Piscataqua Savings Bank and the unauthorized payment of bills by PSB.
- B. Discussion of new accounting firm.
- X. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

## Memo

To: Coakley Executive Committee From: Peter Britz, Coakley Coordinator

Date: September 30, 2020

Re: Activity report

## **Fall Sampling**

The fall sampling proposal is included in the packet for your review and approval (2020\_09\_23\_Fall 2020 Sampling Proposal.pdf). Fall sampling to begin at site next week. Residential sample collection will take place in advance of the fall sampling round.

## **Water Supply Samples**

All water supply well results have been complied and sent to the property owners where samples were taken. These samples originally taken with the Spring sampling round were delayed do to lab issues. The results were provided on September 22 with the attached table and cover letter (Coakley Residential Water Supply Well Results Spring 2020.pdf & Residential Results Cover Letter.pdf)

## Site Mowing

The annual cap mowing has taken place. I will be inspecting the site later this week and an invoice should be on next meeting's agenda.

#### **Surface Water Work**

NHDOT access has been approved. Two contractors have visited the site and provided estimates. CES will be overseeing the contractor work to remove the Beaver Dam blocking the culvert under the railroad right-of-way. USDA wildlife services is prepared to begin beaver trapping but currently that work is on hold as there is currently no sign of beaver activity.

### **Deep Bedrock Study**

USEPA and NHDES have approved the use of MW-6 for a site pump test. In advance of that work a well will be installed near GZ-105. Surface geophysics was performed in the general area where the well will be sited to inform the exact location of the well. A proposal to perform the surface geophysics was provided by CES (10424016-04\_Contract Amendment \_Surface Geophysics.pdf) This work is being compiled now and will be provided to the agencies with a recommended location for the new well. Once that well is installed the pump test can be scheduled. A contract amendment to (Contract Amendment\_MW-6 Investigation\_Deep Bedrock Investigation\_10424016-05.pdf) because the original Deep Bedrock Investigation budget did not anticpate the level of work needed for developing MW-6. Both these amendments need to be approve by the Executive Committee.

#### DOJ Bill

We received word from the bank that payment has been received for Invoice 11 (\$125,130.94). Invoice 12 has not gone out as planned as there is additional invoice backup information that is needed before the invoice can be sent.



## Engineers • Environmental Scientists • Surveyors

September 23, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Proposal for Fall 2020 Sampling and Reporting | Coakley Landfill Superfund Site | North

Hampton and Greenland, New Hampshire

Contract No. 10424026

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following proposal for sampling and reporting services to the Coakley Landfill Group (CLG). The Scope of Services for this proposal is based upon correspondence between the CLG, United States Environmental Protection Agency (USEPA), and New Hampshire Department of Environmental Services (NHDES) regarding the Bi-Annual Sampling event scheduled for Fall 2020.

The following tasks and associated costs are based on previous biannual sampling events completed in accordance with the Sampling and Analysis Plan (SAP) and incorporates USEPA comments (made via email correspondence on August 22, 2019) to recommendations included with the Draft 2018 Annual Summary Report and USEPA response to the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo (received on March 27, 2020 via email correspondence).

#### SCOPE OF SERVICES

The Coakley Landfill SAP requires the following scope of sampling services be completed during the Fall 2020 Bi-Annual long-term monitoring event with revisions made to the scope based on USEPA correspondence on August 22, 2019 and March 27, 2020. Sampling activities will be completed in accordance with the SAP with changes to the sampling frequency and list of proposed sample analysis noted accordingly. Similar to the 2020 Spring sampling event, all PFAS analysis will include an expanded list of 26 PFAS compounds versus those completed during previous sampling events (UCMR3 – 6 compound list). A list of PFAS compounds included for analysis is provided as **Attachment A**.

## Task 1A | Bi-Annual Water Quality Sampling - Private Water Supply Well Sampling:

A total of 24 offsite private water supply wells are sampled as part of the current groundwater monitoring program. Sampling of private water supply wells remains in accordance with the current SAP; however, sampling analysis was reduced to only include per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and general water quality field parameters. This reduction in analytes (arsenic and manganese removed) was implemented during Fall 2019, in accordance with USEPA approval on August 22, 2019.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 1





- The physical condition and security of all private water supply sampling locations will be evaluated at the time of sample collection. This evaluation will be documented on field sheets and include water treatment systems, if any, sampling location within the property, and any other observations made at the time of sample collection [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect samples from 24 private water supply wells as included on Table 1. Analysis has been reduced to include only 1,4-dioxane and PFAS in accordance with USEPA approval. PFAS analysis will included an expanded list of analytes as included in Attachment A.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples, a matrix spike/matrix spike duplicate (MS/MSD), and equipment rinsate blank.

Based on results obtained during the Spring 2020 biannual event for some PFAS compounds at private water supply well locations, it is proposed that sampling of these wells occur at the beginning of the event as a separate field effort to expedite sample results and data validation.

## Task 1B | Bi-Annual Water Quality Sampling: OU-1/OU-2 Groundwater Sampling:

The CLG currently samples a total of 11 OU-1 wells and 38 OU-2 wells. The groundwater sampling efforts within OU-1/OU-2 will include the following:

- Collect groundwater samples from 49 groundwater monitoring wells as included on Table 2. Analysis for the Fall 2020 event includes only 1,4-dioxane and PFAS and will be conducted in accordance with the SAP. As per USEPA recommendation, sampling of OU-1 and OU-2 groundwater monitoring wells can return to an annual event with 1,4-dioxane and PFAS sampled for twice per year. In addition, PFAS analysis will continue to be performed for an expanded 26-compound list versus that performed during past bi-annual sampling events (UCMR3 6 compound list).
- The physical condition and security of all sampling locations will be evaluated, and this evaluation will be documented on field sheets [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include four duplicate samples, three MS/MSD samples, and one equipment rinsate blank.

## Task 1C | Bi-Annual Water Quality Sampling: Surface Water/L-1 Seep Sampling:

The CLG currently samples a total of eight surface water and one landfill seep as part of its biannual sampling event. Sampling locations have not changed since 2017.

- Collect surface water samples from eight sampling locations (SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2), if sufficient water is present. Analysis during the Fall 2020 event will be conducted in accordance with the SAP, with the exception of volatile organic compounds (VOC's), which were removed as per CLG recommendation and approved by USEPA via its email dated March 27, 2020.
- Collect a sample from the L-1 seep sampling location if sufficient water is present. Analysis
  during the Fall 2020 event will be conducted in accordance with the SAP.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples and two matrix spike/matrix spike duplicates, and one equipment rinsate blank.

All water quality samples will be analyzed for field parameters using portable field instrumentation. Field instruments will be calibrated in accordance with requirements contained in the SAP.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 2





Eastern Analytical, Inc. (Eastern) of Concord, New Hampshire will provide the required analytical laboratory services for VOCs, 1,4-dioxane, metals, and general landfill parameters. Vista Analytical Laboratory (Vista) of El Dorado Hills, California will provide the required analytical laboratory services for PFAS analysis. Eastern and Vista will provide the laboratory data in standard PDF report and in a Microsoft Excel database format with supporting documentation to complete data validation following receipt of laboratory reports.

## Task 2 | Fall 2020 Bi-Annual Sampling Event: Data Validation:

A Tier 1 data validation process will be completed by Quality Assurance Associates (QAA) based in College Station, Texas and will invoice CES directly for data validation services completed. Data validation services will be completed in accordance with the SAP and QAPP. As discussed in Task 1A, private water supply well samples may be collected as part of a separate field effort with validation performed apart from OU-1/OU-2 groundwater, leachate seep, and surface water samples.

## Task 3 | 2020 Bi-Annual Data Report Preparation:

CES will prepare a 2020 Bi-Annual Data Report (Report) that will include a review of analytical data, preparation of summary tables and figures, and preparation of a report for review by the CLG, USEPA, and NHDES. The report will include a comprehensive discussion of both 2020 biannual events (Spring and Fall). CES will provide the CLG with a "universal" database file including analytical laboratory results and results of the Tier 1 Plus data validation. It should be noted that reporting efforts for 2020 will include additional isoconcentration figures for recently reinstated NHDES Ambient Groundwater Quality Standards (AGQS) for PFHxS and PFNA. The addition of these two PFAS compounds will also result in a need for additional discussion within the Report.

#### IMPLEMENTATION AND SCHEDULE

It is estimated that up to 12 field days with two field staff will be required to complete the Fall 2020 monitoring event. Time is also included for scheduling sampling at residences, calibration of field equipment prior to the sampling event (as required by the SAP), mobilization and demobilization. Sampling costs include all labor, expenses, instrument rentals, and associated supplies. Private water supply well sampling is currently scheduled for completion September 29<sup>th</sup> through October 1<sup>st</sup>, 2020. In the event that a private well sample cannot be scheduled during this time, necessary arrangements will be made for that well to be sampled during the completion of OU-1/OU-2 groundwater sampling efforts outlined in Task 1B and Task 1C.

#### **COMPENSATION**

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.





TASK	DESCRIPTION	COST ESTIMATE
1A	Private Water Supply Well Sampling  Collect drinking water samples from 24 private water supply wells.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$10,600.00 Analytical Costs: \$12,800.00
1B	<ul> <li>OU-1/OU-2 Groundwater Sampling</li> <li>Analyze groundwater samples.</li> <li>Collect requisite QA/QC samples.</li> <li>Provide laboratory report of results with full QA/QC data.</li> </ul>	CES Labor/Expenses: \$25,350.00 Analytical Costs: \$25,200.00
1C	Surface Water/Sediment Sampling  Collect surface water samples from SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2.  Collect a sample from the L-1 seep location.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$1,600.00 Analytical Costs: \$11,000.00
2	<ul> <li>Data Validation</li> <li>Complete data validation on 24 private water supply samples with expanded list of PFAS compounds and 1,4-dioxane.</li> <li>Perform data validation on 49 OU-1/OU-2 groundwater monitoring wells.</li> <li>Complete data validation of 8 surface water and L-1 seep sample results.</li> </ul>	Subcontractor Costs: \$8,250.00
3	<ul> <li>2020 Bi-Annual Report Preparation</li> <li>Review laboratory data.</li> <li>Prepare summary tables and groundwater contour figures.</li> <li>Prepare draft and final reports for review by the CLG, USEPA, and NHDES.</li> </ul>	CES Labor/Expenses: \$14,400.00
	TOTAL	\$109,200.00

The not-to-exceed budget listed above includes costs associated with sampling equipment/meters and consumables (filters, tubing, etc.), sub-contractors, labor, report preparation, and reimbursable expenses.

Costs for this project will be invoiced monthly, based upon the work completed during the invoice period with updates to project budget and remaining scope provided when 25 percent of the budget remains. CES is prepared to initiate work on this project upon receipt of a signed copy of the attached Service Agreement **Attachment B**.





#### **ASSUMPTIONS**

The following assumptions were used in the development of the cost estimate provided above and are based on the authorization by USEPA of recommendations provided in the 2018 Annual Summary Report and the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo. This authorization was provided via email correspondence by Mr. Richard Hull of the USEPA to the CLG on August 22, 2019 and March 27, 2020, respectively.

- The completion of sediment sampling during Spring 2020 qualifies as the single annual event requested by the CLG and authorization provided by the USEPA in its correspondence of August 22, 2019.
- The completion of Spring 2020 sampling at OU-1 and OU-2 groundwater monitoring wells for all parameters (i.e. PFAS, VOCs, 1,4-dioxane) qualifies as the single annual event for the sampling of all parameters with Fall 2020 sampling comprised only of sampling/analysis for 1,4-dioxane and an expanded list of PFAS compounds.
- Offsite water supply wells (i.e. residential wells) will only be sampled/analyzed for 1,4-dioxane, PFAS, and field parameters.
- Analysis of surface water samples will not include VOCs in accordance with USEPA approval provided on March 27, 2020.

#### **AUTHORIZATION**

If this proposal is acceptable to CLG, please sign in the approval block and return a signed copy for our files. CES will return a signed and executed copy of this authorization for CLG files. CES is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Out of scope services will not be performed without prior written approval of CLG. Certificates of insurance are included as **Attachment C**.

If you have any questions concerning this proposal or if additional services are needed, please contact either of the undersigned at (207) 795-6009 and (207) 989-4824 respectively. We appreciate this opportunity to be of service to the CLG.

Sincerely, CES, Inc.

Christopher Buckman, P.G. Senior Project Manager Environmental Division

CFB/JAP/jnc

John Pond, Principal
Executive Vice President
Environmental Division Director





# Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	_ Billing Address:
	_ City/State/ZIP:
Date:	_ Email (Optional):
Phone:	_Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address:
Printed Name:	_ City/State/ZIP:
Date:	_ Email (Optional):
Phone:	Fax:



# **ATTACHMENT A**

# **EXPANDED 26 COMPOUND PFAS LIST**

# Attachment A EXPANDED PFAS ANALYTE LIST

	ANALYTE	CAS No.
PFPeA	Perfluoropentanoic Acid	2706903
PFBS	Perfluorobutane Sulfonic Acid	375735
PFBA	Perfluorobutanoic Acid	375224
PFUnA	Perfluoroundecanoic Acid	2058948
PFTrDA	Perfluorotridecanoate	862374876
PFTeDA	Perfluorotetradecanoic Acid	376067
PFOSA	Perfluorooctane Sulfonamide	754916
PFOS	Perfluorooctane Sulfonate	1763231
PFOA	Pentadecafluorooctanoic Acid	335671
PFNA	Perfluorononanoic Acid	375951
PFHxS	Perfluorohexane Sulfonate	355464
PFHxDA	Perfluorohexadecanoic Acid	67905195
PFHxA	Perfluorohexanoic Acid	307244
PFHpS	Perfluoroheptane Sulfonic Acid	375928
PFHpA	Perfluoroheptanoic Acid	375859
PFDS	Perfluorodecane Sulfonate	67906427
PFDoA	Perfluorododecanoic Acid	307551
PFDA	Perfluorodecanoic Acid	335762
MeFOSE	N-Methyl Perfluorooctane Sulfonamidoethanol	24448097
MeFOSAA	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355319
MeFOSA	N-Methyl Perfluorooctane Sulfonamide	31506328
EtFOSE	N-Ethyl Perfluorooctane Sulfonamidoethanol	1691992
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991506
EtFOSA	N-Ethyl Perfluorooctane Sulfonamide	4151502
8:2 FTS	8:2 Fluorotelomer Sulfonate	39108344
6:2 FTS	6:2 Fluorotelomer Sulfonic Acid	27619972



# **ATTACHMENT B**

# **SERVICE AGREEMENT**



# STANDARD CONDITIONS OF AGREEMENT BETWEEN CES, INC. AND ITS CLIENTS

The terms and conditions contained in this Service Agreement will govern the services described in contract 10424026 dated September 18, 2020, prepared by CES, Inc. (CES) and submitted to:

The Coakley Landfill Group
C/o City of Portsmouth
One Junkins Avenue
Portsmouth, New Hampshire 03801

(referred to as "Client" in this agreement)

#### **SECTION 1 | SCOPE OF SERVICE**

1.1 CES agrees to perform the scope of services contained in the proposal, subject to unanticipated contingencies (as presented in part 7 of this Agreement)

#### **SECTION 2 | PAYMENT TERMS**

2.1 Unless specified in the proposal, services shall be charged on a time and material basis in accordance with the Fee Schedule included with the proposal. CES shall submit invoices on a monthly basis or as presented in the proposal and Client agrees to pay invoices within 60 days of the invoice date. If Client disputes any portion of the invoice, Client will notify CES of the disputed costs and will pay that portion not in dispute. For charges not disputed and not paid by the Client within 60 days, CES reserves the right to charge interest to the unpaid amount at a rate of 1-1/2% per month or up to the maximum allowed by law.

#### **SECTION 3 | PROFESSIONAL RESPONSIBILITY**

3.1 CES shall perform services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CES makes no other warranties or guarantees in the proposal or agreement.

#### **SECTION 4 | LIMITATION OF LIABILITY**

4.1 CES' liability shall be limited to injury or loss caused by the negligence, intentional misconduct or breach of contract by CES employees in the performance of the services described in the proposal. Liability shall be limited to the aggregate amount not to exceed the lesser amount of: a) the damages suffered by the Client as a direct result of negligence, intentional misconduct or breach of contract, or b) the limits of the respective insurance policy.



#### **SECTION 5 | OWNERSHIP OF DOCUMENTS**

5.1 Copies of plans, specifications and reports prepared under this agreement shall be transferred, upon request, to the Client upon completion of the work. Project deliverables as identified in the Scope of Work will be provided to the Client and shall become the property of the Client. CES shall retain copies of all project documents for a period of 3 years.

## **SECTION 6 | UNANTICIPATED CONTINGENCIES**

6.1 If CES is unable to perform the services within the schedule set forth in the proposal due to unanticipated contingencies, such as, but not limited to, a) strikes, riots, unavoidable accidents, acts of God, b) lawful orders issued by any federal, state or local government authority, or c) any other cause beyond CES' reasonable control, then CES shall not be liable to Client for failure to perform its obligations hereunder.

#### **SECTION 7 | TERMINATION**

- 7.1 The Client or CES may terminate performance of the scope of services for any reason by sending a written notice of termination to the other. The termination shall: (1) be effective no sooner than ten (10) working days after receipt of the notice, (2) be without prejudice to any claims unresolved between CES and the Client, and
  - (3) be subject to the other provisions of this Agreement.

In the event of termination, the Client and CES shall maintain their legal rights and obligations as spelled out in this Agreement.

#### **SECTION 8 | THIRD PARTY RIGHTS**

8.1 Client and CES agree that the services performed pursuant to this Agreement are solely for the benefit of the Client and are not intended to benefit any other person or entity. This agreement shall not create any rights or benefits for a third party.

#### **SECTION 9 | ASSIGNMENTS**

9.1 Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.



## **SECTION 10 | CONFIDENTIALITY**

- 10.1 CES and Client shall hold confidential all business or technical information obtained from the other for a period of three (3) years after obtaining such information, and during that period shall not disclose such information without the others consent except to the extent required to:
  - (1) Perform the services governed by this Agreement,
  - (2) Ensure public safety, health and welfare,
  - (3) After providing the other party with written notice, comply with any court order or other governmental directive, and/or
  - (4) Comply with applicable State and Federal Laws.

The parties' obligations do not apply to information in the public domain.

#### **SECTION 11 | INSURANCE**

11.1 During the performance of activities covered by this Agreement, CES agrees to maintain the following insurance coverage:

INSURANCE	LIMITS
<ul><li>(1) Workers Compensation</li><li>(2) General liability including leased or hired automobile liability</li></ul>	Statutory \$2,000,000 each occurrence
(3) Professional liability	\$1,000,000 each claim



### **CLIENT**

Coakley Landfill Group Robert P. Sullivan, Esq. Counsel to Coakley Landfill Group Portsmouth Municipal Complex 1 Junkins Avenue Portsmouth, NH 03801

Signature		
Typed Name		
Title		
Date		

CES, Inc.

John A. Pond 465 South Main Street Brewer, ME 04412

Signature

John A. Pond

Typed Name

**Environmental Division Director** 

Title

09/18/2020

Date



# **ATTACHMENT C**

# **CERTIFICATES OF INSURANCE**



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

THIS CELLIN	cate does not comer rights to the continuate	HOIGOI III III GO GI GI		
PRODUCER			NAME:	
Cross Insurance	ce		A gNJ , Extl: (207) 947-7345 AC, NoI:	
491 Main Stre	et		ADDRESS: malley@crossagency.com	
P.O. Box 1388			INSURER(S) AFFORDING COVERAGE	NAIC#
Bangor		ME 04401	INSURERA: The Phoenix Ins Co	25623
INSURED			INSURERB: The Charter Oak Fire Ins Co	25615
	CES, Inc.		INSURERC: Travelers Property Casualty Company of America	25674
	Po Box 639		INSURERD: Maine Employers Mutual Ins Co	11149
()			INSURERE: MEMIC Indemnity Company	11030
	Brewer	ME 04412	INSURER F:	

COVERAGES

CERTIFICATE NUMBER: CL19112607390

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,

EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ,: VIII I ,MANUSY, FXY, LIMITS TYPE OF INSURANCE INSE WE POLICY NUMBER COMMERCIAL GENERAL LIABILITY 1,000,000 S EACH OCCURRENCE ,100,000 ¥ EM:SEs'tii; rtencel claims-made [81 occur s 5,000 MED EXP (Any one person) \$1,000,000 PERSONAL & ADV INJURY Inc. blkt Cont y P-630-8L253856 01/01/2020 01/01/2021 Α s 2,000,000 GENERAL AGGREGATE R'LAGGREGATE LIMITAPPLIES PER:
POLICY **[81**] PEG LOC \$ 2,000,000 PRODUCTS-COMP/OP AGG \$ 1,000,000 **Employee Benefits** OTHER: OOMSM'IES-SING!,E;I<IMIT s 1,000,000 AUTOMOBILE LIABILITY BODILY INJURY (Per person) ANYAUTO OWNED AUTOS ONLY HIRED BODILY INJURY (Per accident) SCHEDULED ٧ 810-8|295085 01/01/2020 01/01/2021 В AUTOS NON-OWNED AUTOS ONLY PROPERTY DAMAGE /Per accident) AUTOS ONLY Medical payments s 5,000 s 10,000,000 UMBRELLA LIAB EACH OCCURRENCE OCCUR CLAIMS-MADE EXCESS LIAB 01/01/2020 01/01/2021 AGGREGATE 10,000,000 CUP-8L300794 C 10,000 DED | X RETENTIONS XI ffTuTE WORKERS COMPENSATION AND EMPLOYERS' LIABILITY E.L. EACH ACCIDENT s 1,000,000 ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) 12/31/2020 12/31/2019 5101801109 D NIA E.L. DISEASE-EAEMPLOYEE 1,000,000 lf ves. describe under DESCRIPTION OF OPERATIONS below \$1,000,000 E.L. DISEASE - POLICY LIMIT Each Accident 1,000,000 Workers Compensation 12/31/2019 12/31/2020 Disease-EA Employee 1,000,000 3102806829 Ε Disease-Policy Limit 1,000,000

DESCRIPTION OF OPERATIONS/ LOCATIONS/ VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space Is required)

The Coakley Landfill Group are named as additional insureds. Refer to policy for exclusionary endorsements and special provisions.

