

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

February 8, 2018

**Subject: Quanta Resources Corporation Superfund Site, Operable Unit 1 (OU1), Edgewater, New Jersey, Progress Report: January 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 January 2018, approximately 65,682 man-hours worked without a lost-time incident
- No recordable incidents occurred during the month of January

### Work Completed

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

**Figure 1. Bulkhead and ISS Progress through January 2018**

*ISS Areas shown are approximate and not drawn to scale*



### OU1 NAPL Recovery

- 24 gallons of NAPL were collected from RW4-2.
- RW3-3 remains covered by the access road on the Quanta site and is currently inaccessible. During the month of February, CH2M will locate the well, demarcate the location to ensure that construction vehicles do not disturb the area, and will begin gauging for future reports.

### OU1 General Civil Work

- Continued debris removal and concrete crushing operations, as needed
- Continued clearing and debris removal in ISS Area 3A
- Completed restoration of ISS Area 5A (iPark)
- Completed the temporary restoration of Block 93 Central and North
- Continued with odor/dust suppression and stockpile management, as needed
- Started clearing and debris removal in ISS Area 8
- Started stockpiling of materials for ISS in Area 7B

### OU1 Bulkhead Installation

- No work was performed on the bulkhead installation during the month of January

### OU1 In Situ Solidification/Stabilization

- In January fifty-four (54) cells (8,424 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 has been temporarily suspended due to the temperatures below 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 January
- Minor movements to the north side of building 115 River road were noted. The movement was determined to be the result of temperature changes

### OU1 Offsite Waste Disposal

- Hazardous
  - Two (2) 55-gallon drums of NAPL to Veolia's facility in Middlesex, NJ
  - Four (4) 55-gallon drums of NAPL Stained PPE to Cycle Chem's facility in Lewisburg, PA
- Non-hazardous
  - One (1) 27-CY dump truck of Asphalt to Reliable Wood, Inc
  - Two (2) 30-CY roll-offs of Mixed Metals to Evergreen Recycling Solutions
  - Five (5) 30-CY roll-offs of Treated Wood Material to C.E.C.S, Inc
  - One (1) 60-CY dump trailer of treated Wood Material to C.E.C.S, Inc

### OU1 HCAA

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

## Site Security, Maintenance, and Inspections

- Completed weekly boom inspections and SWPPP inspections on January 2, January 9, January 16, and January 23, 2018
- No site security issues for the month of January 2018

## Two Week Look Ahead

- Continue with ISS on the main Quanta property in Area 3A
- Evaluate baildown testing results for RW4-2
- Submit the 2016-2017 Annual NAPL Recovery Report

## 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 8<sup>th</sup> 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

- Site inspections were performed by the EPA and NJDEP to document completion of ISS Area 3A on January 25, 2018. Site Inspections indicated that ISS was completed within the prescribed area in accordance with the ROD and approved design.

## Issues and Corrective Actions

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

### Peat

Peat was encountered on the main Quanta property at elevations slightly above the required ISS depth. Approval was received from EPA on January 30 to perform ISS consistent with the approach on Block 93. ISS will be terminated where peat is encountered as peat is not conducive to ISS and acts as a confining layer to downward migration of NAPL. Similar to Block 93, the ISS contractor will be using GPS to record the top of the peat/meadow mat material, when encountered, and a CH2M representative will confirm the presence of peat/meadow mat and make a record of their observations.

### Air Monitoring/Emission Controls

Complaints were received during January regarding odors emanating from the site. It appears that while the workers at the site continued to apply odor control materials – a non-toxic foam and Posi-shell – to help control odors, two activities may have contributed to the recent odors experienced:

- Debris was cleared on the main Quanta property directly adjacent to the sidewalk.
- 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.
- Begin use of Bio-Solve – Bio-Solve is an additional odor suppressant that is being tested in addition to a non-toxic foam and Posi-shell.
- 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.

## Weather

Due to abnormally cold temperatures experienced during early January, operations at the site were temporarily suspended the week of the 2<sup>nd</sup>.

