

January 9, 2020

Attention: Mr. Shane Nelson, RPM/OSC  
U.S. Environmental Protection Agency – Region 2  
290 Broadway, Floor 19  
New York, NY 10007-1866

**Subject: Quanta Resources Corporation Superfund Site, Operable Unit 1 (OU1), Edgewater, New Jersey, Progress Report: December 2019**

Dear Mr. Nelson

This letter is the progress report required pursuant to the U.S. Environmental Protection Agency (EPA) Consent Decree for the Remedial Design (RD) and Remedial Action (RA) at the Quanta Resources Corporation Superfund Site, OU1, which was finalized with the courts on March 11, 2013.

## **Health and Safety**

Through December 31, 2019, approximately 205,281 labor hours worked.

## **Work Completed**

The activities completed during December to comply with the Consent Decree are described in the following subsections. Figure 1 (attached) depicts the work activities completed as of the end of December.

### **OU1 General Civil Work**

- Supported site contractor operations and continued general site maintenance activities.
- Continued realignment of onsite utilities to accommodate future ISS activities.
- Continued final restoration activities at Segment A of the bulkhead.

### **OU1 ISS**

- Managed and maintained the soil stockpile in Area 7A.
- Completed debris removal and ISS activities at Tent 3-2 located in ISS Area 3A (northwest corner of Site) in all safely accessible cells within the tent footprint. Ten (10) complete cells (1,215 CY of material) were treated.
- Completed temporary capping activities at Tent 7-1 located in ISS Area 7B (adjacent to the bulkhead). Began disassembling tent to prepare to relocate the tent to its next location (Tent 7-2 located adjacent to the bulkhead immediately north of Tent 7-1).



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- Completed temporary capping activities of completed ISS cells in Area 8 outside of tents (north east corner of the site).

#### **OU1 Bulkhead Installation**

- Completed installation of permanent deadmen/tie-rod system in Segments D and E of the bulkhead inside Tent 7-1 located in ISS Area 7B (adjacent to the bulkhead).

#### **OU1 Vibration and Air Monitoring**

- Continued with vibration and movement monitoring. Observed no vibrations outside the project limits during December.
- Continued perimeter air monitoring in accordance with the Perimeter Air Monitoring Plan and the applicable adjustments/addendums.

#### **OU1 Offsite Waste Disposal**

- Non-Hazardous
  - Thirty-six (36) 25-cy dump trucks of soil to the Conestoga Landfill in Morgantown, PA.
- Hazardous
  - No Hazardous waste was transported from the Site in December.

#### **OU1 NAPL Recovery**

- Pump from RW4-2 repaired by manufacturer.
- Sentinel wells measured on December 19.

#### **Site Security, Maintenance, and Inspections**

- Completed weekly boom and SWPPP inspections on December 5, December 13, December 18, and December 27.

#### **Two-Week Look-Ahead**

- Resume NAPL pumping at RW4-2.
- Gauge sentry wells.
- Perform baildown test at RW4-2.
- Continue management of the soil stockpile in Area 7A.
- Complete disassembly of and relocate Tent 7-1 located in ISS Area 7B (adjacent to the bulkhead) to its next location at Tent 7-2 located in ISS Area 7B (adjacent to the bulkhead and directly north of the Tent 7-1 location).
- Begin loading out soil stockpiled inside Tent 3-2 located in ISS Area 3A (northwest corner of Site) for offsite disposal to prepare to relocate tent to its next location.



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- Begin debris removal and ISS activities in in Area 6B outside of tents (directly west of and adjacent to the Pier Building headhouse wall). Prepare to begin installation of permanent deadman and tie-rod system in this area.
- Complete final restoration of the iPark River Walk sidewalk in Area 6A (adjacent to and south of the Pier Building).
- Continue realigning onsite utilities to prepare for future ISS activities.

## Data and Submittals

### ISS Compliance Data Summary

All samples required to demonstrate ISS compliance with the unconfined compressive strength and permeability criteria, and the 90 percent leaching reduction goal have been collected as required by the approved remedial action work plan and QAPP this month. The ISS Results Dashboards (Attachment A) presents both results for 28-day cure time compliance samples and earlier conformance data results (that is, for cure times less than 28 days) where available. The first set of leaching results associated with Batch 5 have been received and are included within the dashboards. As detailed on the dashboard 7 out of 10 constituents have greater than 90% reduction in leaching surpassing performance criteria. All compliance sample results received in the past month met the ROD requirements.

### Air Monitoring

Provided perimeter and offsite air monitoring data when received (typically daily) to EPA. Results continue to show non-detects for naphthalene at the residential receptors during intrusive activities. These results were uploaded upon receipt to [www.quantaremediation.com](http://www.quantaremediation.com)

### Other Deliverables and Submittals

- Submitted to EPA on December 12 a request to perform additional treatment cells located in Area 6B (directly west of and adjacent to the Pier Building headhouse wall). EPA provided approved on December 17.
- Received comments from EPA on December 19 associated with the Annual Vapor Intrusion Monitoring Reports.

### Receipt of Approvals/Denials

EPA approved proposal to perform Area 6B (noted above) outside of tents

### Issues and Corrective Actions

No corrective actions were taken during this reporting period.

### Stakeholder Communication and Community Involvement

- Submitted the monthly progress report for November on December 10th.