CERTIFICATE HOLDER	CANCELLATION

The Coakley Landfill Group C/0 City of Portsmouth

One Junkins Avenue

Portsmouth NH 03801

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Molly b. alley

CESINC0-01

**CJOHNSON** 

# ACORD

# **CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY) 12/5/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

Ame 859	DUCER es & Gough Willard Street				CONTACT NAME: PHUNE (A/C, No, Ext): (617) 3	328-6555	(A/C, No)	(617) 3	28-6888
	te 320 ncy, MA 02169				ADDRESS: boston@	garriesgou	JII.COIII		
	,						RDING COVERAGE		NAIC#
					INSURER A : Berkshi	re Hathaway	Specialty Insurance Co	mpany	22276
INSL	JRED				INSURER B :				
	CES, Inc.				INSURER C:				
	465 South Main Street				INSURER D :				
	Brewer, ME 04412				INSURER E :				
					INSURER F:				
CO	VERAGES CER	TIFIC	ATE	NUMBER:			REVISION NUMBER:		
C IV	HIS IS TO CERTIFY THAT THE POLICIES IDICATED. NOTWITHSTANDING ANY REI ERTIFICATE MAY BE ISSUED OR MAY F XCLUSIONS AND CONDITIONS OF SUCH	QUIRI PERTA POLI	EMEN AIN, 7 CIES	NT, TERM OR CONDITION ( THE INSURANCE AFFORDI LIMITS SHOWN MAY HAV	OF ANY CONTRACT ED BY THE POLICIE E BEEN REDUCED B	OR OTHER I S DESCRIBE Y PAID CLAIN	DOCUMENT WITH RESPE D HEREIN IS SUBJECT TO	CT TO V	VHICH THIS
INSR	TYPE OF INSURANCE	ADDL:	SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	(MM/DD/YYYY)	LIMIT	'S	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	\$	
	CLAIMS-MADE OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	
							MED EXP (Any one person)	\$	
							PERSONAL & ADV INJURY	\$	
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	
	POLICY PECT LOC								
							PRODUCTS - COMP/OP AGG	\$	
	OTHER: AUTOMOBILE LIABILITY		-				COMBINED SINGLE LIMIT	\$	
	ANY AUTO						(Ea accident)	\$	
	OWNED SCHEDULED						BODILY INJURY (Per person)	\$	
							BODILY INJURY (Per accident) FROPERTY DAMAGE	\$	
	HIRED AUTOS ONLY NON-OWNED AUTOS ONLY						(Per accident)	\$	
		-						\$	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	\$	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	\$	
	DED RETENTION \$						I DED. L. ZOTI.	\$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY  Y/N						STATUTE ER		
	ANY PROPRIETOR/PARTNER/EXECUTIVE	N/A					E.L. EACH ACCIDENT	\$	
	(Mandatory in NH)  If yes, describe under						E.L. DISEASE - EAEMPLOYEE	\$	
	DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	\$	
Α	Prof. Liability			47EPP30451003	12/8/2019	12/8/2020	Per Claim Limtit		3,000,000
Α			4	47EPP30451003	12/8/2019	12/8/2020	Aggregate Limit		3,000,000
AII C	RIPTION OF OPERATIONS / LOCATIONS / VEHICL overages are in accordance with the pol			and conditions.		re space is requ	uired)		
CER	TIFICATE HOLDER				CANCELLATION				
	The Coakley Landfill Group c/o City of Portsmouth One Junkins Avenue Portsmouth, NH 03801					DATE THE	ESCRIBED POLICIES BE CA REOF, NOTICE WILL B Y PROVISIONS.		
	NPD 25 (2016/03)					0.004# 161	ODD CODDODATION A		



# Engineers • Environmental Scientists • Surveyors

September 22, 2020

Re: Spring 2020 Private Water Supply Well Sampling Results

Dear Sir/Madam:

The attached table includes a summary of the analytical results obtained for your water supply well sampled by CES, Inc. on behalf of the Coakley Landfill Group. These results include 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). Before the Fall of 2019, analysis of PFAS included six compounds but this was expanded to 26 PFAS compounds starting in late 2019.

1,4-dioxane was not detected in nearly all the water samples. This is consistent with past results. Two wells closest to the north margin of the landfill occasionally show 1,4-dioxane detections that exceed the State of New Hampshire standard. Both wells have treatment systems installed by the CLG in recent years that have been effective in removing this contaminant.

All PFAS results were below the USEPA Lifetime Health Advisory of 70 parts per trillion for PFOA and PFOS combined. The results for nearly all samples were also below the recently enacted New Hampshire drinking water standards for the four compounds with standards. One well closest to the north margin of the landfill showed a detection slightly above the new State standard. This is one of the two wells that have had treatment systems installed by the CLG in recent years that have proven effective in removing PFAS.

There were some detections for parameters that do not have USEPA or New Hampshire standards. In particular, perfluorooctanesulfonamide (PFOSA), a PFAS compound with no regulatory standards, was reported as detected at most locations during the Spring 2020 sampling event at higher values than the Fall 2019 results. Our review indicates that not all of the detections for this and other PFAS compounds are related to the Coakley Landfill. The CLG will continue to monitor both the regulated and non-regulated PFAS compounds to better establish distribution, trends, and sources for the detections.

The next sampling event will be completed in October, and these results will be conveyed to you in the shortest time possible based on lab reporting, data analysis, and review by the regulatory agencies.

If you have any questions, please feel free to contact the undersigned by phone (207) 404-5958 or email cbuckman@cesincusa.com or Peter Britz at (603) 610-7215 or email at plbritz@cityofportsmouth.com.

Sincerely,

Christopher F. Buckman, PG Senior Project Geologist

11133

Private Water Supply Well Sampling Results | 09.22.2020 | Page 1



Table 4 Summary of 2020 Analytical Results for Off-Site Water Supply Wells Coakley Landfill - North Hampton, New Hampshire

1   1   1   1   1   1   1   1   1   1	1   1   1   1   1   1   1   1   1   1	SAMPLE SAMPLES	12			!!		1	-	9	100000	11.000	100	Hande II	1 man 11 m		S P	TRANSPORT TO	Definition of					, Amb	Andrew Transfer	1		Total Control
Column   C	Column   C	DESCRIPTION OF THE PROPERTY OF		The same of	-			li i	ш.	ı.		М.		<b>.</b> .		<b>.</b>									<b>-1</b>	ı	≝.	≝.
1	1	The Particular of the Particul	1				1	1	-	4		-8			ı	-8									_			771
1	Application   Color	STREET, MAN DESCRIPTION OF STREET			13	H	H	Н		,		-	9	10	1	5	10		H	1		2	H	143	10	F	Н	
1		Commission Owners (1997)	-	1	100		+	ł		236	200	470	1 2		750	1	1	850		100		1	+	2 2	200	1	+	474
1	The control of the	13			1.7	1		H		-	1.4	-	199	-	9.8		-	-	ŀ		f	17	*	Į	83	t	t	
1   1   1   1   1   1   1   1   1   1	1   1   1   1   1   1   1   1   1   1	Code in the state Printer 2000			110					-	E .	=	9		-			103		7					#	110	Н	**
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Column   C	SCHOOL SECRETARIES	DIBPA	N N N	238.00		-	-	-	4 Mee	* 1100	WHITE SERVICE	Appl 1	-	ł	٠	٠	+	T NW	The second	ł	ł	100		# W433	10.00	-	TANKET.
Control   Cont		OUTE BANKE CO		100	Thursday.	1	1	1	-	-	1	1		1	1				1	1			1	1		10.0	ш	1
1,12,   1,12		のできるとは、大学のでは、 11日の AL Man ののでは、 11日の とうしゅうしゅう	THE RESIDENCE			The second second	The Part of the Pa	The second secon	Total Control of the last	No. of Concession, Name of Street, or other Persons and Persons an	The state of the s			- Annual	1	THE REAL PROPERTY.			Appendix named in	C. Michigan		STATE			ACCRECATION AND ADDRESS.		м	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1, 12, 12, 13, 13, 13, 13, 13, 13, 13, 13, 13, 13	Parfluorobulance Acts (Physics)	-	1	1,76	43	U	10.1 1.62	2,16.2	4310	4220	1.6.5	Н	4,460	137.0	0.000	3.78.7	4574	120	191 4.3	60 434	Ď	4,30 U	2	4.36.0	4.22 U	ш	1.99.3
Column   C		Perfluoropentanoic acid (PFpEA)	1	1	122		43	10 833	0 4.37.0	4310	4220	4,410	199	4.48.0	137.0	4.85 U	4.18 U	1000	376	A10	6.01	5	D 4 36 U	188	4.56.0	2.033	. 1	3.101
11	Color   Colo	Perfluorabutanesalionic acid (PFBS)	-	1	2.54		1.0	1.0 4.32	0.487.0	4310	6.22.0	4.8157				4.35 ()	1.12.1		120	4.34	2		1,000	200	177 ST (13)	4.28 U		2.043
1	1	Perfluorohexanoix Acid (PFFtxA)	1	1	127.		3	4.10	0.000	4.11.00	4229	4.619		75		(39.05)	4,18 G	0.65	D. 00	31.0	(0)	Ц	4.35 (1	92	4.56 (0)	日本で		4,46,00
1	1	Perfluoroneptanoic acid (PFHpA)	1	1	0.47	437		LT. 1.17	437.0	0.000.0	422.0	4410		Н		13300	4,180		1 000	43	10.4	0.19	1,000	99	4.58.00	4,250.0	9	1.41.1
1	Color   Colo	Particorchexanesudonic acid (PFHxS)	-		1.53			187 488	437.0	1.40	271.7	1.64.5	Н			23.00	2,15.5		D	310	(a)	U A.58	4.4	2	1,167	4,28 U	ш	4,46 (3) 4,33
1	1	1H, 1H, 2H, 2H-Parfluoropatanesulfonic Acid (8.2FTS)	ŀ	į	4471			10	0.014	0.00	# 27.U	0.19.9	143	4.48.0	137.01	433.0	4.1817	4,970	137.0	4.3	164 1.03	57 - 0	430 6	99	0.95+	4.28.0		6.66.0
Color   Colo		Perfluorocclanois acid (PFOA)	3.0	Ŀ	11.3	18	17	43.	101	0.87	**	1361	ME	4 12.5		1,563	4,133	1,943	- CI			9.7	1,445	94	1.86.7	6.11	L	214
11	1	Parfluorohaptangsulfonio Acid (PFHoS)			4.171		10	10 421	0 4377.0	4.911	425.0	4.617	t			COSCO.	4.181	000	1376	41.0	123	0 639	D 01 A 10 U	181	4,56.00	4.380	L	6.46 (1)
1	12   12   12   12   12   12   12   12	Parfluorononanoic poid (PFNA)		1	1117	ŀ	ŀ	t	4117	H	8.79.11	4810	t	ŀ	13	1787	4 19 11	7624	0.00	2 2 11 18 2	100	0 478	4.347		177.0	4.76 (1)	L	4 65 1
11   11   11   11   11   11   11   1	1	Perfluoropotanosultonemide (PFOSA)	-	1	8.45			H		٠	300	18.1	t			en e		-		-	1	1	1	1	11.3	-	4	
	Color   Colo	Perfluorooctanesulfone (PFOS)	100	1800	101			H		4111	4.38.4	447.51	t	ľ	150	779477	41811	100	0.00	645	-	-			11.70.4	2	Ł	
Compared by Comp		Parfluorodecanoic Acid (PEDA)	,		1777	-	-	10 410	700	4310	4.22.12	D) FF	2		1	4.33.02	4.18-1	0.000	139.0	43	-	0 6.39	4381	*	11.35.11	1383	L	A 46E U
	Color   Colo	1H, 1H, 2H, 2H-Partiuorodecanasultania Acid (8:3FTS)	1	1	4.63.1	ŀ		10 430	4374	0.00	4250	U18.8	92	4.48-12	137.0	4.3317	4.1813	4574	4350	D	100	. 3	0 4300	2	4.36.0	4.28-0	1	0.000
		N-Methyl Perfluoroctanesationamidoacetic And (MeFOSA	3	1	447			10 435	U 4 37 C	4310	0113	4417	2		1	- nay	0.00.0	707	0.00	5	-	ľ		15	0.88.9	OH.		d.at.u
The color of the	The control of the co		-		4.471	H	ŀ	H	4370	544	4220	4411	ŀ			t	4.1815	000	0.00	H	ŀ	ľ		9	1988	0.28.0		440.0
	The control of the co		4	Ť	6.471		4.1	4.12	U ANTE	ALTHUR.	4.77.11	4411	H	TO 1819	CITY OF	13877	4.18 G	m cs	U U CE	5	9	ET I	1000	MS	4.56 III	4.28 UT.		10.69.11
1	1		,	î	6.471		1.17	111 432	U 437 L	4310	1727	0.184	H		m	138111	4380	-809	1320	3	15	1 A.H.	0.000	88	4.56 III	4,38.1		10 997
	The control of the co	Perfluentedecaneic Acid (PFDa4)			4.17			3		H	DEX.	4411	H	4480	133.0		6.88.5	100	320		2	1 1 1 38	11 4351	N.S.	4.38.11	17.00		0.46.5
	Compared by Comp	N-Methyl Perfluoroctans Sulfonamide (MeFOSA)			123		1	NO.	3	7180	O L LL	22.4 (4)	H	22.30	14.07	-	27.6 410	12.91	11.811	(0)	812 178	10 25.5	20 5 1	N.	22.8 U	25.4.02		-
Column   C	Column   C	Perfluorotrodecanole Acid (PFTrDA)		,	6.47			t	Н	DIES	4220	COLUMN	H	H	2	4.33.0	4.19.0	457.0	1320		-	B 438	U8Ch U	20	1367	4.38.11		4460 4330
Column   C		Perfluorofetradecanoio Acid (PFTeDa)	,	,	1,47	L		ļ	H	Out	17627	7777	H	H	2	4.83.0	4.18.0	0.653	100	-	-	1 438	U 4381	92	4.36.0	4.38.0	L	446.0
1.5   1.5	Color   Colo	N-Ethyl Perfluoropotane Sulfonemide (EFOSA)	1	1	27.3		100	10 111	H	H	Dive	201101	104	H	L	Casul.	22.5 (1)	72.90	TRUE	20.00	10 210	0.22	U H 51	100	22.8 U	11.40	L	22.30
C	C	Perfluorocexadecanole Acid (PFI-tcDA)	-	1	4.67	1 424	4.0	10 422	5	A THE	4224	DIES	12	5	2000	430	4180	11 CO 2	767	4.0	100	0.438	4.300	22	4.16.0	4.28.11	L	4460
10   10   10   10   10   10   10   10	17.0   17.0	N-Methyl Perfluoroctanesulfonamido Ethanol (MeFOSE)	1	1	111	27.	11	8.62 1.88	U TIME	2150	BLUE	11.10	2	1230	10.00	20,00	H	11472	tiet.	11 11	10 10	0 22 0	12.51	E	12.00	21,4 8		22.30
10	10   11   12   12   12   13   13   13   13	N-Eth II Perfluoropctanesulfonamido Ethanol (EIFOSE)	1	1	123	21.4	10 31	811 216	U ZIAN	21117	2110	2010	104	2230	1180	1471	5	11672	1.00	110 21	811 217	12.0	213.0	£	32.60	21.411		22.30
NRECS ADCS - 1882 A PARK (SO AND	NINECTORIA ENTINE DE CONTROLLE CONTR	Combination of PFOA and PFOS	20	1	17.31	62 5	2 20	63. 43	4.54	0.67	4.87	1303	-	183	717	1361	4.13.3	3363	(30)	(3)	100	100	12,00	92	CHO	11.47		6.65
WING DOOR DESCRIPTION OF THE PROPERTY OF THE P	N MOTO ACCES THE REST ACCES TO ACCES TO ACCES TO ACCES TO ACCES THE ACCES ACCES TO ACCES THE ACCES ACCES TO ACCES	TABLE NOTES:												-					and a second second									
(1857) ALL 185 PACE OF THE ACT OF	(1927) ACT OF CONTROL	and the same of the same							A STANTON	OUGHT - OOG	Ambiant Can	diam'r. Church	Planehase				-	-	1									
(1927) At 1.0 (1920) Companies and when whether the companies are shown as the companies and the companies are shown as the companies and the companies are shown as the companies are	USBA (a Luick) contains and wase viected USBA (a Luick) controlled using the USBA between the USBA (a Luick) controlled using the USBA between USBA between the USBA between U	NA # Not Analyzed							USEPAM	CL* USEPAP	fenary Drinking	Water Standa	Di Dallando				8 20	R = Breekfast	HII Road									
the control of the co	New Challer and wear species to the control of the	NAM = Met Messured							USEPAC	L. USEPA GA	LUNGWATER CRIMI	th Standard					5	1 = Birch Road	ğ									
Foot * Data behave a married for smooth and managemen. *Augment concentrations companied to USEPN + i.e. of 3 mpl. **The special section of the special section	Post – Past baskeret sanske kollenter for sanske and mangaren. * Magarenes zoerestitation sompawa to USERN M, M of 2 in gut.	AN * Not Nazordod - Daki paremetar monsusement did not ment. aChtm : miero-Samaen mer cantimeter.	CACC critisia a.	Tables reject	pe				or behards	han denote con.	stantistica acces	peding the NH.	DES amblent G	mundwater One	My Sharehad		: 5	o lafavetta R.	- P									
*Mangimese socionalisions sompanies to 1088PA - M, et 0.03 mg/L	*** *** *** *** *** *** *** *** *** **	ugil micrograms per liter (perts per billion)							Post - Po	at troobment so	riple collected t	or arsenic and	manganese.				ż	- North Road	1.									
		mg/L = miligrams per liter (parts per million)							- Mangan	se concentrati	ons compared t	O USEPA HA	NO.3 mg/L				£	VC = Pinavioo.	1 Circle									
		ng/L × earograms per liter (perts per trition)															¥	:D = Ridgecre.	# Drive									
		NTO - Nephelometric Turbidity Units															Œ.	D- Red Oax	Ortro									
		MICALINE AND															2	3 = 358 B/esk	SECHIII ROAD									

11 should be round that 3 and 5 Derly Farm Lane bishe on was 9 and 11 Derly farm Lane share one well, and 15 and 17 Derly Farm Lane attents one well.
\*\*HODES Ambient Groundwelet Country Sparces of effective September 3, 2020.



# Engineers • Environmental Scientists • Surveyors

September 9, 2020

Mr. Peter Britz Coakley Project Coordinator 1 Junkins Avenue Portsmouth, New Hampshire 03801

RE: Contract Amendment for Additional MW-6 Investigative Tasks | Coakley Landfill

Superfund Site | North Hampton and Greenland, New Hampshire

**Contract Number: 10424016-05** 

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment for professional consulting services to the Coakley Landfill Group (CLG). The Scope of Work for this amendment includes the completion of investigative tasks within MW-6 outside those detailed in contract amendment 10424016-03 (Task 6) issued to the CLG on December 17, 2019. These tasks were requested, in part, by the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) via email correspondence to the CLG dated April 16, 2020 and June 18, 2020. These additional tasks were incorporated in the Revised Deep Bedrock Investigation Work Plan Addendum (Work Plan Addendum) as submitted to the Agencies on July 17, 2020. CLG has previously approved proposals and budgets to complete several investigation activities as outlined in the Revised Draft Deep Bedrock Investigation Work Plan (Work Plan) dated May 31, 2018 and conditionally approved by the USEPA on July 17, 2018; however, additional requested tasks and/or expanded scopes of work requested by the USEPA and NHDES during the course of the Deep Bedrock Investigation have resulted in additional project expenditures. CES and CLG have communicated throughout the deep bedrock investigation process regarding the additional requests made by the Agencies and verbal approvals have been granted by CLG to facilitate timely responses to agency requests. An accounting of costs is included in monthly invoices submitted to the CLG by CES; however, this amendment formalizes the costs associated with additionally requested MW-6 investigative items (e.g., containerization of redevelopment water).

#### **SCOPE OF SERVICES**

Tasks outlined below are those additionally completed during an investigation within deep bedrock monitoring well MW-6. These tasks were requested by the USEPA in its response to the Draft Deep Bedrock Investigation Work Plan Addendum and its review of the memorandum Deep Bedrock Downhole Geophysics and Packer Sampling Interval Recommendations: MW-6. Responses to these documents were provided via email correspondence on April 16, 2020 and June 18, 2020, respectively.

#### Well Redevelopment

Prior to initiation of the pumping test, MW-6 was redeveloped to prepare the well for the completion of borehole geophysical logging. The well was redeveloped in accordance with the

Mr. Peter Britz | 09.09.2020 | 10424.016-05 | Page 1





Work Plan Addendum; however, the Agencies requested that redevelopment water be containerized and not discharged to the ground at the well location. As such, additional costs were incurred during the transport, storage, and characterization (via laboratory analysis) of this investigation derived waste (IDW). These costs included the completion of a NHDES Temporary Groundwater Discharge Permit Application (NHDES-W-03-154) to address the management and disposal of the water from redevelopment.

#### Interval Packer Sampling

Following the completion of borehole geophysical logging, interval packer sampling recommendations were provided to the Agencies in the memorandum *Deep Bedrock Downhole Geophysics and Packer Sampling Interval Recommendations: MW-6* dated June 11, 2020. Following its review, the USEPA provided recommendations via email correspondence on June 18, 2020 that included the addition of two packer sampling intervals and requested the addition of volatile organic compounds (VOCs) to the list of analyses performed on each of the sampled intervals. A total of eight intervals were investigated (seven sampled due to no recharge in one interval) with collected samples submitted to Alpha Analytical for analysis of PFAS (26 compound list), 1,4-dioxane, VOCs, arsenic, manganese, and general landfill parameters (ammonia, chemical oxygen demand, chloride, hardness, and nitrate. Equipment blanks were also collected for the water level meter, packer string, and sampling pump; however, these samples were included in contract amendment 10424016-03 (December 17, 2019).

Original estimates for interval packer sampling provided to the CLG in contract amendment 10424016-03 included two days for interval packer sampling; however, the addition of two intervals and the analysis of VOCs resulted in the addition of one day to the total interval packer sampling field effort completed by CES.

#### MW-6 Viability Memorandum

It was determined through USEPA comments that the generation of a memorandum detailing the results of the interval packer sampling and analysis of the wells overall viability for use during the pumping test would be necessary. This memorandum (*MW-6 Interval Packer Sampling Results and Pumping Test Viability*) was issued to the Agencies on August 18, 2020 and outlined the meeting of MW-6 requirements for use as the pumping test well. These requirements were defined in a letter from the USEPA to the CLG dated June 17, 2020. This letter provided comments to the Draft Deep Bedrock Investigation Work Plan Addendum as submitted to the Agencies on April 6, 2020. MW-6 was conditionally approved by the USEPA for use as the pumping test well via email correspondence on August 26, 2020.

