

From: PDKing0000@aol.com
Sent: Thursday, August 14, 2008 8:56 AM
To: kaue@waterboards.ca.gov
Cc: Wickham, Jerry, Env. Health; McCaulou@waterboards.ca.gov
Subject: Fwd: I have a vinyl chloride plume getting into a creek w. conc. > Table F ESL.

Attachments: I have a vinyl chloride plume getting into a creek w. conc. > Table F ESL.
Hi Kent,

I am forwarding this to you in Mary Rose's absence.

Best Regards,
Paul King

In a message dated 8/14/2008 8:34:23 A.M. Pacific Daylight Time, PDKing0000 writes:

Hi Mary Rose,

When we have chemicals entering a creek at concentrations slightly above the May 2008 ESL for freshwater surface water bodies, are we required to provide notifications, and if so to whom? We are working with Alameda County Environmental Health Department on this one, but I want to make sure that we get all of our notifications covered if they are required. Possible organizations that come to mind include the following.

- o RWQCB
- o Fish and Game
- o Fish and Wildlife
- o US EPA?
- o DTSC?
- o OES?
- o City of Oakland
- o Community
- o Anyone else?

Details below.

I am working on a case where a PCE plume has decomposed in the presence of Stoddard solvent to primarily cis-1,2-DCE and some vinyl chloride. The site is a drycleaner that has existed since approximately 1912. The plume has made it all the way to a creek located approximately 400 feet from the source. The majority of the creek bed and creek bank are channelized with concrete. We collected groundwater grab samples from boreholes located adjacent to the creek in the creek bank to identify where the plume intersects the creek. We collected creek water samples from upstream and downstream of where the plume appears to intersect the creek, in addition to within the zone where the plume appears to intersect the creek. In the zone where the plume appears to intersect the creek there is a 3 ft by 4 ft hole cut into the bottom of the concrete channel, presumably to relieve water pressure from beneath the concrete channel bottom. We collected our water sample in the creek in the

zone that appears to be impacted by the plume from the hole cut in the creek bottom.

HVOCs were not detected upstream or downstream, but were detected in the hole in the creek bottom as follows: cis-1,2-DCE at 4.9 ug/L (ESL=6.0 ug/L) and vinyl chloride at 0.80 ug/L (ESL= 0.5 ug/L). ESLs are from May 2008 Table F. We also analyzed for Stoddard solvent, but did not detect any. Creek bank borehole groundwater grab sample concentrations range from ND to 2.6 ug/L cis-1,2-DCE and from ND to 1.5 ug/L vinyl chloride. I suspect the HVOCs are entering the creek through the hole in the bottom of the creek and are then diluted to ND levels a short distance downstream. There are weep holes that are located in the walls of the concrete channel where the plume intersects the creek, and the concrete is wet with a film of water beneath the weep holes. The weep holes have not been evaluated for the presence of HVOCs, however I suspect that the HVOCs are volatilizing while the water is sitting in the bottom of the weep holes or from the film of water on the wall of the creek channel.

Please let me know if there is any policy or procedure for community notification, and if so, when such notification would become necessary. Thank you!

Best Regards,
Paul King

P&D Environmental, Inc.
55 Santa Clara Avenue, Suite 240
Oakland, CA 94610
510-658-6916 (telephone)
510-834-0152 (facsimile)

paul.king@pdenviro.com

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From: Wickham, Jerry, Env. Health
Sent: Thursday, August 14, 2008 9:44 AM
To: 'PDKing0000@aol.com'
Subject: RE: RO357 Snow Cleaners Creek Water and Creek Bank Borehole Groundwater Results
Paul,

I concur with the proposal to collect one creek water sample at a location approximately 50 feet downstream from C2 for analysis for VOCs using EPA method 8260B.

Regards,

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
510-567-6791
jerry.wickham@acgov.org

From: PDKing0000@aol.com [mailto:PDKing0000@aol.com]
Sent: Thursday, August 14, 2008 8:53 AM
To: Wickham, Jerry, Env. Health
Subject: RO357 Snow Cleaners Creek Water and Creek Bank Borehole Groundwater Results

Hi Jerry,

You will find attached the following documents.

- o 0808034.pdf (lab results for creek samples C1 through C3)
- o 0808022.pdf (lab results for creek bank borehole groundwater samples B29 through B32)
- o 0298.R6 fig 2 w 8260 results.pdf (Figure showing creek sample locations and HVOC results)
- o 0298.R6 fig 2 w TPH-BO results.pdf (Figure showing creek sample locations and TPH-BO results)

We collected creek water samples from upstream (C1) and downstream (C3) of where the plume appears to intersect the creek, in addition to within the zone where the plume appears to intersect the creek (C2). In the zone where the plume appears to intersect the creek there is a 3 ft by 4 ft hole cut into the bottom of the concrete channel, presumably to relieve water pressure from beneath the concrete channel bottom. We collected our water sample in the creek in the zone that appears to be impacted by the plume from the hole cut in the creek channel bottom.

HVOCs were not detected upstream or downstream, but were detected in the hole in the creek bottom as follows: cis-1,2-DCE at 4.9 ug/L (ESL=6.0 ug/L) and vinyl chloride at 0.80 ug/L (ESL= 0.5 ug/L). ESLs are from May 2008 Table F for freshwater surface bodies. We also analyzed for Stoddard solvent, but did not detect any. Creek bank borehole groundwater grab sample concentrations range from ND to 2.6 ug/L cis-1,2-DCE and from ND to 1.5 ug/L vinyl chloride. I suspect the HVOCs are entering the creek through the hole in the bottom of the creek and are then diluted to ND levels a short distance downstream (certainly by

the time they reach C3). There are weep holes that are located in the walls of the concrete channel where the plume intersects the creek, and the concrete is wet with a film of water beneath the weep holes. The weep holes have not been evaluated for the presence of HVOCs, however I suspect that the HVOCs volatilize from the water sitting in the bottom of the weep holes and from the film of water on the walls of the creek channel.

I propose that we collect one creek water sample designated as C4 for EPA 8010 analysis at a location 50 feet downstream of C2 to verify that the detected HVOCs are diluted to below ESL concentrations a short distance downstream of location C2. Please let me know your thoughts on this proposed action. Thank you!

Best Regards,
Paul King

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510-658-6916

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Subject: RO357 Snow Cleaners Creek Water and Creek Bank Borehole Groundwater Results

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