ANCHOR QEA

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June 22, 2015

Mr. Gary Miller, Remedial Project Manager
U.S. Environmental Protection Agency, Region 6
Superfund Division (6SF-RA)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: San Jacinto River Waste Pits Superfund Site
U.S. EPA Region 6, CERCLA Docket No. 06-03-10 UAO for RI/FS

Project Number: 090557-01.06

Dear Mr. Miller:

This letter is provided to you in response to a "Memo to File" dated June 16, 2015 (Memo to File) that I received from Valmichael Leos related to an "[i]mpromptu visual cap inspection at the San Jacinto River Waste Pits superfund site." In an email dated June 17, 2015, Carlos Sanchez of USEPA Region 6 notified Respondents (International Paper Company and McGinnis Industrial Maintenance Corporation) that all future correspondence with USEPA on the Time Critical Removal Action (TCRA) and Remedial Investigation/Feasibility Study at the San Jacinto River Waste Pits Superfund Site (Site) should be submitted to you.

As an initial matter, both you and Wendell Mears, a senior engineer with Anchor QEA, were present at the inspection of June 15, 2015 to which Mr. Leos refers in his Memo to File (June 15 inspection). Mr. Mears was heavily involved in the design and construction of the TCRA armored cap and is intimately familiar with the area in and around the armored cap, and specifically, with the area addressed in the Memo to File. Prior to the June 15, 2015 inspection, Anchor QEA had performed an inspection of the armored cap on June 12, 2015 on behalf of the Respondents. Anchor QEA's inspection was in response to your email of

June 11, 2015, transmitting photographs of certain areas of the armored cap provided to you by Mr. Bob Allen, Director, Harris County Pollution Control, on June 11, 2015.

Our findings regarding observations of geotextile material in certain areas remain consistent with what was relayed to you verbally on June 12, 2015 - the TCRA armored cap remains intact and unaffected by recent heavy rains in Harris County. The observed geotextile fabric referenced in Mr. Leos' Memo to File is associated with an extra layer of protection placed atop the armored cap to facilitate construction and to protect the underlying cap materials. More specifically, the subject area (where the geotextile fabric was observed) was utilized as a stockpile area during construction of the TCRA armored cap and continues to be utilized during implementation of routine cap maintenance and enhancement activities. Below the observed surface in this stockpile area there are several layers of armor and geotextile including the following (from bottom to top):

1. Geotextile and aggregate were used to install a ramp into the western cell in the subject area and also provide an area for armor stone stockpiling during construction in the subject area.
2. The TCRA armored cap (including geomembrane and geotextile layers, plus the armored rock) was installed over the western cell, with each of these layers extending into the subject area.
3. Finally, the contractor lapped geotextile over the central and southern berms in the subject area after the armor rock (in item 2 above) was placed to act as a separation layer. The separation layer was subsequently covered by additional armor rock.

The purpose of the separation geotextile layer and associated armor rock was to protect the armored cap during construction, while leaving an area suitable for future stockpiles.

The attached photographs (Figures 2 - 9) taken during and immediately after construction show the subject area and document the installation of the different geotextile layers and armor rock. What was observed during the recent Site inspection were small patches of the separation layer of geotextile, specifically installed for protection during construction. The separation geotextile is plainly visible on top of the protective armored cap in Figures 5 and 6 attached and remnants, similar to what was observed during the recent Site inspection, remained visible immediately following construction. The recent storm events and

associated flows referred to in the Memo to File have not, based on the inspections Anchor QEA has conducted, caused any degradation of the TCRA armored cap at the Site.

As pointed out by Mr. Mears during the June 15, 2015 inspection, there are other similar areas of the armored cap in which multiple layers of geotextile were used as protective measures during construction. In particular, this condition exists at the ramp/entrance into the central part of the western cell (as shown on the attached Figure 1).