#### COMPENSATION

Task	Cost Estimate
Bedrock Well Evaluation: MW-6	
CES Interval Packer Sampling - Labor and Expenses (2 Intervals)	\$800.00
Alpha Analytical Laboratory – Packer Sampling Analysis (2 Intervals)	\$1,100.00
Alpha Analytical Laboratory – Packer Sampling Analysis (VOCs)	\$1,050.00
Alpha Analytical Laboratory – Redevelopment Water Characterization	\$600.00
CES IDW Management and Discharge Permit – Labor and Expenses	\$1,450.00
MW-6 Pumping Test Viability Memorandum	\$2,800.00
Contract Amendment Total	\$7,800.00

Mr. Peter Britz | 09.09.2020 | 10424.016-05 | Page 2





Costs associated with this project will continue to be invoiced monthly, based upon the work completed during the invoice period. This work is currently being tracked as Task 7 of the Cost Breakdown Spreadsheet provided with submitted monthly invoices to the CLG. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES. The proposed costs, upon approval by the CLG, will be added to Task 7 of the Deep Bedrock Investigation project budget (10424.016) under the terms and conditions and rate schedule used in the original project agreement. An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

If you have any questions concerning this propo	osal, please contact us at (207) 795-6009.
Sincerely, CES, Inc.	
chizz-	
Christopher F. Buckman, P.G. Senior Project Geologist	
CFB/	
Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:	
Signature:	Billing Address:
Printed Name:	_ City/State/ZIP:
Date:	_Email (Optional):
Phone:	_Fax:



# COAKLEY EXECUTIVE COMMITTEE Wednesday, September 30, 2020 AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-18, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

# Please use the following to call in to the meeting:

Conference Call Dial-in #: 603-766-5646 Conference ID: 393626

I. Review the minutes of the August 18, 2020 Coakley Teleconference call.

# <u>OU-1</u>

# II. BILLS

# City of Portsmouth

Α.	Invoice #	2900497584 date Peter Britz & Financial service	d 8/18/2020 es - 8/2020	50%	\$2,750.00
В.	Invoice #	2900530605 date Peter Britz & Financial service	d 9/15/2020 es - 9/2020	50%	\$2,750.00
CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through:	9/30/2020 8/27/2020 7/26/2020		
C.	Invoice #	20203555 General technical assistance		35%	\$536.38
D.	Invoice #	20203558 Spring 2020 Sampling		35%	\$6,305.86

1 4 4 0/4 0/0000

**ሲሳ 750 00** 

**CES, Inc.** Payment Certifications dated: 9/30/2020

Invoices dated: 4/24/2020 Services rendered through: 3/29/2020 Invoices not received until 8/25/2020

E. Invoice # 20201648 35% \$825.13

General technical assistance services

F. Invoice # 20201647 100% \$1,065.00

Stormwater Work Plan, Fall 2018 Sampling & Out of Scope

G. Invoice # 20201650 35% \$597.63

2019 Spring Sampling

H. Invoice # 20201651 35% \$3,416.57

2019 Fall Sampling

**NE Lock and Safe** Payment Certification dated: 9/30/2020

Invoice dated: 9/21/2020 Service dated: 9/21/2020

I. Invoice # 335xx 50% \$149.80

Long & regular shackles

## III. OU - 1 ACTION ITEMS

There were no action items.

# IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 8/31/2020: \$338,261.45

# <u>OU-2</u>

# V. BILLS

# City of Portsmouth

A. Invoice # 2900497584 dated 8/18/2020 50% \$2,750.00

Peter Britz & Financial services - 8/2020

В.	Invoice #	2900530605 dated Peter Britz & Financial services	9/15/2020 s - 9/2020	50%	\$2,750.00
CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through	9/30/2020 8/27/2020 7/26/2020		
C.	Invoice #	20203555 General technical assistance se	ervices	65%	\$996.12
D.	Invoice #	20203558 Spring 2020 Sampling		65%	\$11,710.89
E.	Invoice #	20203557 Bedrock Investigation Work Pla	an & Services	100%	\$20,745.04
CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through Invoices not received until 8/25	4/24/2020 3/29/2020		
F.	Invoice #	20201648 General technical assistance se	ervices	65%	\$1,532.37
G.	Invoice #	20201649 Interim Bedrock Investigation F	Report & Services	100%	\$8,345.00
Н.	Invoice #	20201650 2019 Spring Sampling		65%	\$1,109.87
l.	Invoice #	20201651 2019 Fall Sampling		65%	\$6,345.06
Advance	Radon Mit	igation Payment Certification dated: Invoice dated: 8/5/2020 Service date: 8/5/2020	9/30/2020		
J.	Invoice #:	PIN157 Breakfast Hill Golf Club / 339 B Sampling & lab fees; Maintena		100% I,4-Dioxane	\$2,963.00

NE Lock and Safe Payment Certification dated: 9/30/2020

Invoice dated: 9/21/2020 Service dated: 9/21/2020

K. Invoice # 335xx 50% \$149.80

Long & regular shackles

# VI. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 8/31/2020: \$714,332.98

# **COMBINED OU-1 & OU-2**

# VII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 9/30/2020 with attachments:

- \* Fall 2020 Sampling proposal 9/23/20 needs approval
- \* Water supply results: cover letter 9/22/2020 & results table
- \* Surface geophysics proposal needs approval
- \* Deep bedrock surface geophysics proposal 8/27/2020 executed 9/28/2020 This is Record item IX-B below - **needs formal approval**
- \* Deep bedrock: MW6 installation proposal 9/9/2020- needs approval

# VIII. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. Letter from R. Hull of USEPA dated 9/1/2020 to J. Fitzgerald; Re: Request for Access to Property at 65 North Road, N Hampton, NH; and Enclosure: Consent for Access to Property for J. & Y. Fitzgerald.
- B. CES Contract Amendment Proposal for Surface Geophysical Surveying dated 8/27/2020 and signed by Chair Spear on 9/28/2020.



# IX. OTHER BUSINESS

- A. Update from Bob re: the meeting on 8/25/2020 with Tom Queeney of Piscataqua Savings Bank and the unauthorized payment of bills by PSB.
- B. Discussion of new accounting firm.

# X. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

# Memo

To: Coakley Executive Committee From: Peter Britz, Coakley Coordinator

Date: September 30, 2020

Re: Activity report

# **Fall Sampling**

The fall sampling proposal is included in the packet for your review and approval (2020\_09\_23\_Fall 2020 Sampling Proposal.pdf). Fall sampling to begin at site next week. Residential sample collection will take place in advance of the fall sampling round.

# **Water Supply Samples**

All water supply well results have been complied and sent to the property owners where samples were taken. These samples originally taken with the Spring sampling round were delayed do to lab issues. The results were provided on September 22 with the attached table and cover letter (Coakley Residential Water Supply Well Results Spring 2020.pdf & Residential Results Cover Letter.pdf)

#### Site Mowing

The annual cap mowing has taken place. I will be inspecting the site later this week and an invoice should be on next meeting's agenda.

#### **Surface Water Work**

NHDOT access has been approved. Two contractors have visited the site and provided estimates. CES will be overseeing the contractor work to remove the Beaver Dam blocking the culvert under the railroad right-of-way. USDA wildlife services is prepared to begin beaver trapping but currently that work is on hold as there is currently no sign of beaver activity.

#### Deep Bedrock Study

USEPA and NHDES have approved the use of MW-6 for a site pump test. In advance of that work a well will be installed near GZ-105. Surface geophysics was performed in the general area where the well will be sited to inform the exact location of the well. A proposal to perform the surface geophysics was provided by CES (10424016-04\_Contract Amendment \_Surface Geophysics.pdf) This work is being compiled now and will be provided to the agencies with a recommended location for the new well. Once that well is installed the pump test can be scheduled. A contract amendment to (Contract Amendment\_MW-6 Investigation\_Deep Bedrock Investigation\_10424016-05.pdf) because the original Deep Bedrock Investigation budget did not anticpate the level of work needed for developing MW-6. Both these amendments need to be approve by the Executive Committee.

#### DOJ Bill

We received word from the bank that payment has been received for Invoice 11 (\$125,130.94). Invoice 12 has not gone out as planned as there is additional invoice backup information that is needed before the invoice can be sent.





September 23, 2020

Mr. Peter Britz Coakley Project Coordinator Coakley Landfill Group 1 Junkins Avenue Portsmouth, New Hampshire 03801

RE: Proposal for Fall 2020 Sampling and Reporting | Coakley Landfill Superfund Site | North

Hampton and Greenland, New Hampshire

Contract No. 10424026

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following proposal for sampling and reporting services to the Coakley Landfill Group (CLG). The Scope of Services for this proposal is based upon correspondence between the CLG, United States Environmental Protection Agency (USEPA), and New Hampshire Department of Environmental Services (NHDES) regarding the Bi-Annual Sampling event scheduled for Fall 2020.

The following tasks and associated costs are based on previous biannual sampling events completed in accordance with the Sampling and Analysis Plan (SAP) and incorporates USEPA comments (made via email correspondence on August 22, 2019) to recommendations included with the Draft 2018 Annual Summary Report and USEPA response to the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo (received on March 27, 2020 via email correspondence).

#### **SCOPE OF SERVICES**

The Coakley Landfill SAP requires the following scope of sampling services be completed during the Fall 2020 Bi-Annual long-term monitoring event with revisions made to the scope based on USEPA correspondence on August 22, 2019 and March 27, 2020. Sampling activities will be completed in accordance with the SAP with changes to the sampling frequency and list of proposed sample analysis noted accordingly. Similar to the 2020 Spring sampling event, all PFAS analysis will include an expanded list of 26 PFAS compounds versus those completed during previous sampling events (UCMR3 – 6 compound list). A list of PFAS compounds included for analysis is provided as **Attachment A**.

# Task 1A | Bi-Annual Water Quality Sampling - Private Water Supply Well Sampling:

A total of 24 offsite private water supply wells are sampled as part of the current groundwater monitoring program. Sampling of private water supply wells remains in accordance with the current SAP; however, sampling analysis was reduced to only include per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and general water quality field parameters. This reduction in analytes (arsenic and manganese removed) was implemented during Fall 2019, in accordance with USEPA approval on August 22, 2019.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 1





- The physical condition and security of all private water supply sampling locations will be evaluated at the time of sample collection. This evaluation will be documented on field sheets and include water treatment systems, if any, sampling location within the property, and any other observations made at the time of sample collection [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect samples from 24 private water supply wells as included on Table 1. Analysis has been reduced to include only 1,4-dioxane and PFAS in accordance with USEPA approval. PFAS analysis will included an expanded list of analytes as included in Attachment A.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples, a matrix spike/matrix spike duplicate (MS/MSD), and equipment rinsate blank.

Based on results obtained during the Spring 2020 biannual event for some PFAS compounds at private water supply well locations, it is proposed that sampling of these wells occur at the beginning of the event as a separate field effort to expedite sample results and data validation.

# Task 1B | Bi-Annual Water Quality Sampling: OU-1/OU-2 Groundwater Sampling:

The CLG currently samples a total of 11 OU-1 wells and 38 OU-2 wells. The groundwater sampling efforts within OU-1/OU-2 will include the following:

- Collect groundwater samples from 49 groundwater monitoring wells as included on Table 2. Analysis for the Fall 2020 event includes only 1,4-dioxane and PFAS and will be conducted in accordance with the SAP. As per USEPA recommendation, sampling of OU-1 and OU-2 groundwater monitoring wells can return to an annual event with 1,4-dioxane and PFAS sampled for twice per year. In addition, PFAS analysis will continue to be performed for an expanded 26-compound list versus that performed during past bi-annual sampling events (UCMR3 6 compound list).
- The physical condition and security of all sampling locations will be evaluated, and this evaluation will be documented on field sheets [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include four duplicate samples, three MS/MSD samples, and one equipment rinsate blank.

## Task 1C | Bi-Annual Water Quality Sampling: Surface Water/L-1 Seep Sampling:

The CLG currently samples a total of eight surface water and one landfill seep as part of its biannual sampling event. Sampling locations have not changed since 2017.

- Collect surface water samples from eight sampling locations (SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2), if sufficient water is present. Analysis during the Fall 2020 event will be conducted in accordance with the SAP, with the exception of volatile organic compounds (VOC's), which were removed as per CLG recommendation and approved by USEPA via its email dated March 27, 2020.
- Collect a sample from the L-1 seep sampling location if sufficient water is present. Analysis during the Fall 2020 event will be conducted in accordance with the SAP.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples and two matrix spike/matrix spike duplicates, and one equipment rinsate blank.

All water quality samples will be analyzed for field parameters using portable field instrumentation. Field instruments will be calibrated in accordance with requirements contained in the SAP.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 2





Eastern Analytical, Inc. (Eastern) of Concord, New Hampshire will provide the required analytical laboratory services for VOCs, 1,4-dioxane, metals, and general landfill parameters. Vista Analytical Laboratory (Vista) of El Dorado Hills, California will provide the required analytical laboratory services for PFAS analysis. Eastern and Vista will provide the laboratory data in standard PDF report and in a Microsoft Excel database format with supporting documentation to complete data validation following receipt of laboratory reports.

#### Task 2 | Fall 2020 Bi-Annual Sampling Event: Data Validation:

A Tier 1 data validation process will be completed by Quality Assurance Associates (QAA) based in College Station, Texas and will invoice CES directly for data validation services completed. Data validation services will be completed in accordance with the SAP and QAPP. As discussed in Task 1A, private water supply well samples may be collected as part of a separate field effort with validation performed apart from OU-1/OU-2 groundwater, leachate seep, and surface water samples.

## Task 3 | 2020 Bi-Annual Data Report Preparation:

CES will prepare a 2020 Bi-Annual Data Report (Report) that will include a review of analytical data, preparation of summary tables and figures, and preparation of a report for review by the CLG, USEPA, and NHDES. The report will include a comprehensive discussion of both 2020 biannual events (Spring and Fall). CES will provide the CLG with a "universal" database file including analytical laboratory results and results of the Tier 1 Plus data validation. It should be noted that reporting efforts for 2020 will include additional isoconcentration figures for recently reinstated NHDES Ambient Groundwater Quality Standards (AGQS) for PFHxS and PFNA. The addition of these two PFAS compounds will also result in a need for additional discussion within the Report.

#### IMPLEMENTATION AND SCHEDULE

It is estimated that up to 12 field days with two field staff will be required to complete the Fall 2020 monitoring event. Time is also included for scheduling sampling at residences, calibration of field equipment prior to the sampling event (as required by the SAP), mobilization and demobilization. Sampling costs include all labor, expenses, instrument rentals, and associated supplies. Private water supply well sampling is currently scheduled for completion September 29<sup>th</sup> through October 1<sup>st</sup>, 2020. In the event that a private well sample cannot be scheduled during this time, necessary arrangements will be made for that well to be sampled during the completion of OU-1/OU-2 groundwater sampling efforts outlined in Task 1B and Task 1C.

#### **COMPENSATION**

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.





TASK	DESCRIPTION	COST ESTIMATE
1A	Private Water Supply Well Sampling  Collect drinking water samples from 24 private water supply wells.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$10,600.00 Analytical Costs: \$12,800.00
1B	OU-1/OU-2 Groundwater Sampling  Analyze groundwater samples.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$25,350.00 Analytical Costs: \$25,200.00
1C	Surface Water/Sediment Sampling  Collect surface water samples from SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2.  Collect a sample from the L-1 seep location.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$1,600.00 Analytical Costs: \$11,000.00
2	<ul> <li>Data Validation</li> <li>Complete data validation on 24 private water supply samples with expanded list of PFAS compounds and 1,4-dioxane.</li> <li>Perform data validation on 49 OU-1/OU-2 groundwater monitoring wells.</li> <li>Complete data validation of 8 surface water and L-1 seep sample results.</li> </ul>	Subcontractor Costs: \$8,250.00
3	<ul> <li>2020 Bi-Annual Report Preparation</li> <li>Review laboratory data.</li> <li>Prepare summary tables and groundwater contour figures.</li> <li>Prepare draft and final reports for review by the CLG, USEPA, and NHDES.</li> </ul>	CES Labor/Expenses: \$14,400.00
	TOTAL	\$109,200.00

The not-to-exceed budget listed above includes costs associated with sampling equipment/meters and consumables (filters, tubing, etc.), sub-contractors, labor, report preparation, and reimbursable expenses.

Costs for this project will be invoiced monthly, based upon the work completed during the invoice period with updates to project budget and remaining scope provided when 25 percent of the budget remains. CES is prepared to initiate work on this project upon receipt of a signed copy of the attached Service Agreement **Attachment B**.





#### **ASSUMPTIONS**

The following assumptions were used in the development of the cost estimate provided above and are based on the authorization by USEPA of recommendations provided in the 2018 Annual Summary Report and the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo. This authorization was provided via email correspondence by Mr. Richard Hull of the USEPA to the CLG on August 22, 2019 and March 27, 2020, respectively.

- The completion of sediment sampling during Spring 2020 qualifies as the single annual event requested by the CLG and authorization provided by the USEPA in its correspondence of August 22, 2019.
- The completion of Spring 2020 sampling at OU-1 and OU-2 groundwater monitoring wells for all parameters (i.e. PFAS, VOCs, 1,4-dioxane) qualifies as the single annual event for the sampling of all parameters with Fall 2020 sampling comprised only of sampling/analysis for 1,4-dioxane and an expanded list of PFAS compounds.
- Offsite water supply wells (i.e. residential wells) will only be sampled/analyzed for 1,4-dioxane, PFAS, and field parameters.
- Analysis of surface water samples will not include VOCs in accordance with USEPA approval provided on March 27, 2020.

#### **AUTHORIZATION**

If this proposal is acceptable to CLG, please sign in the approval block and return a signed copy for our files. CES will return a signed and executed copy of this authorization for CLG files. CES is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Out of scope services will not be performed without prior written approval of CLG. Certificates of insurance are included as **Attachment C**.

If you have any questions concerning this proposal or if additional services are needed, please contact either of the undersigned at (207) 795-6009 and (207) 989-4824 respectively. We appreciate this opportunity to be of service to the CLG.

Sincerely, CES, Inc.

Christopher Buckman, P.G. Senior Project Manager Environmental Division

CFB/JAP/jnc Enc. John Pond, Principal
Executive Vice President
Environmental Division Director





# Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:	
Printed Name:	City/State/ZIP:	
Date:	Email (Optional):	
Phone:	Fax:	
Acceptance on behalf of CES, Inc.:		
Signature:	Billing Address:	
Printed Name:	City/State/ZIP:	
Date:	Email (Optional):	
Phone:	Fax:	



# **ATTACHMENT A**

# **EXPANDED 26 COMPOUND PFAS LIST**

# Attachment A EXPANDED PFAS ANALYTE LIST

	ANALYTE	CAS No.
PFPeA	Perfluoropentanoic Acid	2706903
PFBS	Perfluorobutane Sulfonic Acid	375735
PFBA	Perfluorobutanoic Acid	375224
PFUnA	Perfluoroundecanoic Acid	2058948
PFTrDA	Perfluorotridecanoate	862374876
PFTeDA	Perfluorotetradecanoic Acid	376067
PFOSA	Perfluorooctane Sulfonamide	754916
PFOS	Perfluorooctane Sulfonate	1763231
PFOA	Pentadecafluorooctanoic Acid	335671
PFNA	Perfluorononanoic Acid	375951
PFHxS	Perfluorohexane Sulfonate	355464
PFHxDA	Perfluorohexadecanoic Acid	67905195
PFHxA	Perfluorohexanoic Acid	307244
PFHpS	Perfluoroheptane Sulfonic Acid	375928
PFHpA	Perfluoroheptanoic Acid	375859
PFDS	Perfluorodecane Sulfonate	67906427
PFDoA	Perfluorododecanoic Acid	307551
PFDA	Perfluorodecanoic Acid	335762
MeFOSE	N-Methyl Perfluorooctane Sulfonamidoethanol	24448097
MeFOSAA	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355319
MeFOSA	N-Methyl Perfluorooctane Sulfonamide	31506328
EtFOSE	N-Ethyl Perfluorooctane Sulfonamidoethanol	1691992
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991506
EtFOSA	N-Ethyl Perfluorooctane Sulfonamide	4151502
8:2 FTS	8:2 Fluorotelomer Sulfonate	39108344
6:2 FTS	6:2 Fluorotelomer Sulfonic Acid	27619972



# **ATTACHMENT B**

# SERVICE AGREEMENT



# STANDARD CONDITIONS OF AGREEMENT BETWEEN CES, INC. AND ITS CLIENTS

The terms and conditions contained in this Service Agreement will govern the services described in contract 10424026 dated September 18, 2020, prepared by CES, Inc. (CES) and submitted to:

The Coakley Landfill Group
C/o City of Portsmouth
One Junkins Avenue
Portsmouth, New Hampshire 03801

(referred to as "Client" in this agreement)

#### **SECTION 1 | SCOPE OF SERVICE**

1.1 CES agrees to perform the scope of services contained in the proposal, subject to unanticipated contingencies (as presented in part 7 of this Agreement)

#### **SECTION 2 | PAYMENT TERMS**

2.1 Unless specified in the proposal, services shall be charged on a time and material basis in accordance with the Fee Schedule included with the proposal. CES shall submit invoices on a monthly basis or as presented in the proposal and Client agrees to pay invoices within 60 days of the invoice date. If Client disputes any portion of the invoice, Client will notify CES of the disputed costs and will pay that portion not in dispute. For charges not disputed and not paid by the Client within 60 days, CES reserves the right to charge interest to the unpaid amount at a rate of 1-1/2% per month or up to the maximum allowed by law.

#### **SECTION 3 | PROFESSIONAL RESPONSIBILITY**

3.1 CES shall perform services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CES makes no other warranties or guarantees in the proposal or agreement.

#### **SECTION 4 | LIMITATION OF LIABILITY**

4.1 CES' liability shall be limited to injury or loss caused by the negligence, intentional misconduct or breach of contract by CES employees in the performance of the services described in the proposal. Liability shall be limited to the aggregate amount not to exceed the lesser amount of: a) the damages suffered by the Client as a direct result of negligence, intentional misconduct or breach of contract, or b) the limits of the respective insurance policy.



#### **SECTION 5 | OWNERSHIP OF DOCUMENTS**

5.1 Copies of plans, specifications and reports prepared under this agreement shall be transferred, upon request, to the Client upon completion of the work. Project deliverables as identified in the Scope of Work will be provided to the Client and shall become the property of the Client. CES shall retain copies of all project documents for a period of 3 years.

## **SECTION 6 | UNANTICIPATED CONTINGENCIES**

6.1 If CES is unable to perform the services within the schedule set forth in the proposal due to unanticipated contingencies, such as, but not limited to, a) strikes, riots, unavoidable accidents, acts of God, b) lawful orders issued by any federal, state or local government authority, or c) any other cause beyond CES' reasonable control, then CES shall not be liable to Client for failure to perform its obligations hereunder.

#### **SECTION 7 | TERMINATION**

- 7.1 The Client or CES may terminate performance of the scope of services for any reason by sending a written notice of termination to the other. The termination shall: (1) be effective no sooner than ten (10) working days after receipt of the notice, (2) be without prejudice to any claims unresolved between CES and the Client, and
  - (3) be subject to the other provisions of this Agreement.

In the event of termination, the Client and CES shall maintain their legal rights and obligations as spelled out in this Agreement.

#### **SECTION 8 | THIRD PARTY RIGHTS**

8.1 Client and CES agree that the services performed pursuant to this Agreement are solely for the benefit of the Client and are not intended to benefit any other person or entity. This agreement shall not create any rights or benefits for a third party.

#### **SECTION 9 | ASSIGNMENTS**

9.1 Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.



