

November 14, 2017

Mr. Darren Parkin
Water Resource Specialist
City of Laramie
P.O. Box C
Laramie, WY 82070

RE: Review of the Addendum to Site Specific Investigation for City of Laramie Property at Southeast Corner of Beech and Boulder Drive dated October 20, 2017 [SSI for Southeast Corner of Beech and Boulder Drive, dated June 26, 2015 and the Addendum dated October 30, 2015, both prepared by the Trihydro Corporation.]

Darren:

WWC Engineering reviewed the referenced Addendum to the Site Specific Investigation. The development plan for this property is an expansion of an existing storm water detention pond.

The Addendum does not appear to address issues identified in our previous review of the SSI, prepared by WWC and Hinckley Consulting, dated November 18, 2015. These issues include:

1. The SSI suggestion that the Satanka Shale at the Site is 230 feet thick is simply repeated in the Addendum. The SSI does not support this estimate, and the estimate is different than Trihydro's estimates for adjacent properties.
2. The Addenda repeats the SSI's mischaracterization of the Sherman Hills Fault as a discrete linear feature at the mapped location. There is readily available research done by the City in 2015 which shows otherwise.
3. There is no discussion of the stratigraphic location of the static water level at his location.
4. There is no discussion of the potential impact of the Sherman Hills Fault on the confining characteristics of the Satanka Shale. Note that the criteria adopted by the City's Casper Aquifer Protection Plan (p. 48) is that "at least 75 vertical feet of undisturbed Satanka Shale (50 percent more than the thickness of the zone of apparent connectivity) was needed to effectively protect the Casper Aquifer from contaminants that may be spilled or introduced at or near the ground surface."

Additional issues with the Addendum include:

5. First, the Addendum's last paragraph states that the expansion presents no "additional risk", which is not an opinion on risk. Second, the last paragraph states that soil sampling "would be beneficial" to determine risk, inferring that risk remains to be determined. Third, the previously prepared WWC-Hinckley review suggested a more thoughtful risk evaluation for this property. These three items suggest that an evaluation of risk appropriate to this project has not been prepared.

6. Retention/detention ponds require a maintenance plan, as stated in item 11 of the SSI.
7. The 100-year flood plain estimate from the Trihydro Oct 30, 2015 Addendum does not suggest that the existing detention pond needs to be expanded, as is proposed. Can Trihydro, or AMEC, offer an explanation for the different flood plain delineations.

Please let me know if you have any questions.

Sincerely,



Murray Schroeder, P.E.
Branch Manager

MS:lw

