

From: [Helton, Kelsey](#)
To: [Robin Hallbourg](#); [John Mousa](#)
Subject: FW: Koppers - UIC for HG DNAPL Recovery Pilot
Date: Tuesday, January 29, 2008 5:49:44 PM

Going backwards- last memo with recommendations for HG DNAPL pilot- Kelsey

more to follow

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Brouman, Mitch (Pittsburgh) NA [mailto:Mitch.Brouman@hanson.biz]
Sent: Wednesday, April 25, 2007 9:59 PM
To: Helton, Kelsey; nmisquitta@keyenvir.com
Cc: Slenska, Mike (Pittsburgh) NA; McLaughlin.Amy@epamail.epa.gov; miller.scott@epa.gov; Osteen.Bill@epamail.epa.gov
Subject: RE: Koppers - UIC for HG DNAPL Recovery Pilot

Thanks, we'll get his done asap.

-----Original Message-----

From: Helton, Kelsey [mailto:Kelsey.Helton@dep.state.fl.us]
Sent: Wednesday, April 25, 2007 11:08 AM
To: Helton, Kelsey; nmisquitta@keyenvir.com; Brouman, Mitch (Pittsburgh) NA
Cc: Slenska, Mike (Pittsburgh) NA; McLaughlin.Amy@epamail.epa.gov; miller.scott@epa.gov; Osteen.Bill@epamail.epa.gov
Subject: RE: Koppers - UIC for HG DNAPL Recovery Pilot
Importance: High

Neil, Mitch, Mike etal-

DEP has complete review of the Feb 27 2007 UIC application for the Hawthorn Pilot Study. The UIC criteria and recommendations by DEP as provided in the December 13, 2006 email have been satisfactorily addressed. The revised Figure 1 with referenced POC locations submitted subsequent to receipt of application is also satisfactory.

After discussion with DEP Engineering staff on the February submittal, we have 1 follow-up requirement that should be incorporated: A post injection 90-day monitoring event should be performed to confirm no adverse effect, using same POC monitoring wells and analytes previously proposed. This would be conducted 90 days after the proposed 30 day re-injection activities. In addition, if Beazer elects to continue with the pilot beyond the proposed 30 day period- which we encourage assuming no adverse effects- then subsequent 90 day (quarterly) monitoring events should be conducted, with the final event 90-days after ceasing re-injection activities. These events would also include water level monitoring.

A follow-up email report with resulting data should be submitted following each quarterly event. DEP should be notified if the pilot will continue beyond the proposed 30- days.

We understand that Beazer is also considering a surficial aquifer pilot using a similar DNAPL recovery scenario. A separate UIC proposal should be submitted similarly to Hawthorne UIC application. Review should go more quickly, with the main difference being the POC monitoring requirements.

We also understand that EPA has requested a final HG Pilot work plan prior to implementation of the pilot. Please provide a final UIC application incorporating the above final requirements and updated figure 1- either as a separate submittal or as an addendum to the final Work Plan. Final UIC application should be provided to DEP (Kelsey Helton) before implementation of pilot. Associated UIC "Memo" should be "To: Rich Deuerling" with Kelsey Helton as cc. However, I will continue to be your point of contact and recipient of all submittals; and will forward the final UIC application to Mr. Deuerling for their UIC files.

Call me if you have any questions.

Thanks-

Kelsey Helton
DEP- Bureau of Waste Cleanup
Hazardous waste Cleanup Section, Mail Station 4520
2600 Blair stone Road
Tallahassee, FL 32399-2400
850-245-8969

From: Helton, Kelsey
Sent: Wednesday, December 13, 2006 3:12 PM
To: 'nmisquitta@keyenvir.com'
Cc: mike.slenska@hanson.biz; Helton, Kelsey; 'McLaughlin.Amy@epamail.epa.gov'
Subject: RE: Koppers - UIC for HG DNAPL Recovery Pilot

This is to follow up on our prior conference call Dec 8 and to touch on a couple of more things.

1st- to summarize the UIC requirements and agreed approach regarding pilot study:

The Pilot Study WP proposes to conduct a pilot using a large diameter recovery well in Upper HQ (double cased similarly to onsite monitoring wells), with recovery of DNAPL and contaminated groundwater. Residence time in the RW will serve to separate the DNAPL from recovered groundwater. DNAPL will be stored and disposed appropriately per regulations and recovered groundwater will be re-injected onsite, back into the Upper HG (the same aquifer) without treatment.

This approach is allowed by the DEP State UIC rules, Chapter 62-522.300(2)(c), for DEP approved aquifer remediation projects using UIC wells as described in 62-528.600(2)(d). As discussed, the premise is that a zone of discharge is allowed for primary and secondary groundwater standard exceedances and prime constituents of "reagents" , in accordance with a DEP approved remedial design that addresses the duration and size of the ZOD and groundwater monitoring requirements. Obviously the premise is that these activities will not result in exacerbation or migration of the existing contaminant plume.