## Stakeholder Communication and Community Involvement

- Submitted the monthly progress report for December on January 8.
- In January, there were 5 residential concerns submitted to EPA, Honeywell, or CH2M.
- Hosted and attended biweekly calls on January 3, January 17, and January 31 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](http://www.quantaremediation.com)
- Provided updated site progress map and construction photos biweekly for uploading on project website. Reviewed website, submitted text changes, and provided an updated schedule.

## Activities Planned for Next 6 Weeks

- Continue with ISS mixing
- Pending approval from the property owner, work will begin on Segment A, B, and C of the bulkhead
- In February, we will 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.

## Weather

As detailed above, the below average temperatures have led to delays at the site.

## 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.



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

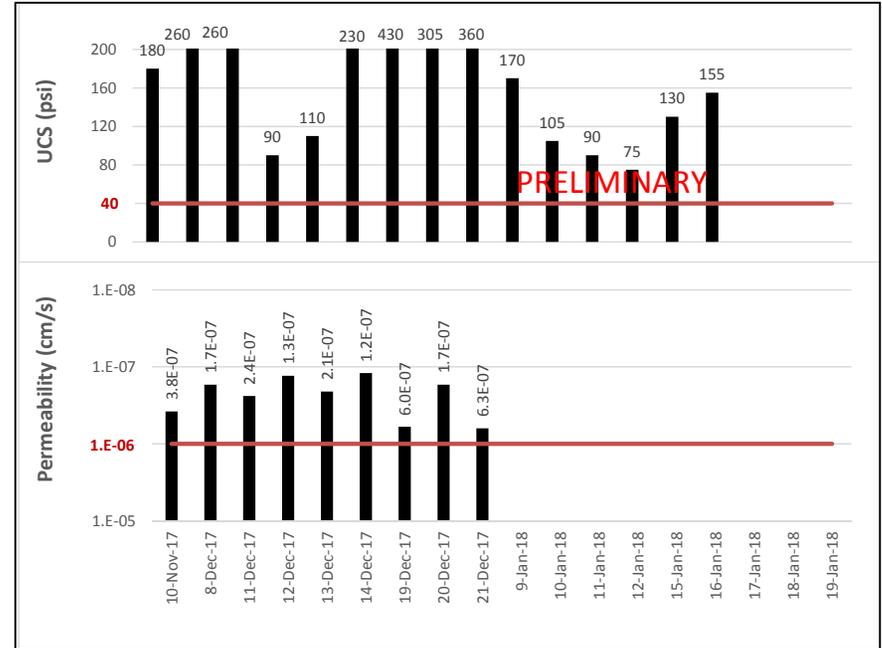
Quanta Resources Corporation Superfund Site, OU1

Data through: 1/30/2018

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%		
3A	10-Jan-18	175	2%	6%		
3A	11-Jan-18	794	2%	6%		
3A	12-Jan-18	587	2%	6%		
3A	15-Jan-18	466	2%	6%		
3A	16-Jan-18	602	2%	6%		
3A	17-Jan-18	370	2%	6%		
3A	18-Jan-18	575	2%	6%		
3A	19-Jan-18	551	2%	6%		

