Message

From: Ho, Yenhung [Ho.Yenhung@epa.gov]
Sent: 5/27/2021 11:00:23 PM
To: Shari.Ring@cadmusgroup.com
CC: Rao, Kate [Rao.kate@epa.gov]; Albright, David [Albright.David@epa.gov]
Subject: FW: EPA request for updates to application

Hi Shari, fyi. Please let us know if you have any response to any of the CES's questions below. Thanks.

From: Rebecca Hollis <rhollis@cleanenergysystems.com>
Sent: Thursday, May 27, 2021 3:12 PM
To: Ho, Yenhung <Ho.Yenhung@epa.gov>
Cc: Albright, David <Albright.David@epa.gov>; Natalie Nowiski <NNowiski@slb.com>; Larry Trowsdale <lstrowsdale@cleanenergysystems.com>; Keith Pronske <klpronske@cleanenergysystems.com>; Vivian Rohrback <VRohrback@slb.com>
Subject: RE: EPA request for updates to application

Fixed my response to 2a below.

Thanks again,
-Rebecca

From: Rebecca Hollis
Sent: Thursday, May 27, 2021 2:55 PM
To: Ho, Yenhung <Ho.Yenhung@epa.gov>
Cc: Albright, David <Albright.David@epa.gov>; Natalie Nowiski <NNowiski@slb.com>; Larry Trowsdale <lstrowsdale@cleanenergysystems.com>; 'Keith Pronske (klpronske@cleanenergysystems.com)' <klpronske@cleanenergysystems.com>; Vivian Rohrback <VRohrback@slb.com>
Subject: RE: EPA request for updates to application

Dear Calvin,

Good to hear from you and thank you for following up. I have included responses to your questions within your email below, in blue font. We also had just a few questions for your team that I also included below, red font.

As always, let me know if you have any questions or need anything else at this time.

Thank you,
-Rebecca

Rebecca Hollis
Director Business Development -
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rhollis@cleanenergysystems.com
The Power to Reverse Climate Change

From: Ho, Yenhung <Ho.Yenhung@epa.gov>
Sent: Tuesday, May 18, 2021 4:38 PM
To: Rebecca Hollis <rhollis@cleanenergysystems.com>
Cc: Albright, David <Albright.David@epa.gov>
Subject: RE: EPA request for updates to application

Hi Rebecca,

We look forward to receiving an updated permit application from CES. Please don't hesitate to contact us if CES has any questions.

In addition to our most recent request letter, we need the following data/clarification. Please feel free to provide a response along with the updated application.

1. Please include in the updated permit application the township-range-section where the proposed Mendota_INJ_1 well will be located in.
   - OK. This will be included in the updated application material.
2. Please clarify:
   a. if the CO2 stream for injection will be generated mainly/only from the oxy-combustion process;
   - Yes. The CO2 stream for injection will come from the oxy-combustion system. This will be clarified in the updated application material.
   b. if the CO2 stream will be injected in the supercritical state only; and
   - Yes. The CO2 stream will be pressurized to a supercritical state and injection conditions will be monitored at the well, e.g. pressure, temperature.
   - This will be clarified in the updated application material.
   c. if the address of the CES Mendota site is 400 Guillen Pkwy, Mendota, CA 93640.
   - I can confirm the address of the Mendota plant is: 400 Guillan Park Drive, Mendota Ca 93640. This is per the official recording and public tax information. It appears our application material is incorrect (note Google maps has the street name wrong).
   - This will be corrected in the updated application material.
   - In addition, we will clarify the base coordinate system when utilizing GPS coordinates.

Lastly, do you have an update on the topics of financial assurance, Endangered Species Act, National Historic Preservation Act, and subsidence?

Financial Assurance:
- Received revised report from 3rd party firm (TRC) on cost estimates for ERRP; currently under review
    - Also, conducted analysis using DOE NRAP tools to estimate probability and range of potential leakage
        - Currently under review for consideration in ERR cost estimates
- Working with project team to optimize financial assurances/coverage
- Question: Does EPA have any comments/additional feedback on the preliminary proposal/scheme discuss in December?

ESA
- Finalizing report for 71 acre plant site
    - Plan to submit to EPA with NHPA study for plant site ASAP (estimate early June)
- Proposal in for desktop study received and being evaluated for larger, anticipated 3d seismic area (estimate up to 32 sq miles potential)

NHPA
- Report for 71-acre plant site complete
    - Plan to submit to EPA with ESA study for plant site ASAP (estimate early June)

- Proposal in for desktop study received and being evaluated for larger, anticipated 3d seismic area (estimate up to 32 sq miles potential)

Subsidence

- The team has been researching various options to determine the extent of subsidence in the area by the following:
    - Review of CalGEM WellSTAR data for the Gill Ranch wells including the drilling history and the intent documents.
    - Review of the California DWR public GPS monitor located to the south of Mendota.
    - Review of the CA DWR InSAR (satellite) data to try to understand historic trends of subsidence in the region.
        - Data above indicates that the Mendota site is not seeing the level of subsidence indicated by EPA/CalGEM in their response.
    - On-going conversations with a 3rd party vendor for potential acquisition of past satellite imagery data in the region to understand historic trends. A determination has not been made as to whether to move forward with a study.
    - CES is now in direct contact with Gill Ranch.
    - A preliminary geomechanics study was performed with varying subsidence rates to determine the effect of subsidence on the formation. No significant overburden stress/strain was predicted from the simulated subsidence cases.
- Upon understanding the extent of subsidence, options will be reviewed and evaluated to confirm if valid solutions; includes a review and evaluation of monitoring techniques.
- To support the investigation, CES would like to clarify with EPA/CalGEM:
    - Question: What is meant by "unlanding" as per the exemption document.
    - Question: Are you able to elaborate on how "unlanding" is performed and the expected results?

Thanks,
Calvin

From: Rebecca Hollis <rhollis@cleanenergysystems.com>
Sent: Monday, May 3, 2021 11:26 AM
To: Ho, Yenhung <Ho.Yenhung@epa.gov>
Cc: Albright, David <Albright.David@epa.gov>
Subject: RE: EPA request for updates to application

Thank you, Calvin.
Appreciate you sending this along. Yes, I received the notification through the GSDT as well on Friday.
I have already forwarded to the technical team for review. Will get back to you ASAP with any follow questions/clarification.

Best Regards and happy Monday,
-Rebecca

Rebecca Hollis
Director Business Development -

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The Power to Reverse Climate Change

From: Ho, Yenhung <Ho.Yenhung@epa.gov>
Sent: Friday, April 30, 2021 10:32 AM
To: Rebecca Hollis <rhollis@cleanenergysystems.com>
Cc: Albright, David <Albright.David@epa.gov>
Subject: EPA request for updates to application

Good morning, Rebecca,

Attached is a copy of EPA's request for updates to CES's Class VI permit application. The request has also been uploaded to the GSDT.

Please let us know if you have any questions about this request.

Regards,
Calvin

Calvin Ho
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