Jolly, Becky <becky.jolly@dnr.iowa.gov>

Re: WDC

1 message

Leat, Mick <mick.leat@dnr.iowa.gov> Fri, Oct 4, 2024 at 2:11 PM
To: Bob Roach <RRoach@penn-er.com>
Cc: Matt Thelen <matt.thelen@wellmandynamics.com>, Becky Jolly <becky.jolly@dnr.iowa.gov>

We're OK with that. And thanks for the update on the CCL thickness issue..

Mick Leat
Environmental Engineer
Solid Waste and Contaminated Sites Section
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Des Moines, IA
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Department of Natural Resources

On Fri, Oct 4, 2024 at 1:16 PM Bob Roach <RRoach@penn-er.com> wrote:

> Thank you Mick. I believe I forgot to respond to this.
>
> We are not proposing mixing rock with the soil.
>
> Riprap may be used in channels/swales outside the waste disposal area or above waste disposal areas with a geotextile placed between the soil and rock, and the rock thickness would be used with the underlying uncompacted soil to comprise the 2-foot thick vegetative cover/erosion layer. We would provide a minimum of 1-foot of soil between the compacted clay layer and the rock layer.
>
> Just an update from our last phone conversation, additional clay was added to areas that were less than clay 1.9' thick, resurveyed, and confirmed to be at least 2 feet thick.
>
> Thanks,

Bob Roach, P.E. | Senior Project Engineer

Rroach@penn-er.com

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Pittsburgh, PA 15205

Penn E&R
Environmental & Remediation, Inc.

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From: Leat, Mick <mick.leat@dnr.iowa.gov>
Sent: Monday, September 23, 2024 5:51 PM
To: Bob Roach <RRoach@penn-er.com>
Cc: Matt Thelen <matt.thelen@wellmandynamics.com>; Becky Jolly <becky.jolly@dnr.iowa.gov>
Subject: Re: WDC

External Message: Use extreme caution with links and attachments

Question #1 - I am not sure what you are asking here. Are you suggesting check dams, or some other structures or just mixing in rock with the uncompacted soil? Please provide me with some more details. If you are talking about the general final cover slope, we prefer (and have found that) thick, healthy vegetation is more than adequate to prevent erosion, and that rock mixed with the cover soil may make mowing more difficult as well as hamper vegetation health.

Question #2 - We are OK using riprap/rock in channels/swales above waste disposal areas provided a geotextile is placed between the soil and rock, and the rock thickness can be used with the underlying uncompacted soil to comprise the 2-foot thick vegetative cover/erosion layer. We would like to see a minimum of 1-foot of soil between the compacted clay layer and the rock layer.

Regarding the remainder of your email, we concur with each of your statements. Please let me know if this doesn't answer your questions.

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IOWA | Department of Natural Resources

On Mon, Sep 23, 2024 at 2:42 PM Bob Roach <RRoach@penn-er.com> wrote:

> Hi Mick,
>
> Thank you for returning my call regarding the below. Below I have a question from the Contractor and summary of our phone conversation.
>
> Could WDC add riprap/rock along the landfill slope to protect it from erosion?
>
> Slopes within the landfill boundary will be less than 25% as required per the regulations, but he offered this as a protective measure.
>
> He also recommended rock in channels/swales that will convey water to proposed tile drainage. I assume that rock would be acceptable since it is outside the landfill boundary.
>
> I was not sure about the slopes within the landfill boundary, though. He thought the rock could be incorporated into the two-foot topsoil cover, probably after the first foot of topsoil. Any input is appreciated.
>
> Per our phone conversation, the Contractor will add clay and compact it in areas where the clay layer is less than two feet where there are multiple spots adjacent or where the clay layer is less than 1.9 feet. There are four such areas.
>
> We plan to provide Quality Assurance Report after construction describing the efforts and summarize the cap results. The report will have attachments with the raw data from the landfill – field density reports, as built drawing, and elevation shots taken of the final waste, clay cap, and topsoil cap.
>
> IDNR is acceptable with the consultant (Team Services) report guidelines for passing results – 95% or higher specific density percentage and percent moisture of dry mass at optimum moisture or 4 percent above.
>
> WDC shall conduct monthly inspections after the cap is installed and shall conduct semi-annual inspections for at least the next 30 years after closure.
>
> Any comments, please let me know.
>
> Thank you,

Bob Roach, P.E. | Senior Project Engineer

Rroach@penn-er.com

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From: Bob Roach
Sent: Monday, September 23, 2024 9:57 AM
To: mick.leat@dnr.iowa.gov
Cc: Matt Thelen <matt.thelen@wellmandynamics.com>
Subject: WDC

Good morning Mick,

I tried your cell phone this morning and can try you again later but wanted to send this email in the meantime. I was out at the site with Matt last week and WDC has the clay layer installed and had the top of the clay layer surveyed. We compared it to the top of waste survey and wanted to discuss the findings with you. We were not sure what deliverable was needed to you to confirm the two feet of cover and if spots that are tenths of an inch short of two feet of cover would be acceptable? Please give me a call or email response when you are able

Thank you,

Bob Roach, P.E. | Senior Project Engineer

Rroach@penn-er.com

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