

Mr. Shane Nelson, RPM/OSC
U.S. Environmental Protection Agency—Region 2
Emergency and Remedial Response Division
290 Broadway, Floor 19
New York, NY 10007-1866

March 9, 2018

Subject: Quanta Resources Corporation Superfund Site, Operable Unit 1 (OU1), Edgewater, New Jersey, Progress Report: February 2018

Dear Mr. Nelson,

This letter is the progress report required pursuant to the U.S. Environmental Protection Agency (EPA) Consent Decree (CD) 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

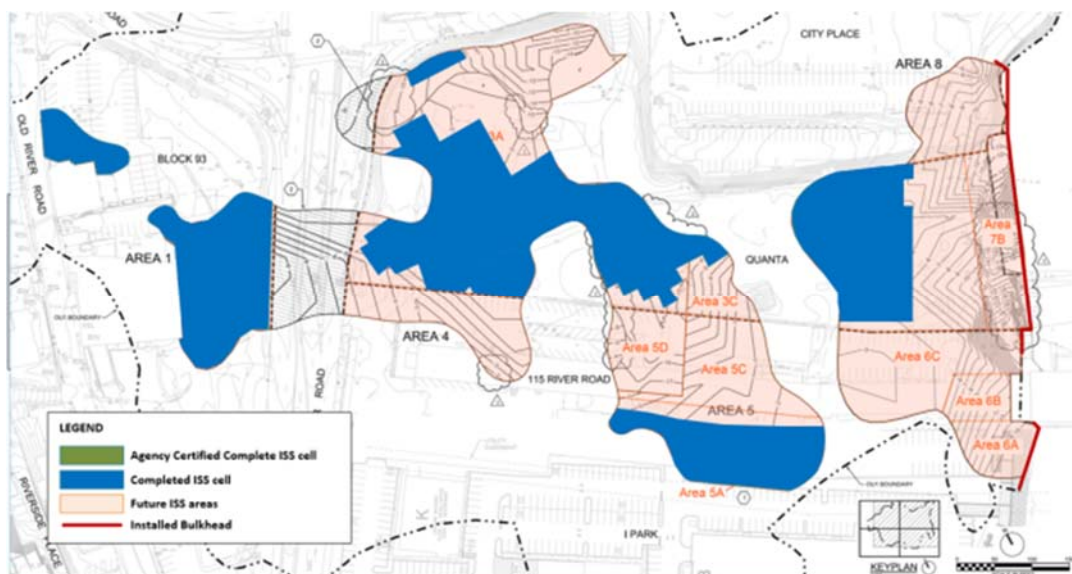
- Through February 2018, approximately 72,677 man-hours worked without a lost-time incident
- No recordable incidents occurred during the month of February

Work Completed

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

Figure 1. Bulkhead and ISS Progress through February 2018

ISS Areas shown are approximate and not drawn to scale



OU1 NAPL Recovery

- Conducted quarterly baildown test at RW4-2 on February 05, 2018.
- Retrieved transducer data from RW4-2 on February 20, 2018
- Located RW3-3 under the site access road and marked for protection.
- Gauged accessible sentry wells on February 20, 2018. The RW3-3 area was flooded and this well could not be gauged.
- Performed routine maintenance on the RW4-2 pump
- 25 gallons of NAPL were collected from RW4-2 during recovery operations in February.

OU1 General Civil Work

- Continued debris removal and concrete crushing operations, as needed
- Continued clearing and debris removal in ISS Area 3A
- Continued ISS in Area 3A
- Started clearing in Area 3C
- Started preparation for the work around the Pier Building
- Continued with odor/dust suppression and stockpile management, as needed
- Continued backfilling of materials for the Area 7B Pilot

OU1 Bulkhead Installation

- Performed tensioning of the tie-rods

OU1 In Situ Solidification/Stabilization

- In February fifty-six (56) cells (8,000 CY of material) located within Areas 3A were mixed. (see attached dashboards for maps)
- Continued debris removal and ISS activities in Area 3A
- The use of perimeter misting systems was used on days when the temperature was above freezing

OU1 Vibration and Air Monitoring

- Continued with vibration and movement monitoring
- Continued perimeter air monitoring in accordance with the Perimeter Air Monitoring Plan
- Continued weekly air sampling during ISS activities
- No vibrations outside of the project limits were noted during the month of February

