

From: Spry ORourke, Linda
To: ["Friesen, Kathy"; Jensen Jr., Charles H.](#)
Cc: [Fischer, Alex](#); [Spray, Karen](#)
Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)
Date: Monday, July 02, 2012 10:48:00 AM

Kathy,

The following is a brief summary of our call today regarding this project.

1. Encana clarified that Encana environmental department personnel have spent multiple hours communicating with Mr. Guthrie and Mr. Schultz regarding the release into the Davis Ditch. In my email below, I was only relaying what Mr. Guthrie told me early in the investigation, and my understanding was that the interaction he was less than pleased with was with field personnel vacuuming the water from the ditch. I have no doubts that Encana's environmental department has gone to lengths to communicate with the landowners.
2. Charlie reported that he sampled the scum reported by the landowners, and analyzed for BTEX, TDS, Cl, and sulfate. The released water had been through the dissolved air flotation treatment system, so I would not be surprised for the light-end hydrocarbons to have been largely stripped out of the water via that treatment. By the time COGCC's consultant sampled the ditch, irrigation had occurred and we did not see the scum so it was not included in our sample.
3. Encana requested Uranium to be removed from the analyte list, because their lab cannot perform this analysis. [Linda Spry O'Rourke granted the removal of Uranium from the required analyte list](#), unless something anomalous is noted in the samples COGCC collected.
4. Encana reported that they have been making calls to landowners, including Tim Melton.
5. We discussed that collecting post-infiltration samples from the water features sampled by COGCC is the priority of activities to be completed by July 10, 2012. If additional time is required to complete the other abatement actions, for example, to complete the engineering analysis of the pipeline failure, Encana should request an extension for the individual abatement action.
6. We discussed the workplan approval timing. The NOAV does not expressly require approval of the workplan prior to implementation, and the conference all appears to have us all on the same page. If Encana has the ability to sample landowner water features prior to submittal of the workplan, [Linda gave them approval to do so](#), since we have discussed the analytical suite.
7. SAR was questioned; Linda reported that COGCC requests SAR analysis on domestic well samples. A discussion of the chemistry behind the analysis would have to be addressed by our chemist.

If you have any further questions, and are unable to reach me, please contact Alex Fischer or Karen Spray.

Thanks for your efforts on this project.

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From: Friesen, Kathy [mailto:Kathy.Friesen@encana.com]
Sent: Monday, July 02, 2012 8:13 AM
To: Spry ORourke, Linda; Jensen Jr., Charles H.
Cc: Fischer, Alex
Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)

Linda
I would just like to reiterate that we were seeking clarification and the opportunity to speak to the actions we've taken thus far, including our interactions with Mr. Guthrie both during and following the spill. We would appreciate a phone conversation this morning if you are available. We can use the following conference call:

Conference Call in #: 1-877-445-2224

Meeting ID 2852665

We are available at 10:00 am.

Thank you
Kathy

From: Spry ORourke, Linda [mailto:Linda.SpryORourke@state.co.us]
Sent: Thursday, June 28, 2012 4:42 PM
To: Friesen, Kathy; Jensen Jr., Charles H.
Cc: Fischer, Alex
Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)

Kathy,

I too am out of the office tomorrow.

As I discussed with Chris Hines when he brought up this project for discussion earlier this week:

1. COGCC has already collected baseline water samples from the three users who expressed concerns to us for their water wells/springs because of the Encana release into the ditch. The analytical suite I sent with the NOAV material is the analytical suite I use when I collect baseline samples. It is not very useful to have follow on samples, designed to verify whether an impact

occurred or not, to be analyzed using a different suite (however BART is not required; I may not have deleted it from the list I sent). I discussed this with Chris and warned him that the suite I use is broader than the very minimal Table 910-1 water analyte list.