The construction specifications required "Geotextile panels shall overlap by a minimum of three (3) feet." This means that the same condition of multiple layers of geotextile exists at other areas of geotextile overlap. In some geotextile overlap areas located on a curved surface of the armored cap, such as at the northern end of the central berm, more geotextile was used to provide a larger overlap that the minimum 3 feet that was required as part of the construction specifications. We also used this technique in the two maintenance events, lapping the geotextile and armor a minimum of 3 feet onto adjacent undamaged surfaces. When abutting completed segments of work, any geotextile material in excess of 3 feet was pulled vertical and trimmed or tucked into the armor stone. We insisted that the contractor leave "tails" sufficient for inspection by USEPA and Anchor QEA during construction, repair, and enhancement phases. In these areas, small strips of geotextile may be seen at the surface; however, probing in those areas demonstrates there is armor rock and geotextile beneath that overlap surface.

As requested in the Memo to File, Respondents will place additional rock in the subject area in the near future as a cosmetic measure to prevent the separation geotextile layer from being observed at the surface. Our intent is to use armor rock C that is currently stockpiled at a nearby facility for use in maintenance of the armored cap. It is estimated that this effort will require approximately one cubic yard or less of material. The material will be installed using hand tools. Coordination of this effort, along with additional vegetation control by Benchmark Ecological Services, is complete at this point and we received your concurrence for the maintenance and vegetation control in an email to me on June 19, 2015.

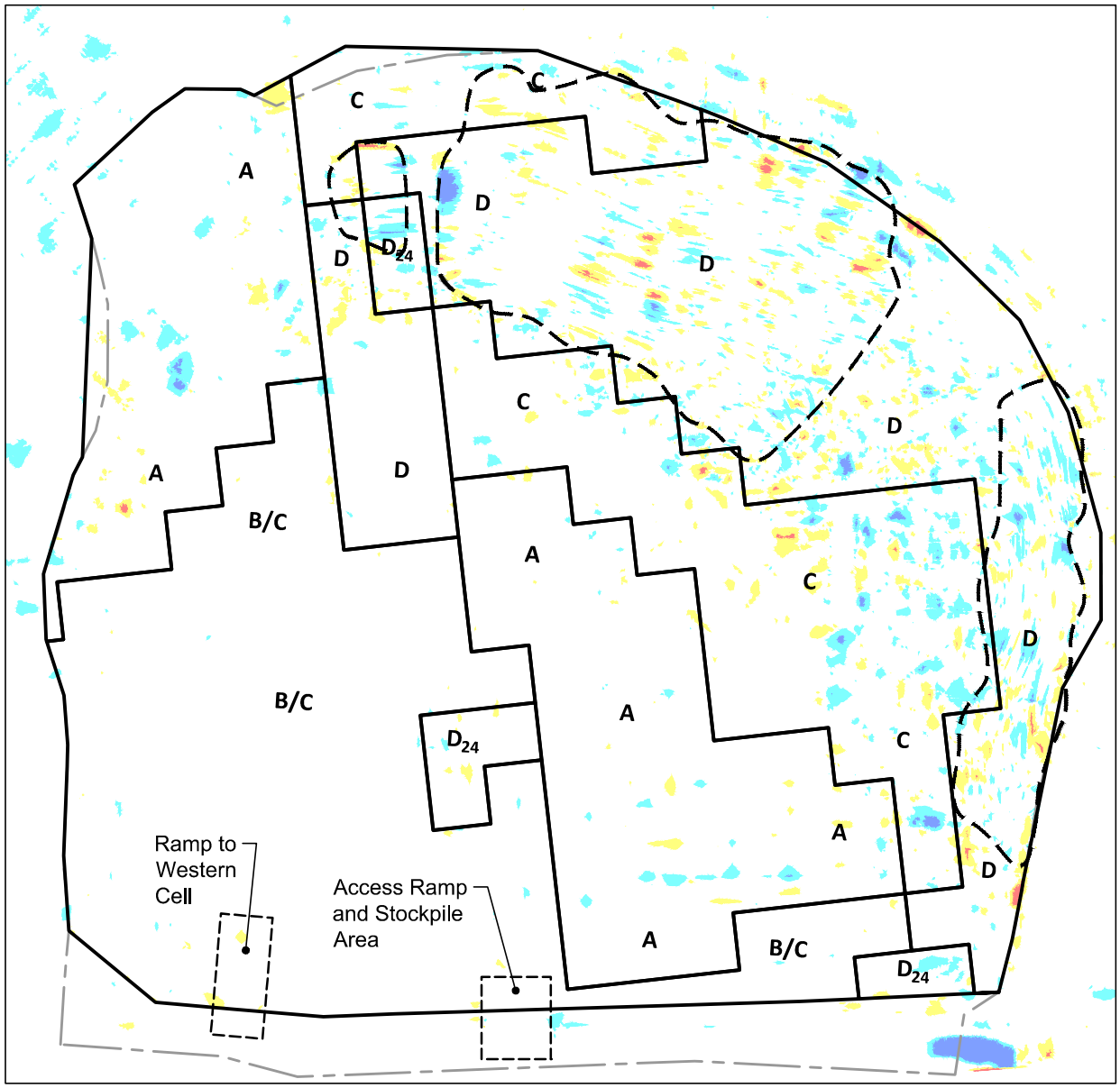
We trust this transmittal clarifies the record regarding the presence of the separation geotextile layer in the subject area, as well as confirms that the TCRA armored cap continues to function as designed.