OU1 Offsite Waste Disposal

- Hazardous
 - No hazardous material transported off-site in February
- Non-hazardous
 - Two (2) 20-CY roll offs of Asphalt to C.E.C.S, Inc
 - Five (5) 30-CY roll-offs of Treated Wood Material to C.E.C.S, Inc
 - One (1) 30-CY roll-off of Empty Plastic Drums to EverGreen Recycling Solutions
 - Two (2) 30-CY roll-offs of NAPL Contaminated Pipe to the Conestoga Landfill in Morgantown, PA
 - Two (2) 60-CY dump trailers of treated Wood Material to C.E.C.S, Inc

OU1 HCAA

- Continued development of presentation detailing next steps to be taken associated with the HCAA

OU1 Annual Vapor Intrusion Investigation

- Completed the annual vapor intrusion sampling at 103 River Road and 163 Old River Road from February 26th through February 27th.

Site Security, Maintenance, and Inspections

- Completed weekly boom inspections on February 7, February 16, and February 22, 2018
- Completed weekly SWPPP inspections on February 8, February 16, and February 22, 2018
- No site security issues for the month of February 2018

Two Week Look Ahead

- Prepare quarterly data transmittal for work from November 2017 – January 2018 and the February 05 baildown test.
- Continue twice weekly pumping at RW4-2
- Gauge sentry wells
- Clear and ISS in Area 3C
- Meet with EPA to discuss next steps regarding the HCAA

Data and Submittals

ISS Compliance Data Summary

All required samples 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. All compliance sample results received in the past month met the ROD requirements.

The first complete ISS Completion Package was submitted on January 8th for Block 93. As detailed in the report, Honeywell is requesting concurrence from EPA that in-situ stabilization was completed in accordance with the EPA-approved *Remedial Design* and *Remedial Action Work Plan*.

Air Monitoring

Provided perimeter air monitoring data weekly to EPA. Awaiting response from EPA on the Perimeter Air Monitoring Plan Addendum submitted in December.

Other Deliverables and Submittals

- No other submittals were provided in February

Issues and Corrective Actions

Below section details issues and corrective actions encountered during the reporting period.

Air Monitoring/Emission Controls

Complaints were received during February regarding odors emanating from the site. Conditions at the site have been wet and muddy which can hinder the effectiveness of some of the odor control materials as they are broken down more quickly. The ongoing freeze/thaw conditions can also affect how long the odor suppressant materials were effective.

As a result of this, additional actions are being taken:

- Increase use of Portland cement within Posi-shell mix – to help the Posi-shell set up faster, the team is evaluating the effectiveness of adding Portland cement to the Posi-shell spray.
- Cover disturbed areas with plastic sheeting on Fridays – The Posi-shell has been effective at controlling odors until the recent ongoing freeze/thaw conditions. Therefore, the use of plastic sheeting to cover stockpiles and disturbed areas had been minimized. If site conditions are appropriate from a safety and accessibility perspective, plastic sheeting will be used to cover stockpiles and disturbed areas on Friday afternoons before leaving the site.
- Additional sampling is planned to be completed at the City Place property.

Stakeholder Communication and Community Involvement

- Submitted the monthly progress report for January on February 8.
- Tracked community concerns and complaints. In February, there was 8 residential concerns submitted (by 7 people) to EPA, Honeywell, the Bergen County Department of Health, NJDEP, or CH2M.
- Hosted and attended biweekly calls on February 14 and 27 with EPA, NJDEP, USACE, Honeywell and CH2M
- Provided weekly and as-needed progress updates for email distribution to pier tenants.
- Uploaded daily air monitoring results to www.quantaremediation.com
- Submitted draft posters and a fact sheet for an upcoming public in March
- Provided updated site progress map and construction photos biweekly for uploading on project website. Reviewed website and submitted text changes.

Activities Planned for Next 6 Weeks

- Complete air sampling at the City Place property in response to community complaints
- Continue with ISS mixing
- Pending approval from the property owner, work will begin on Segment A, B, and C of the bulkhead
- Conduct a baildown test at RW4-2, gauge the sentry wells, and resume twice a week pumping at RW4-2 following complete recovery from the baildown test.