# **SECTION 10 | CONFIDENTIALITY**

- 10.1 CES and Client shall hold confidential all business or technical information obtained from the other for a period of three (3) years after obtaining such information, and during that period shall not disclose such information without the others consent except to the extent required to:
  - (1) Perform the services governed by this Agreement,
  - (2) Ensure public safety, health and welfare,
  - (3) After providing the other party with written notice, comply with any court order or other governmental directive, and/or
  - (4) Comply with applicable State and Federal Laws.

The parties' obligations do not apply to information in the public domain.

# **SECTION 11 | INSURANCE**

11.1 During the performance of activities covered by this Agreement, CES agrees to maintain the following insurance coverage:

INSURANCE	LIMITS
(1) Workers Compensation	Statutory
(2) General liability including leased	\$2,000,000 each occurrence
or hired automobile liability	
(3) Professional liability	\$1,000,000 each claim



### **CLIENT**

Coakley Landfill Group Robert P. Sullivan, Esq. Counsel to Coakley Landfill Group Portsmouth Municipal Complex 1 Junkins Avenue Portsmouth, NH 03801

Signature	
Typed Name	
 Title	
 Date	

CES, Inc.

John A. Pond 465 South Main Street Brewer, ME 04412

Signature

John A. Pond

Typed Name

Environmental Division Director

Title

09/18/2020

Date



# **ATTACHMENT C**

# **CERTIFICATES OF INSURANCE**



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER		NAME: Molly Alley	
Cross Insurance		A gNJ , Extl: (207) 947-7345	
491 Main Street		ADDRESS: malley@crossagency.com	
P.O. Box 1388		INSURER(S) AFFORDING COVERAGE	NAIC#
Bangor	ME 04401	INSURERA: The Phoenix Ins Co	25623
INSURED		INSURERB: The Charter Oak Fire Ins Co	25615
CES, Inc.		INSURERC: Travelers Property Casualty Company of America	25674
Po Box 639		INSURERD: Maine Employers Mutual Ins Co	11149
		INSURERE: MEMIC Indemnity Company	11030
Brewer	ME 04412	INSURER F:	

COVERAGES CERTIFICATE NUMBER: CL19112607390 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, FXCI USIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSF	TYPE OF INSURANCE	INSE	WVD	POLICY NUMBER	,: Mill i	'WWHRX EXS	LIMITS
A	COMMERCIAL GENERAL LIABILITY  D CLAIMS-MADE [81 OCCUR  INC. DIKT CONT.  R'LAGGREGATE LIMITAPPLIES PER: POLICY [81 PROT LOC	y		P-630-8L253856	01/01/2020	01/01/2021	### EACH OCCURRENCE   \$ 1,000,000    ### EM:SES'1ii; r1encel   \$ 100,000    ### MED EXP (Any one person)   \$ 5,000    ### PERSONAL & ADV INJURY   \$ 1,000,000    ### GENERAL AGGREGATE   \$ 2,000,000    ### PRODUCTS-COMP/OP AGG   \$ 2,000,000    ### Employee Benefits   \$ 1,000,000    ### EMERICAN
В	OTHER:  AUTOMOBILE LIABILITY  X ANYAUTO  OWNED  AUTOS ONLY HIRED AUTOS ONLY AUTOS ONLY AUTOS ONLY AUTOS ONLY AUTOS ONLY AUTOS ONLY	y		810-8l295085	01/01/2020	01/01/2021	Employee Benefits \$1,000,000  COMSMIES-SINGLE;I <imit \$="" \$1,000,000="" \$5,000<="" (per="" accident)="" bodily="" damage="" injury="" medical="" payments="" per="" person)="" property="" td=""></imit>
С	UMBRELLA LIAB EXCESS LIAB  DED RETENTIONS 10,000	у		CUP-8L300794	01/01/2020	01/01/2021	EACH OCCURRENCE \$ 10,000,000  AGGREGATE \$ 10,000,000  \$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	NIA		5101801109	12/31/2019	12/31/2020	E.L. EACH ACCIDENT \$ 1,000,000  E.L. DISEASE-EAEMPLOYEE 1,000,000  E.L. DISEASE - POLICY LIMIT \$ 1,000,000
Е	Workers Compensation			3102806829	12/31/2019	12/31/2020	Each Accident         1,000,000           Disease-EA Employee         1,000,000           Disease-Policy Limit         1,000,000

DESCRIPTION OF OPERATIONS/ LOCATIONS/ VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space Is required)

The Coakley Landfill Group are named as additional insureds. Refer to policy for exclusionary endorsements and special provisions.

CERTIFICATE HOLDER	CANCELLATION

The Coakley Landfill Group C/0 City of Portsmouth

One Junkins Avenue

Portsmouth NH 03801

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Wolf b. alley

CESINC0-01

CJOHNSON

DATE (MM/DD/YYYY)
12/5/2019

# ACORD'

### CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER. IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statementon this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). (A/C, No):(617) 328-6888 (A/C, No, Ext): (617) 328-6555 Ames & Gough 859 Willard Street E-MAIL boston@amesgough.com Suite 320 Quincy, MA 02169 INSURER(S) AFFORDING COVERAGE NAIC # INSURER A: Berkshire Hathaway Specialty Insurance Company 22276 **INSURER B** INSURED INSURER C: CES, Inc. 465 South Main Street INSURER D Brewer, ME 04412 INSURER E : INSURER F: REVISION NUMBER: **CERTIFICATE NUMBER:** COVERAGES THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS. EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. INSR LTR ADDL SUBR INSD WVD POLICY NUMBER (MM/DD/YYYY) (MM/DD/YYYY) LIMITS TYPE OF INSURANCE COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) CLAIMS-MADE OCCUR \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE \$ POLICY TECT. PRODUCTS - COMP/OP AGG | \$ OTHER COMBINED SINGLE LIMIT
(Fa accident) AUTOMOBILE LIABILITY \$ ANY AUTO BODILY INJURY (Per person) OWNED AUTOS ONLY SCHEDULED AUTOS BODILY INJURY (Per accident) PRUPERTY DAMAGE (Per accident) NON-OWNED AUTOS ONLY HIRED AUTOS ONLY \$ EACH OCCURRENCE \$ UMBRELLA LIAB OCCUR **EXCESS LIAB** CLAIMS-MADE AGGREGATE \$ RETENTION \$ WORKERS COMPENSATION STATUTE AND EMPLOYERS' LIABILITY E.L. EACH ACCIDENT ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N/A (Mandatory in NH) E.L. DISEASE - EA EMPLOYEE \$ f yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT 12/8/2020 Per Claim Limtit 3,000,000 12/8/2019 Prof. Liability 47EPP30451003 Α 3,000,000 12/8/2020 | Aggregate Limit 12/8/2019 47EPP30451003 Α DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) All Coverages are in accordance with the policy terms and conditions. CANCELLATION CERTIFICATE HOLDER SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN The Coakley Landfill Group ACCORDANCE WITH THE POLICY PROVISIONS. c/o City of Portsmouth One Junkins Avenue **AUTHORIZED REPRESENTATIVE** Portsmouth, NH 03801



# Engineers • Environmental Scientists • Surveyors

September 23, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Proposal for Fall 2020 Sampling and Reporting | Coakley Landfill Superfund Site | North

Hampton and Greenland, New Hampshire

Contract No. 10424026

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following proposal for sampling and reporting services to the Coakley Landfill Group (CLG). The Scope of Services for this proposal is based upon correspondence between the CLG, United States Environmental Protection Agency (USEPA), and New Hampshire Department of Environmental Services (NHDES) regarding the Bi-Annual Sampling event scheduled for Fall 2020.

The following tasks and associated costs are based on previous biannual sampling events completed in accordance with the Sampling and Analysis Plan (SAP) and incorporates USEPA comments (made via email correspondence on August 22, 2019) to recommendations included with the Draft 2018 Annual Summary Report and USEPA response to the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo (received on March 27, 2020 via email correspondence).

### **SCOPE OF SERVICES**

The Coakley Landfill SAP requires the following scope of sampling services be completed during the Fall 2020 Bi-Annual long-term monitoring event with revisions made to the scope based on USEPA correspondence on August 22, 2019 and March 27, 2020. Sampling activities will be completed in accordance with the SAP with changes to the sampling frequency and list of proposed sample analysis noted accordingly. Similar to the 2020 Spring sampling event, all PFAS analysis will include an expanded list of 26 PFAS compounds versus those completed during previous sampling events (UCMR3 – 6 compound list). A list of PFAS compounds included for analysis is provided as **Attachment A**.

### Task 1A | Bi-Annual Water Quality Sampling - Private Water Supply Well Sampling:

A total of 24 offsite private water supply wells are sampled as part of the current groundwater monitoring program. Sampling of private water supply wells remains in accordance with the current SAP; however, sampling analysis was reduced to only include per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane, and general water quality field parameters. This reduction in analytes (arsenic and manganese removed) was implemented during Fall 2019, in accordance with USEPA approval on August 22, 2019.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 1





- The physical condition and security of all private water supply sampling locations will be evaluated at the time of sample collection. This evaluation will be documented on field sheets and include water treatment systems, if any, sampling location within the property, and any other observations made at the time of sample collection [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect samples from 24 private water supply wells as included on Table 1. Analysis has been reduced to include only 1,4-dioxane and PFAS in accordance with USEPA approval. PFAS analysis will included an expanded list of analytes as included in Attachment A.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples, a matrix spike/matrix spike duplicate (MS/MSD), and equipment rinsate blank.

Based on results obtained during the Spring 2020 biannual event for some PFAS compounds at private water supply well locations, it is proposed that sampling of these wells occur at the beginning of the event as a separate field effort to expedite sample results and data validation.

### Task 1B | Bi-Annual Water Quality Sampling: OU-1/OU-2 Groundwater Sampling:

The CLG currently samples a total of 11 OU-1 wells and 38 OU-2 wells. The groundwater sampling efforts within OU-1/OU-2 will include the following:

- Collect groundwater samples from 49 groundwater monitoring wells as included on Table 2. Analysis for the Fall 2020 event includes only 1,4-dioxane and PFAS and will be conducted in accordance with the SAP. As per USEPA recommendation, sampling of OU-1 and OU-2 groundwater monitoring wells can return to an annual event with 1,4-dioxane and PFAS sampled for twice per year. In addition, PFAS analysis will continue to be performed for an expanded 26-compound list versus that performed during past bi-annual sampling events (UCMR3 6 compound list).
- ♦ The physical condition and security of all sampling locations will be evaluated, and this evaluation will be documented on field sheets [Note that this information is necessary to complete the Annual Institutional Control Plan Inspection report].
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include four duplicate samples, three MS/MSD samples, and one equipment rinsate blank.

### Task 1C | Bi-Annual Water Quality Sampling: Surface Water/L-1 Seep Sampling:

The CLG currently samples a total of eight surface water and one landfill seep as part of its biannual sampling event. Sampling locations have not changed since 2017.

- Collect surface water samples from eight sampling locations (SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2), if sufficient water is present. Analysis during the Fall 2020 event will be conducted in accordance with the SAP, with the exception of volatile organic compounds (VOC's), which were removed as per CLG recommendation and approved by USEPA via its email dated March 27, 2020.
- Collect a sample from the L-1 seep sampling location if sufficient water is present. Analysis
  during the Fall 2020 event will be conducted in accordance with the SAP.
- Collect quality assurance/quality control (QA/QC) samples in accordance with the project SAP.
   These include two duplicate samples and two matrix spike/matrix spike duplicates, and one equipment rinsate blank.

All water quality samples will be analyzed for field parameters using portable field instrumentation. Field instruments will be calibrated in accordance with requirements contained in the SAP.

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 2





Eastern Analytical, Inc. (Eastern) of Concord, New Hampshire will provide the required analytical laboratory services for VOCs, 1,4-dioxane, metals, and general landfill parameters. Vista Analytical Laboratory (Vista) of EI Dorado Hills, California will provide the required analytical laboratory services for PFAS analysis. Eastern and Vista will provide the laboratory data in standard PDF report and in a Microsoft Excel database format with supporting documentation to complete data validation following receipt of laboratory reports.

# Task 2 | Fall 2020 Bi-Annual Sampling Event: Data Validation:

A Tier 1 data validation process will be completed by Quality Assurance Associates (QAA) based in College Station, Texas and will invoice CES directly for data validation services completed. Data validation services will be completed in accordance with the SAP and QAPP. As discussed in Task 1A, private water supply well samples may be collected as part of a separate field effort with validation performed apart from OU-1/OU-2 groundwater, leachate seep, and surface water samples.

### Task 3 | 2020 Bi-Annual Data Report Preparation:

CES will prepare a 2020 Bi-Annual Data Report (Report) that will include a review of analytical data, preparation of summary tables and figures, and preparation of a report for review by the CLG, USEPA, and NHDES. The report will include a comprehensive discussion of both 2020 biannual events (Spring and Fall). CES will provide the CLG with a "universal" database file including analytical laboratory results and results of the Tier 1 Plus data validation. It should be noted that reporting efforts for 2020 will include additional isoconcentration figures for recently reinstated NHDES Ambient Groundwater Quality Standards (AGQS) for PFHxS and PFNA. The addition of these two PFAS compounds will also result in a need for additional discussion within the Report.

# IMPLEMENTATION AND SCHEDULE

It is estimated that up to 12 field days with two field staff will be required to complete the Fall 2020 monitoring event. Time is also included for scheduling sampling at residences, calibration of field equipment prior to the sampling event (as required by the SAP), mobilization and demobilization. Sampling costs include all labor, expenses, instrument rentals, and associated supplies. Private water supply well sampling is currently scheduled for completion September 29<sup>th</sup> through October 1<sup>st</sup>, 2020. In the event that a private well sample cannot be scheduled during this time, necessary arrangements will be made for that well to be sampled during the completion of OU-1/OU-2 groundwater sampling efforts outlined in Task 1B and Task 1C.

### **COMPENSATION**

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.





TASK	DESCRIPTION	COST ESTIMATE
1A	Private Water Supply Well Sampling  Collect drinking water samples from 24 private water supply wells.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$10,600.00 Analytical Costs: \$12,800.00
1B	<ul> <li>OU-1/OU-2 Groundwater Sampling</li> <li>Analyze groundwater samples.</li> <li>Collect requisite QA/QC samples.</li> <li>Provide laboratory report of results with full QA/QC data.</li> </ul>	CES Labor/Expenses \$25,350.00 Analytical Costs: \$25,200.00
1C	Surface Water/Sediment Sampling  Collect surface water samples from SW-4, SW-5, SW-103, SW-110, SW-111, SW-LR, SW-BB1, and SW-BB2.  Collect a sample from the L-1 seep location.  Collect requisite QA/QC samples.  Provide laboratory report of results with full QA/QC data.	CES Labor/Expenses: \$1,600.00 Analytical Costs: \$11,000.00
2	<ul> <li>Data Validation</li> <li>Complete data validation on 24 private water supply samples with expanded list of PFAS compounds and 1,4-dioxane.</li> <li>Perform data validation on 49 OU-1/OU-2 groundwater monitoring wells.</li> <li>Complete data validation of 8 surface water and L-1 seep sample results.</li> </ul>	Subcontractor Costs: \$8,250.00
3	<ul> <li>2020 Bi-Annual Report Preparation</li> <li>Review laboratory data.</li> <li>Prepare summary tables and groundwater contour figures.</li> <li>Prepare draft and final reports for review by the CLG, USEPA, and NHDES.</li> </ul>	CES Labor/Expenses: \$14,400.00
	TOTAL	\$109,200.00

The not-to-exceed budget listed above includes costs associated with sampling equipment/meters and consumables (filters, tubing, etc.), sub-contractors, labor, report preparation, and reimbursable expenses.

Costs for this project will be invoiced monthly, based upon the work completed during the invoice period with updates to project budget and remaining scope provided when 25 percent of the budget remains. CES is prepared to initiate work on this project upon receipt of a signed copy of the attached Service Agreement **Attachment B**.





#### **ASSUMPTIONS**

The following assumptions were used in the development of the cost estimate provided above and are based on the authorization by USEPA of recommendations provided in the 2018 Annual Summary Report and the March 23, 2020 Proposed Groundwater Sampling Program Revisions Memo. This authorization was provided via email correspondence by Mr. Richard Hull of the USEPA to the CLG on August 22, 2019 and March 27, 2020, respectively.

- The completion of sediment sampling during Spring 2020 qualifies as the single annual event requested by the CLG and authorization provided by the USEPA in its correspondence of August 22, 2019.
- The completion of Spring 2020 sampling at OU-1 and OU-2 groundwater monitoring wells for all parameters (i.e. PFAS, VOCs, 1,4-dioxane) qualifies as the single annual event for the sampling of all parameters with Fall 2020 sampling comprised only of sampling/analysis for 1,4-dioxane and an expanded list of PFAS compounds.
- Offsite water supply wells (i.e. residential wells) will only be sampled/analyzed for 1,4-dioxane, PFAS, and field parameters.
- Analysis of surface water samples will not include VOCs in accordance with USEPA approval provided on March 27, 2020.

#### **AUTHORIZATION**

If this proposal is acceptable to CLG, please sign in the approval block and return a signed copy for our files. CES will return a signed and executed copy of this authorization for CLG files. CES is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Out of scope services will not be performed without prior written approval of CLG. Certificates of insurance are included as **Attachment C**.

If you have any questions concerning this proposal or if additional services are needed, please contact either of the undersigned at (207) 795-6009 and (207) 989-4824 respectively. We appreciate this opportunity to be of service to the CLG.

Sincerely, CES, Inc.

Christopher Buckman, P.G. Senior Project Manager Environmental Division

CFB/JAP/jnc Enc. ohn Pond, Principal Executive Vice President Environmental Division Director





# Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:
Printed Name:	_ City/State/ZIP:
Date:	Email (Optional):
Phone:	_Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address:
Printed Name:	City/State/ZIP:
Date:	Email (Optional):
Phone:	Fax:

Mr. Peter Britz | 09.23.2020 | 10424.026.000 | Page 6



# **ATTACHMENT A**

# **EXPANDED 26 COMPOUND PFAS LIST**

# Attachment A EXPANDED PFAS ANALYTE LIST

he said	ANALYTE	CAS No.
PFPeA	Perfluoropentanoic Acid	2706903
PFBS	Perfluorobutane Sulfonic Acid	375735
PFBA	Perfluorobutanoic Acid	375224
PFUnA	Perfluoroundecanoic Acid	2058948
PFTrDA	Perfluorotridecanoate	862374876
PFTeDA	Perfluorotetradecanoic Acid	376067
PFOSA	Perfluorooctane Sulfonamide	754916
PFOS	Perfluorooctane Sulfonate	1763231
PFOA	Pentadecafluorooctanoic Acid	335671
PFNA	Perfluorononanoic Acid	375951
PFHxS	Perfluorohexane Sulfonate	355464
PFHxDA	Perfluorohexadecanoic Acid	67905195
PFHxA	Perfluorohexanoic Acid	307244
PFHpS	Perfluoroheptane Sulfonic Acid	375928
PFHpA	Perfluoroheptanoic Acid	375859
PFDS	Perfluorodecane Sulfonate	67906427
PFDoA	Perfluorododecanoic Acid	307551
PFDA	Perfluorodecanoic Acid	335762
MeFOSE	N-Methyl Perfluorooctane Sulfonamidoethanol	24448097
MeFOSAA	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355319
MeFOSA	N-Methyl Perfluorooctane Sulfonamide	31506328
EtFOSE	N-Ethyl Perfluorooctane Sulfonamidoethanol	1691992
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991506
EtFOSA	N-Ethyl Perfluorooctane Sulfonamide	4151502
8:2 FTS	8:2 Fluorotelomer Sulfonate	39108344
6:2 FTS	6:2 Fluorotelomer Sulfonic Acid	27619972



# ATTACHMENT B

### **SERVICE AGREEMENT**



# STANDARD CONDITIONS OF AGREEMENT BETWEEN CES, INC. AND ITS CLIENTS

The terms and conditions contained in this Service Agreement will govern the services described in contract 10424026 dated September 18, 2020, prepared by CES, Inc. (CES) and submitted to:

The Coakley Landfill Group C/o City of Portsmouth One Junkins Avenue Portsmouth, New Hampshire 03801

(referred to as "Client" in this agreement)

### **SECTION 1 | SCOPE OF SERVICE**

1.1 CES agrees to perform the scope of services contained in the proposal, subject to unanticipated contingencies (as presented in part 7 of this Agreement)

### **SECTION 2 | PAYMENT TERMS**

2.1 Unless specified in the proposal, services shall be charged on a time and material basis in accordance with the Fee Schedule included with the proposal. CES shall submit invoices on a monthly basis or as presented in the proposal and Client agrees to pay invoices within 60 days of the invoice date. If Client disputes any portion of the invoice, Client will notify CES of the disputed costs and will pay that portion not in dispute. For charges not disputed and not paid by the Client within 60 days, CES reserves the right to charge interest to the unpaid amount at a rate of 1-1/2% per month or up to the maximum allowed by law.

### **SECTION 3 | PROFESSIONAL RESPONSIBILITY**

3.1 CES shall perform services in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. CES makes no other warranties or guarantees in the proposal or agreement.

### **SECTION 4 | LIMITATION OF LIABILITY**

4.1 CES' liability shall be limited to injury or loss caused by the negligence, intentional misconduct or breach of contract by CES employees in the performance of the services described in the proposal. Liability shall be limited to the aggregate amount not to exceed the lesser amount of: a) the damages suffered by the Client as a direct result of negligence, intentional misconduct or breach of contract, or b) the limits of the respective insurance policy.



# **SECTION 5 | OWNERSHIP OF DOCUMENTS**

5.1 Copies of plans, specifications and reports prepared under this agreement shall be transferred, upon request, to the Client upon completion of the work. Project deliverables as identified in the Scope of Work will be provided to the Client and shall become the property of the Client. CES shall retain copies of all project documents for a period of 3 years.

### **SECTION 6 I UNANTICIPATED CONTINGENCIES**

6.1 If CES is unable to perform the services within the schedule set forth in the proposal due to unanticipated contingencies, such as, but not limited to, a) strikes, riots, unavoidable accidents, acts of God, b) lawful orders issued by any federal, state or local government authority, or c) any other cause beyond CES' reasonable control, then CES shall not be liable to Client for failure to perform its obligations hereunder.

### **SECTION 7 | TERMINATION**

- 7.1 The Client or CES may terminate performance of the scope of services for any reason by sending a written notice of termination to the other. The termination shall: (1) be effective no sooner than ten (10) working days after receipt of the notice, (2) be without prejudice to any claims unresolved between CES and the Client, and
  - (3) be subject to the other provisions of this Agreement.

In the event of termination, the Client and CES shall maintain their legal rights and obligations as spelled out in this Agreement.

### **SECTION 8 | THIRD PARTY RIGHTS**

8.1 Client and CES agree that the services performed pursuant to this Agreement are solely for the benefit of the Client and are not intended to benefit any other person or entity. This agreement shall not create any rights or benefits for a third party.

### **SECTION 9 | ASSIGNMENTS**

9.1 Neither party to this Agreement shall assign its duties and obligations hereunder without the prior written consent of the other party.