Sincerely,

David C. Keith
Project Coordinator

cc: Anne Foster, USEPA

FIGURES



LEGEND:

- January 2015 Bathymetric and Topographic Contours (1 Foot Interval)
- Approximate Extent of April 2015 Survey
- B/C — Armored Cap Type and Boundary
- Historic Impoundment Limits
- > 1.0 Foot Increase
- 0.5 Foot Increase to 1.0 Foot Increase
- 0.5 Foot Increase to 0.5 Foot Decrease
- 0.5 Foot Decrease to 1.0 Foot Decrease
- > 1.0 Foot Decrease
- 30' × 30' — Example 30'x30' Area

SOURCE: Drawing prepared from surveys provided by Hydrographic Consultants dated July 2014 and January 2015 and supplemented with additional survey data collected on April 8, 2015.
HORIZONTAL DATUM: Texas State Plane South Central, NAD83, U.S. Feet.
VERTICAL DATUM: NAVD 88.

0 150
Scale in Feet

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Figure 1
Post TCRA Site Map Showing Stockpile and Ramp Areas Utilized During Construction
San Jacinto River Waste Pits Superfund Site

Note multiple lapped layers of geotextile are installed before crushed stone aggregate.

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Figure 2
Construction East Ramp to Stockpile Area
San Jacinto River Waste Pits Superfund Site

Looking southeast toward the stockpile area on the central berm.

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Figure 3
Protective Cushion Geotextile Layer Added Over Geomembrane
San Jacinto River Waste Pits Superfund Site

Looking south toward the stockpile area.

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Figure 4
Geotextile and Armor Stone Placed Along Central Berm
San Jacinto River Waste Pits Superfund Site

Note separation layer of geotextile utilized for the stockpile area during construction is shown lying over the protective armored cap.

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Figure 5
Project Ariel Photograph Dated June 9, 2011
San Jacinto River Waste Pits Superfund Site

Note protective armor cap beneath the separation geotextile in the stockpile area.

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Figure 6
Construction Stockpile Area
San Jacinto River Waste Pits Superfund Site

Note reddish colored processed concrete aggregates in the stockpile area.

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Figure 7
Project Completion Photograph from I-10 Bridge
San Jacinto River Waste Pits Superfund Site

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Figure 8
Project Completion Photograph Dated July 14, 2011 in the Photograph Logs
San Jacinto River Waste Pits Superfund Site

Note signage and reddish colored processed concrete aggregate along the central berm with remanent geotextile from multiple laps for the 12 ounce geotextile underlayer, geomembrane, 16 ounce cushion layer, and the final layer of geotextile and armor stone.

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Figure 9
Project Completion Photograph Dated July 28, 2011 in the Photograph Logs
San Jacinto River Waste Pits Superfund Site