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- Reviewed and updated the Honeywell website as needed. Coordinated preparation of written updates and maps and submitted progress photos.
- Tracked community concerns and complaints. In December, two community concerns were submitted to EPA by email associated with parking lot lighting unrelated to the OU1 remedial action.
- Provided weekly and as-needed progress updates for email distribution to pier tenants.
- Submitted weekly updates to EPA summarizing upcoming site activities.
- Uploaded daily air monitoring results to [www.quantaremediation.com](http://www.quantaremediation.com)

### **Activities Planned for Next 6 Weeks**

- Continue with NAPL recovery operations and submit the next quarterly data transmittal.
- Continue weekly boom inspections and SWPPP inspections and associated maintenance.
- Complete soil load-out activities for offsite disposal within Tent 3-2 (northwest corner of the site). Install temporary cap inside the tent once soil is loaded out, and begin to relocate the tent to the next location.
- Relocate Tent 7-1 in ISS Area 7B (adjacent to the bulkhead) to its next location at Tent 7-2 in ISS Area 7B (adjacent to bulkhead and just north of Tent 7-1 location). Begin debris removal and ISS activities inside Tent 7-2.
- Continue debris removal and ISS activities in Area 6B outside of tents (directly west of and adjacent to the Pier Building headhouse wall). Complete installation of the permanent deadman and tie-rod system for the bulkhead in Area 6B.

### **Schedule Update and Delays**

The schedule is currently being completed and will be provided once finalized. Phase 2 activities are anticipated to extend into mid to late 2020.

### **Percent Complete**

Work associated with the entire OU1 Remedial Action is approximately 64 percent complete.



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Please feel free to contact me at 267-250-7387 or Steve Coladonato, Honeywell Remediation Manager, at 302-791-6738 if you have any questions or comments regarding the Quanta project.

Sincerely,

Stephen J. Zarlinski  
Project Manager

Attachment – Figure 1 - ISS Status Map  
In Situ Solidification/Stabilization Results Dashboard

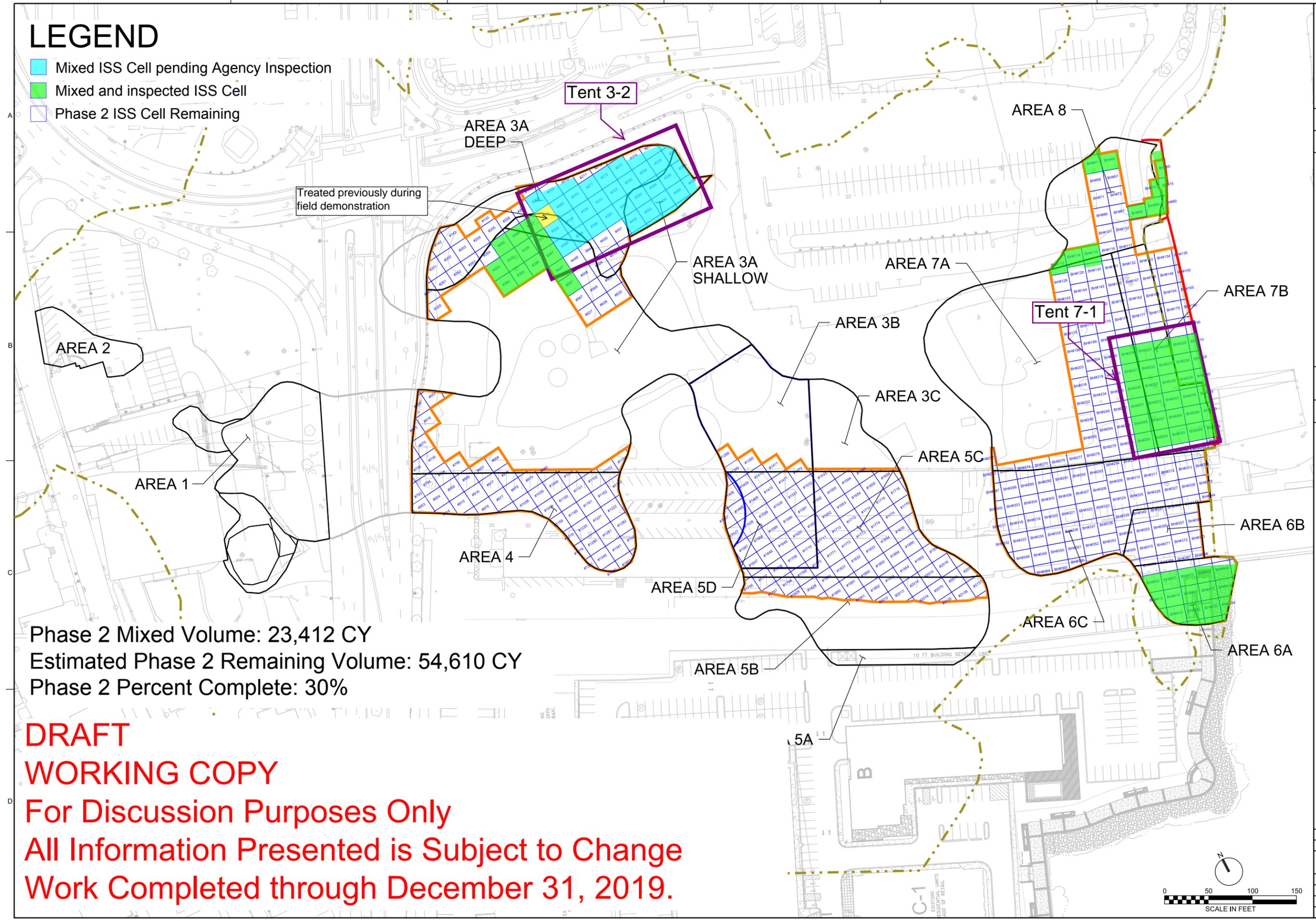
Copies to:

Clay Monroe (EPA)  
Steve Coladonato (Honeywell)  
Erica Bergman (NJDEP)  
Helen Fahy (Fahy Associates)  
Neil Ravensbergen (USACE)  
Frank Rossi (Boswell)  
Michael Johnson (USACE)  
Devin Sokolich (Hongkun USA)

Rich Puvogel (EPA)  
John Mojka (Honeywell)  
Greg Franz (Borough of Edgewater)  
Tim Johnson (Anchor QEA)  
Rich Gajdek (USACE)  
Neil Kolb (USACE)

# LEGEND

- Mixed ISS Cell pending Agency Inspection
- Mixed and inspected ISS Cell
- Phase 2 ISS Cell Remaining



Phase 2 Mixed Volume: 23,412 CY  
 Estimated Phase 2 Remaining Volume: 54,610 CY  
 Phase 2 Percent Complete: 30%

**DRAFT**  
**WORKING COPY**  
 For Discussion Purposes Only  
 All Information Presented is Subject to Change  
 Work Completed through December 31, 2019.

NO.		DATE		DR		REVISION		BY		APVD	
DSGN		EA MCKENNA		PA KARABAN		CHK		APVD			
HONEYWELL INTERNATIONAL INC. QUANTA RESOURCES CORPORATION SUPERFUND SITE Edgewater, New Jersey											
<b>JACOBS</b> CIVIL PHASE 2 ISS CELLS											
1"=50' VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING.											
DATE		428872									
PROJ		428872									
DWG		FIG-1									
SHEET		of									
FILENAME: 10-C-F201-9-24-19.dgn    PLOT DATE: 2019/09/25    PLOT TIME: 10:12:09 AM											

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### In Situ Solidification/Stabilization Results Dashboard, Tent 3-1 (Leaching Batch 5)

Quanta Resources Corporation Superfund Site, OU1

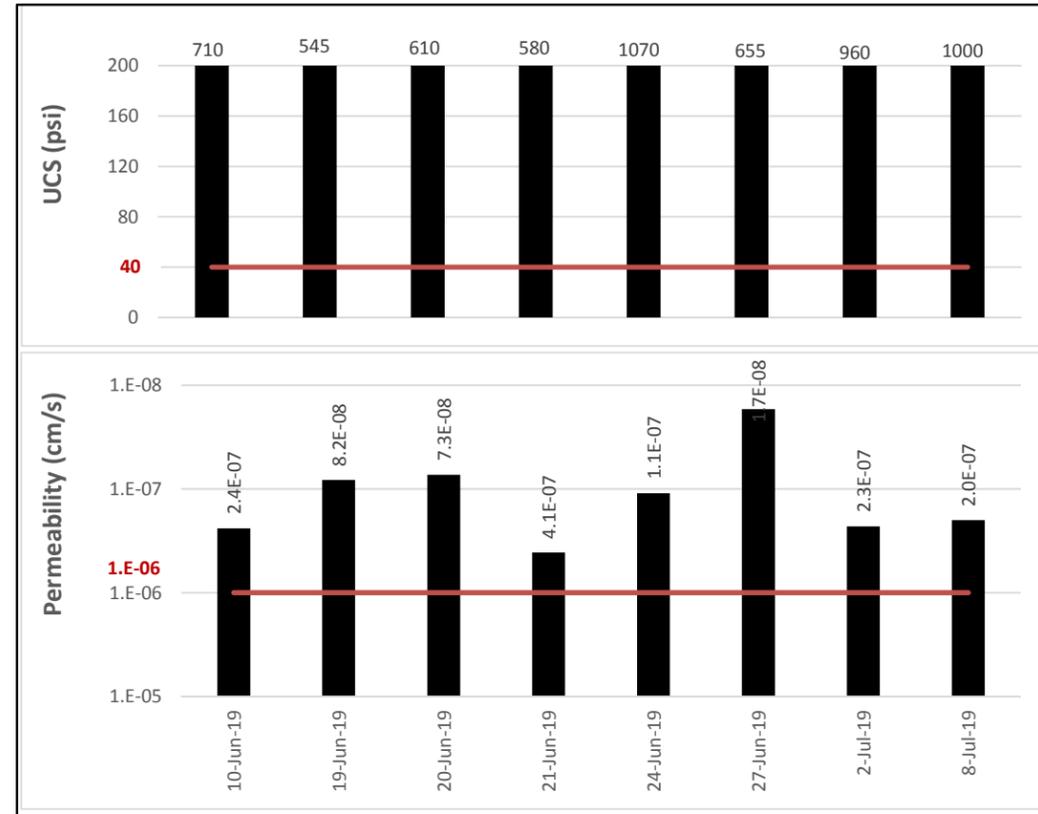
Data through: 12/22/2019

Tent	Date	Volume (CY)	Mix Design		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3-1	10-Jun-19	288	2%	6%	710	2.40E-07
3-1	19-Jun-19	167	2%	6%	545	8.20E-08
3-1	20-Jun-19	166	2%	6%	610	7.30E-08
3-1	21-Jun-19	280	2%	6%	580	4.10E-07
3-1	24-Jun-19	147	2%	6%	1070	1.10E-07
3-1	27-Jun-19	343	2%	6%	655	1.70E-08
3-1	2-Jul-19	343	2%	6%	960	2.30E-07
3-1	8-Jul-19	342	2%	6%	1000	2.00E-07