# **SECTION 10 | CONFIDENTIALITY**

- 10.1 CES and Client shall hold confidential all business or technical information obtained from the other for a period of three (3) years after obtaining such information, and during that period shall not disclose such information without the others consent except to the extent required to:
  - (1) Perform the services governed by this Agreement,
  - (2) Ensure public safety, health and welfare,
  - (3) After providing the other party with written notice, comply with any court order or other governmental directive, and/or
  - (4) Comply with applicable State and Federal Laws.

The parties' obligations do not apply to information in the public domain.

# **SECTION 11 | INSURANCE**

11.1 During the performance of activities covered by this Agreement, CES agrees to maintain the following insurance coverage:

INSURANCE	LIMITS
<ul><li>(1) Workers Compensation</li><li>(2) General liability including leased or hired automobile liability</li></ul>	Statutory \$2,000,000 each occurrence
(3) Professional liability	\$1,000,000 each claim



### **CLIENT**

Coakley Landfill Group Robert P. Sullivan, Esq. Counsel to Coakley Landfill Group Portsmouth Municipal Complex 1 Junkins Avenue Portsmouth, NH 03801

Signature	
Typed Name	
Title	
 Date	

CES, Inc.

John A. Pond 465 South Main Street Brewer, ME 04412

Signature

John A. Pond

Typed Name

Environmental Division Director

Title

09/18/2020

Date



# ATTACHMENT C

# **CERTIFICATES OF INSURANCE**



## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/26/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

i uns cerun	cate does not comer rights to the certificate	Molaci III lica or or	on enderesment(e)	
PRODUCER			NAME: Molly Alley	
Cross Insurance	ce		A gNJ Extl: (207) 947-7345 50°C, Nol:	
491 Main Stre	et		ADDRESS: malley@crossagency.com	
P.O. Box 1388			INSURER(S) AFFORDING COVERAGE	NAIC#
Bangor		ME 04401	INSURERA: The Phoenix Ins Co	25623
INSURED			INSURERB: The Charter Oak Fire Ins Co	25615
	CES, Inc.		INSURERC: Travelers Property Casualty Company of America	25674
	Po Box 639		INSURERD: Maine Employers Mutual Ins Co	11149
			INSURERE: MEMIC Indemnity Company	11030
	Brewer	ME 04412	INSURER F:	

COVERAGES

CERTIFICATE NUMBER:

CL19112607390

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAYPERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

NSF	TYPE OF INSURANCE	INSE	WID	POLICY NUMBER	,: MIII I	'WW/PRX-EXA	LIMI	rs
A	COMMERCIAL GENERAL LIABILITY  D CLAIMS-MADE [81 OCCUR  INC. BIRT CONT  R'LAGGREGATE LIMITAPPLIES PER: POLICY [81 PROT LOC OTHER:	у		P-630-8L253856	01/01/2020	01/01/2021	EACH OCCURRENCE  \$\frac{\text{Y} EM:SEs'1ii; r1encel}{\text{MED EXP (Any one person)}}\$\$ PERSONAL & ADV INJURY  GENERAL AGGREGATE  PRODUCTS-COMP/OP AGG  Employee Benefits	s 1,000,000 \$100,000 \$5,000 \$1,000,000 \$2,000,000 \$1,000,000 \$1,000,000
3	AUTOMOBILE LIABILITY  ANYAUTO  OWNED AUTOS ONLY HIRED AUTOS ONLY AUTOS ONLY  SCHEDULED AUTOS ONLY AUTOS ONLY  SCHEDULED AUTOS ONLY AUTOS ONLY	у		810-81295085	01/01/2020	01/01/2021	BODILY INJURY (Per person) BODILY INJURY (Per accident) BODILY INJURY (Per accident) PROPERTY DAMAGE //Per accident) Medical payments	\$ 1,000,000 \$ \$ \$ \$ 5,000
;	UMBRELLA LIAB EXCESS LIAB  DED   X   RETENTIONS   10,000	у		CUP-8L300794	01/01/2020	01/01/2021	EACH OCCURRENCE AGGREGATE	\$ 10,000,000 \$ 10,000,000 \$
)	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	NIA		5101801109	12/31/2019	12/31/2020	E.L. EACH ACCIDENT  E.L. DISEASE EAEMPLOYEE  E.L. DISEASE - POLICY LIMIT	\$ 1,000,000 1,000,000 \$ 1,000,000
:	Workers Compensation			3102806829	12/31/2019	12/31/2020	Each Accident Disease-EA Employee Disease-Policy Limit	1,000,000 1,000,000 1,000,000

DESCRIPTION OF OPERATIONS/ LOCATIONS/ VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space Is required)

The Coakley Landfill Group are named as additional insureds. Refer to policy for exclusionary endorsements and special provisions.

CERTIFICATE HOLDER	CANCELLATION

The Coakley Landfill Group C/0 City of Portsmouth

One Junkins Avenue

Portsmouth NH 03801

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Molly b. alley

ACORD

CESINC0-01

CJOHNSON

DATE (MM/DD/YYYY) 12/5/2019

CERTIFICATE OF LIABILITY INSURANCE

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statementon this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). CONTACT (A/C, No): (617) 328-6888 (A/C, No, Ext): (617) 328-6555 Ames & Gough 859 Willard Street E-MAIL ADDRESS: boston@amesgough.com Suite 320 Quincy, MA 02169 INSURER(S) AFFORDING COVERAGE INSURER A: Berkshire Hathaway Specialty Insurance Company 22276 INSURER B: INSURED INSURER C: CES. Inc. 465 South Main Street INSURER D : Brewer, ME 04412 INSURER E: INSURER F **REVISION NUMBER: COVERAGES** CERTIFICATE NUMBER: THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. ADDL SUBR INSD WVD (MM/DD/YYYY) (MM/DD/YYYY) LIMITS POLICY NUMBER TYPE OF INSURANCE COMMERCIAL GENERAL LIABILITY EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) CLAIMS-MADE OCCUR \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GEN'L AGGREGATE LIMIT APPLIES PER: GENERAL AGGREGATE POLICY PRO: PRODUCTS - COMP/OP AGG \$ OTHER COMBINED SINGLE LIMIT (Ea accident) AUTOMOBILE LIABILITY BODILY INJURY (Per person) ANY AUTO SCHEDULED AUTOS OWNED AUTOS ONLY BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) NON-OWNED AUTOS ONLY \$ HIRED AUTOS ONLY EACH OCCURRENCE \$ UMBRELLA LIAB OCCUR AGGREGATE \$ **EXCESS LIAB** CLAIMS-MADE DED **RETENTION \$** WORKERS COMPENSATION AND EMPLOYERS' LIABILITY STATUTE ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) E.L. EACH ACCIDENT N/A E.L. DISEASE - EA EMPLOYEE If yes, describe under DESCRIPTION OF OPERATIONS below E.L. DISEASE - POLICY LIMIT 12/8/2020 Per Claim Limtit 3,000,000 12/8/2019 47EPP30451003 Prof. Liability Α 3,000,000 12/8/2020 | Aggregate Limit 12/8/2019 47EPP30451003 DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) All Coverages are in accordance with the policy terms and conditions. CANCELLATION CERTIFICATE HOLDER SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN The Coakley Landfill Group ACCORDANCE WITH THE POLICY PROVISIONS. c/o City of Portsmouth One Junkins Avenue **AUTHORIZED REPRESENTATIVE** Portsmouth, NH 03801



# Engineers • Environmental Scientists • Surveyors

September 22, 2020

Re: Spring 2020 Private Water Supply Well Sampling Results

Dear Sir/Madam:

The attached table includes a summary of the analytical results obtained for your water supply well sampled by CES, Inc. on behalf of the Coakley Landfill Group. These results include 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS). Before the Fall of 2019, analysis of PFAS included six compounds but this was expanded to 26 PFAS compounds starting in late 2019.

1,4-dioxane was not detected in nearly all the water samples. This is consistent with past results. Two wells closest to the north margin of the landfill occasionally show 1,4-dioxane detections that exceed the State of New Hampshire standard. Both wells have treatment systems installed by the CLG in recent years that have been effective in removing this contaminant.

All PFAS results were below the USEPA Lifetime Health Advisory of 70 parts per trillion for PFOA and PFOS combined. The results for nearly all samples were also below the recently enacted New Hampshire drinking water standards for the four compounds with standards. One well closest to the north margin of the landfill showed a detection slightly above the new State standard. This is one of the two wells that have had treatment systems installed by the CLG in recent years that have proven effective in removing PFAS.

There were some detections for parameters that do not have USEPA or New Hampshire standards. In particular, perfluorooctanesulfonamide (PFOSA), a PFAS compound with no regulatory standards, was reported as detected at most locations during the Spring 2020 sampling event at higher values than the Fall 2019 results. Our review indicates that not all of the detections for this and other PFAS compounds are related to the Coakley Landfill. The CLG will continue to monitor both the regulated and non-regulated PFAS compounds to better establish distribution, trends, and sources for the detections.

The next sampling event will be completed in October, and these results will be conveyed to you in the shortest time possible based on lab reporting, data analysis, and review by the regulatory agencies.

If you have any questions, please feel free to contact the undersigned by phone (207) 404-5958 or email cbuckman@cesincusa.com or Peter Britz at (603) 610-7215 or email at plbritz@cityofportsmouth.com.

Sincerely,

Christopher F. Buckman, PG Senior Project Geologist

Sensible Solutions | www.cesincusa.com

Table 4
Summary of 2020 Analytical Results for Off-Site Water Supply Wells
Coakley Landfill - North Hampton, New Hampshire

SAMPLE RENTHE STILLS	THE PERSON NAMED IN				1			W	I		e a seco		THE RESERVE THE PERSON OF THE				-		Na Pie	than, that, steam think the water that state the same	1	g w a	-	-		¥
CHEST STATE OF STATE		100			THE PERSON NAMED IN			700				STATE OF THE PARTY AND ADDRESS OF THE PARTY AN		The state of the s		STATE		O'SCHOOL STATE	Carried Company	Same of Persons	transfer to the	A CONTRACTOR OF THE PARTY OF TH				Part Action
(Addition (split)	3 632	1 2	123	187	40.2	0.250 0.210	ш	102	46.2 1 49	462 168	-63	-62	-62	452	-62	-0.2	-52	482	44.2 00.2	2 482	98	+62	48.2	45.7	103	525
DECEMBER OF THE	74	1	No. of the last	1000000	1 TO	1		100	The same of the sa	The No. of Persons	The same	100		Con Cons	1000		Table Co.	100000		SO THE PARTY OF	The same of the sa	H CONTRACT	Calebra Calebra	Charge Street		
THEORETICS INSPANS CARDING		1		- 57			1	+	1	2	2			200		9							2	-		
CARDINA BOLING		-									1			8			28	I			-	255	2,0			100
CHARLES CONTROL OF THE PARTY OF							1		1			100		1			1			*				1		
Participant of the Participant	1	-			1	1			2	1		-		20		1	-					1	1	1		1
Turney of the control		1	I.					-	1			0				3	-	1				ľ		-		Ļ
CAMPINE SIGNATURE AND IN	DESTANDANT MAIL	=	-	110.00	Alle Bills	-	4.000			1	***	The sister.	411170	-	All Mode	NAM.		THE PERSON NAMED IN	AND SHIPE		т	PART CARD	111111	1788.13	CTRIN STREET	I PANT
The second secon	100	,		1				H HIST		1					ı.		h			ŀ	т	ł		ı	Ì	į
THE R. P. LEWIS CO., LANSING MICH. LANSING MICH. BUT AND RESIDENCE.	Dank Age of																									
Perlucrobulance Appr (PFBA)		-	1.083	4180	0.00	7.88.4	1 100	A DIES	42330	98	0.000	0.00	6330	2.00	4521	6370	1.183	0 1 0 M/4	4360 1 4360	10 1 + 30 CT	99	4.56.0	4.78.0	7 1 1 00 1	4 15 0 1 4	0.00
Parliamentancic and (PEnEA)					10.00	17.16.5	٠	1	100	ļ	+	4	L	0.0		٠	+	4	4	÷	÷	+-	4	t		11/4
Darfinorehidenesi Monie acid (OERO)			1,000			-	t		200			-		100	1	1			100		1	01.00	4 10 17		17.00	11 000
Legisland and a state dead of the part			2010	100	2	A WAY	1	4110	200		†	200	4.000	484	100	200	1000			ļ		200	1	+		0 00
Perilipotanasanoix Acid (PPPCA)	l.		4511	4.28.00	4.31 (4)	4310	411.4	431.00	17.0	10	1	THE STATE OF	CHIM	41110	4.37.0	4,20.00	200	118	4340 439	3000	100	3,38.00	4.28.00	1000	mer.	0/2
Perfluoronaptanoic acid (PFHpA)	1		(Y)	4.18.0	43100	1.73.1	4.17.0	Gattle A	220 0.00	10.1	0.000	41700	4.32.07	4180	43745	4350	4,41.0	N.C.	27 DM	100 + 39 %	115	4.56.00	4,78.0	1,11,1	100	0.27
Perfluorohexanesuffonic acid (PFHxS)	=		1817	0.81.9	7 64 2	4.32.5	411.0	1.65.1	750	9	0.860	4270	43802	3.16.1	1.46	4390	D (9.8	1,96.7	たず つま	16.9	116	CHI	0.85.4	113 W 113	9 9 9 9	0.65
1H. 1H. 2H. 2H-Perfluomoctanesultonic Acid (6:2FTS)			11.079	4.18.0	4,311	43911	4 11/15	,	0417	100	t	4374	4380	4.18.0	4500	0.00	11 19 19	三 二 二 三 三 三 三 三 三 三 三 三 三 三 三 三 三 三 三 三	34.0	10 4 39 0	14	0.35.7	口紙*	- 17	9 (3.0.)	00.4
Parlingo dancing and IPPOA	i.	,	1.00		1 10 1	11.5	٠	t	t	ł	t	1	1 22	10.00	1.66.1	130	1 100	ļ	+	-	×	1.00	t	t	1323	1,592
Dorflood Section Control of Control	+			2000			1	t	+	+	t	1111111	1111111			100	1	1	20.00	0.000		1000	100	111111111111111111111111111111111111111	1000	1
	1					2000				+	200	+	200				1	100				The second	200	+		
Carry or a constitution of the constitution of	-		AAAA			4.44.0	-	100	47	2	200	100	6.353	1 1 1 1	1		1	1	100	100			1			
Periliboroctanesullonamide (PTOCH)	+		111			1	1		124	-	1	+	4	7	*		966	100	100				100	1	1	100
r millionoccanesanione (Prop)	N D		1	100	1				100	+	+	+	100			1		t	1				1	+		
Peniuorodecanose Acid (PPLA)	-		4.621	200	4311	4327		4310	20 40		1	4 110	200	133	2	4.00	2010	t		1		4380	100		200	
1H, 1H, 2H, 2H-Perfluorodecanasulfonio Acid (8:2F1S)	1		4471	7 10 1	4.11.11	7.557	41111	,		4	1	+	4130	4.81	4270	4.37.0	5	+	-	+		4.58.0		+	4300	n do
N-Methyl Perfuercoctanesulforamidoacetic Acid (Mal-DSAA)	1		4471	0.000	4.370	1004	7000		2			4370	4350	4.00 1	0.550	437.0	4.4) 1/	187	ME 4390	4300	14	4.56.0	4280	5	4.30 0	72.0
N-Ethyl Perfluorocctanesullonamidoacetic (EIFOSAA)	1		1100	2000	4312	1000	1000	4310 4	622 U 4.41	,		4270	4337	4,56 2	17.53	* TES	4.63 19	190	30	1007	18	7351	377	446.0	4.23%	77.77
Perfluoroundecanolo Acid (PFUnA)	-	1	4677	AMA	4.11.114	4387	837.W	1	T	,	4.00 24	+		4.19.0	457.00	4.77.4	4410	A 10	34.9. 4.71	4.3D I	2	4.56 1/0	* M.	4.4E UI 4	MCC.	17.0
83			0.079	1287	427.0	433.0	637.0	4310 6	622.0 6.41	110	T	637.00	433.00	4111	4570	4.27.11	6.41.0	9 03	20 43		100	456(1)	0.850	4.46 111 4	- mark	70.00
			4.4714	4387	4310	0.000	137.0	4.310 4	422.0	11.0	U. 646 U	-	435.0	4.18.0	4570	4.27.0	4.41.0	4.76 0 4.34	34U 439U	4301	50	4,56.0	4.28.0	4,46.0	4.72.U	0.42.6
N-Methyl Perfluoroctane Sultonamide (MeFOSA)			283.0	21.42	21.50	31.4 123	21.5 (22	115.0	550 221	1277 188	22.20	21400	22.4 U.I	22.6 UD	22,9 U	13.80	22,8 UP	21.8 U 73	121 IZ	0	9	22.83	27.4 17	22.3 U	25.611 2	07.1
Perfluorotrodecennic Acid (PFTrDA)	1		4475	4.28.17	4312	4 32 17	4370	4 5155	22.0	11.0	44617	437.0	4327	- CHEN	437.0	4.37.0	K41.U	1360	34.12. 4.39	1000	100	4.56 U	4.26 U	4,46.0	4300	0.00
Perfluorotetradecanold Acid (PFTeDa)	1	4	4.67%	4.38 1/	4215	4322	0.00	4.2117	422.0 441	11.12	446.0			4,18.0	4520	437.0	4.43.0	4.36.1	34 U. 4,39	0.00.4 0.00	91	4.56.9	4.28 (2	4.46.0	4.339	0.07
N-Ethyl Perfluctoctons Sulfonamide (EIFOSA)	1		22.50	4149	23.517	21.812	21,917	2150	22 851	101		21410	22.534	22.8 45	115.22	21.89	UL 9.25	17 6812	8 th 22.1	21.51	100	23.9 U	35.40	22,310	21.60	31.0
Perfluorogexadecanoic Acid (PFHxDA)	1		6470	4.1012	4310	437.0	4370	1000	4.22.0	100	6400	†	× 350	4,100	4570	0.00	4410	1000	200	4300	9	280	4.400	0.00	170	
Nederly Perguspos and Supposed Property (Net USE)	1		27.30	1000	1000	200	7000	1130		211		200	100	6828	26.20	12.5	1	750	-				1	1	7	100
Combination of PFOA and PFOS	-	,	7 11.0	2.86.7	-	OF P	70.7			1		1961	180	1602	3.00	(10)	1	100	181	03		36	100	1.493	136	136.1
TABLE NOTES:																										
The Lib Additional Control Con	UGC criterie and lon in the blank vi method requirem and 11 Berry Per	wers rejected: and tripper than and or analysis on Lane abers o	the result in line su cutability the beathrich was well, and 15 ar	imple. cal hodding time of 17 Berry Frae	r. M Lana share o		See SEE AGGS - NEGOT SANIER COMMENT COMES SERVICED COMES SEE AGGS - NEGOT SANIER COMES AGGS - COMES - COMES AGGS - COMES - COMES AGGS - COMES - C	+ NATOESS Andel SESSA APIREARY EISA GROUNDAN Deb concentralité Brande concentralité Brande concentralité Product ambille on noembrandesses	In Secundary Water Districts Water And Committee Committ	r Doubly Stance Standard Charles of the Parket Charles of the Parket Charles of the Parket of the Pa	Bard (CL), hap tever (CL), habett Grounds of CL), of CL, o	Series Codes Nevel Series Conservation Commission Commission Commission Codes Nevel Codes Nevel Commission Codes Nevel Codes Nevel Nevel Codes Nevel Nevel Codes Nevel Nevel Codes Nevel Nevel Nevel Codes Nevel N	D. Walter		Both Research The Control of the Con	Le Beny Sent Lines (B) The Establish III Road (B) The Establish III Road (B	2									
The second secon																										





August 27, 2020

Mr. Peter Britz
Coakley Project Coordinator
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Contract Amendment Proposal for Surface Geophysical Surveying

Coakley Landfill Superfund Site | North Hampton and Greenland, NH

Contract Amendment Number: 10424016-04

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment for professional consulting services to the Coakley Landfill Group (CLG). The Scope of Work for this amendment is to perform tasks in support of completing the Deep Bedrock Investigation activities in accordance with the *Revised Deep Bedrock Investigation Work Plan Addendum* (Work Plan Addendum) as provided to the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on July 17, 2020. The Work Plan Addendum was conditionally approved by the USEPA in its letter to the CLG dated August 4, 2020.

#### PROJECT UNDERSTANDING

As part of the Work Plan Addendum, the installation of an additional deep bedrock groundwater monitoring well was proposed in the area located near existing bedrock monitoring well GZ-105 to address potential contaminant migration in deep bedrock. The proposed well is anticipated to be installed on a parcel currently owned by the State of New Hampshire (the State) and will be subject to access from the State via an executed access agreement between CES and New Hampshire Department of Transportation (NHDOT).

Based on a photolineament analysis completed during the original Remedial Investigation (Weston, 1988) and surface geophysics completed in 2018 to support the "micro-locating" of deep bedrock borings MW-20/-21/-22, several features were interpreted on the aforementioned State-owned parcel and will be the target for the proposed geophysical surveying. These photolineaments and electrical resistivity anomalies may correlate with subsurface geologic features (e.g. bedrock fractures) that could serve as a potential migration pathway in deep bedrock south of the landfill.

Electrical resistivity surveying is the preferred method for locating fractures and determining their orientations. This method was proven effective during surface geophysics completed at the Site in 2018. The location of proposed geophysical survey profiles and survey coverage within the investigation area has been documented in the Work Plan Addendum (CES, 2020). CES will contract with Northeast Geophysical Services, Inc (NGS) for geophysical data collection.

Peter Britz | 08.27.2020 | 10424016-04 | Page 1





#### **SCOPE OF SERVICES**

Task 1 | Site Preparation and Transect Clearing: In an effort to complete the survey within the State parcel, flagging of the approximate southern and northern parcel boundaries will be completed. This flagging will be completed by CES and be used to guide the marking of geophysical transects to ensure placement within the desired parcel boundaries. It is anticipated that hand-clearing of brush will be required and be used to facilitate geophysical data collection.

Task 2 | Electrical Resistivity Surveying: CES will contract with NGS and oversee electrical resistivity data collection and be responsible for the recording of transect location for later reporting. The CES representative will also serve as the point of contact for any property owner that may be affected by the activities proposed. This includes the NHDOT and owners of property adjacent to the target parcel. The survey will consist of:

Two parallel transects oriented east-west and perpendicular to the former railroad easement. These profiles are designed to intersect interpreted photolineaments and previously identified surface geophysical anomalies (CES, 2018). Each profile will be approximately 1,800-feet in length and extend east from previously collected electrical resistivity profiles towards the parcel located immediately north of MW-6.

Task 3 | Summary Memorandum and Site Visit: Following data reduction and receipt of the report provided by NGS, CES will prepare a brief memorandum detailing the interpretation of results. This memorandum will also include recommendations for well placement. Based on experience gained in the placement of MW-20/-21/-22 in 2018, it is anticipated that a site meeting will be held between CES, the Agencies (USEPA and NHDES), and CLG to confer on well placement.