Total CY Mixed: **7916**

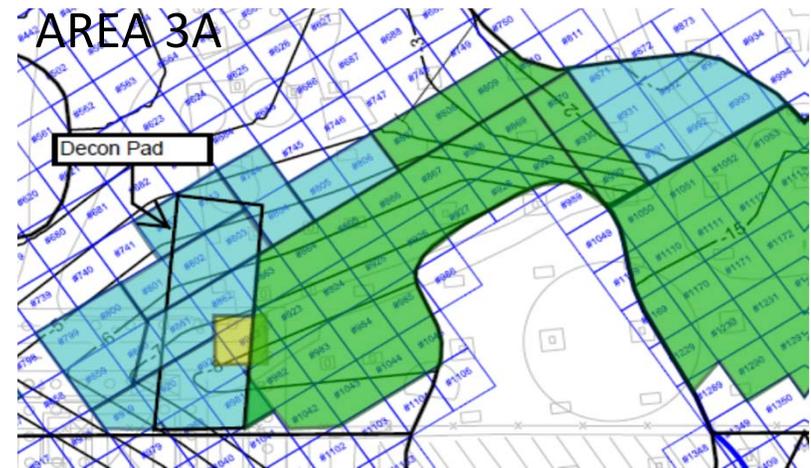
data pending



Leaching Reduction by Constituent					
Site Constituent	Reduction	Site Constituent	Reduction	Notes	
1	Arsenic	100%	12	Benzo(b)fluoranthene	NE
2	Benzene	99%	13	Benzo(g,h,i)perylene	NE
3	Toluene	99%	14	Benzo(k)fluoranthene	NE
4	Ethylbenzene	99%	15	Chrysene	97%
5	Total Xylenes	100%	16	Dibenz(a,h)anthracene	NE
6	Naphthalene	100%	17	Fluoranthene	98%
7	Acenaphthene	100%	18	Fluorene	100%
8	Acenaphthylene	99%	19	Indeno(1,2,3-cd)pyrene	NE
9	Anthracene	99%	20	Phenanthrene	99%
10	Benzo(a)anthracene	95%	21	Pyrene	98%
11	Benzo(a)pyrene	NE			

**Constituents Passing**

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.



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected. Yellow square indicates previously-mixed field demonstration cell.

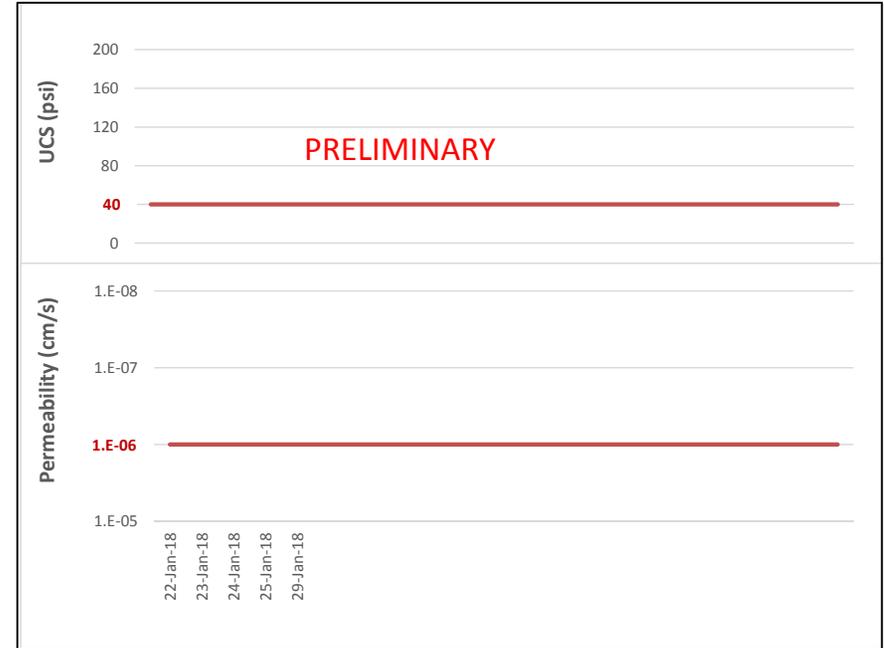
### In Situ Solidification/Stabilization Results Dashboard, Areas 3A (Leaching Batch 3)

Quanta Resources Corporation Superfund Site, OU1

Data through: 1/30/2018

Area	Date	Volume (CY)	Actual Mix		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
3B	22-Jan-18	452	2%	6%		
3A	23-Jan-18	574	2%	6%		
3A	24-Jan-18	585	2%	6%	<i>data pending</i>	
3A	25-Jan-18	704	2%	6%		
3A	29-Jan-18	725	2%	6%		