Total CY Mixed: 2076

Leaching Reduction by Constituent		
Site Constituent	8-Jul-19	
1 Arsenic	97%	
2 Benzene	99%	
3 Toluene	99%	
4 Ethylbenzene	99%	
5 Total Xylenes	99%	
6 Naphthalene	96%	
7 Acenaphthene	88%	
8 Acenaphthylene	94%	
9 Anthracene	NE	<1% tPAH
10 Benzo(a)anthracene	NE	<1% tPAH
11 Benzo(a)pyrene	NE	<1% tPAH
12 Benzo(b)fluoranthene	NE	<1% tPAH
13 Benzo(g,h,i)perylene	NE	Not detected
14 Benzo(k)fluoranthene	NE	<1% tPAH
15 Chrysene	NE	<1% tPAH
16 Dibenz(a,h)anthracene	NE	Not detected
17 Fluoranthene	NE	<1% tPAH
18 Fluorene	83%	
19 Indeno(1,2,3-cd)pyrene	NE	Not detected
20 Phenanthrene	53%	
21 Pyrene	NE	<1% tPAH
<b>Constituents Passing</b>	<b>7 of 10</b>	

Leaching calculations for each constituent provided in the ISS Memo for this Parcel. Boxed sample dates on table above indicate collection of a leaching sample. Constituents with 90+% reduction are shaded green. NE - Not Evaluated; constituent not detected in baseline sample or <1% of tPAH.



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected.

# In Situ Solidification/Stabilization Results Dashboard, Tent 3-2 (Leaching Batch 5)

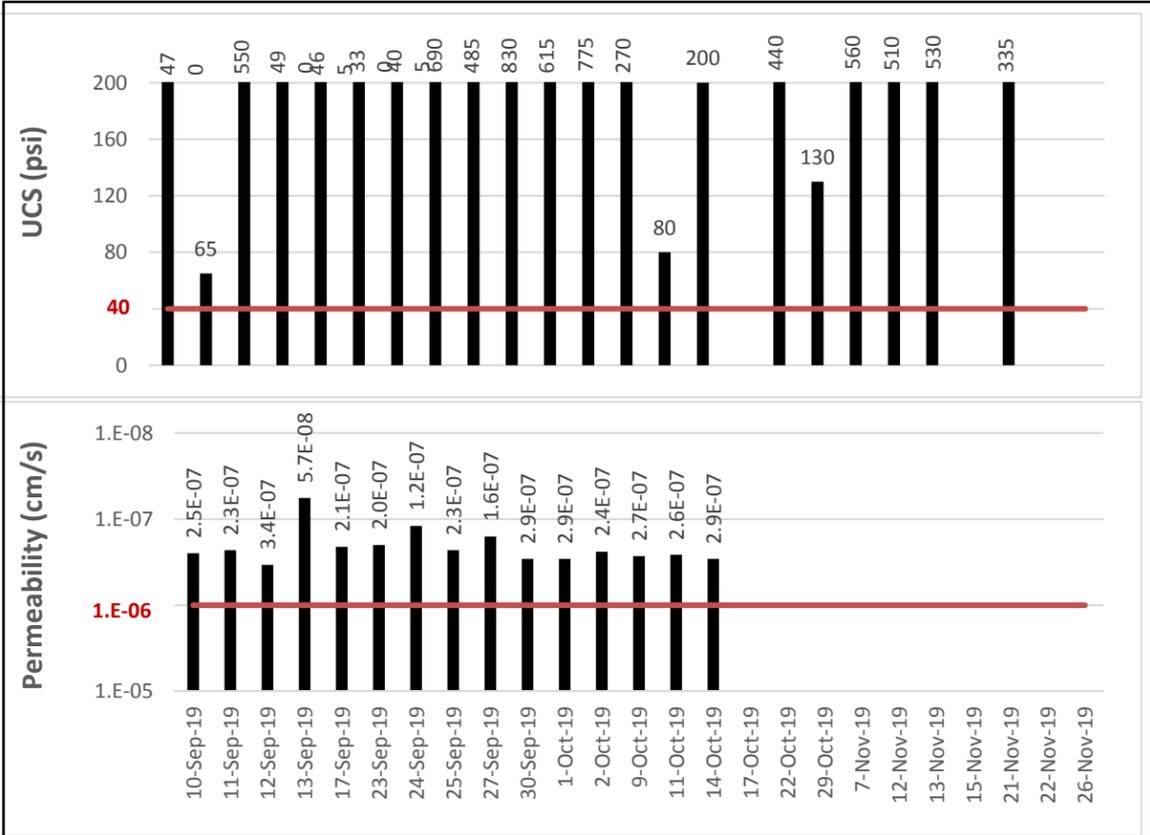
Quanta Resources Corporation Superfund Site, OU1

