From:	Susan Hanson
To:	Valdez, Heather
Cc:	Kelly Wright
Subject:	Re: FMC OU Soil RA - Proposed Flexterra and Smart Ditch Material Substitutions [WARNING: SPF validation failed]
Date:	Thursday, September 01, 2016 12:38:58 PM

JW response

Susan Hanson

On Aug 25, 2016, at 6:19 PM, "Williams, Jonathan" <Williams.Jonathan@epa.gov> wrote:

Rachel and Rob:

EPA has reviewed FMC's Proposed Alternate Erosion Control Material and Stormwater Channel Lining System, and Proposed Geogrid Fabric for Access to Groundwater Monitoring Wells within Capped RAs, submitted August 15, 2016. Comments on the explanatory letter and accompanying information are provided below.

As discussed during the weekly progress call this morning, EPA can be available tomorrow (August 26) or next Monday (August 29) to discuss these comments as needed to facilitate FMC responses.

Flexterra as a Substitute for ECBs:

Detail has not been provided on the method of application for the Flexterra growth medium or proposed thickness of the Flexterra layer. Technical specifications provided in Attachment 1 require a minimum thickness of 5.6 millimeters (0.22 inch) for optimal performance. FMC must (1) provide details on application of the growth medium; (2) confirm that Flexterra will be seeded with the approved vegetation mix; and (3) outline specific inspection frequencies, evaluation criteria, and repair procedures for the Flexterra layer and associated vegetation in an updated OMMP.

SmartDitch Lining as a Substitute to Concrete-Lined Channels:

1. Revised plans and specifications showing proposed SmartDitch components (e.g., trenches, connectors, fittings, flares) and placement/discharge locations must be provided.
2. Describe how FMC will ensure that surface water runoff will flow into, rather than

undercut or flow around, the SmartDitch features. This problem has already been encountered at constructed stormwater ditches in the capped areas. The manufacturer recommends use of specific edge protection products to avoid undermining of the plastic ditch material by surface water flow.
3. Provide information about the expected longevity of the SmartDitch components. This detail is needed to confirm that the updated OMMP will include appropriate provisions for inspection, maintenance, and repair/replacement as needed.
4. The SmartDitch technology must be visually compatible with the remediated areas to the extent practicable. Provide information about available colors proposed for use.
5. Additional detail must be provided regarding derivation of the SmartDitch maximum flow rates in Table 1 of the subject letter. Also, clarify which stormwater channels are proposed to be constructed using SmartDitch, and and revise the table to include additional channels as necessary.

Access Roads on ET Caps to Support CERCLA and RCRA Groundwater Monitoring Effort:

1. Expand the proposal to indicate how the geogrid alignments will be marked in the field to ensure that these pathways are used as access roads, rather than unprotected portions of the cap.
2. Briefly describe how access on soil-capped areas will be provided not only to existing monitoring wells but also additional wells and/or borings to be installed during the groundwater RD/RA at locations yet to be determined.

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From: Rob Hartman [mailto:Rob.J.Hartman@mwhglobal.com]
Sent: Monday, August 15, 2016 10:03 AM
To: Williams, Jonathan <Williams.Jonathan@epa.gov>
Cc: Michele Benchouk <benchouk_michele@bah.com>; Doug Tanner <Douglas.Tanner@deq.idaho.gov>; Scott.Miller@deq.idaho.gov; 'wayne.crowther@deq.idaho.gov' <wayne.crowther@deq.idaho.gov>; Kelly Wright (kwright@sbtribes.com) <kwright@sbtribes.com>;susanh@ida.net; Rachel Greengas <Rachel.Greengas@fmc.com>
Subject: FMC OU Soil RA - Proposed Flexterra and Smart Ditch Material Substitutions

Jonathan: On behalf of FMC, the attached letter provides information on FMC's proposed alternate erosion control material and storm water channel lining

system, including the manufacturer's product information sheets. FMC is providing the attached information on the proposed substitute materials to EPA for review and approval.

As also described in the attached letter, FMC is evaluating integrating a geogrid fabric into the cover soil of the caps to provide reliable access and minimizing potential damage (rutting) to the caps when FMC's contractor accesses the groundwater monitoring wells located within capped RAs. FMC will provided additional information to EPA on the proposed geogrid fabric and alignment of the monitoring well access roadways on capped areas after it completes its evaluation.

Please call Rachel Greengas at (215) 299-6550 or me at (801) 617-3256 if you have any questions. Thank you,

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