Schedule Update and Delays

The overall schedule for the OU1 remediation has been extended because of the delays described in the following subsections (for this reporting period) and prior status reports. To keep the project moving forward, the ISS work sequencing has been modified to allow the Civil and ISS Contractors to continue working in other areas of OU1 while delays in specific portions of the site are resolved.

Concrete Volume

Large volumes of reinforced concrete have been encountered in many of the ISS areas. The concrete has been noted to be 3 to 5 feet thick in some areas with reinforcement bars up to 2-inches in diameter. Removal of the reinforced concrete has taken longer than anticipated, which has resulted in delays to the ISS schedule.

115 River Road Access

The demolition of the 115 River Road building may not start until June 2018 and is expected to require approximately 3 months to complete. Work will continue in accessible areas of the site if feasible.

Percent Complete

Work associated with the OU1 ISS Remedial Action is approximately 50 percent complete based upon the baseline schedule provided on February 15, 2017, with a revised schedule showing construction starting on Block 93 provided on May 3, 2017.

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,

CH2M HILL



Stephen J. Zarlinski
Project Manager

Enclosures: Attachment A, ISS Results Dashboards, Areas 3A, 3B, and 7A

cc:	Clay Monroe (EPA)	Rich Puvogel (EPA)
	Steve Coladonato (Honeywell)	John Mojka (Honeywell)
	Erica Bergman (NJDEP)	Greg Franz (Borough of Edgewater)
	Helen Fahy (Fahy Associates)	Jose Sananes (Ramboll)
	Neil Ravensbergen (USACE)	Rich Gajdek (USACE)
	Frank Rossi (Boswell)	Richard Ho (EPA)
	Neil Kolb (USACE)	Michael Johnson (USACE)

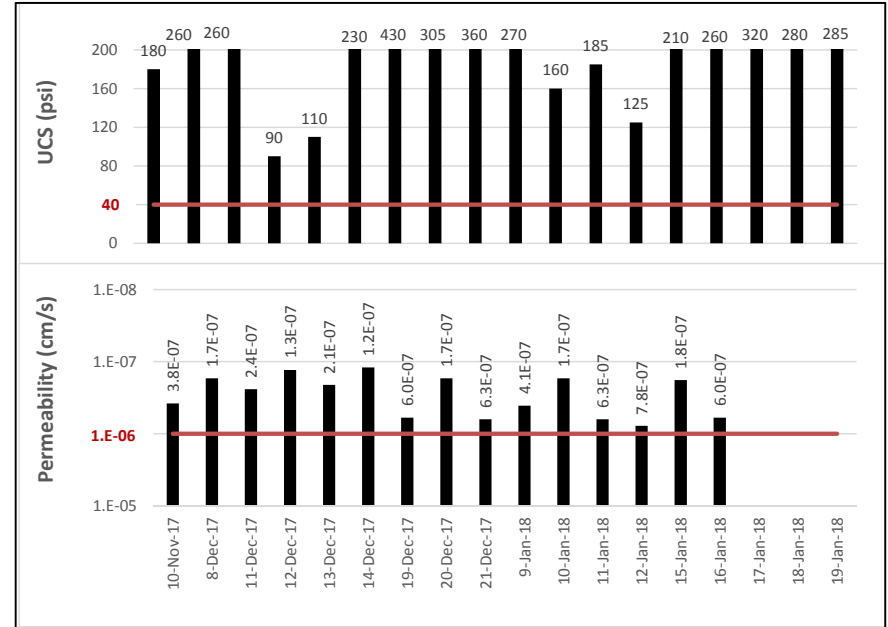
In Situ Solidification/Stabilization Results Dashboard, Area 3A/B (Leaching Batch 2)

