From:	Matt Dahlem <mdahlem@fehr-graham.com></mdahlem@fehr-graham.com>
Sent:	Thursday, May 21, 2020 4:28 PM
То:	Schultz, Josie M - DNR; McKnight, Kevin - DNR
Subject:	FW: Bay Towel Schedule

Below is our tentative schedule – just wanted to make you aware. The RP (John Butz of Bay Towel) approved it.

Let me know if you have any questions.

Matt

## MATT DAHLEM, PG | Branch Manager Fehr Graham | Engineering & Environmental

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From: Matt Dahlem Sent: Thursday, May 21, 2020 8:42 AM To: Dillon Plamann <<u>DPlamann@fehr-graham.com</u>>; Donald P. Gallo <<u>DGallo@axley.com</u>>; John Butz <<u>Jbutz@baytowel.com</u>> Subject: Bay Towel Schedule

John,

See our preliminary schedule that seems to work out for Orin and Legacy. Absorb and please make any comments. If you are good with it, please let me know as soon as you can, then I will distribute to the subcontractors that are involved in this work. Just an FYI, with the stockpiles and rolloffs, I would probably advise against any parking while we are doing this work.

- Week of June 1 utilities cleared, permits pulled / approved by City and Legacy, excavation boundaries marked, excavation equipment onsite ready for use on June 8
- Week of June 8 Legacy will excavate approximately 3,100 tons and stage onsite to be beneficially reused to backfill the current remedial excavation.
  - $\circ$   $\;$  Additionally, beginning June 8, we would request no cars be parked on the lot through end of July
- Week of June 15 An estimated 2,300 tons of contaminated soil from two different areas will be excavated and direct hauled to Waste Management's Ridgeview Security Landfill in Whitelaw, Wisconsin.
  - WM will deliver 14-roll-off boxes to the site on June 19
- Week of June 22 Hazardous soils, approximately 600 tons, will be excavated and placed into approximately 14 roll-off boxes.
  - The soil in the roll-off boxes will be treated using Fenton's reagent and BAM™ from Orin. All soil will be treated by a combination of continuously mixing the impacted soils with an excavator while simultaneously applying the preferred treatment chemicals. The oxidant will be sprayed directly onto the soils until the desired amount of oxidant is

thoroughly incorporated. A backhoe will mix the BAM<sup>™</sup> with the treated soils to complete the oxidation reaction and to assist in stabilization of the treated, saturated soils.

- Three grab samples from each box will be analyzed for VOC and TCLP VOC analysis. The grab samples will be collected from discrete sample locations/depths in each box (i.e., the soil samples will not be composite samples) with laboratory rush 3-day turnaround times
- Week of June 29
  - Lab results back.
  - New disposal profile completed.
  - If data demonstrates compliance with landfill, the landfill will accept the material for hauling and disposal.
  - The 14-rolloff boxes will be removed, disposed of at landfill by WM, and returned to the site on July 2
- Week of July 6 Hazardous soils, approximately 600 tons, will be excavated and placed into approximately 14 roll-off boxes.
  - o The soil in the roll-off boxes will be treated using Fenton's reagent and BAM<sup>™</sup> from Orin. All soil will be treated by a combination of continuously mixing the impacted soils with an excavator while simultaneously applying the preferred treatment chemicals. The oxidant will be sprayed directly onto the soils until the desired amount of oxidant is thoroughly incorporated. A backhoe will mix the BAM<sup>™</sup> with the treated soils to complete the oxidation reaction and to assist in stabilization of the treated, saturated soils.
  - Three grab samples from each box will be analyzed for VOC and TCLP VOC analysis. The grab samples will be collected from discrete sample locations/depths in each box (i.e., the soil samples will not be composite samples) with laboratory rush 3-day turnaround times
  - An estimated 25 sidewall/perimeter soil samples will be retained from the remedial excavation to document the final soil chemistry results from the excavation walls. Base samples will not be retained as previous soil chemistry results can be used to document the remaining in place soil chemistry concentrations. Soil samples will be retained for laboratory analysis of VOCs.
- Week of July 13
  - Lab results back.
  - New disposal profile completed.
  - If data demonstrates compliance with landfill, the landfill will accept the material for hauling and disposal.
  - The 14-rolloff boxes will be removed, disposed of at landfill by WM, and returned to the site on July 17
  - If there is still tonnage available, dig non-haz material out from 25-30-feet bgs in main excavation and direct haul to Waste Management's Ridgeview Security LandfillI in Whitelaw, Wisconsin.
  - BAM<sup>™</sup> will be applied to the base of the soil excavation and backfilled with geotechnically suitable materials per the SMP
- Week of July 20
  - Backfill with geotechnically suitable materials per the SMP
- Week of July 27

- Replacement of SMW-1 will be completed with a well nest including a new groundwater monitoring well to excavation depth (30-feet below grade) and a piezometer to 50-feet below grade.
- Week of August 3
  - o Groundwater Monitoring Well Development and Surveying Activities
- Week of August 10
  - Post-Excavation Groundwater Sampling

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