From: Tom.Perina@CH2M.com
To: Raymond Chavira/R9/USEPA/US@EPA
Cc: Kerang.Sun@CH2M.com; John.Dolegowski@CH2M.com
Subject: RE: USEPA File and Data Request Response
Date: 04/05/2012 07:11 PM

Ray,

Please see below a summary of the key findings of John's review of the Benchmark documents from NG.

Tom

From: Dolegowski, John/SCO
Sent: Friday, March 30, 2012 5:14 PM
To: Perina, Tom/RIV
Cc: Sun, Kerang/SCO
Subject: FW: USEPA File and Data Request Response

Tom,

As requested by Ray Chavira, I have reviewed the Benchmark documents included in the CD (and available from a downloadable link) submitted by Joe Kwan / Northrop Grumman (NG) on 23 March 2012 – *see email from NG below*. Approximately 140 documents from the RWQCB files were included in this collection. Most of the documents were correspondence between the RWQCB, Northrop Grumman and their attorneys, Woodward Clyde, and Orion. A number of site investigation reports, yearly remediation summary reports, and groundwater monitoring reports were also included. Many of these reports had been provided to EPA earlier in the CD provided by Northrop on 01 March 2012. In general, I did not see documents that were unexpected given our current understanding of the site. The majority of site related information appears to have been disclosed by now. Listed below are some documents that did warrant closer review. The exact file names are provided for reference by those wishing to read the actual documents.

1998-1221-Benchmark-ltr to RWQCB re Selenium Detection.pdf First regulatory reference that selenium concentrations exceeded regulatory limits in treated groundwater discharged from Benchmark groundwater treatment facility.

2003-0110-Benchmark-ltr from RWQCB re Req. for Monitoring of Emergent Chemicals.pdf Regional Board request for monitoring of emergent chemicals, including 1,4-dioxane and hexavalent chromium. A report or letter showing the results of the sampling for the emergent chemicals could not be found, and 1,4-dioxane and hex chrome were not added as analytes in the future Benchmark groundwater monitoring reports until Nov 2005 (that is when 1,4-dioxane began to be analyzed and reported). Hex chrome was not added as an analyte to the future groundwater monitoring reports. A reference to the need to treat 1,4-dioxane in the groundwater from the Benchmark pump and treat system was included in the *Annual Groundwater Monitoring and Remediation System Status Report Nov 2004* (Northrop Grumman, March 2005).

2003-0311-Benchmark-Evaluation of DPE Pilot Test Results Memo.pdf This report evaluated a test to implement dual phase extraction (simultaneous groundwater pumping and vapor extraction from the same wells) from the Z4-series wells. The report includes VOC and 1,4-dioxane analyses from the Z4-series wells.

2004-0927-Benchmark-ltr to RWQCB re Comments on Tentative Waste Discharge Requirements.pdf NG's request that selenium not be included in the Benchmark WDRs for discharge of treated groundwater to Puente Creek.

2012-0316-Benchmark-Source Area Investigation Memo.pdf Northrop Grumman provided a copy of this document that summarizes the Deep Source Investigations Conducted in 2002 and 2004 without the appendixes on 22 March 2011. The appendixes include some interesting information, including the boring logs, photographs of continuous core, lab reports, and historical groundwater analyses for Benchmark monitoring wells.

John Dolegowski
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From: Kwan, Joseph P (CO) [mailto:Joe.Kwan@ngc.com]
Sent: Friday, March 23, 2012 6:15 PM
To: Raymond Chavira
Cc: Pete MacNicholl (pmacnich@dtsc.ca.gov); Perina, Tom/RIV; Sun, Kerang/SCO; Dolegowski, John/SCO; Niemeyer, Linda (CO) (Contr); Lewis, Richard (ESS) (Contr); jgwinn@orionenv.com; Matthew Nelson; mpurchase@orionenv.com
Subject: USEPA File and Data Request Response

Ray – The attached document addresses the information requests outlined in your 3/19/2012 email to Orion. Please note that the RWQCB correspondence and other additional documents have been uploaded to Orion's FTP website. The link to access this information is as follows:

http://ftp2.orionenv.com/dm/index.php?interface=download&hash=c50b47e6f2a1339d8fd420e32814cdfd

Please let me know if you have any questions.

-Joe-

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