As such, we have agreed to the following which will be documented in the upcoming pilot design, submitted for DEP for review and approval regarding UIC requirements:

- MWs HG4-S, HG-5S, HG10S, and HG-16S will serve as point of compliance wells to confirm that no adverse plume migrations is occurring.
- Monitoring parameters will be those currently monitored as COC: PAHs, phenolic compounds, TPH, BTEX, metals , as well as Oil and Grease.
- A baseline monitoring event will be performed prior to initiation of the pilot of these

monitoring wells. Sampling of recovery and injection wells should be included.

- Follow up (compliance) monitoring using same MWs will occur 1 month after the pilot begins. This time frame represents the duration of the pilot.
- A pilot study report with the monitoring data will be submitted within 6 weeks after completion of pilot. Based on those results, decisions regarding continuation of the pilot and the scope for continued groundwater monitoring will be made.

2nd- Add points or recommendations as a follow up to our discussion:

- The proposed location for the injection wells should be in an area where groundwater contamination in the Upper HG already exists and such that injection will not exacerbate the extent of the contamination. Groundwater sampling, during the initial field work to locate the IW and confirm the injection interval, should be performed to confirm this.
- In addition to baseline sampling, contaminant levels in the recovered groundwater should be monitored, prior to re-injection. The recommended frequency is at the 2 week time frame and at the end of the 1 month time frame, when the pilot is completed.
- We recommend that a DNAPL recovery pilot be conducted in the surficial aquifer in the north lagoon area as well. We understand that will be discussed further in an anticipated January meeting concurrent with discussions regarding the recommended additional Floridan monitoring wells and recommended pumping tests.
- Also as discussed, re-injection of untreated groundwater is only allowed back into the aquifer from which it was recovered. Otherwise groundwater treatment to meet GCTLs prior to injection or application for a UIC variance is required.

I look forward to completion of the initial design field work and receipt of the pilot design and completed UIC proposal form, for DEP review. Please call me at 850-245-8969 if you need to discuss further.

Thank you-

Kelsey Helton
Bureau of Waste Cleanup

From: Neale Misquitta [mailto:nmisquitta@keyenvir.com]
Sent: Thursday, December 07, 2006 11:52 AM
To: Helton, Kelsey
Cc: mike.slenska@hanson.biz
Subject: RE: Koppers - Gainesville - Conference Call to Discuss UIC Summittal

Hi Kelsey:

For the conference call tomorrow (December 8, 2006 at 11:30 A.M.), pls use the following dial in information:

1 800 373 0950

Code: 144354

Talk to you tomorrow.

Neale

From: Helton, Kelsey [mailto:Kelsey.Helton@dep.state.fl.us]
Sent: Tuesday, December 05, 2006 10:37 AM
To: nmisquitta@keyenvir.com
Cc: Helton, Kelsey
Subject: RE: Koppers - Gainesville - Conference Call to Discuss UIC Sumittal

Perfect- I'll put it on my calendar. Thanks for your persistence- Kelsey

From: Neale Misquitta [mailto:nmisquitta@keyenvir.com]
Sent: Monday, December 04, 2006 4:01 PM
To: Helton, Kelsey
Cc: 'Slenska, Mike (Pittsburgh) NA'
Subject: RE: Koppers - Gainesville - Conference Call to Discuss UIC Sumittal

Good Afternoon Kelsey:

Thank you for sending me the form. We will review it and be prepared to discuss this week. How does Friday at 11:30 work for you? Please let me know and I will send out the dial in information.

Neale

From: Helton, Kelsey [mailto:Kelsey.Helton@dep.state.fl.us]
Sent: Friday, December 01, 2006 1:25 PM
To: nmisquitta@keyenvir.com
Cc: Slenska, Mike (Pittsburgh) NA; Helton, Kelsey
Subject: RE: Koppers - Gainesville - Conference Call to Discuss UIC Sumittal

Hi, Neale- I did get your phone msg earlier and I apologize for the delay in responding. We have been moving and I have been out of town it seems like 75% of the last month or 2.

Attached is the UIC form that you will need to fill out for UIC review. This is included with the pilot design for DEP review. And we can conference next week on the form and the UIC requirements. I am available next Wed or Thursday afternoon or Friday morning. Please let me know what is convenient for ya'll. Thanks- Kelsey

From: Neale Misquitta [mailto:nmisquitta@keyenvir.com]
Sent: Friday, December 01, 2006 11:49 AM
To: Helton, Kelsey
Cc: 'Slenska, Mike (Pittsburgh) NA'
Subject: Gainesville - Conference Call to Discuss UIC Sumittal

Good Morning Kelsey:

I attempted to contact you on the phone and am following up with this email. As you know, U.S. EPA recently approved the implementation of the Pilot Study Work Plan for the Upper Hawthorn Group DNAPL Recovery, which was authored by KEY and GeoTrans. One component of the pilot study is the re-injection of coproduced groundwater. KEY would like to coordinate the submittal of the UIC application with you and would like to schedule a conference call at your convenience to discuss this issue further. We are looking at preparing the submittal to FDEP

over the next couple of weeks. Almost any time next week would work for us. Please could you provide me with a time suitable for you and we will coordinate the call. In the interim, if you need to talk to me, please contact me at 412 279 3363.

Thank you

Neale

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