Data through: 12/22/2019

Tent	Date	Volume (CY)	Mix Design		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3-2	10-Sep-19	179	2%	6%	470	2.50E-07
3-2	11-Sep-19	339	2%	6%	65	2.30E-07
3-2	12-Sep-19	293	2%	6%	550	3.40E-07
3-2	13-Sep-19	182	2%	6%	490	5.70E-08
3-2	17-Sep-19	343	2%	6%	465	2.10E-07
3-2	23-Sep-19	342	2%	6%	330	2.00E-07
3-2	24-Sep-19	329	2%	6%	405	1.20E-07
3-2	25-Sep-19	328	2%	6%	690	2.30E-07
3-2	27-Sep-19	414	2%	6%	485	1.60E-07
3-2	30-Sep-19	304	2%	6%	830	2.90E-07
3-2	1-Oct-19	348	2%	6%	615	2.90E-07
3-2	2-Oct-19	355	2%	6%	775	2.40E-07
3-2	9-Oct-19	306	2%	6%	270	2.70E-07
3-2	11-Oct-19	320	2%	6%	80	2.60E-07
3-2	14-Oct-19	71	2%	6%	200	2.90E-07
3-2	17-Oct-19	301	2%	6%		
3-2	22-Oct-19	320	2%	6%	440	
3-2	29-Oct-19	273	2%	6%	130	
3-2	7-Nov-19	261	2%	6%	560	
3-2	12-Nov-19	327	2%	6%	510	
3-2	13-Nov-19	104	2%	6%	530	
3-2	15-Nov-19	203	2%	6%		
3-2	21-Nov-19	320	2%	6%	335	
3-2	22-Nov-19	92	2%	6%		
3-2	26-Nov-19	331	2%	6%		

Total CY Mixed: 6985

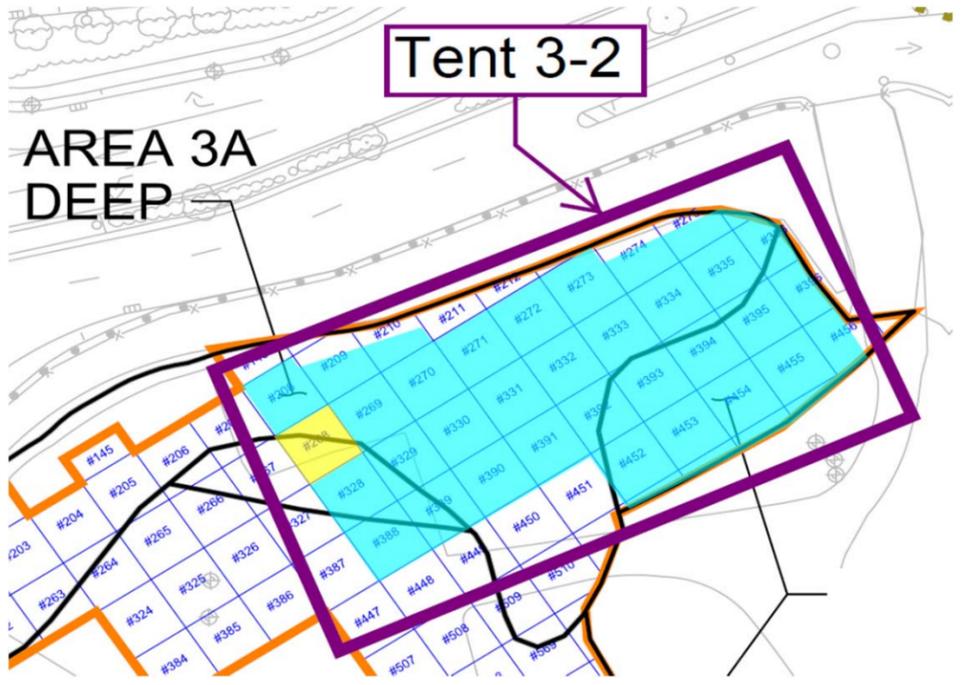
Data Pending



Leaching Reduction by Constituent			
Site Constituent	11-Oct-19	Site Constituent	11-Oct-19
1	Arsenic	12	Benzo(b)fluoranthene
2	Benzene	13	Benzo(g,h,i)perylene
3	Toluene	14	Benzo(k)fluoranthene
4	Ethylbenzene	15	Benzo(a)fluoranthene
5	Total Xylenes	16	Benzo(a)anthracene
6	Naphthalene	17	Fluoranthene
7	Acenaphthene	18	Fluorene
8	Acenaphthylene	19	Indeno(1,2,3-cd)pyrene
9	Anthracene	20	Phenanthrene
10	Benzo(a)anthracene	21	Pyrene
11	Benzo(a)pyrene		

Data Pending

Constituents Passing:



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected. Yellow cells were previously mixed during the ISS Field Demonstration.