2. We have shouldered the burden of initial baseline sampling, but we did not cause the release directly into waters of the state, so it is appropriate for Encana to shoulder the follow on sampling burden. We purposely collected samples before the reported 2-week recharge of wells from the ditch so that they would be baseline samples for comparison to follow-on samples.
3. Yesterday I emailed Chris and Charlie the contact info and address for another landowner who called because of concerns relative to this release.
4. The landowners are already expressing to us that they do not trust Encana. One landowner reported to me that when he investigated the lack of water in the ditch, went to the headgate and saw the release/vacuuming operations that he “got the brushoff from Encana personnel”. I suspect this is contributing to why he doesn’t trust Encana at this point. He contacted everyone on the ditch to tell them of it and I received a complaint from the person at the approximate location of the legal that I cited in the draft NOAV. Her concern is her spring which may be the end of the Davis Ditch and that is why hers was chosen as the end point of sampling.
5. Kirby Wynn told me that he was fielding calls from landowners on the Dry Hollow Creek also, concerned about impacts, as some reports said water was not all diverted into the Davis Ditch but some went into Dry Hollow Creek. Given that two of the landowners reported seeing iridescent scum on the water in Davis Ditch (and both said they were familiar with bacterial scum and this was different), it appears that some fluid escaped before capture by the vacuum truck, which would make sense. Even the quickest response takes a few minutes to enact and the water doesn’t wait.
6. So, given the direct release to a water of the state, an investigation robust enough to demonstrate whether impacts to shallow groundwater by seepage from the Davis Ditch occurred (or not) is appropriate. I have discussed the abatement actions with others at COGCC and we are in agreement on them.

Monday morning we could have a brief call at 10am to discuss further if it is necessary. But, Charlie had already told me his field instrument wasn’t detecting impacts in sediment, and that doesn’t change our rationale. I did forget one abatement item in the draft NOAV though that I’d discussed with Chris, and I’ll add it in when I enter the official version. We would like to see a sample of the source water, for the same suite as the domestic well samples. I realize that the water cycles, but a representative sample will be needed to characterize the waste that was released into the ditch.

I hope this clarifies some of the questions.

Talk to you Monday

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From: Friesen, Kathy [<mailto:Kathy.Friesen@encana.com>]
Sent: Thursday, June 28, 2012 4:00 PM
To: Spry ORourke, Linda; Jensen Jr., Charles H.
Cc: Fischer, Alex
Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)

Linda
Would you have an opportunity for a phone call with Charlie and I tomorrow morning to clarify a couple of points, especially in light of the sample results we have already received. Our office is closed tomorrow, but Charlie and I will make ourselves available and I could set up a conference call. First thing Monday would be another option. Please let us know.

Points of clarification include
COGCC analytical list vs. use of Table 910-1
Extent of Davis Ditch/Dry Hollow users/response

Kathy

From: Spry ORourke, Linda [<mailto:Linda.SpryORourke@state.co.us>]
Sent: Thursday, June 28, 2012 3:03 PM
To: Jensen Jr., Charles H.
Cc: Friesen, Kathy; Fischer, Alex
Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)

Charlie,

The abatement actions are not likely to change. The due date was chosen based on the report that at least one well goes dry within 2 weeks if the ditch doesn't have water. That implies that recharge occurs in two weeks. Two weeks from the date of the release would then theoretically be the soonest that impacted water could show up in the domestic wells. Two weeks after the release would be tomorrow. In choosing dates, I allowed for between two and three weeks after the release to conduct the sampling, in case the two weeks recharge was inexact. Our contractor was able to sample the three wells in a single day. It makes sense to have the workplan done before the fieldwork begins. When Chris Hines called me earlier this

week to discuss projects and brought this one up, I told him about the July 10th date for needing the wells resampled. The workplan doesn't have to be elaborate or lengthy. I apologize that the science behind the rationale for choosing the date when the wells need to be sampled by is not so handy with the holiday. Does Encana close down for part of that week? I suppose one option would be to use the contractor I used; he knows just where the wells are, who to contact for sampling and the analytical suite. That might make that part less painful. If we delay longer than 3 weeks, I believe the landowners will view it as an effort to 'not find' a potential impact. Therefore, I think it important that the sampling occur based on the science schedule.

I am having technical issues with getting the NOAV into the system, so it is not likely to occur today after all. But, I'm not likely to change what goes into the NOAV either.

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From: Jensen Jr., Charles H.