#### COMPENSATION

We propose to undertake the above Scope of Services for the **project fee of \$22,225.00**. This not-to-exceed budget includes costs associated with sub-contractors, labor, report preparation, and reimbursable expenses. Costs for this project will be invoiced monthly, based upon the work completed during the invoice period.

TASK	DESCRIPTION	COST ESTIMATE
1	Site Preparation and Transect Clearing <u>CES Labor and Expenses</u> Task Total	\$3,500.00 \$3,500.00
2	Electrical Resistivity Surveying CES Oversight Labor and Expenses Northeast Geophysical Services – Geophysics Task Total	\$4,525.00 <u>\$10,800.00</u> <b>\$15,325.00</b>
3	Summary Memorandum and Site Visit  CES Labor and Expenses  Task Total  Contract Amendment Total	\$3,400.00 \$3,400.00 \$22,225.00

Peter Britz | 08.27.2020 | 10424016-04 | Page 2





#### **AUTHORIZATION**

If this contract amendment is acceptable to the CLG, please sign in the approval block and return a signed copy for our files. CES is prepared to initiate work on this project upon receipt of a signed copy of this proposal. Costs for this task will continue to be invoiced monthly under current CES project number 10424.016, based upon the work completed during the invoice period. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES. The proposed costs, upon approval by the CLG, will be added to the Deep Bedrock Investigation project budget (10424.016) under the terms and conditions and rate schedule used in the original project agreement. An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

If you have any questions concerning this proposal, please feel free to contact the undersigned at (207) 795-6009.

Sincer	ely,
CES.	lnc.

Christopher Buckman,	PG
Project Geologist	

CFB/rlt Enc

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:	_
Printed Name:	City/State/ZIP:	
Date:	Email (Optional):	
Phone:	Fax:	



# Engineers • Environmental Scientists • Surveyors

September 9, 2020

Mr. Peter Britz Coakley Project Coordinator 1 Junkins Avenue Portsmouth, New Hampshire 03801

RE: Contract Amendment for Additional MW-6 Investigative Tasks | Coakley Landfill

Superfund Site | North Hampton and Greenland, New Hampshire

**Contract Number: 10424016-05** 

### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment for professional consulting services to the Coakley Landfill Group (CLG). The Scope of Work for this amendment includes the completion of investigative tasks within MW-6 outside those detailed in contract amendment 10424016-03 (Task 6) issued to the CLG on December 17, 2019. These tasks were requested, in part, by the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) via email correspondence to the CLG dated April 16, 2020 and June 18, 2020. These additional tasks were incorporated in the Revised Deep Bedrock Investigation Work Plan Addendum (Work Plan Addendum) as submitted to the Agencies on July 17, 2020. CLG has previously approved proposals and budgets to complete several investigation activities as outlined in the Revised Draft Deep Bedrock Investigation Work Plan (Work Plan) dated May 31, 2018 and conditionally approved by the USEPA on July 17, 2018; however, additional requested tasks and/or expanded scopes of work requested by the USEPA and NHDES during the course of the Deep Bedrock Investigation have resulted in additional project expenditures. CES and CLG have communicated throughout the deep bedrock investigation process regarding the additional requests made by the Agencies and verbal approvals have been granted by CLG to facilitate timely responses to agency requests. An accounting of costs is included in monthly invoices submitted to the CLG by CES; however, this amendment formalizes the costs associated with additionally requested MW-6 investigative items (e.g., containerization of redevelopment water).

#### SCOPE OF SERVICES

Tasks outlined below are those additionally completed during an investigation within deep bedrock monitoring well MW-6. These tasks were requested by the USEPA in its response to the Draft Deep Bedrock Investigation Work Plan Addendum and its review of the memorandum Deep Bedrock Downhole Geophysics and Packer Sampling Interval Recommendations: MW-6. Responses to these documents were provided via email correspondence on April 16, 2020 and June 18, 2020, respectively.

#### Well Redevelopment

Prior to initiation of the pumping test, MW-6 was redeveloped to prepare the well for the completion of borehole geophysical logging. The well was redeveloped in accordance with the

Mr. Peter Britz | 09.09.2020 | 10424.016-05 | Page 1





Work Plan Addendum; however, the Agencies requested that redevelopment water be containerized and not discharged to the ground at the well location. As such, additional costs were incurred during the transport, storage, and characterization (via laboratory analysis) of this investigation derived waste (IDW). These costs included the completion of a NHDES Temporary Groundwater Discharge Permit Application (NHDES-W-03-154) to address the management and disposal of the water from redevelopment.

#### Interval Packer Sampling

Following the completion of borehole geophysical logging, interval packer sampling recommendations were provided to the Agencies in the memorandum *Deep Bedrock Downhole Geophysics and Packer Sampling Interval Recommendations: MW-6* dated June 11, 2020. Following its review, the USEPA provided recommendations via email correspondence on June 18, 2020 that included the addition of two packer sampling intervals and requested the addition of volatile organic compounds (VOCs) to the list of analyses performed on each of the sampled intervals. A total of eight intervals were investigated (seven sampled due to no recharge in one interval) with collected samples submitted to Alpha Analytical for analysis of PFAS (26 compound list), 1,4-dioxane, VOCs, arsenic, manganese, and general landfill parameters (ammonia, chemical oxygen demand, chloride, hardness, and nitrate. Equipment blanks were also collected for the water level meter, packer string, and sampling pump; however, these samples were included in contract amendment 10424016-03 (December 17, 2019).

Original estimates for interval packer sampling provided to the CLG in contract amendment 10424016-03 included two days for interval packer sampling; however, the addition of two intervals and the analysis of VOCs resulted in the addition of one day to the total interval packer sampling field effort completed by CES.

#### MW-6 Viability Memorandum

It was determined through USEPA comments that the generation of a memorandum detailing the results of the interval packer sampling and analysis of the wells overall viability for use during the pumping test would be necessary. This memorandum (*MW-6 Interval Packer Sampling Results and Pumping Test Viability*) was issued to the Agencies on August 18, 2020 and outlined the meeting of MW-6 requirements for use as the pumping test well. These requirements were defined in a letter from the USEPA to the CLG dated June 17, 2020. This letter provided comments to the Draft Deep Bedrock Investigation Work Plan Addendum as submitted to the Agencies on April 6, 2020. MW-6 was conditionally approved by the USEPA for use as the pumping test well via email correspondence on August 26, 2020.

#### COMPENSATION

Task	Cost Estimate
Bedrock Well Evaluation: MW-6	
CES Interval Packer Sampling – Labor and Expenses (2 Intervals)	\$800.00
Alpha Analytical Laboratory – Packer Sampling Analysis (2 Intervals)	\$1,100.00
Alpha Analytical Laboratory – Packer Sampling Analysis (VOCs)	\$1,050.00
Alpha Analytical Laboratory – Redevelopment Water Characterization	\$600.00
CES IDW Management and Discharge Permit – Labor and Expenses	\$1,450.00
MW-6 Pumping Test Viability Memorandum	\$2,800.00
Contract Amendment Total	\$7,800.00

Mr. Peter Britz | 09.09.2020 | 10424.016-05 | Page 2





Costs associated with this project will continue to be invoiced monthly, based upon the work completed during the invoice period. This work is currently being tracked as Task 7 of the Cost Breakdown Spreadsheet provided with submitted monthly invoices to the CLG. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES. The proposed costs, upon approval by the CLG, will be added to Task 7 of the Deep Bedrock Investigation project budget (10424.016) under the terms and conditions and rate schedule used in the original project agreement. An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

•	
If you have any questions concerning this propo	osal, please contact us at (207) 795-6009.
Sincerely, CES, Inc.	
cers	
Christopher F. Buckman, P.G. Senior Project Geologist	
CFB/	
Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:	
Signature:	Billing Address:
Printed Name:	_ City/State/ZIP:
Date:	_Email (Optional):
Phone:	_Fax:



## COAKLEY EXECUTIVE COMMITTEE

# Wednesday, December 9, 2020 AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-23, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

## Please use the following to call in to the meeting:

Conference Call Dial-in #: 603-766-5646

Conference ID: 393626

I. Review the minutes of the November 4, 2020 Coakley Teleconference call.

### <u>OU-1</u>

#### II. BILLS

## City of Portsmouth

A. Invoice # 2900635011 dated 11/19/2020 50% \$2,750.00

Peter Britz & Financial services - 11/2020

**DC MacRitchie** Payment Certification dated: 12/9/2020

Invoice dated: 11/9/2020 Services rendered through: 11/4/2020

B. Invoice # 205637 50% \$1,410.00

**Professional Services** 

### Piscataqua Savings Bank

C. Invoice dated: 11/11/2020 100% \$2,500.00

Services rendered through: 11/30/2021

### III. OU - 1 ACTION ITEMS

There were no action items.

## IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 12/1/2020: \$297,296.08

<u>OU-2</u>

## V. BILLS

## City of Portsmouth

A. Invoice # 2900635011 dated 11/19/2020 50% \$2,750.00

Peter Britz & Financial services - 11/2020

**DC MacRitchie** Payment Certification dated: 12/9/2020

Invoice dated: 11/9/2020 Services rendered through 11/4/2020

B. Invoice # 205637 50% \$1,410.00

Professional Services

### Piscataqua Savings Bank

C. Invoice dated: 11/11/2020 100% \$2,500.00

Services rendered through: 11/30/2021

DES Payment Certifications dated: 12/9/2020

Invoice dated: 4/29/2020 Services rendered through: 12/31/2019

D. Invoice # 198712001-11 100% \$1,413.89

Monitor/sample/data collection -residential wells

ARM Payment Certifications dated: 12/9/2020

E. Invoice#: PIN159 dated 8/17/2020 100% \$695.00 F. Invoice#: PIN165 dated 11/12/2020 100% \$1,724.00

### VI. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 12/1/2020: \$722,329.96

## **COMBINED OU-1 & OU-2**

### VII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

- A. Report of Peter Britz of the City of Portsmouth dated 12/9/2020 with three attachments (CES Contracts):
  - \*Change in Services\_Deep Bedrock Investigation\_DPT\_10424016
    - ---Seeking review and approval
  - \*Contract Amendment\_Deep Bedrock Investigation\_10424016-06
    - ---Seeking review and approval
  - \*Proposed well location site plan
    - --- attached for reference: Figure 2\_Site Plan

#### VIII. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. CES Proposal for Surface Water Treatment Remedy and Beaver Mitigation Contract Management dated 10/23/2020 and executed by Chair Spear on 11/4/2020.
- B. Letter to DOJ dated 11/30/2020 re: Invoice 12 from Peter Britz with attached Release signed by Peter Britz on 11/30/2020.
- C. Invoice #12 from OU-2 CLG dated 4/1/2020 for the period 9/1/2019 8/31/2020. Invoice sent to Settling Federal Agencies c/o The United States (DOJ).

#### IX. OTHER BUSINESS

# X. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING





October 29, 2020

Mr. Peter Britz
Coakley Project Coordinator
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Contract Amendment Revision for Deep Bedrock Investigation Task

Direct Push Investigation - Area West of MW-21

Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire

#### Dear Peter:

CES, Inc. (CES) is submitting the following revision to the scope of services to be provided under Task 7 of contract amendment 10424016-03 as provided to the Coakley Landfill Group (CLG) on December 17, 2019. Task 7 was for the installation of an overburden and shallow bedrock (50 feet into bedrock) well couplet in the area located west of MW-21. This well couplet was proposed due to detections of PFAS and 1,4-dioxane in shallow bedrock prior to the construction of bedrock monitoring wells MW-21D1/-D2. Following construction of the bedrock wells at MW-21, PFAS and 1,4-dioxane detections have not been reported and subsequent changes to the scope made to address these data. The Scope of Work revisions, as documented below, are for the completion of a direct push technology (DPT) investigation in the area west of MW-21 to identify a location for an overburden well to monitor groundwater quality and define changes to the western extents of the GMZ, if any. The DPT investigation was incorporated into Section 2.7 of the Revised Deep Bedrock Investigation Work Plan Addendum (Work Plan Addendum) as submitted to the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on July 17, 2020. The Work Plan Addendum was conditionally approved by the USEPA on August 4, 2020.

#### **SCOPE OF SERVICES**

Analytical results for overburden groundwater monitoring well MW-21S, sampled in September 2019, showed concentrations of 1,4-dioxane at 27.3 ug/L, with concentrations of 1,4-dioxane reported as Not Detected (ND) in both the shallow (MW-21D2) and deep (MW-21D1) bedrock intervals. The overburden concentration at this well is similar to that reported within nearby overburden monitoring well location FPC-6A (19.3 ug/L). The potential for migration within the overburden groundwater west of MW-21 requires further investigation to delineate the boundary of the GMZ. The additional overburden groundwater elevation data is also anticipated to help confirm the CSM relative to bedrock groundwater flow paths.

Based on surface geophysical mapping performed in May/June 2018 to position deep bedrock well couplet drilling locations, electrical resistivity data illustrates a shallow zone of low resistivity in the area immediately south and west of the MW-21 well couplet. These localized anomalies are characteristic of those typically associated with more electrically conductive overburden

Mr. Peter Britz | 10.29.2020 | 10424.016-04 | Page 1





sediments deposited within the more electrically resistive bedrock topographic lows. These low resistivity anomalies are coincident between parallel north-south resistivity profiles and correlate with interpreted low-lying wetland topography interpreted from LiDAR data. The overburden sediments appear too thin to the west as the channel broadens, with the interpreted thickness ranging from approximately 14 to 16 feet to approximately 8 to 10 feet. This interpretation is supported, in part, from the absence of overburden observed during drilling at the MW-21D deep bedrock boring location. The location of MW-21S (130 feet south of MW-21D1/-D2) was selected based on in-field interpretation of surface topography, location relative to the MW-21D boring, and drilling rig access. Topographic ridges in the area surrounding MW-21S/-21D, based on field observations at the time of well installation, are comprised of bedrock with overburden sediments being thin to absent. These observations are consistent with interpreted LiDAR data and surface geophysical results (ground-penetrating radar and electrical resistivity). Similarities in topography between the area near MW-21S/-21D and areas west suggest that overburden sediments will thin to the west with the proposed direct push technology (DPT) investigation designed to confirm this interpretation.

DPT will be used to determine depth of overburden and allow for the collection of overburden groundwater samples without the need for permanent well/piezometer installations. Continuous undisturbed samples of overburden material will be collected using DPT sampling methods and used to record lithology in the aforementioned low-lying areas west of MW-21S (**Figure 1**). The evaluation of lithology will allow for the determination of discrete sampling intervals within the overburden if individual water-bearing lithologic units are encountered.

Discrete overburden groundwater samples will be collected by advancing DPT tooling to target intervals, based on lithology and presence of water, where a 1-inch PVC temporary well screen will be installed and developed to allow for low-flow sampling. The screen length will vary depending on the mapped thickness of overburden units and be installed based on conditions observed in the field. For example, if till is encountered directly overlying the point of DPT refusal (assumed bedrock surface), the screened interval will be placed closest to the inferred bedrock surface. Conversely, if a single lithology is observed extending from ground surface to DPT refusal, a screened interval will be placed at the base of refusal and another at the uppermost section of saturated overburden. This sampling methodology is designed to allow for the lateral delineation of 1,4-dioxane within overburden west of MW-21S and provide information relative to the interaction between groundwater at the bedrock/overburden interface. Although 1,4-dioxane is the target contaminant of concern for the area west of MW-21S, samples will be analyzed for 1,4-dioxane, PFAS, arsenic, and manganese with field parameters (dissolved oxygen [DO], ORP, pH, specific conductance, temperature, and turbidity) monitored during sampling.

The use of dedicated temporary well screens will reduce the likelihood of cross-contamination between sampling locations and allow for more accurate stabilized static water levels within overburden lithologic units. These overburden groundwater elevations will be used for evaluating the relationship between groundwater and surface water, with surface water elevations provided through activities completed in support of the Surface Water Evaluation. Borings will be advanced every 150 feet along the transects identified on **Figure 2.2**, with DPT tooling decontaminated between each boring. Lithologic information will be recorded within each boring with groundwater samples collected from every other boring along the transects or based on observed lithology variations within a single location. These lithologic changes include samples collected from glacial outwash and till units when encountered within the same boring.

Mr. Peter Britz | 10.29.2020 | 10424.016-04 | Page 2





Static water level information within individual lithologic units will be recorded at the time of sampling, with measuring point elevations surveyed relative to previously surveyed wells MW-21S and/or MW-21D1/-D2. This information will aid in the additional understanding of groundwater and surface water interactions, further evaluate vertical and horizontal gradients in the area west of the wetland complex (identified data gap within the CSM), provide information relative to transport mechanisms and pathways in overburden west of MW-21S, and aid in the correlation of surface water/groundwater/porewater data collected as part of the surface water evaluation as outlined in the Surface Water Evaluation Scope of Work submitted on January 22, 2020. As per the CSM, overburden and bedrock groundwater flow in the area of MW-21S is conceptualized to be primarily to the east toward the wetland complex where discharge to surface water occurs. The vertical groundwater gradient within bedrock at MW-21 is upward and indicates that some bedrock groundwater discharges to overburden and subsequently to surface water within the wetland complex.

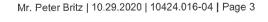
Additional permanent monitoring locations are not proposed, given the current monitoring well network and the limitations of current property access agreements. Following receipt of analytical results, temporary PVC wells screened at those locations without detections of 1,4-dioxane will be removed with at least one location identified for permanent monitoring well construction. This well will provide monitoring of overburden groundwater quality in the western portion of the GMZ and be used to establish the western GMZ boundary for finalization of the Groundwater Management Permit (GMP). This recommendation will be conditioned, in part, on modification of existing land access agreements between the CLG and the property owners.

#### COMPENSATION

The scope of services as outlined above will not require changes to the budget proposed in Task 7 of the original contract amendment (10424016-03). The original proposed budget was \$46,100.00 with the anticipated DPT investigation costs totaling \$22,750.00. It should be noted that these funds have not been utilized to date to address costs associated with other bedrock investigation activities and the change in services provided herein to document the change in use of funds from those originally proposed.

Task	Cost Estimate
Direct Push Investigation: Western Extent of GMZ – MW-21	
CES DPT Piezometer Install and Development - Labor and Expenses	\$5,750.00
New England Test Boring – Direct Push Technology Field Services	\$7,800.00
CES Piezometer Sampling – Labor and Expenses	\$4,475.00
Alpha Analytical Laboratory - Groundwater Sampling Analysis	\$4,730.00
Contract Amendment Total	\$22,755.00

Costs associated with this project will continue to be invoiced monthly, based upon the work completed during the invoice period. This work will be tracked as a separate project task of the Cost Breakdown Spreadsheet provided with submitted monthly invoices to the CLG. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES. The proposed costs were based on the rate schedule used in the original project agreement (10424016). An estimate to completion will be prepared when 25 percent of the budget remains.







This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

If you have any questions concerning this proposal, please contact me at (207) 404-5958.

Sincerely, CES, Inc.

Christopher F. Buckman, P.G. Senior Project Geologist

CFB/jnc Attachments

Acceptance and Authorization to Proceed with Change in Scope of Services on behalf of Coakley Landfill Group:

Signature:	Billing Address:	_
Printed Name:	City/State/ZIP:	_
Date:	Email (Optional):	_
Phone:	Fax:	



# **ATTACHMENT 1**

## **CERTIFICATES OF INSURANCE**





## **ATTACHMENT 2**

# 2018 SCHEDULE OF CHARGES

# Memo

To: Coakley Executive Committee From: Peter Britz, Coakley Coordinator

Date: December 9, 2020
Re: Activity report

#### **Surface Water Treatment**

The first phase of a pilot study to determine effectiveness of the treatment blankets is complete. Three rounds of sampling should be completed in the next week or two. Once all the test results have been received they will be reviewed and used as a basis for next steps.

## **Deep Bedrock Study**

The NHDOT agreement to access the land where the proposed well will be installed was received about a week before the planned install date of November 25. However due to heavy rain the install has been delayed due to access constraints. The area became very wet and inaccessible for drill rig without matting. Quotes from a timber mat company have been requested. Once a firm has been selected the mats will go in and the work can be completed.

## **DOJ Bill**

The Department of Justice OU-2 reimbursement, Invoice 12, was sent out December 3 for \$91,078.62 for the period of September 2019 through August 2020.

#### **CES Contracts**

- 1) Direct Push Investigation: Groundwater results for overburden monitoring well MW-21S, sampled in September 2019, showed concentrations of 1,4-dioxane at 27.3 ug/L, with concentrations of 1,4-dioxane reported as Not Detected (ND) in both the shallow (MW-21D2) and deep (MW-21D1) bedrock intervals. The overburden concentration at this well is similar to that reported within nearby overburden monitoring well location FPC-6A (19.3 ug/L). In order to investigate the potential for migration within the overburden groundwater west of MW-21 a direct push installation of temporary monitoring wells was approved to further delineate the boundary of the GMZ. The additional overburden groundwater elevation data is also anticipated to help confirm the conceptual site model relative to bedrock groundwater flow paths. The proposed work was described in the Deep Bedrock workplan addendum approved by EPA in August 2020. A contract for this work is attached for review and approval. (Change in Services\_Deep Bedrock Investigation\_DPT\_10424016)
- 2) Also as part of the deep bedrock work plan amendment we agreed to conduct additional investigations on an existing well BP-4. This work will include redevelopment of that well and downhole geophysics investigations in preparation to add this well to ongoing site monitoring. In addition to that work the contract for drilling of MW-25 needs to be executed along with the geophysical work needed for that new well. That work will commence once the timber matting has been installed and the contractor can reach the site. This work is contained in the attached contract which needs approval (*Contract Amendment\_Deep Bedrock Investigation\_10424016-06*). The location of the proposed well is just East of GZ-105. I have attached a site plan for reference (Figure 2\_Site Plan).





October 27, 2020

Mr. Peter Britz
Coakley Project Coordinator
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Contract Amendment for Deep Bedrock Investigation Tasks

Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire

**Contract Number: 10424016-06** 

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment for professional consulting services to the Coakley Landfill Group (CLG). The Scope of Work for this amendment includes the completion of investigative tasks associated with the deep bedrock investigation. These tasks were incorporated into the Revised Deep Bedrock Investigation Work Plan Addendum (Work Plan Addendum) as submitted to the United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on July 17, 2020. The Work Plan Addendum was conditionally approved by the USEPA on August 4, 2020.

#### **SCOPE OF SERVICES**

Tasks outlined below are those required in support of the Deep Bedrock Investigation

#### Task 1 - BP-4 Investigation

As requested in its letter of August 4, 2020, the USEPA recommended that further evaluation of BP-4 be completed. This evaluation would serve to characterize the remaining open borehole deep bedrock well and further assess the eastern groundwater flowpath in bedrock. Data from this well will be integrated with information from previously investigated wells and used in further development of the Conceptual Site Model. This evaluation will include the completion of borehole geophysical logging concurrent with that proposed at MW-25. It is not proposed for the collection of interval packer sampling at this location due to location within OU-1 and this well being included with regular permit-required sampling program for the Landfill.

