Message

From: McEvoy, Molly [mcevoy.molly@epa.gov]
Sent: 2/13/2020 10:40:25 PM
To: Ho, Yenhung [Ho.Yenhung@epa.gov]
CC: Albright, David [Albright.David@epa.gov]; Bates, William [bates.william@epa.gov]
Subject: RE: GSDT Notifications for CES Permit App
Attachments: rrdm_guidance_for_operators_final_2016.pdf

Hi Calvin,

Thank you for forwarding me the other email from Rebecca. As long as all the require information is submitted to EPA via the GSDT, one can argue the application is complete. However, if information is not submitted through the proper modules, it could increase the amount of time EPA needs to review the application and the likelihood that required information will not be submitted.

Rebecca's other email suggests that CES may have all the necessary information and is prepared to submit into the "Alt PISC Timeframe Demonstration" module.

In regards to the "Pre-Operational Testing" module, Section 3 of the Recordkeeping, Reporting, and Data Management Guidance for Owners and Operators (found on EPA's website here and attached) may provide CES with the information they are looking for. Only the proposed pre-operational formation testing program that meets the requirements of 146.87 is required with the initial permit application. Section 2.2 of the Pre-Operational Testing Module User Guide also speaks to this.

Let me know if you need anything else.

Thanks,
Molly

Molly McEvoy
Office of Ground Water & Drinking Water
U.S. Environmental Protection Agency
Washington, D.C.
Phone: 202-564-4765

From: Ho, Yenhung <Ho.Yenhung@epa.gov>
Sent: Thursday, February 13, 2020 2:27 PM
To: McEvoy, Molly <mcevoy.molly@epa.gov>
Cc: Albright, David <Albright.David@epa.gov>
Subject: FW: GSDT Notifications for CES Permit App

Hi Molly,

CES confirmed that they didn't submit the Pre-Operational Testing and Alt PICS modules because no wells have been drilled and no site-specific details have been collected at the pre-construction stage. However, CES is willing to work to provide as much information as possible if we require them to submit these modules at this time. Shall we let CES know that they need to submit these modules for completeness of the application?

Thanks,
Calvin

From: Rebecca Hollis <rhollis@cleanenergysystems.com>
Sent: Thursday, February 13, 2020 10:10 AM
To: Albright, David <Albright.David@epa.gov>
Cc: Ho, Yenhung <Ho.Yenhung@epa.gov>; Wayne Rowe <rowe5@slb.com>; Wade Zaluski <WZaluski@slb.com>
Subject: RE: GSDT Notifications for CES Permit App

Hi again, David,

We reviewed the feedback provided by Molly. Then went back and took a harder look at GS Data Tool modules: Pre-Operational Testing, and Alt PICS Timeframe Demonstration, as well as our application material. The short summary is that we did not submit information through the two modules because we felt at our current stage (Preconstruction) we have not drilled wells or collected the site-specific detail requested. That being said, much of the information is presented (based on computational modeling) throughout other sections of our application. So, if EPA requires these two modules be completed at this phase, we can work to provide as much info as possible at this time.

In our re-review, I did see the check boxes in the Project Information module that I did check for both the Pre-Operational Testing and Alt PICS Timeframe Demonstration modules. So, this was indeed an inconsistency with our application, my mistake, and a good catch by EPA.

To provide more detail on the modules and our reasoning for not submitting them at this time:

> **"Pre-Operational Testing:** this module supports the submission of geologic, hydrogeologic, and well-related data collected during the construction of a new well or during/after conversion of a Class VI well prior to commencing injection pursuant to 40 CFR 146.82(c)."
>
> - This was not submitted because CES is in the Preconstruction Phase. There is no well-related data collected because a well has not been drilled at this time.
> - Operational testing schedules are presented in the Attachments submitted under Project Plan Submissions.

> **"Alternative PISC Timeframe Demonstration:** this module is used to submit an alternative PISC timeframe demonstration by owners or operators who opt to make this demonstration pursuant to 40 CFR 146.93(c)."
>
> - As per our evaluation in Section 5 of ATTACHMENT E: POST-INJECTION SITE CARE AND SITE CLOSURE PLAN 40 CFR 146.93(a), This pre-construction application is proposing a ten year post monitoring period following the cessation of injection operations. This alternative post injection site care (PISC) timeframe, pursuant to 40 CFR 146.93(c)(1) is based on the computational modeling to delineate the AoR; predictions of plume migration, pressure decline, and carbon dioxide trapping. Once site-specific (characterization well, 3D seismic, etc.) has been acquired, CES will either complete the alternative post-injection site care plan or modify the monitoring time-frame for the *"Monitoring Above the Confining Zone"* and *"Carbon Dioxide Plume and Pressure Front Tracking"* sections of this attachment.
> - Because this conclusion is based on only computational modeling, CES concluded it was not the time to submit this module. The requested items to submit are presented in the submitted Narrative and Attachments A through Attachments H.

Please advise if EPA requires CES to submit these modules at this time.

Thank you again,
-Rebecca

Rebecca Hollis
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The Power to Reverse Climate Change

From: Rebecca Hollis
Sent: Tuesday, February 11, 2020 9:59 AM
To: Albright, David <Albright.David@epa.gov>
Cc: Ho, Yenhung <Ho.Yenhung@epa.gov>
Subject: RE: GSDT Notifications for CES Permit App

Thank you, David.

I will review this with the team and get back to you ASAP.

Thanks again for your assistance in this matter.

Best,
-Rebecca

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The Power to Reverse Climate Change

From: Albright, David <Albright.David@epa.gov>
Sent: Tuesday, February 11, 2020 9:44 AM
To: Rebecca Hollis <rhollis@cleanenergysystems.com>
Cc: Ho, Yenhung <Ho.Yenhung@epa.gov>
Subject: FW: GSDT Notifications for CES Permit App

Hi Rebecca, below is the text of the message sent to me by Molly McEvoy, per our discussion a moment ago. We can discuss at your convenience.

Thanks, David

Hi David,

The information CES submitted via the GSDT is formally submitted to EPA, but I'm not sure if they are done submitting for this application.

I would expect to see submissions into the Pre-Operational Testing module. They did not submit anything to this module but it's possible they included the information required under 146.82(a)(8) in another module. They also have not submitted data into any of the optional modules (e.g., Alternative PISC Timeframe Demonstration).

I'm looking at their form submissions and it appears CES marked in the Project Information module that they would be submitting data into the Pre-Operational Testing module and Alt PICS Timeframe Demonstration module. I can't tell for sure from their submissions, so it may be necessary to confirm with CES that they are done submitting information to EPA.

I'll work on adding your emails to the email notifications list for this project. Let me know if you need any other help with the GSDT.

Thanks,
Molly