Total CY Mixed: **3040**

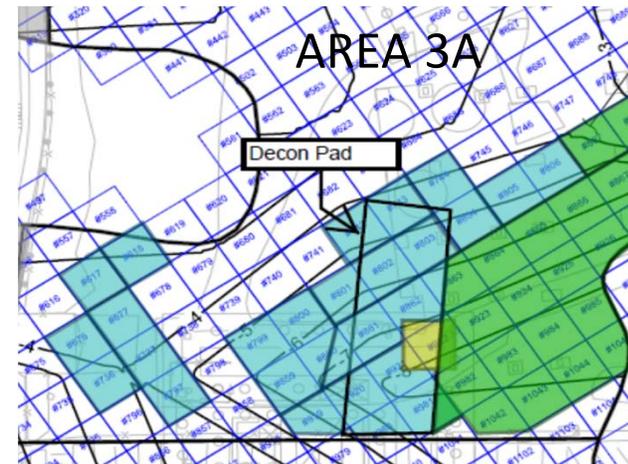


Leaching Reduction by Constituent			
Site Constituent		Site Constituent	
1 Arsenic		12 Benzo(b)fluoranthene	
2 Benzene		13 Benzo(g,h,i)perylene	
3 Toluene		14 Benzo(k)fluoranthene	
4 Ethylbenzene		15 Chrysene	
5 Total Xylenes		16 Dibenzo(a,h)anthracene	
6 Naphthalene		17 Fluoranthene	
7 Acenaphthene		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.*

Sample is Curing



Note: Mixed areas awaiting EPA inspection indicated with blue shading. Green cells are mixed and have been inspected. Yellow square indicates previously-mixed field demonstration cell.

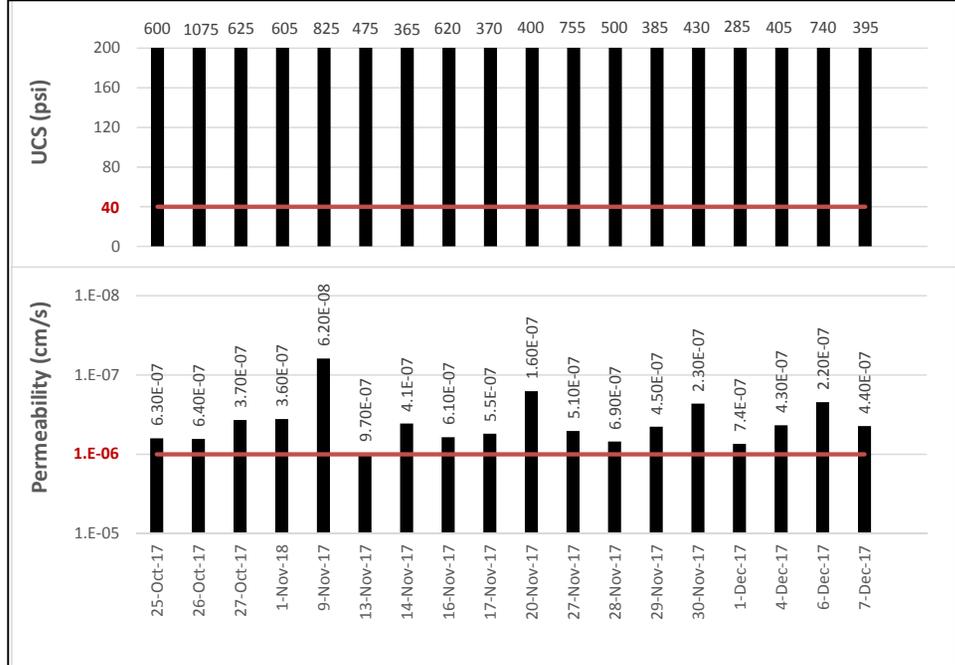
# In Situ Solidification/Stabilization Results Dashboard, Area 7A (Leaching Batch 2)

