To: Salera, Jerry@DOC [Jerry.Salera@conservation.ca.gov]
Cc: Dermer, Michele[Dermer.Michele@epa.gov]
From: Robin, George
Sent: Thur 3/21/2013 6:19:40 PM
Subject: (Final)(Tech Review) Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Hi Jerry,

•□□□□□□□ Please see my replies depicted as "***[GR]*** I agree...." within **your earlier email** and just below your comments "***[JS]*** I believe...". I wanted to retain the same context in response.

Additionally:

•□□□□□□□ Please refer to Appendix H – Correspondence ERG_RWQCB

I have a problem with the exchange between the operator and the Regional Board in a number of areas. First, EPA's interest, as an agency, is formally, ultimately focused upon the Ca. DOGGR's making the petition to all the interested/affected parties of the state. The Appendix H does not satisfactorily represent this kind of agency-to-agency exchange. The operator's (Michelle Ricker, SCS Engineers) response to the Regional Board only provided them with information – for the Regional Board to figure out – and the information package that is cited is missing – for the EPA to retrieve. This was not an answer to the Board's question. The App. H did not provide whether or how the Board responded either. In short, this was not an official exchange represented by the Ca. DOGGR. Further, please assume that any question from the Regional Board (or anyone else) is in effect, a question from EPA.

Thank you for your patience, allowing me the opportunity to focus my review in this way, in these circumstances.

Please consider my review finished. Michele Dermer may have additional input?

Please let me know if we need to discuss. I will try my best to accommodate your busy schedule!

George

From: Salera, Jerry@DOC [mailto:Jerry.Salera@conservation.ca.gov]
Sent: Thursday, March 14, 2013 11:08 AM
To: Robin, George
Cc: Dermer, Michele
Subject: RE: (Preliminary)(Tech Review) Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Hi George,

I've forwarded the additional documentation the operator needs to do as discussed below. I do have some questions which I've highlighted on some items I'm not clear with and request clarification. I've indicated my comments/query in red for readability.

Also, do you have any more comments that needs to be take cared of. Kindly let me know as soon as possible. Thanks.

Jerry

From: Robin, George [mailto:Robin.George@epa.gov]
Sent: Friday, March 08, 2013 2:31 PM
To: Salera, Jerry@DOC
Cc: Albright, David; Dermer, Michele; R9-Deep
Subject: RE: (Preliminary)(Tech Review) Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Hi Jerry,

This is the first set of notes. I might come up with more, but will let you know immediately when this review is finished.

•□□□□□□□ Public Notice uses the descriptive "minor" to describe the AE (aquifer exemption). Either this term "minor" should be defined or it should simply be left out of the Notice to avoid the public's misunderstanding of what aspect "minor" refers. This term is solely for the use of our agencies to describe the process of approval/review that we will undertake. Whereas, for the public's reference, the aquifer in question is simply being petitioned as qualifying for an exemption from protection.

•□□□□□□□ A major component of the EPA's review process could be dealt with readily if the comments and response exchange between the Ca's DOGGR and the appropriate Regional Board were shared with EPA in advance of the Public Notice, but either while in development or at conclusion. Our experience is that these exchanges are more technically in depth than those from the Public's scrutiny. We have seen this exchange reflected by influencing the Operator's editing their original application package. Further please keep in mind that any comment/question from an agency or from the Public will become the EPA's. The current example is that of the Regional Board's request for defining the vertical distance of the water supply wells and the proposed injection zone to be exempted...

•□□□□□□□ The large printed maps were helpful, however the software (as opposed by the hand-drawn maps) did not allow the Section lines and numbers to be visible and prominent sufficiently. Please have the operator re-draw. You had the same problem and your approach to Map 2 helped us out during our phone conversation.

•□□□□□□□ Please consider phone discussions at various stages of the AE process with us at Region 9. We went through a lot of information very quickly because of our exchanges in real time – actually, probably faster than my typing this whole message of notes you and I determined! If it is helpful the goal is for Region 9 (when we are the authorizing signee) to be as ready as possible to respond following the formal receipt of the AE application/petition. Additionally, importantly, the 45 days is not enough time for a technical review that has only begun in earnest at the time of formal submission and requires additional information/action from the operator. The regulations at 144.7 seem to only allow for "acceptance" or "disapproval" and either becomes the final decision, not interim.

[JS] I believe we have had preliminary phone discussions on this project to clarify various data 2-3 times before the submission last Feb 20 (since withdrawn). I emailed the initial materials early December and subsequently emailed additional documents after these preliminary discussions. Do you propose a more in-depth discussion and documentation prior to formal

submission? By in-depth discussion and documentation, I mean a more or less thorough review of the material submitted so that any possible changes to the AE document during the 45-day technical review period will not be substantial requiring, in EPA's view, an additional Public Comment period. I'm posing this question to guide us in future submissions.