Quanta Resources Corporation Superfund Site, OU1

Data through: 3/1/2018

Area	Date	Volume (CY)	Actual Mix		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3B	10-Nov-17	321	2%	7%	MEETS	MEETS
3A	8-Dec-17	380	3%	8%	MEETS	MEETS
3A	11-Dec-17	443	3%	7%	MEETS	MEETS
3A	12-Dec-17	367	3%	7%	MEETS	MEETS
3A	13-Dec-17	163	2%	7%	MEETS	MEETS
3A	14-Dec-17	410	2%	7%	MEETS	MEETS
3A	19-Dec-17	450	3%	8%	MEETS	MEETS
3A	20-Dec-17	404	2%	7%	MEETS	MEETS
3A	21-Dec-17	512	2%	7%	MEETS	MEETS
3A	9-Jan-18	346	2%	6%	MEETS	MEETS
3A	10-Jan-18	175	2%	6%	MEETS	MEETS
3A	11-Jan-18	794	2%	6%	MEETS	MEETS
3A	12-Jan-18	587	2%	6%	MEETS	MEETS
3A	15-Jan-18	466	2%	6%	MEETS	MEETS
3A	16-Jan-18	602	2%	6%	MEETS	MEETS
3A	17-Jan-18	370	2%	6%	MEETS	MEETS
3A	18-Jan-18	575	2%	6%	MEETS	data pending
3A	19-Jan-18	551	2%	6%	MEETS	data pending

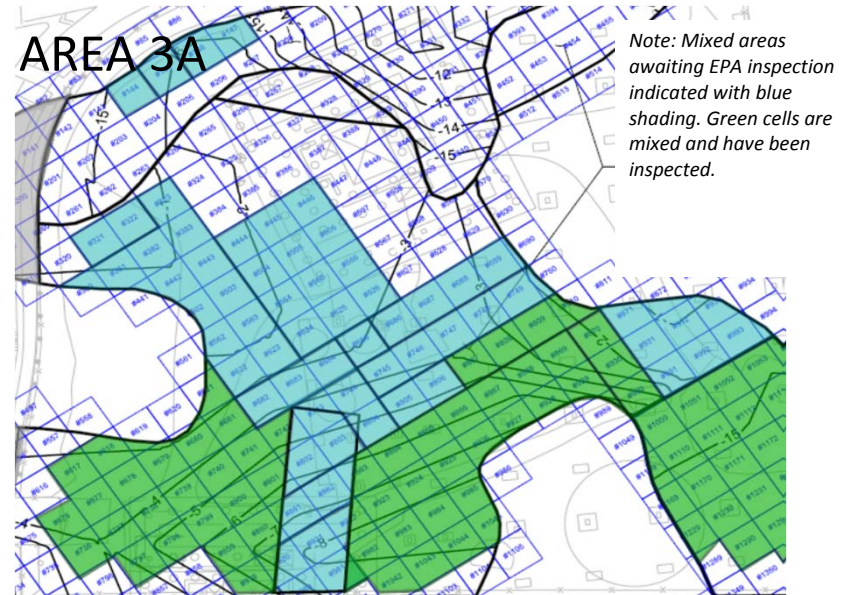
Total CY Mixed: **7916**



Leaching Reduction by Constituent				
Site Constituent	Reduction	Site Constituent	Reduction	Passing
1 Arsenic	99%	12 Benzo(b)fluoranthene	NE	
2 Benzene	98%	13 Benzo(g,h,i)perylene	NE	
3 Toluene	97%	14 Benzo(k)fluoranthene	NE	
4 Ethylbenzene	98%	15 Chrysene	93%	
5 Total Xylenes	99%	16 Dibenz(a,h)anthracene	NE	
6 Naphthalene	99%	17 Fluoranthene	92%	
7 Acenaphthene	99%	18 Fluorene	98%	
8 Acenaphthylene	97%	19 Indeno(1,2,3-cd)pyrene	NE	
9 Anthracene	97%	20 Phenanthrene	97%	
10 Benzo(a)anthracene	85%	21 Pyrene	91%	
11 Benzo(a)pyrene	NE			

Constituents Passing 14/15

Leaching calculations for each constituent provided in Attachment 4 of the ISS Memo for this Parcel. Constituents with 90+% reduction are shaded green. Representative 20,000 CY leaching sample for this portion of Area 7A collected Oct 13 in Area 5B. Boxed sample dates on table above indicate collection of a held leaching sample.