Quanta Resources Corporation Superfund Site, OU1

Data through: 1/30/2018

Area	Date	Daily Volume (CY)	Actual Mix		UCS (≥40 psi)	Permeability (≤1E-6 cm/s)
			Cement	Slag		
7A	25-Oct-17	150	5%	10%	MEETS	MEETS
7A	26-Oct-17	470	2%	7%	MEETS	MEETS
7A	27-Oct-17	493	5%	7%	MEETS	MEETS
7A	1-Nov-18	629	5%	7%	MEETS	MEETS
7A	9-Nov-17	200	3%	7%	MEETS	MEETS
7A	13-Nov-17	633	2%	7%	MEETS	MEETS
7A	14-Nov-17	557	2%	7%	MEETS	MEETS
7A	16-Nov-17	621	2%	7%	MEETS	MEETS
7A	17-Nov-17	501	2%	7%	MEETS	MEETS
7A	20-Nov-17	215	2%	7%	MEETS	MEETS
7A	27-Nov-17	672	2%	7%	MEETS	MEETS
7A	28-Nov-17	486	2%	7%	MEETS	MEETS
7A	29-Nov-17	637	2%	7%	MEETS	MEETS
7A	30-Nov-17	200	2%	7%	MEETS	MEETS
7A	1-Dec-17	447	2%	7%	MEETS	MEETS
7A	4-Dec-17	594	2%	7%	MEETS	MEETS
7A	6-Dec-17	651	2%	7%	MEETS	MEETS
7A	7-Dec-17	504	2%	7%	MEETS	MEETS

Total CY Mixed: **8,660**

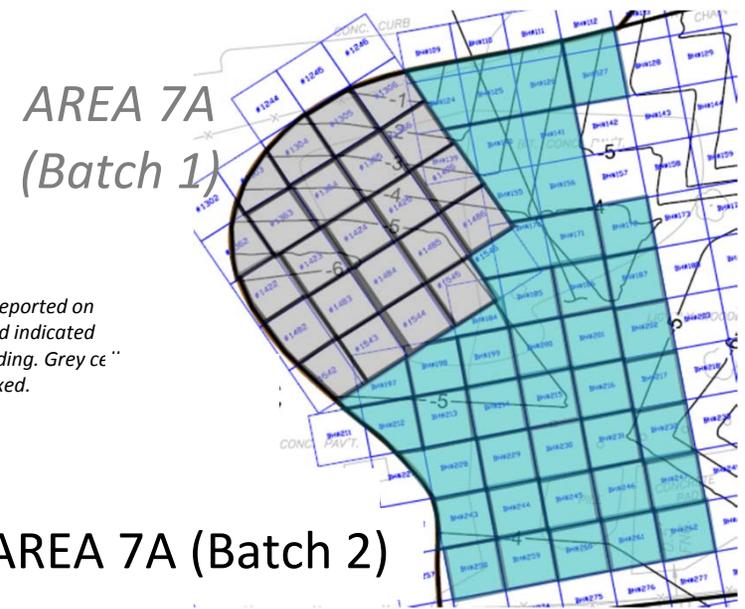


Leaching Reduction by Constituent				
Site Constituent	Reduction (%)	Site Constituent	Reduction (%)	Result
1 Arsenic	100%	12 Benzo(b)fluoranthene	NE	NE
2 Benzene	99%	13 Benzo(g,h,i)perylene	NE	NE
3 Toluene	99%	14 Benzo(k)fluoranthene	NE	NE
4 Ethylbenzene	99%	15 Chrysene	97%	97%
5 Total Xylenes	100%	16 Dibenz(a,h)anthracene	NE	NE
6 Naphthalene	100%	17 Fluoranthene	98%	98%
7 Acenaphthene	100%	18 Fluorene	100%	100%
8 Acenaphthylene	99%	19 Indeno(1,2,3-cd)pyrene	NE	NE
9 Anthracene	99%	20 Phenanthrene	99%	99%
10 Benzo(a)anthracene	95%	21 Pyrene	98%	98%
11 Benzo(a)pyrene	NE			

Preliminary; through time step 4

Constituents Passing TBD

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. Representative 20,000 CY leaching sample for this portion of Area 7A collected Oct 13 in Area



Note:  
Mixed areas reported on this dashboard indicated with blue shading. Grey cells previously mixed.

AREA 7A (Batch 2)