

Brad Billings wrote:

RE: 2RP-3893

At this time, your proposal, dated January 2, 2017 is **not** approved. OCD requests that a investigation/monitor well be installed as close to the point of release as practicable. Based on your "Figure 1" in the proposal, this will be in the approximate location identified as "S-1 -10' ". Well screenings are to be set at 5ft above water surface and 10 ft below water surface. A survey of the top of the well casing is to be within 1/100 of an inch. OCD also requests that during drilling operations, soil samples be obtained at 5' intervals and tested for BTEX, TPH and Chloride. Once the well is completed, water samples are to be obtained for analyses, utilizing standard, acceptable sampling methods and protocol. Once this data has been obtained, OCD will evaluate, and consider a soil remediation proposal, and if necessary, a water abatement plan. Please advise once the boring activity has been scheduled.

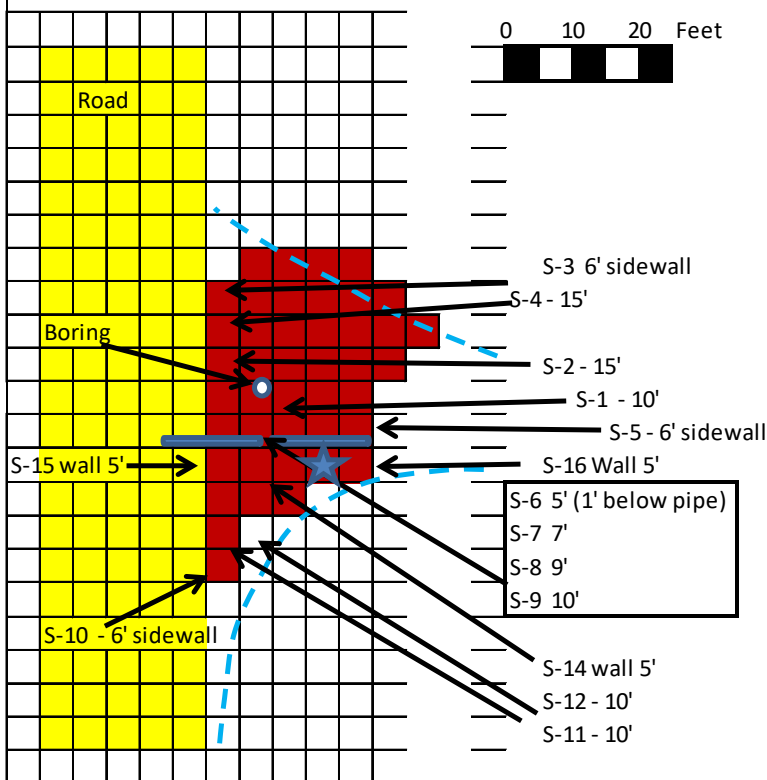
Randall Hicks response

While a well at location S-1 is a reasonable location based upon soil chemistry from the investigation, of concern to us is a location northwest of the pipeline break (identified by samples S6-S9). As best we can tell from this area potentiometric surface map (Plate 2), east-southeast is the direction of groundwater flow in the area of the release. Thus, we believe that the best location would be southeast of the release and at the edge of the footprint identified

by the excavation – a location downgradient from the point of release.

In order to move the well as close as practical to the release point, a location southeast of the pipe break, as shown by the blue star (about 15-foot west of our initial proposed location) in the attached diagram, is a reasonable alternative. Since the pipeline runs east-west, the location shown by the star is as close as practical and lies down gradient from the point of release.

We will expose the pipeline, verify the leak location then move southeast the minimum distance that meets safety setback requirements.



In a review of our submission, I noticed that we neglected to attach the New Mexico Guideline for construction of monitoring wells – it is attached to this response.

We would appreciate an explanation that compares and contrasts the OCD mandate to use a 10-foot screen length with the NMED Guidance that allows a 15-foot length. We assume that the 15-foot screen length of NMED Guidance is rooted in reasonable technical justification as is a 10-foot length that of OCD is requiring for this site. We can delay the installation of the proposed well until OCD has sufficient time to respond to this request. Given the fact that the area is experiencing a general decrease in the water table elevation, a longer screen length will prolong the life of the well. As an alternative to waiting on an OCD technical explanation for the 10-foot screen length, we can employ low-flow sampling to minimize any impact of a longer screen while allowing a 15-foot screen length to extend the life of the well.

As we agree to a well location within the footprint of the release, sampling soil as suggested by OCD makes perfect sense and let the record show that during drilling, we will take soil samples at 5' intervals and provide laboratory testing of these samples for BTEX, TPH and Chloride. Because the pipeline leak occurred at a depth of 5 feet below grade, soil sampling will begin at 10 feet below grade.

As TPH is not a groundwater standard, we are curious regarding the request to examine the soil samples for TPH. If this request is for academic interest, may we employ a 10-foot sampling interval for this parameter rather than the suggested 5-foot interval? The sampling of TPH to protect groundwater has consistently been puzzling to Hicks Consultants and we believe that OCD now has the staff to address this question in a technically defensible manner. Your response would be a courtesy and will not influence our commitment to sample and analyze as described above.

The top of the well casing will be surveyed and the elevation will be established by a Licensed Professional Land Surveyor. We are checking to see the level of accuracy expected by such a survey. We will get back to you on this issue.

The well boring will be logged by a geologist, Kristin Pope and she will be responsible for seeing that the well construction meets the criteria that we all agree to.