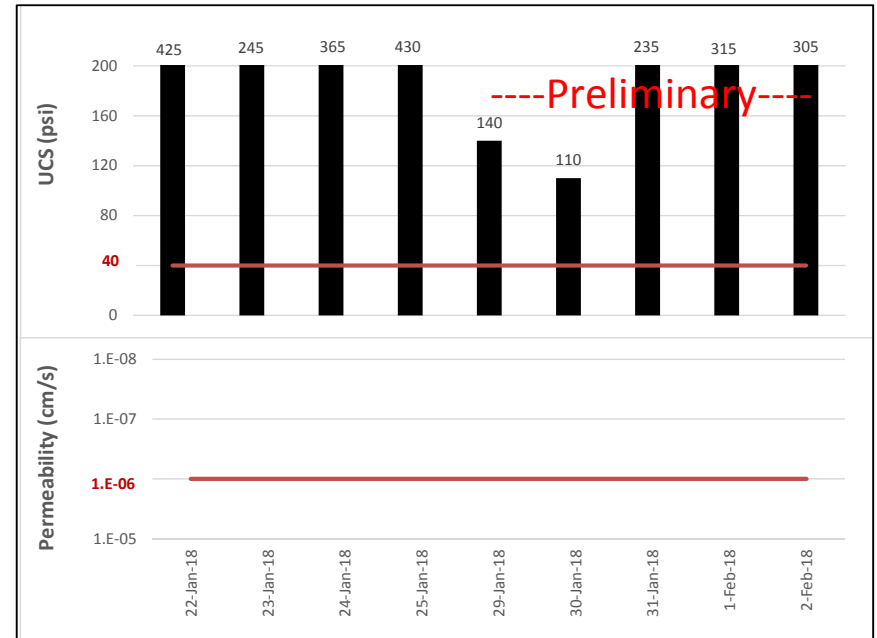
In Situ Solidification/Stabilization Results Dashboard, Area 3A (Leaching Batch 3)

Quanta Resources Corporation Superfund Site, OU1

Data through: 3/1/2018

Area	Date	Volume (CY)	Actual Mix		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3A	22-Jan-18	452	2%	6%	MEETS	
3A	23-Jan-18	574	2%	6%	MEETS	
3A	24-Jan-18	585	2%	6%	MEETS	
3A	25-Jan-18	603	2%	6%	MEETS	
3A	29-Jan-18	725	2%	6%		
3A	30-Jan-18	434	2%	6%	data pending	
3A	31-Jan-18	585	2%	6%		
3A	1-Feb-18	572	2%	6%		
3A	2-Feb-18	399	2%	6%		

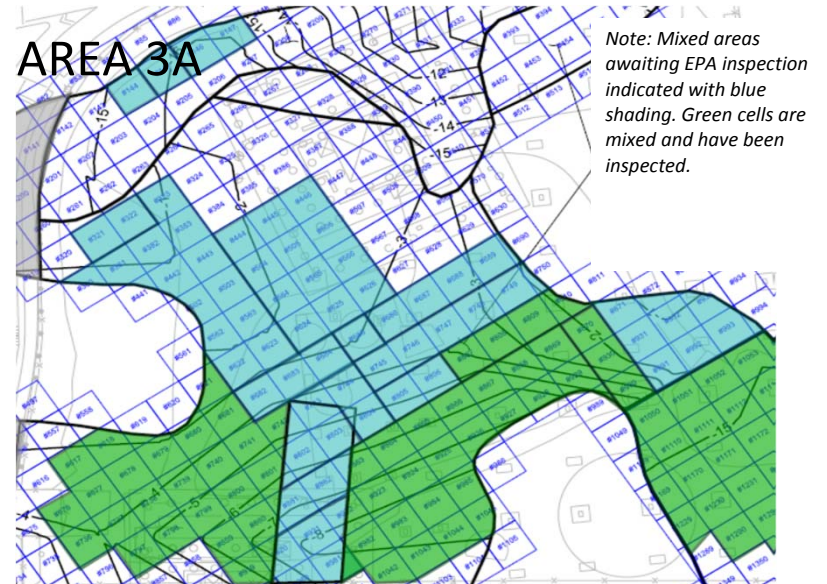
Total CY Mixed: **4929**



Leaching Reduction by 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	Chrysene
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 4 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.



