



Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

August 27, 2018

John Coates, P.E., Administrator
Cindy Mulkey, Program Administrator
Daniel Reeves, E.I.T., Engineer Specialist I
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, FL 32399

RE: Collier-Hogan 20-3H Well

Dear Mr. Coates, Ms. Mulkey, and Mr. Reeves:

Thank you for your time in attending a meeting between the Florida Department of Environmental Protection (FDEP) and the Conservancy of Southwest Florida (Conservancy) held on July 16, 2018.

Analytical Suites

We appreciate the revised "Current and Proposed Analytical Suites" spreadsheet for the Collier-Hogan deep monitoring well (DMW). We thank you for including the addition of five new tests (including acrylamide, acrylates, triethanolamine, vinyl acetate, and benzaldehyde). We also thank you for the continuation of gasoline, diesel, and oil range organics, as well as TRPH testing.

At this time, we ask that you modify the Analytical Suites document to explicitly include that pH testing will be performed. As noted on the July 20, 2018 document, alkalinity is proposed to be eliminated as long as pH testing is kept. Please add a line that indicates pH data will continue to be gathered.

March 2018 Water Quality Monitoring Report

We are reviewing the provided March 2018 monitoring report. It appears that the test result for Diesel Range Organics is missing from page 7 of 56, even though the values are reported for trip blanks as part of the QA analytics. Please provide an explanation as to why this appears to be missing from this part of the report.

Length of Monitoring

Please clarify for us how long water quality monitoring will continue at the Collier-Hogan well site. We understand some language describing continued testing was included in the previous settlement agreements, but additional complications have occurred at the site since that time, namely the improper disposal of over 80 barrels of oil/oily waste documented by ALL Consulting in February 2016.



Conservancy of Southwest Florida has been awarded Charity Navigator's prestigious 4-Star top rating for good governance, sound fiscal management and commitment to accountability and transparency. Charity Navigator is America's largest and most respected independent evaluator of charities.

The Conservancy remains extremely concerned about this finding and believes that the extremely high finding of 2080 ug/L diesel organics in 06/23/16 report may be related. Further, we are aware that the Cement Bond Logs are not as strong as they should be, particularly at the interval between 500' and 1200'.

These factors lead us to recommend that FDEP work with Dan A. Hughes to extend monitoring of the Collier-Hogan well to account for ongoing concerns related to the oily waste disposal.

Monitoring Wells

Since the 2014 consent order anticipated sampling and analyses of all monitoring wells (not just the deep monitoring well), please provide to the Conservancy all water quality monitoring reports from all of the wells being tested. To date, the monitoring reports from Deep Monitoring Well (DMW-2) are the only documents being provided to the Conservancy.

Please clarify the depths of wells MW-2, MW-4, NWSW, SESW. It is our understanding that these wells, along with DMW2-SW at 80 feet and DMW-2 at 1,600 feet will be used to monitor water quality into the future. However, please further clarify at what depth intervals the monitoring reports are being drawn from these wells, particularly the DMW-2.

Based on the information we have, the Conservancy maintains that an additional monitoring well just above the retainer and cement at around ~450' is needed to verify any potential upward movement of contaminants. This is important since the depth of improper oily waste disposal may have been around 1,600 feet based on our discussions during the meeting. Therefore, it is uncertain that existing wells would fully capture potential contamination from that event, particularly those constituents that are buoyant.

Further, ALL Consulting reported that:

“With numerous fishing jobs and possible junk left in the hole (the record is not complete as to what was recovered) it is very possible the open hole packers on the 4-1/2-inch production casing could have been damaged tripping in the hole. Damage to the packers could have prevented them from enlarging properly or caused them not to seal during placement. Packers that did not properly seal could be a conduit of fluid movement at the proposed approximate 9,000 psi bottom-hole treatment pressure. This, coupled with poor cement jobs on the production, intermediate and surface casings, could have provided conduits to USDWs.”¹

This could be interpreted to mean that conduits existed to shallower aquifers above the base of the USDW during the unauthorized fracking event.

Please provide us in writing why FDEP believes monitoring at our recommended depth is not necessary.

¹ ALL Consulting, 2014. Expert Evaluation of the D.A. Hughes Collier-Hogan 20-3H Well Drilling and Workover. Prepared for Florida Department of Environmental Protection. P. 23.

Outstanding Requests

Thank you for sending many of the documents we requested on July 20, 2018.

Please send information regarding the required payment by Dan A. Hughes to Minerals Trust of \$350,000.00 under the settlement order dated January 5, 2016, which is an outstanding requested item.

In addition to the monitoring well reports requested in the section above, we would also like to request Dan A Hughes' groundwater monitoring plan, if they completed one.

If you have any questions about this letter or would like to discuss further, please call me at (239) 262-0304, ext. 286.

Sincerely,



Amber Crooks
Environmental Policy Manager

cc: Danette Kinaszczuk and Chad Ward, Collier County