### In Situ Solidification/Stabilization Results Dashboard, Tent 7-1 (Leaching Batch 6)

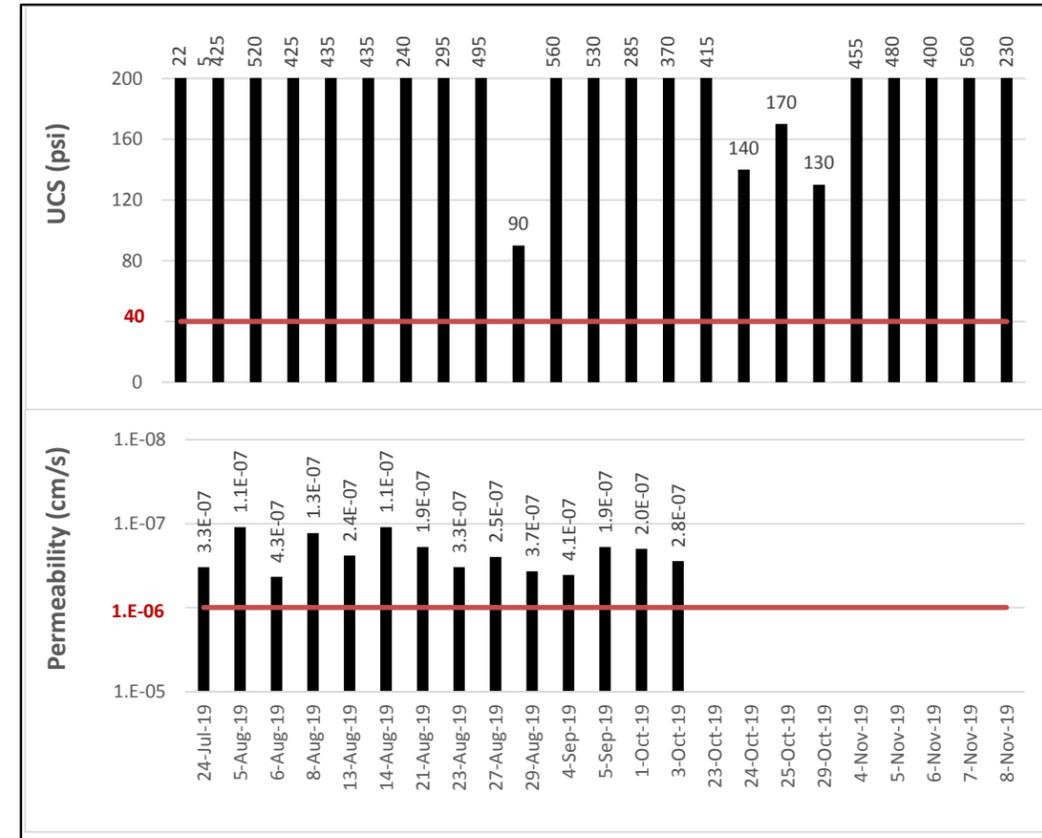
Quanta Resources Corporation Superfund Site, OU1

Data through: 12/22/2019

Tent	Date	Volume (CY)	Mix Design		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
7-1	24-Jul-19	536	2%	6%	225	3.3E-07
7-1	5-Aug-19	494	2%	6%	425	1.1E-07
7-1	6-Aug-19	488	2%	6%	520	4.3E-07
7-1	8-Aug-19	468	2%	6%	425	1.3E-07
7-1	13-Aug-19	502	2%	6%	435	2.4E-07
7-1	14-Aug-19	524	2%	6%	435	1.1E-07
7-1	21-Aug-19	354	2%	6%	240	1.9E-07
7-1	23-Aug-19	323	2%	6%	295	3.3E-07
7-1	27-Aug-19	291	2%	6%	495	2.5E-07
7-1	29-Aug-19	298	2%	6%	90	3.7E-07
7-1	4-Sep-19	335	2%	6%	560	4.1E-07
7-1	5-Sep-19	282	2%	6%	530	1.9E-07
7-1	1-Oct-19	457	2%	6%	285	2.0E-07
7-1	3-Oct-19	246	2%	6%	370	2.8E-07
7-1	23-Oct-19	596	2%	6%	415	
7-1	24-Oct-19	290	2%	6%	140	
7-1	25-Oct-19	308	2%	6%	170	
7-1	29-Oct-19	296	2%	6%	130	
7-1	4-Nov-19	260	2%	6%	455	
7-1	5-Nov-19	268	2%	6%	480	
7-1	6-Nov-19	159	2%	6%	400	
7-1	7-Nov-19	262	2%	6%	560	
7-1	8-Nov-19	276	2%	6%	230	