[\[mailto:Charles.Jensen@encana.com\]](mailto:Charles.Jensen@encana.com)

Sent: Thursday, June 28, 2012 2:28 PM

To: Spry ORourke, Linda

Cc: Friesen, Kathy; Fischer, Alex

Subject: RE: Dry Hollow Pipeline Release (non-facility id 429326)

Hi Linda,

Thanks for the info...based on our current data and any data you might have, can this draft be modified? Our soil data at the source and the ditch water samples (including the scum) does not show impacts. Also, next week is a holiday week (July 4th) as people are gone (including homeowners) and labs are closed. Can the July 10th date be moved a few days?

Charlie

From: Spry ORourke, Linda

[\[mailto:Linda.SpryORourke@state.co.us\]](mailto:Linda.SpryORourke@state.co.us)

Sent: Thursday, June 28, 2012 2:17 PM
To: Jensen Jr., Charles H.
Cc: Friesen, Kathy; Fischer, Alex
Subject: Dry Hollow Pipeline Release (non-facility id 429326)

Hi Charlie,

As we discussed last week, COGCC will be issuing an NOAV for this release which directly impacted waters of the state. I want to let you know I am preparing to enter this NOAV into our system this afternoon. However, because I understand that reporters can see the NOAV as soon as I begin entering it, I want to let you know what it will contain, in the event you get calls. I am working remotely today so have some logistics to juggle before I can get a signed copy of the official NOAV emailed to you later today. In the meantime, here is the pertinent information that will be in the NOAV.

Facility 429326

SWSE 7 6S 92W

Date of Alleged Violation: 6/16/2012

Describe Alleged Violation: A pipeline containing produced water and flowback water developed a sudden leak at the above location, resulting in ~50 bbls of E&P waste water (produced and recycled water) being released into the Davis irrigation ditch, which is a water of the state. Encana personnel noticed a sudden pressure drop in the line and identified the leak. Encana reported the incident to the CDPHE- incident #2012-0427. Encana filed a verbal report to the COGCC and have submitted a Form 19 Spill Report. Encana pumped water out of the ditch to recover the fluids, repaired the line, and collected soil samples. A complaint (#200353851) was filed with the COGCC by one downstream ditch user regarding possible impacts to their pond and spring. Ditch users downstream of the release reported seeing iridescent and/or odorous scum collect intermittently along the ditch. Ditch users reported that the ditch recharges the aquifer containing their domestic water wells. One downstream ditch user reported that their well is dry in two weeks if there is no water flow in the ditch.

Act, Order, Regulation, Permit Conditions Cited:

324.A.a, 324.A.b, 907.a.(1), 907.a.(2)

Abatement Due Date: 07/09/2012 (Please note I've tried to word this so that the 'plan' (not all the sampling and reporting) is due 7/9/2012, since sampling must occur by 7/10/2012 at the three locations I sampled last week.

Abatement actions: 1. Submit a written engineering evaluation of the pipeline failure, and actions to be taken to prevent a repeat occurrences 2. Provide a work plan for an investigation into possible impacts from the release including A.) a desktop and field reconnaissance well search to identify both permitted and unpermitted domestic water wells, springs, ponds and other water features downgradient of the release location, B. Sampling program to collect samples from the Guthrie well, Schultz well, and Janice Hunt spring utilizing the COGCC analytical suite (attached), no later than July 10, 2012 to evaluate possible impacts to wells and spring(s) after infiltration time. C. An additional sampling event for the 3 features is required by September 10, 2012. D. Water features identified in the well search shall be sampled when identified and again by September 10, 2012 if they are located between the release location and the northern edge of NESE Section 27 6S 92W 6th meridian. E. A comprehensive, interpretive report summarizing the investigation and results is due by October 15, 2012. 3. Provide list of downstream Davis Ditch and Dry Hollow users with contact dates and user response . 4. If COGCC analytical sampling results indicate an impact, additional sampling may be required. 5. Provide pipeline testing records.

I've attached the analytical suite I sent to our consultant.

I should have the official NOAV to email you late today.

If you have questions, please call my cell. I will be out tomorrow afternoon, but may be reachable by cell in the morning.

Thanks.

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