Prior to completion of geophysical logging, BP-4 will be redeveloped using the same methods as employed during the redevelopment of MW-6 in 2020 and RI wells (GZ series wells) completed in 2018 and 2019. The well will first be agitated using a water jetting tool attached to a 4-inch diameter submersible pump. The pump and jetting tool will be lowered into the well. Following submersion below the static water table, the pump will be energized and pressurized water (jetting) used to loosen sediment on the borehole walls and agitate the water column. The pump and jetting fixture will be lowered to the bottom of the well and retrieved, with agitation occurring in both directions (lowering and raising of the pump). Immediately following retrieval, the jetting

Mr. Peter Britz | 10.27.2020 | 10424.016-06 | Page 1





fixture will be removed, and a hose will be attached to the pump discharge and lowered to approximately 25 feet below the static water table. Pumping will be initiated at an average rate of 10 gallons per minute (gpm) until water runs clear (<50 NTU) or until drawdown comes to within 5-feet of the pump intake, at which time the pump will be surged and lowered in 25 foot increments until the bottom of the well is reached (99 foot total well depth), with pumping occurring at each interval until water runs clear. Drawdown and pumping rates will be recorded during well redevelopment to aid in the design of the variable rate pumping test outlined below. Redevelopment water will be discharged to the ground in the area immediately adjacent to the well.

## Task 2 - Deep Bedrock Well Installation: MW-25

A new deep bedrock well (MW-25) will be installed in the area near existing shallow bedrock monitoring well GZ-105. The location for this well was based on the completion of surface geophysical surveying and detailed in the *Surface Geophysical Results and MW-25 Well Locating Memorandum* (Memorandum) dated October 2, 2020. These results were reviewed by the USEPA and NHDES with a Site meeting held on October 14, 2020. The location was agreed upon by the Agencies during the meeting with a representative of Glacier Drilling, LLC. (Glacier) in attendance. The well will be drilled to a depth of 250 feet into bedrock with approximately 30 feet of overburden anticipated as per the well installation and boring log information for GZ-105. GZ-105 is located approximately 50 west of the proposed MW-25 location. It should be noted that the location is within parcel 21-40, is currently owned by the State of New Hampshire, and managed by the New Hampshire Department of Transportation (NHDOT) Rail and Transit Bureau. Access for well installation will be obtained through the execution of a Temporary Access Agreement between CES and the NHDOT (not executed as of October 27, 2020). Costs for clearing of access from the easement to the proposed well location has not been included and will be provided pending execution of the access agreement.

#### **COMPENSATION**

Task	Cost Estimate
Task 1 - Bedrock Well Evaluation: BP-4	
CES Well Redevelopment – Labor and Expenses	\$1,700.00
Northeast Geophysical Services – Borehole Geophysical Logging	\$3,300.00
CES Borehole Geophysics Oversight – Labor and Expenses	\$1,250.00
Task Total	\$6,250.00
Task 2 - Well Installation and Borehole Geophysics: MW-25	
CES Drilling Oversight – Labor and Expenses	\$7,150.00
Glacier Drilling – MW-25 Well Installation	\$30,250.00
Northeast Geophysical Services – Borehole Geophysical Logging	\$4,850.00
CES Borehole Geophysics Oversight – Labor and Expenses	<u>1,450.00</u>
Task Total	\$43,700.00
Contract Amendment Total	\$49,950.00





Costs associated with this project will continue to be invoiced monthly, based upon the work completed during the invoice period. Work will be performed in accordance with contract Terms and Conditions previously executed by CLG and CES under 10424016. The proposed costs, upon approval by the CLG, will be added to the Deep Bedrock Investigation project budget (10424.016) under the terms and conditions and rate schedule used in the original project agreement. An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and evaluation of any additionally requested items requested by or approved by the CLG.

If you have any questions concerning this proposal, please contact the undersigned at (207) 404-5958.

CES, Inc.

Christopher F. Buckman, P.G. Senior Project Geologist

CFB/jnc Attachments

Sincerely,

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:
Printed Name:	_ City/State/ZIP:
Date:	_ Email (Optional):
Phone:	_ Fax:

# COAKLEY EXECUTIVE COMMITTEE Wednesday, November 4, 2020

# AGENDA

10:00 a.m., Teleconference

Per NH RSA 91-A:2, III (b) the Chair has declared COVID-19 outbreak an emergency and has waived the requirement that a quorum be physically present at the meeting pursuant to the Governor's Executive Order 2020-04, Section 8, as extended by Executive Order 2020-20, and Emergency Order #12, Section 3. Members will be participating remotely and will identify their location and any person present with them at that location. All votes will be by roll call.

## Please use the following to call in to the meeting:

Conference Call Dial-in #: 603-766-5646

Conference ID: 393626

I. Review the minutes of the September 30, 2020 Coakley Teleconference call.

## **OU-1**

## II. BILLS

# **City of Portsmouth**

A.	Invoice #	2900573590 dated	10/15/2020	50%	\$2,750.00
		Peter Britz & Financial services	s - 10/2020		
CES, Inc.		Payment Certifications dated: Invoices dated:	11/4/2020 9/21/2020		
		Services rendered through:	8/30/2020		
В	Invoice #	20203752		35%	\$662.38
		General technical assistance			
C.	Invoice #	20203750		100%	\$1,978.65
		Stormwater Work Plan, Fall 20	18 Sampling & Out of Scope		
D.	Invoice #	20203749		35%	\$1,546.12
		2019 Spring Sampling			

E.	Invoice #	20203748 2019 Fall Sampling		35%	\$210.73
F.	Invoice #	20203753 2020 Spring Sampling		35%	\$3,573.40
CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through:	11/4/2020 10/21/2020 9/27/2020		
G.	Invoice #	20204302 General technical Support		35%	\$924.00
Н.	Invoice #	20204300 Stormwater Work Plan, Fall 2018	Sampling & Out of Scope	35%	\$1,217.50
1.	Invoice #	20204303 2020 Spring Sampling		35%	\$2,828.60
J.	Invoice #	20204299 Fall 2020 Sampling		35%	\$6,886.15

# III. OU - 1 ACTION ITEMS

There were no action items.

# IV. OU - 1 RECORD ITEMS

A. OU – 1 Balance as of 10/30/2020: \$319,870.85

## **OU-2**

## v. BILLS

# **City of Portsmouth**

A. Invoice # 2900573590 dated 10/15/2020 50% \$2,750.00

Peter Britz & Financial services - 10/2020

CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through	11/4/2020 9/21/2020 8/30/2020		
B.	Invoice #	20203752 General technical Support		65%	\$1,230.12
C.	Invoice #	20203751 Bedrock Investigation Work Pla	an & Services	100%	\$8,778.95
D.	Invoice #	20203749 2019 Spring Sampling		65%	\$2,871.38
E.	Invoice #	20203748 2019 Fall Sampling		65%	\$391.37
F.	Invoice #	20203753 2020 Spring Sampling		65%	\$6,636.33
CES, Inc.		Payment Certifications dated: Invoices dated: Services rendered through	11/4/2020 10/21/2020 9/27/2020		
G.	Invoice #	20204302 General technical Support		65%	\$1,716.00
H.	Invoice #	20204301 Bedrock Investigation Activities	3	100%	\$16,927.21
l.	Invoice #	20204303 2020 Spring Sampling		65%	\$5,253.10
J.	Invoice #	20204299 Fall 2020 Sampling		65%	\$12,788.55

# VI. OU - 2 RECORD ITEMS

A. OU-2 Balance as of 10/30/2020: **\$781,666.22** 

## **COMBINED OU-1 & OU-2**

## VII. COMBINED OU - 1 & OU - 2 ACTION ITEMS

A. Report of Peter Britz of the City of Portsmouth dated 11/4/2020 with two attachments:

\*

CES Contract Amendment for surface water treatment and beaver mitigation, dated 10/23/2020 - Requires approval by CLG and signature.

\*

CES Contract amendment culvert blockage removal dated 10/2/2020 and signed by P. Britz on 10/21/2020. This is also Record Item VIII-B below

B. Update on meetings with two CPA firms:

Leslie Walker of Mason & Rich, PA

Frank Saglio of Wipfli LLP

## VIII. COMBINED OU - 1 & OU - 2 RECORD ITEMS

- A. CES Proposal for Fall 2020 Sampling and Reporting dated 9/23/2020; executed by Chair Spear 10/5/2020.
- B. Proposal for Surface Water Treatment, Access Agreement Preparation and Beaver Mitigation Contract Management Contract Amendment No 10424020-04, dated 10/2/2020; executed by Peter Britz 10/21/2020.
- C. Contract Amendment for Additional MW-6 Investigative Tasks, Contract # 10424016-05 dated 9/9/2020; executed by Chair Spear 9/30/2020.

## IX. OTHER BUSINESS

## X. SCHEDULE THE NEXT COAKLEY EXECUTIVE COMMITTEE MEETING

# Memo

To: Coakley Executive Committee
From: Peter Britz, Coakley Coordinator

Date: November 4, 2020
Re: Activity report

## **Surface Water Treatment**

Delivery of the filtration blankets has occurred and CES is making preparations to install the blankets this week or next. The blankets are designed to remove PFAS from surface water and will be installed before surface water leaves the GMZ and enters Berry's brook. This is the first phase of a pilot study to determine effectiveness of the treatment blankets. Testing will be conducted from samples taken from surface water before the blankets and from surface water samples taken after the blankets to determine the amount of PFAS if any that is removed. Additional surface water sampling rounds will occur every two weeks after deployment. The blankets will be removed for the winter and a plan for future installation will be prepared after all sample results have been reviewed.

## **Deep Bedrock Study**

New well installation has been scheduled. The new well will be installed on NHDOT property near GZ-105 and will be called MW-25. Installation is planned for November 25, 2020. However, before the well can be installed approval of an access agreement by the State of NH Department of Transportation is required. The agreement has been submitted and is awaiting NHDOT sign-off. Following new well installation transducers will be installed in select wells in preparation for the pump test at MW-6.

#### DOJ Bill

I had hoped to get Invoice 12 out before this meeting but were not able to compile the additional backup before this meeting as it took more time than expected to compile. I will be going over the final submission in the next week to prepare for submission to DOJ. Unless final review changes something the amount will be \$97,078.62.

#### **CES Contracts**

- 1) CES has submitted a contract amendment which includes time for CES to deploy the surface water treatment blankets, collect and process water quality samples and oversee beaver control all in support of the HB-494 pilot water quality project. This amendment is attached and requires approval by the Group and signature by the Chair. (10424020-05\_Surface Water Treatment\_Beaver Mitigation\_Contract Amendment\_rev01.pdf)
- 2) I signed off on one CES contract amendment under the \$10,000 threshold for the Group's signature. That contract is for a subcontractor to remove the blockage of a culvert. This contract was for a total of \$8,625.00. The signed contract is attached as (10424020-04\_Culvert Blockage Removal\_Contract Amendment\_signed.pdf)



# Engineers • Environmental Scientists • Surveyors

October 23, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, New Hampshire 03801

RE: Proposal for Surface Water Treatment Remedy and Beaver Mitigation Contract Management

Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire Contract Amendment No. 10424020-05

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment and description of services to the Coakley Landfill Group (CLG) for the implementation of a surface water treatment remedy, beaver mitigation contract management, and culvert blockage removal at the Coakley Landfill Superfund Site (Site). The Scope of Services for this contract amendment is based on the Surface Water Evaluation Scope of Work (Scope of Work) and the Surface Water Treatment Pilot Study Memorandum (Memorandum). These were developed by CES on behalf of the CLG and submitted to United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on January 22, 2020, and October 9, 2020, respectively.

In addition to the Scope of Work, some activities (NHDOT temporary access agreement and USDA contracting) were requested by the CLG. The implementation of a surface water treatment remedy in accordance with House Bill 494 (HB 494) is outlined in the HB 494 - Surface Water Treatment Pilot Study Memorandum (Memorandum) submitted to the NHDES and USEPA on September 17, 2020 with comments provided by the NHDES on October 1, 2020. The Memorandum outlined the treatment area, selected remedy, remedy deployment, effectiveness monitoring, remedy evaluation, and reporting.

#### **SCOPE OF SERVICES**

The following scope of services includes those items required to support the ongoing Surface Water Evaluation and HB 494 Surface Water Treatment Remedy (Remedy). These tasks include beaver dam removal, beaver mitigation, and implementation of the Remedy as detailed below.

Task 1 | Surface Water Treatment Remedy: The remedy to address HB 494 will be implemented in accordance with the Memorandum. The implementation is comprised of three primary tasks that include remedy deployment, evaluation sampling, and data analysis and reporting.

Mr. Peter Britz | 10.23.2020 | 10424.020-05 | Page 1





#### Task 1A: HB 494 Remedy Deployment

In accordance with the Memorandum, BAM blankets will be deployed within the channel located at the north end of the Groundwater Management Zone (GMZ) prior to entering a box culvert that underlies the former railroad easement right-of-way. These blankets will be spaced evenly along the length of the channel and be affixed to the channel sidewalls in accordance with the Memorandum. Costs associated with the deployment include the purchase of the BAM material and labor to prepare the channel and deploy the blankets. A total of six BAM blankets will be purchased that are approximately 3-ft by 3-ft and secured within the channel to promote flow through the media while limiting any buildup of detritus or sediment around the blankets. Channel prep will include:

- Clearing of brush along the length of the channel;
- Removal of the beaver dam to lower the impounded water level;
- Repair of channel sidewalls where granite/concrete blocks have fallen into the waterway;
- Removal of any accumulated debris at the ends of the channel; and
- Placement of a screen upstream of the deployed blankets to catch debris before reaching the channel and blankets.

Once complete, channel elevations will be surveyed relative to known staff gauge locations and documented. Blanket deployment will include several activities as outlined in the Memorandum and will include:

- Establish pre- and post-treatment sampling locations within the treatment area;
- Deployment of the BAM blankets along the length of the channel;
- Measure flow rates within the channel prior to and following treatment; and
- Verify the flow of water through the blankets/media and document accordingly.

### Task 1B: Evaluation Sampling

The evaluation of BAM effectiveness will require the collection of pre- and post-treatment samples free from the dilution that may occur via other sources of surface drainage (railroad easement ditches and roadways). Initial pre- and post-treatment sampling will occur at the time of deployment with subsequent pre- and post-treatment sampling occurring every two weeks following remedy deployment (up to three total post-treatment samples for the 2020 season). Due to the current schedule, it is proposed that the blankets will be removed in mid to late November to reduce the likelihood of damage to the blankets from freezing or the potential buildup of ice.

#### Task 1C: Data Analysis and Reporting

The effectiveness of the blankets will be evaluated based on their achievement of a reduction of PFAS in the surface water and will be based on a percent reduction of measured PFAS concentrations. Recommendations for future remedy deployment will be made in the Spring of 2021 and whether the evaluation of floating booms (or other BAM products) will be required upstream of the blankets. These recommendations may include the use of alternative remedy products as presented to the CLG in the Surface Water Treatment Options – HB 494 Memorandum dated February 19, 2020. Reporting will include the documentation of the deployment geometry, analytical results, and overall evaluation of the remedy as deployed. The report will include recommendations for modifications to the remedy, if any, to maintain the remedy objective.



Task 2 | Beaver Mitigation Contract Management: It was requested by the CLG for CES to enter into and manage the beaver mitigation contract with the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS). This effort involved the preparation and signing of a Cooperative Service Agreement (CSA) between the USDA and CES based on correspondence between CES, the CLG, and USDA. The CSA outlines the scope of services to be completed by the USDA in its efforts to mitigate beavers located in the wetland complex west and north of the Coakley Landfill. The contract period of performance is from August 26, 2020 to August 25, 2021 or until the budget proposed by the USDA has been expended. The USDA will invoice CES on a monthly basis for services performed in beaver mitigation with the CLG invoiced according to the terms and conditions of the original contract between the CLG and CES (10424020). This budget will be managed as a separate task and used for costs associated with the execution and management of the CSA between CES and the USDA.

#### IMPLEMENTATION SCHEDULE

Implementation of the Remedy will begin following the removal of beaver dams and blockages as outlined in the Memorandum and Scope of Work. Schedules will be dependent upon the availability of the subcontractor outlined in Task 3 and subject to the terms of the temporary access agreement with the NHDOT. These terms include approval by the NHDOT to enter the easement following notification by CES of the work schedule.

#### COMPENSATION

CES proposes the following not-to-exceed costs for the above-mentioned tasks, as well as the breakdown for each task.

TASK	DESCRIPTION	COST ESTIMATE
1A	HB 494 Remedy Deployment  Channel Preparation Beaver Dam Removal	CES Labor and Expenses \$2,600.00
	Remedy Deployment  Water Flow Measurements	Treatment Media: \$2,200.00
		Task Total: \$4,800.00
18	Remedy Evaluation Sampling  Complete Three Pre- and Post-treatment Sampling Events Laboratory Analysis of Collected Samples for PFAS	CES Labor and Expenses \$2,450.00
	200 Last, Film, St. Co. Co. Co. Co. Co. Co. Co. Co. Co. Co	Laboratory Analytical Costs: \$2,400.00
		Task Total: \$4,850.00
1C	Data Analysis and Reporting	CES Labor: \$4,100.00
		Task Total: \$4,100.00
2	Beaver Mitigation Contract Management  Execution and management of CSA between CES and	CES Labor: \$325 00
	USDA-APHIS.	USDA Contract: \$5,570 0
		Task Total: \$5,895.00
	TOTAL	\$19,645.00

Mr. Peter Britz | 10.23.2020 | 10424.020-05 | Page 3





The not-to-exceed budgets listed above includes costs associated with document preparation and review, sampling equipment/meters and consumables (where required), sub-contractors, labor, and reimbursable expenses. Task budgets will be tracked individually as Task 2 includes a separate cost-not-to-exceed subcontract with the USDA that may not be used in its entirety.

Costs for this project will be invoiced monthly, based upon the work completed during the invoice period. CES is prepared to initiate work on this project upon receipt of a signed copy of this contract amendment.

#### **AUTHORIZATION**

CES is prepared to initiate work on this project upon authorization by the CLG. Work will be performed in accordance with the contract Terms and Conditions and Rate Schedule previously executed by CLG and CES under contract 10424.020. The proposed costs, upon approval by the CLG, will be added to the Stormwater Investigation project budget (10424.020). An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and an evaluation of any additional items requested or approved by the CLG.

If you have any questions concerning this proposal or if additional services are needed, please contact me at (207) 404-5958. CES, Inc. appreciates this opportunity to be of service to the CLG.

Sincerely, CES, Inc.

Christopher Buckman, P.G. Senior Project Manager

CFB/jnc

Acceptance and Authorization to Proceed on behalf of Coakley Landfill Group:

Signature:	Billing Address:	
Printed Name:	City/State/ZIP:	
Date:	Email (Optional):	
Phone:	Fax:	



# Acceptance on behalf of CES, Inc.:

Signature:	Billing Address:	
Printed Name:	City/State/ZiP:	
Date:	Email (Optional):	
Phone:	Fax:	



## Engineers • Environmental Scientists • Surveyors

October 2, 2020

Mr. Peter Britz
Coakley Project Coordinator
Coakley Landfill Group
1 Junkins Avenue
Portsmouth, NH 03801

RE:

Proposal for Surface Water Treatment, Access Agreement Preparation, and Beaver Mitigation Contract Management | Coakley Landfill Superfund Site | North Hampton and Greenland, New Hampshire Contract Amendment No. 10424020-04

#### Dear Peter:

CES, Inc. (CES) is pleased to submit the following contract amendment and description of services to the Coakley Landfill Group (CLG) for the removal of a culvert blockage at the Coakley Landfill Superfund Site (Site). The Scope of Services for this proposal is based on the Surface Water Evaluation Scope of Work (Scope of Work) developed by CES on behalf of the CLG and submitted to United States Environmental Protection Agency (USEPA) and New Hampshire Department of Environmental Services (NHDES) on January 22, 2020. The Scope of Work was developed as per USEPA request on November 22, 2019 in its response to the Stormwater Investigation Report submitted on September 24, 2019. The USEPA and NHDES provided comments to the Scope of Work in a letter dated April 2, 2020 (provided via email correspondence on April 6, 2020). The following proposal is designed as an amendment to existing Stormwater Investigation contract (10424020-03R) provided to the CLG on May 20, 2020 and executed between CES and the CLG on June 17, 2020.

## **SCOPE OF SERVICES**

The following scope of services includes the item(s) required to support the ongoing Surface Water Evaluation and HB 494 Surface Water Treatment Remedy (Remedy) implementation. This task includes culvert blockage removal and subcontractor oversight on behalf of the CLG as detailed below.

Task 1 - Culvert Blockage Removal: Due to a blockage of the culvert by beaver activity located north and west of the landfill, surface water is unable to flow from areas east of the railroad easement to areas west located within the larger wetland complex. As such, the removal of this blockage is required to facilitate ongoing Surface Water Evaluation and Remedy implementation

Mr. Peter Britz | 10.02.2020 | 10424020-04 | Page 1





activities. CES will subcontract with MAC Construction & Excavation, LLC (MAC) to remove the blockage and restore flow between these two wetlands. Material removed during this process will be side casted either side of the easement but within the boundaries of the parcel. These activities have been approved through the execution of a temporary access agreement between CES and the New Hampshire Department of Transportation (NHDOT) on August 19, 2020. CES will provide oversight of the culvert blockage removal and will consist of photo documentation of the removal and coordination with the subcontractor to ensure the work area is secured and left in a condition so as not to result in negative impacts to the easement. Subcontractor oversight will be provided in accordance with conditions of the access agreement between CES and NHDOT.

# IMPLEMENTATION SCHEDULE

Schedules will be dependent upon the availability of the subcontractor outlined above and subject to the terms of the temporary access agreement with the NHDOT. These terms include approval by the NHDOT to enter the easement following notification by CES of the proposed work schedule.

## COMPENSATION

Removal of the culvert blockage is in addition to the scope of services provided in Task 5 (Beaver Dam Removal Assistance) of amendment 10424020-03R. This task, as originally provided, was used in procurement of the access agreement with the NHDOT and contracting with the United States Department of Agriculture (USDA) for beaver mitigation services. CES proposes the following not-to-exceed costs for the above-mentioned task.

TASK	DESCRIPTION	CES Labor and Expenses: \$1,200.00 Subcontractor Costs: \$7,425.00	
1	Culvert Blockage Removal Subcontractor oversight and documentation on behalf of CLG,		
	TOTAL	\$8,625.00	\$7,425.00

The not-to-exceed budget listed above includes costs associated with sub-contractors, labor, documentation of blockage removal, and reimbursable expenses. Costs associated with subcontractor approval and coordination with the NHDOT are being managed through the budget included under Task 8 (HB 494 Technical Assistance) of Contract Amendment 10424020-03R.