Total CY Mixed: 8311

Data Pending

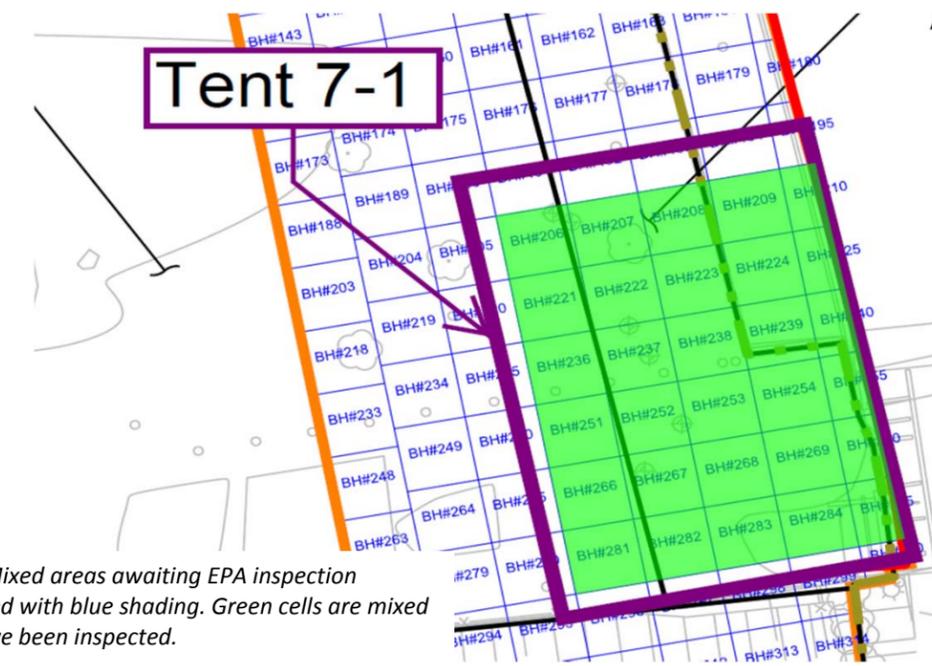


Leaching Reduction by Constituent			
Site Constituent	Site Constituent	Site Constituent	Site Constituent
1	Arsenic	12	Benzo(b)fluoranthene
2	Benzene	13	Benzo(g,h,i)perylene
3	Toluene	14	Benzo(k)fluoranthene
4	Ethylbenzene	15	Fluorene
5	Total Xylenes	16	Dibenz(a,h)anthracene
6	Naphthalene	17	Fluoranthene
7	Acenaphthene	18	Fluorene
8	Acenaphthylene	19	Indeno(1,2,3-cd)pyrene
9	Anthracene	20	Phenanthrene
10	Benzo(a)anthracene	21	Pyrene
11	Benzo(a)pyrene		

Constituents Passing

Leaching calculations for each constituent provided in Attachment 5 of the ISS Memo for this Parcel. Boxed sample dates on table above indicate collection of a leaching sample. Constituents with 90+% reduction are shaded green. NE

Data Pending



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected.

### In Situ Solidification/Stabilization Results Dashboard, NT-61 (Leaching Batch 7)

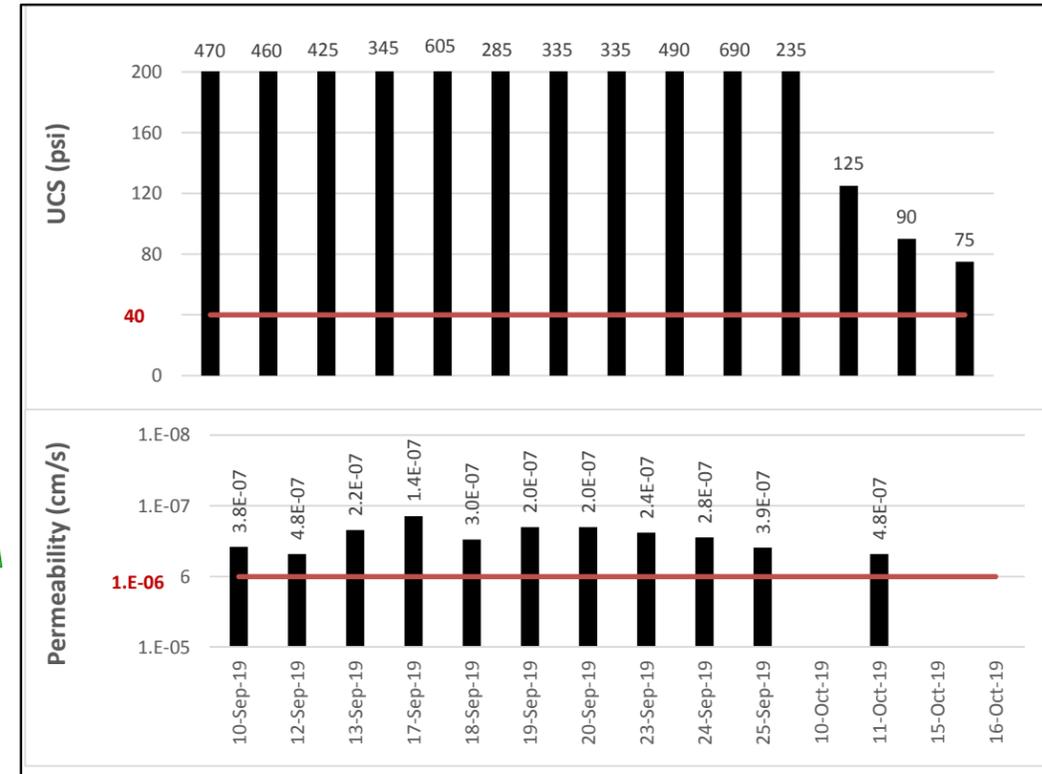
Quanta Resources Corporation Superfund Site, OU1

Data through: 12/22/2019

Area	Date	Volume (CY)	Mix Design		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
NT-61	10-Sep-19	237	4%	6%	470	3.8E-07
NT-61	12-Sep-19	247	4%	6%	460	4.8E-07
NT-61	13-Sep-19	220	4%	6%	425	2.2E-07
NT-61	17-Sep-19	292	4%	6%	345	1.4E-07
NT-61	18-Sep-19	266	4%	6%	605	3.0E-07
NT-61	19-Sep-19	354	4%	6%	285	2.0E-07
NT-61	20-Sep-19	239	4%	6%	335	2.0E-07
NT-61	23-Sep-19	244	4%	6%	335	2.4E-07
NT-61	24-Sep-19	221	4%	6%	490	2.8E-07
NT-61	25-Sep-19	226	4%	6%	690	3.9E-07
NT-61	10-Oct-19	225	4%	6%	235	
NT-61	11-Oct-19	210	4%	6%	125	4.8E-07
NT-61	15-Oct-19	172	4%	6%	90	
NT-61	16-Oct-19	118	4%	6%	75	