[GR] I agree that the preliminary discussions were valuable. Yes, for one, by the time the AE is ready for Public Comment, the Regional Board will have exchanged their comments and likely affected the material. The other comments I made, such as in this email should refer to the degree of scrutiny to which the operator must supply their information and explanation. But I thank you for our cooperative collaboration on this project and the larger issue of future Aquifer Exemptions. The application packages can certainly be prepared to include easy-to-follow documentation and descriptions, etc., however, the AE process will probably never be quite the desired "streamlined, automatic" process because this process, by its very nature demands multiple levels of review and takes into account, a wide range of possible scenarios.

We have to try to get a good, engineering handle though, and that is being developed as we expect more AEs along with improvements in technology. A rule of thumb is that the application should be understood by a "novice" reviewer, especially one who is not familiar with oil field literature and depictions. How do these tables, charts, maps support the application? It can always be assumed that this support as supplied by the application is not as obvious to the reviewer, especially EPA, as it is to the operator of the field's technical staff. Ultimately, the technical staff must understand that the reason for needing this level of explanation is because the EPA must be able to defend their decision – many times, to novice reviewers.

•□□□□□□□ The operator's application's cross-sectional diagrams must correspond with the actual wells on the map. Please have the operator go through these to verify and make any changes needed. Additionally, those cross-sections should be sufficiently able to address the Regional Board's comments.

•□□□□□□□ The maps do not all agree in displaying the Fresh Water wells (unnamed), Fresh Water well 5-25 and Fresh Water Well 6-25. All the maps should agree on the locations.

•□□□□□□□ The AE did not include portions of the field/reservoir where wells 172 and 18-25 in Section 25 (?) and well 96 in Section 36 (?) show being Active Producer. Please have the operator clarify or edit the AE boundaries (to avoid an additional application for a previously overlooked, productive portion).

•□□□□□□□ Please clarify that the exchange and response to the Regional Board's comments were concluded and made available during the period soliciting Public Comments.

•□□□□□□□ Please consider that as a result of the operator's additional, informational response to any review comments, those changes to the application may be determined as significant, enough

to trigger an additional Public Comment period. I know of no applicable guidance as of yet, however, my intuition is that this will not be a difficult decision and will become readily apparent to everyone.

[JS] How long would an acceptable additional Public Comment period be? Do you need to see the changes and concur to the document before we can initiate the newspaper Ad?

[GR] I do not know. We can discuss this, but it will be a legal/management decision. Per my above comment, a major factor is whether the application's editing will be substantial, sufficient to trigger a full Comment period. Those situations are not uncommon. What would be unique is that the Public Comment period will be accompanied by an explanation for the additional period – so that those in the public arena, who examined this before and had no comments, may simply choose to focus upon those highlighted changes that triggered the comment period.

That is what I have so far. I want to get these to you before the end of our day. We went through these items initially because they were the ones that are key in documenting and justifying the case for using Class II EOR in this unexempted area.

Thanks,

George

George Robin (robin.george@epa.gov)

Engineer, Underground Injection Control

US EPA, Region IX *Phone (415) 972-3532*

75 Hawthorne St. *Fax (415) 947-3549*

Ground Water Office

Mail Code: WTR-9

San Francisco, CA 94105

From: Robin, George
Sent: Friday, March 08, 2013 8:56 AM
To: Salera, Jerry@DOC
Cc: Kustic, Tim@DOC; Abel, Pat@DOC; Albright, David; Dermer, Michele
Subject: RE:(Tech Review) Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Hi Jerry,

Per our conversation yesterday, the (technical) review of the AE (aq. exemption) application remains ongoing for the sake of expediency and facilitating the resubmission of the AE with contents that are readily acceptable.

We are intent on developing a smooth AE process and participation as it concerns the agencies, the operators and the public.

I will forward my notes and will continue submitting including when the review is finished.

George

George Robin (robin.george@epa.gov)

Engineer, Underground Injection Control

US EPA, Region IX *Phone (415) 972-3532*

75 Hawthorne St. *Fax (415) 947-3549*

Ground Water Office

Mail Code: WTR-9

San Francisco, CA 94105

From: Dermer, Michele
Sent: Thursday, March 07, 2013 3:41 PM
To: Salera, Jerry@DOC
Cc: Robin, George; Kustic, Tim@DOC; Abel, Pat@DOC; Albright, David
Subject: RE: Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Thanks for the information Jerry.

From: Salera, Jerry@DOC [Jerry.Salera@conservation.ca.gov]
Sent: Thursday, March 07, 2013 11:14 PM
To: Dermer, Michele
Cc: Robin, George; Kustic, Tim@DOC; Abel, Pat@DOC
Subject: Cat Canyon Aquifer Exemption Application - Sisquoc Zone

Hi Michele,

Please be informed that we would like to withdraw the recently submitted AE application for the Sisquoc aquifer in the Cat Canyon field. We intend to resubmit this after providing additional documentation to the application package. A formal letter will be sent to you to confirm this withdrawal. Thank you.

Jerry Salera

Underground Injection Control (UIC) Program

CA Division of Oil, Gas and Geothermal Resources

801 K Street, MS 20-20

Sacramento, CA 95814

Tel: 916-323-1781

Fax: 916-323-0424

Jerry.Salera@conservation.ca.gov