Costs for this project will be involced monthly, based upon the work completed during the invoice period. CES is prepared to initiate work on this project upon receipt of a signed copy of this contract amendment.





## **AUTHORIZATION**

Sincerely,

CES is prepared to initiate work on this project upon authorization by the CLG. Work will be performed in accordance with the contract Terms and Conditions and Rate Schedule previously executed by CLG and CES under contract 10424020. The proposed costs, upon approval by the CLG, will be added to the Stormwater Investigation project budget (10424020). An estimate to completion will be prepared when 25 percent of the budget remains. This estimate will include an analysis of remaining contracted tasks and an evaluation of any additional items requested or approved by the CLG.

If you have any questions concerning this proposal or if additional services are needed, please contact us at (207) 795-6009. We appreciate this opportunity to be of service to the CLG.

CES, Inc.	
cerzz	
Christopher Buckman, P.G. Senior Project Manager	
CFB/jok Enc	
Acceptance and Authorization to Proceed on I	behalf of Coakley Landfill Group:
Signature: 1 to 1	Billing Address: 1 Junkiles Arc
Printed Name: Peta Britz	_ City/State/ZIP:
Date: 10/21/20	_ Email (Optional): DIba has cityef proposed com
Phone: 603 610-7215	_Fax:
Acceptance on behalf of CES, Inc.:	
Signature:	Billing Address: 415 GISBON ST SUITEZED
Printed Name: L'MILISTVIHEL DELLANA	City/State/ZIP: LEWIS TON, MC 04240
Date: 10/7: /2028	Email (Optional): Chuckman C Cestuc Use Cong
Phone: 707 404 5959	Fax:





# **MEMO**

To: Peter Britz, Coakley Landfill Group

From: Christopher Buckman

Re: Surface Water Treatment Options - House Bill 494

Date: September 17, 2020

New Hampshire House Bill 494 (HB 494) requires that the New Hampshire Department of Environmental Services (NHDES) propose a remedy to "ensure the substantial reduction of the contaminants entering Berrys Brook from the Coakley Landfill Superfund site." The Coakley Landfill Group (CLG) has evaluated available treatment technologies feasible in design and implementation to address HB 494 requirements.

HB 494 does not define specific contaminants to be addressed, however, the United States Environmental Protection Agency (USEPA) and NHDES focus has primarily been on per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. Given that 1,4-dioxane has generally not been detected in surface water samples outside the groundwater management zone (GMZ), this discussion of the proposed remedy will focus on reducing PFAS concentrations in general.

Investigations to date have demonstrated that PFAS in overburden and shallow bedrock groundwater discharge to the large wetland complex located west of the landfill. This complex ultimately becomes Berrys Brook, although a defined stream channel does not exist until the north end of the wetland complex, near Breakfast Hill Road, approximately 3,000 feet north of the landfill (**Figure 1**). Except during significant rain events, it appears that most or all of the PFAS entering the wetland complex result from the discharge of groundwater to the surface. This is supported by regular flow (baseflow) observed within the stream channel during prolonged periods of no measurable precipitation. During rain events, PFAS found in landfill stormwater discharge is also a source of contamination to the complex. For the reasons provided in this letter, the area near Breakfast Hill Road where the defined stream channel exists is the most appropriate location for treating PFAS that enter Berrys Brook from the Site. Although the treatment will not occur until after the PFAS has entered the headwaters of Berrys Brook, the system described below appears to be the most feasible way to treat the groundwater and periodic stormwater flows containing PFAS discharging to what becomes Berrys Brook.

The approach to treatment options will be the implementation of a passive remedy that requires minimal maintenance and provides an assessment of concentration reduction. The recommended remedy has proven capability to absorb PFAS and is designed to provide a reduction in PFAS concentrations exiting the GMZ. The treatment area, as illustrated on **Figure 1**, is generally located at the north end of the GMZ, west of the former railroad easement, and east of the

JN: 10424.020 | 09.14.2020 | Page 1





residential property located at 368 Breakfast Hill Road (where private well R-3 is located). Although this area is not within the current GMZ boundary, the area was submitted to the NHDES for inclusion within a proposed GMZ expansion area in December 2018.

The viability of the remedy will be based on its effective reduction of PFAS from the surface water. It is understood that bypass during high precipitation events and seasonal treatment during warm weather months (April through October), will be considered during implementation. These considerations will include placement within the treatment area to limit potential for flow restriction and seasonal deployment to avoid freezing conditions that may reduce remedy effectiveness. This technology allows for the addition of individual components to assess the additive benefit of each and determine which system element or combination of elements provides the best overall approach. Current commercially available technologies developed and tested for the removal of PFAS are focused primarily on the treatment of soil or groundwater, where the application, mixing, or rates of treatment can be more easily controlled. With variable rates of flow, changes in seasonal contaminant concentrations, icing over of the Brook during winter, sediment loading, and potential for contribution from multiple source areas, the treatment of surface water requires a different approach.

#### TREATMENT TECHNOLOGY

The following treatment technology has been shown to reduce the concentration of PFAS in groundwater (soil mixing and permeable reactive barriers) and offers a potential for application in the passive treatment of surface water. The treatment of surface water has not been as widely investigated or implemented as that for soil and groundwater, in large part due to limited established surface water regulatory standards. The passive treatment option discussed below is capable of being scaled to address future objectives and take into consideration the characteristics of the identified treatment area.

#### Bioavailable Absorbent Media (BAM)

BAM is a recycled cellulose bio-mass product that provides a substrate for contaminant absorption. The characteristics of BAM, analogous to that of granular activated carbon (GAC), allows for a large surface area per unit weight of material for sorption to take place. BAM is a trademark material manufactured and marketed by ORIN Technologies, LLC. (ORIN). Implementation to date has been primarily though soil blending and injection; however, ORIN has been treating surface water and stormwater passively through deployment of floating booms and curtains/blankets containing BAM (Attachment A) within stormwater vaults and is comparable to the passive treatment of surface water being proposed at the Site.

#### **EVALUATION REQUIREMENTS**

BAM requires specific criteria for proper evaluation that include, but are not limited to, information on flow rates, defining a test area or fixture to hold the media, access to the treatment area, and a sampling schedule to determine the effectiveness of the remedy components. Flow rate measurements will be made as part of the surface water evaluation, with baseline flow measurements scheduled following beaver dam removal and prior to deployment of the remedy. Access to the proposed treatment area has been coordinated between the New Hampshire Department of Transportation and CES through the execution of an access agreement dated August 19, 2020. It is anticipated that BAM will provide the needed flexibility with regards to meeting HB 494 implementation requirements with little maintenance required beyond deployment. This maintenance includes sampling for assessment of PFAS removal and periodic inspection for debris removal (leaves and detritus) and water passage.



#### Treatment Area

The treatment area is at the north end of the GMZ and located where Berrys Brook transitions from flow within an engineered channel and box culvert to a natural channel (**Figure 1**). The south end of this transition is currently identified by the presence of a beaver dam where a surface water impoundment has been created. The portion of the treatment area selected for deployment of the remedy is the channel that exits the wetland headwaters of Berrys Brook immediately north of the dam before entering a box culvert and heading east under the railroad easement to the outfall located south of Breakfast Hill Road (**Figure 1**). This location provides regular flow throughout the year, is clearly defined with no outside contribution from railroad easement drainage features, and is an area easily accessible for implementation and monitoring. These characteristics, together with the length, width, and depth of the channel, supports the deployment of BAM-filled blankets.

The area located behind the current beaver dam impoundment is well-suited for the deployment of floating booms; however, this impoundment will undergo changes in width and depth following the removal of the beaver dam and will require reassessment for remedy options following dam removal (**Figure 1**). As such, the use of blankets within the channel will be the primary focus of the remedy assessment once surface water levels reach an equilibrium level following dam removal as discussed below. Beaver mitigation and dam removal efforts are ongoing at the time of this memorandum.

#### Evaluation Sampling

The evaluation of BAM effectiveness will require defined sample locations for pre- and post-treatment free from the dilution that may occur via other sources of surface drainage (railroad easement ditches) with long-term viability determined based on the effectiveness of PFAS removal in attaining the statutory criterion.

Baseline sampling will occur in conjunction with the regular Fall groundwater and surface water sampling event required under the GMP. This sampling is typically completed in late September/early October of each year and will include the establishment of a sampling location within the specified channel where water that has been in contact with the BAM can be sampled for an evaluation of PFAS removal. The nearest downstream surface water sampling location (SW-110) will continue to be sampled as part of the Fall event but will not be considered a representative post-treatment sample due to the contribution of untreated surface drainage (i.e., easement ditches and surface runoff) and unknown contribution to surface water from within the inaccessible box culvert by infiltration and seepage of precipitation.

The first BAM component to be evaluated will be blankets placed within the channel as identified above. One end of each blanket placed in the channel will be anchored to each side of the channel at the water surface allowing for the flow of water over and under the blankets thus facilitating the greatest surface area to be in contact with the water. It is currently anticipated that up to four blankets will be deployed in the channel, spaced evenly along its length. Pre-treatment sampling will occur upstream of the blankets with post-treatment samples collected downstream, immediately before where the channel enters the box culvert under the easement.

Initial post-treatment sampling will occur every three weeks following deployment (up to three total post-treatment samples for this season). Due to the current schedule, it is proposed that the blankets will be removed in November to reduce the likelihood of damage to the blankets from freezing or the buildup of ice. The effectiveness of the blankets will be evaluated based on their achievement of a substantial reduction of PFAS in the surface water. Recommendations will be made for the deployment of blankets in the Spring of 2021 and whether the evaluation of floating booms (or other BAM products) will be required upstream of the blankets. Each system component deployed as part of the remedy will be evaluated separately to assess the benefit



each has on the overall reduction of PFAS with changes in system design based on review of post-treatment analytical results.

Should the evaluation of floating booms be needed as part of the remedy implementation, a sampling location immediately upstream of the booms will be established for pre-treatment collection. Post-treatment sampling for the booms will be performed at the blanket evaluation pre-treatment location. Analysis will be completed for the full list of PFAS compounds as included in **Attachment B** to allow for a more direct comparison with surface water samples collected in accordance with the GMP.

## **IMPLEMENTATION SCHEDULE**

The selected remedy will be implemented during Fall 2020 following beaver mitigation efforts and dam removal. Beaver mitigation will be completed by the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS), with dam removal completed by the CLG. It is anticipated that following dam removal, the equalization of water levels within the wetland complex (east and west of the easement) will be required and will be monitored through periodic visual observation of surface water levels and the gauging of water levels within piezometers located in each area. These piezometers will be installed in locations as proposed in the Surface Water Evaluation Scope of Work (CES, 2020) and include locations PZ-8 and PZ-9; however, may require the installation of a surface water gauging location between BB-1 and BB-2 to provide information on stabilized surface water levels.



## FIGURE 1

JN: 10424.020 | 09.08.2020

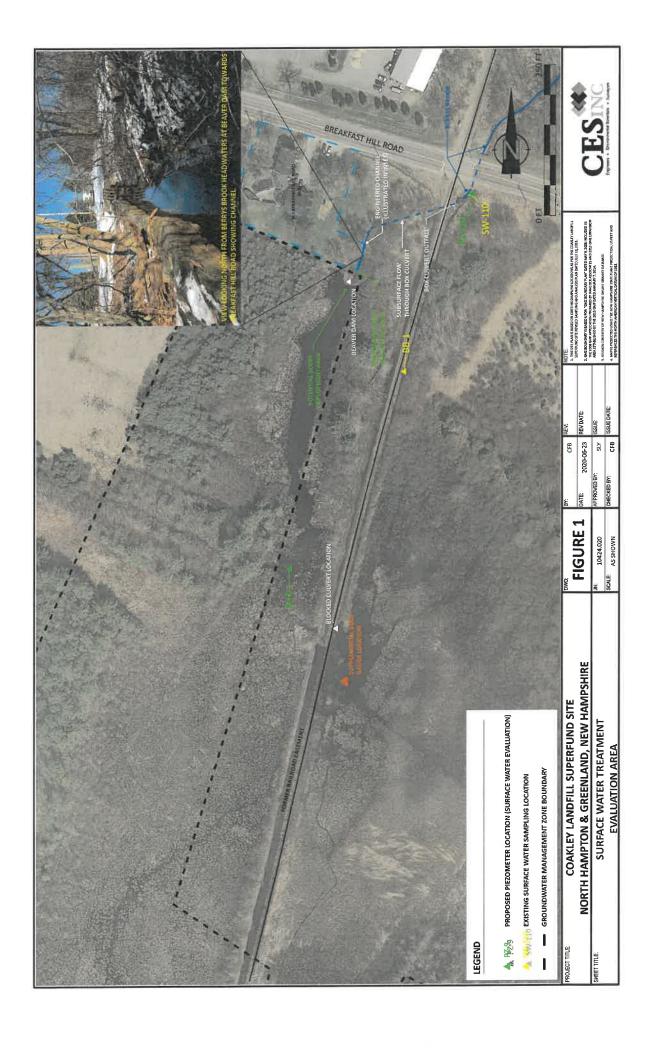


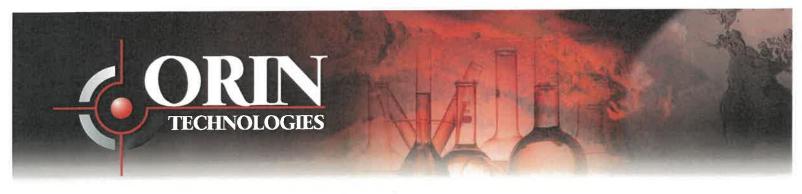
## **ATTACHMENT A**



## **ATTACHMENT B**

		9	

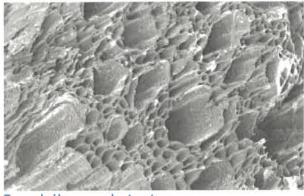




## Bioavailable Absorbent Media (BAM)

BAM is a sustainable, pyrolized, recycled cellulosic bio-mass product (>80% fixed carbon) derived from a proprietary blend of recycled organic materials with a high cation exchange and an estimated half-life of 500 years. BAM has diverse pore sizes with a minimum total surface area of up to 1,133 square meters per gram.

BAM has numerous synergistic qualities and is relatively affordable in large quantities for remediation purposes for both soils and groundwater. It has the ability to provide ample usable surface area for maximizing microbial colonization and thereby an active microbial community. Due to its unique 'honeycomb' structure, BAM has the ability to provide increased pore space for the different strains of microbes. Most importantly, BAM's honeycomb structure allows for maximum contact (bio-availability through high sorbency). This allows for complete degradation of the contaminant.



**Example Honeycomb structure** 

## Advantages

- > Immediate clean up of groundwater through absorption
- > Treats both soils and groundwater
- > Effective on wide range of hydrocarbons, chlorinated solvents, and some heavy metals
- Absorbed contaminants are treated biologically, and can be additionally treated through oxidation or chemical reduction
- Long lasting treatment with no additional costs after initial application
- ➤ Effective as a standalone and works simultaneously with various treatment chemistries

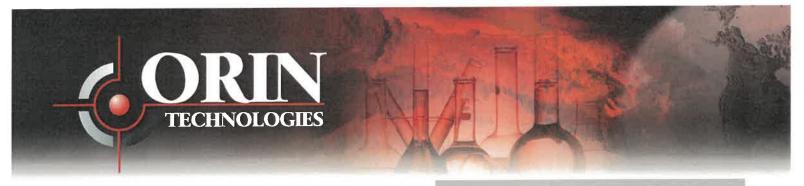
Phone: 608-838-6699

Fax: 608-838-6695

The unique absorption capability of BAM prevents exterior surface microfilm buildup. This allows BAM to absorb contaminants for more productive bioattenuation of contaminants over a longer period of time. Granular Activated Carbon (GAC) primarily <u>adsorbs</u> contamination to the surface of the media, which then is subject to bio-film development, preventing further adsorption. As a result, BAM has been proven to supply long term maintenance free remedial abilities over GAC. Laboratory tests have also shown that BAM has significantly more absorptive capacity than commercially available GAC products.

Email: <a href="mailto:lkinsman@orinrt.com">lkinsman@orinrt.com</a>

Web: www.orinrt.com



## **Application**

The diverse honeycomb structure has various size pore openings. This variation in pore size enables BAM to be efficient at storing CO2, treatment chemistries, and absorbing multiple contaminants from large chain structures to small chemical compounds. The greater storage capacity allows for favorable environments for the long-term destruction of contaminants. In recent vears, the focus at TCA contaminated sites deepened to also investigate 1, 4-Dioxane. Also, Per and Polyfluoroalkyl Substances (PFASs) are also being investigated, especially at site where PFA containing fire retardants were used. Research for their adverse health effects of these emerging contaminants led to the EPA establishing new Minimal Risk Levels for both of the contaminants, and treatment solutions will need to be employed. Through ORIN's continued research, BAM has been successful at treating 1, 4-Dioxane, PFASs, and other listed contaminants.

BAM's exceptional ability to work alone in both aerobic and anaerobic conditions with numerous other treatment chemistries makes it a flexible treatment choice. This characteristic follows ORIN's belief of choosing the right treatment option for the contaminant based on the sites specific parameters. Chemical oxidation or chemical reduction work more effectively than traditional methods due to the increased contact between the treatment chemistry and the absorbed contaminant. In addition to contaminant degradation

#### Some Examples of Treated Contaminants

## **Total Petroleum Hydrocarbons**

- DRO
- GRO
- ORO

## **Aromatic Hydrocarbon Compounds**

BTEX

#### Chlorinated - VOCs

- 1-4,-Dioxane
- · Carbon Tetrachloride
- -ethenes(PCE/TCE)
- -ethanes(DCA/PCA)

## Semi Volatile Organic Compounds

- Naphthalene
- · Pyrene's
- · Phenol's

#### **Pesticides**

- BHC's
- DDT
- Toxaphene

#### Per/Polyfluoroalkyl Substances (PFASs)

Email: <a href="mailto:lkinsman@orinrt.com">lkinsman@orinrt.com</a>

Web: www.orinrt.com

- Perfluoroctane Sulfonate (PFOS)
- Perfluorooctanoic Acid (PFOA)

#### And More!

on the absorption site, chemical treatment addresses residual contaminant that is bound to the soil. Again, this approach treats soils and groundwater for both in-situ and ex-situ applications.

BAM can be utilized in conjunction with the following chemistries:

- > Peroxy Compounds
- > Carbon Sources

Phone: 608-838-6699

Fax: 608-838-6695

> Zero Valent Metals



## Attachment A EXPANDED PFAS ANALYTE LIST

	ANALYTE	CAS No.
PFPeA	Perfluoropentanoic Acid	2706903
PFBS	Perfluorobutane Sulfonic Acid	375735
PFBA	Perfluorobutanoic Acid	375224
PFUnA	Perfluoroundecanoic Acid	2058948
PFTrDA	Perfluorotridecanoate	862374876
PFTeDA	Perfluorotetradecanoic Acid	376067
PFOSA	Perfluorooctane Sulfonamide	754916
PFOS	Perfluorooctane Sulfonate	1763231
PFOA	Pentadecafluorooctanoic Acid	335671
PFNA	Perfluorononanoic Acid	375951
PFHxS	Perfluorohexane Sulfonate	355464
PFHxDA	Perfluorohexadecanoic Acid	67905195
PFHxA	Perfluorohexanoic Acid	307244
PFHpS	Perfluoroheptane Sulfonic Acid	375928
PFHpA	Perfluoroheptanoic Acid	375859
PFDS	Perfluorodecane Sulfonate	67906427
PFDoA	Perfluorododecanoic Acid	307551
PFDA	Perfluorodecanoic Acid	335762
MeFOSE	N-Methyl Perfluorooctane Sulfonamidoethanol	24448097
MeFOSAA	N-Methyl Perfluorooctane Sulfonamidoacetic Acid	2355319
MeFOSA	N-Methyl Perfluorooctane Sulfonamide	31506328
EtFOSE	N-Ethyl Perfluorooctane Sulfonamidoethanol	1691992
EtFOSAA	N-Ethyl Perfluorooctane Sulfonamidoacetic Acid	2991506
EtFOSA	N-Ethyl Perfluorooctane Sulfonamide	4151502
8:2 FTS	8:2 Fluorotelomer Sulfonate	39108344
6:2 FTS	6:2 Fluorotelomer Sulfonic Acid	27619972



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 1 – NEW ENGLAND 5 POST OFFICE SQUARE – SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

#### Via Electronic Mail

Date: See signature stamp below

Robin Mongeon, P.E.
Federal Sites Program Manager
New Hampshire Department of Environmental Services
Hazardous Waste Remediation Bureau
PO Box 95, 29 Hazen Drive
Concord, NH 03302-0095

RE: Coakley Landfill Superfund Site

Dear Robin.

As you know, the Coakley Landfill Group (CLG) submitted a memorandum titled Surface Water Treatment Options – House Bill 494, (the "Memo") dated September 17, 2020, and prepared by CES, Inc. to the State. Skip Hull, EPA's project manager for the Coakley Landfill Superfund Site (the "Site"), reviewed the Memo and provided comments back to Drew Hoffman via email on September 30, 2020. The Memo states that the "CLG has evaluated available treatment technologies feasible in design and implementation to address HB 494." I am writing to provide some general comments regarding the Memo and to reiterate a number of issues that have been raised before by EPA relative to the State law, HB 494.

Following review of the Memo, EPA considers the next steps to be a pilot study and not a permanent treatment to ensure the substantial reduction of the contaminants entering Berrys Brook from the Site as specified by State law HB 494. As a pilot study, the work described in the Memo is not a change to the current remedy detailed in the Record of Decision (ROD) and being implemented by the CLG in accordance with the Consent Decree (CD). If there are further efforts following the outcome of this pilot study to make this treatment permanent, EPA would first need to determine if the treatment constitutes a change to the remedy specified in the ROD (or that a change to the remedy is warranted), based on current site risks and whether the remedy is no longer protective of human health and the environment, before any such treatment could be implemented.

In addition, any work undertaken to address State law HB 494 can in no way impede or delay the ongoing implementation of the CERCLA remedy as provided in the ROD, or any other investigation work that has been directed by EPA such as the ongoing bedrock investigation, the upcoming well installation and the pumping test. As discussed previously with NHDES and

record item VIII-B 3-3-21

CLG, any work undertaken by CLG to address State law HB 494 that is not part of the required remedy or work directed by EPA is outside of the requirements detailed in the ROD and CD.

If you have any questions or would like to discuss this matter further, do not hesitate to contact me at (617) 918-1310, or at <a href="mailto:taylor.melissag@epa.gov">taylor.melissag@epa.gov</a>. In the meantime, EPA will continue to coordinate with DES regarding the CLG's efforts to address State law HB 494.

Sincerely,

MELISSA TAYLOR TAYLOR

Digitally signed by MELISSA TAYLOR Date: 2020.10.09 09:03:11 -04'00'

Melissa G. Taylor, Chief NH & RI Superfund Section

cc: Michael Wimsatt, NHDES RuthAnn Sherman, EPA Skip Hull, EPA