Total CY Mixed: 3271

Data Pending



#### Leaching Reduction by Constituent

Site Constituent	13-Sep-19		
1 Arsenic			
2 Benzene			
3 Toluene			
4 Ethylbenzene			
5 Total Xylenes			
6 Naphthalene			
7 Acenaphthene			
8 Acenaphthylene			
9 Anthracene			
10 Benzo(a)anthracene			
11 Benzo(a)pyrene			
12 Benzo(b)fluoranthene			
13 Benzo(g,h,i)perylene			
14 Benzo(k)fluoranthene			
15 Chrysene			
16 Dibenz(a,h)anthracene			
17 Fluoranthene			
18 Fluorene			
19 Indeno(1,2,3-cd)pyrene			
20 Phenanthrene			
21 Pyrene			

Data Pending

Constituents Passing

Leaching calculations for each constituent provided in the ISS Memo for this Parcel. Boxed sample dates on table above indicate collection of a leaching sample. Constituents with 90+% reduction are shaded green. NE - Not Evaluated; constituent not detected in baseline sample.



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected.

### In Situ Solidification/Stabilization Results Dashboard, Area 8 (Leaching Batch 8)

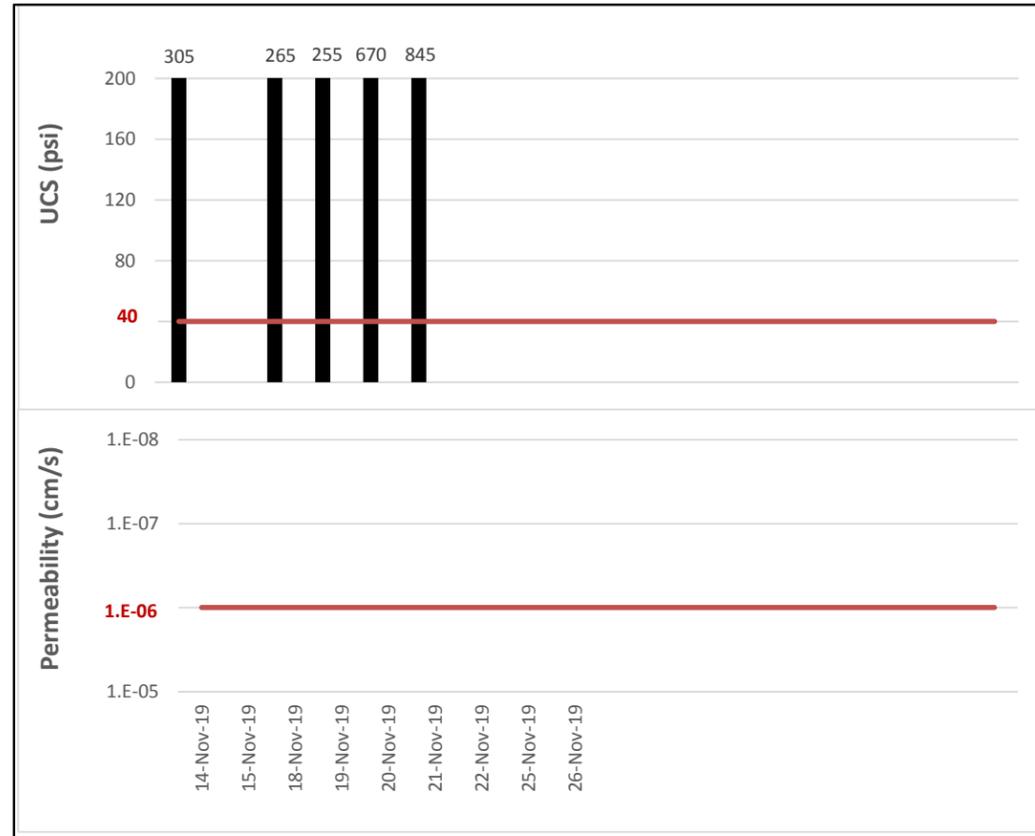
Quanta Resources Corporation Superfund Site, OU1

Data through: 12/22/2019

Area	Date	Volume (CY)	Mix Design		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
8	14-Nov-19	234	2%	6%	305	
8	15-Nov-19	125	2%	6%		
8	18-Nov-19	172	2%	6%	265	
8	19-Nov-19	304	2%	6%	255	
8	20-Nov-19	116	2%	6%	670	
8	21-Nov-19	195	2%	6%	845	
8	22-Nov-19	113	2%	6%		
8	25-Nov-19	170	2%	6%		
8	26-Nov-19	103	2%	6%		

Data Pending

Total CY Mixed: 1531



Leaching Reduction by Constituent		25-Nov-19	
Site	Constituent		
1	Arsenic		
2	Benzene		
3	Toluene		
4	Ethylbenzene		
5	Total Xylenes		
6	Naphthalene		
7	Acenaphthene		
8	Acenaphthylene		
9	Anthracene		
10	Benzo(a)anthracene		
11	Benzo(a)pyrene		
12	Benzo(b)fluoranthene		
13	Benzo(g,h,i)perylene		
14	Benzo(k)fluoranthene		
15	Chrysene		
16	Dibenz(a,h)anthracene		
17	Fluoranthene		
18	Fluorene		
19	Indeno(1,2,3-cd)pyrene		
20	Phenanthrene		
21	Pyrene		
<b>Constituents Passing</b>			

Data Pending

Leaching calculations for each constituent provided in Attachment 5 of the ISS Memo for this Parcel. Boxed sample dates on table above indicate collection of a leaching sample. Constituents with 90+% reduction are shaded green. NE



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green