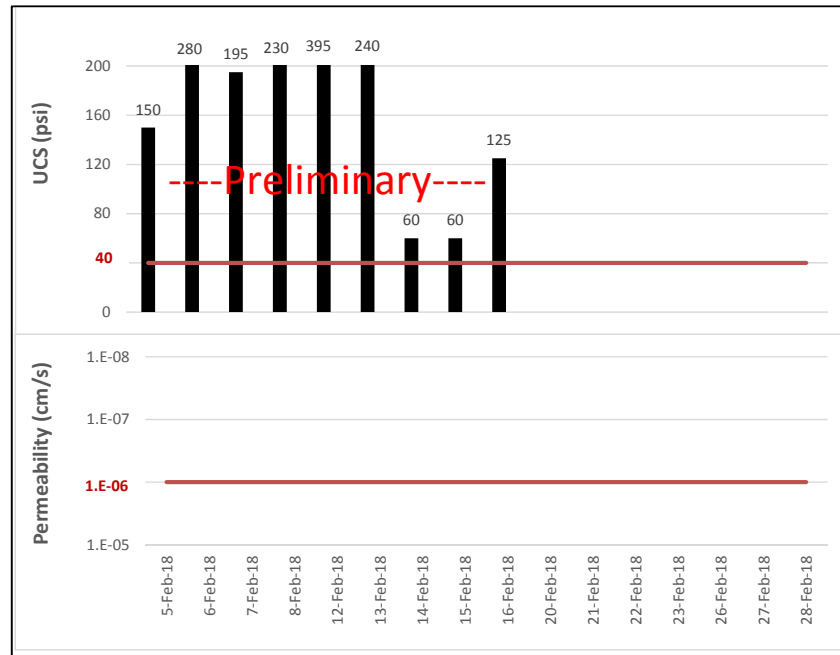
In Situ Solidification/Stabilization Results Dashboard, Area 3A (Leaching Batch 4)

Quanta Resources Corporation Superfund Site, OU1

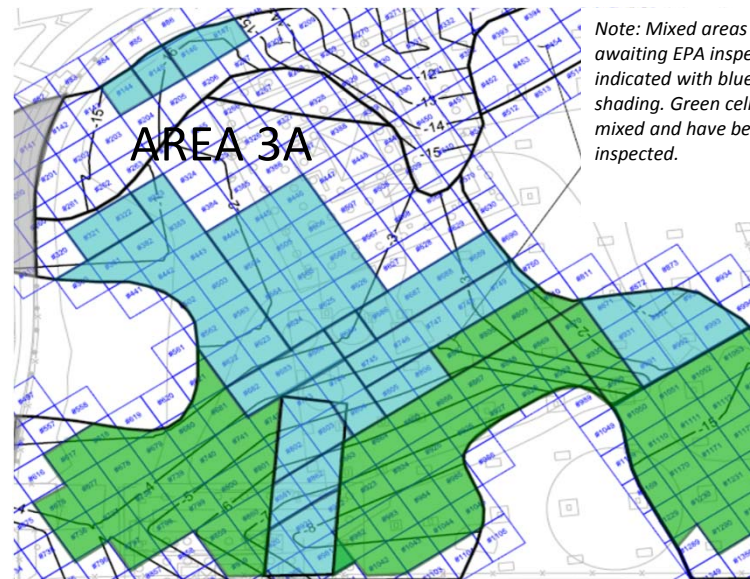
Data through: 3/1/2018

Area	Date	Volume (CY)	Actual Mix		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3A	5-Feb-18	527	2%	6%	<i>data pending</i>	
3A	6-Feb-18	178	2%	6%		
3A	7-Feb-18	565	2%	6%		
3A	8-Feb-18	443	2%	6%		
3A	12-Feb-18	296	2%	6%		
3A	13-Feb-18	360	2%	6%		
3A	14-Feb-18	333	2%	6%		
3A	15-Feb-18	569	2%	6%		
3A	16-Feb-18	314	2%	6%		
3A	20-Feb-18	482	2%	6%		
3A	21-Feb-18	133	2%	6%		
3A	22-Feb-18	397	2%	6%		
3A	23-Feb-18	511	2%	6%		
3A	26-Feb-18	532	2%	6%		
3A	27-Feb-18	773	2%	6%		
3A	28-Feb-18	540	2%	6%		

Total CY Mixed: **6953**



Leaching Reduction by 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 Chrysene	
5 Total Xylenes		16 Benzo(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			
<p><i>Leaching calculations for each constituent provided in Attachment 4 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.</i></p>			



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