Comments on

Eco & Associates, 'April 2012 Groundwater Sampling Report – Final – Brown & Bryant (B&B) Superfund Site, Arvin, CA,' Prepared for US Army Corps of Engineers, Albuquerque District, by Eco & Associates, Orange, CA, October 16 (2012)

Comments Prepared by
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On February 23, 2013 the California Department of Toxic Substance Control (DTSC) announced the availability of reports of recent activities at the Brown & Bryant Superfund site on the EnviroStor website at:

http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=15280011

That website opens to a "Summary" tab. By clicking on the "Activities" tab and scrolling down to the "Completed Activities" section, the following groundwater monitoring report (in two sections) as well as DTSC comments, can be found:

• Eco & Associates, "April 2012 Groundwater Sampling Report – Final – Brown & Bryant Superfund Site, Arvin, CA," Prepared for US Army Corps of Engineers, Albuquerque District, by Eco & Associates, Orange, CA, October 16 (2012).

http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/2310047745/Pages%2 0from%20121016%20-

%20Final%202012.1%20Groundwater%20Monitoring%20Report%5B1%5D-1.pdf

http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/2310047745/Pages%2 0from%20121016%20-

%20Final%202012.1%20Groundwater%20Monitoring%20Report%5B1%5D-2.pdf

http://www.envirostor.dtsc.ca.gov/regulators/deliverable_documents/2542938053/April%202012%20Final%20GWMR%20response.pdf

The US EPA Brown and Bryant Superfund Site website also contains the Eco & Associates October 16, 2012 reports on groundwater sampling:

http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/3dc283e6c5d6056f88257426007417a2/9d08b524a083e3b688257ae2000a0cf3/\$FILE/B&B%20April%202012%20-%20GW%20Sampling.pdf

The Eco & Associates report describes the groundwater monitoring that was conducted at the B&B Site in April 2012 on behalf of the U.S. Army Corps of Engineers (USACE). According to the report, it "was prepared in general conformance with the Workplan prepared by Eco & Associates, Inc. (Eco 2007) modified to include additional sampling for added constituents resulting from EPA and USACE project reviews conducted in March 2011. Revised

Groundwater Sampling and Analysis Plan and Quality Assurance Project Plan (both dated August 2011) were used for this sampling event."

"Well maintenance activities were not performed on A-zone and B-zone wells during the April 2012 sampling event."

"The objective of the sampling and analysis effort was to assess the possible presence and concentration of COCs in groundwater in both the A- and B-zones beneath the Site and the adjoining properties."

The report presents the results of the sampling of the groundwater monitoring wells for the chemicals of concern (COCs) and other constituents of interest in the A and B zones. As has been found in the past, several of the established monitoring wells in the A zone were dry or yielded insufficient water after purging to obtain a sample.

Groundwater elevation contours presented showed that the direction of groundwater migration was the same as it had been in the October 2011 sampling, primarily to the south and southwest.

The analytical data for the samples collected showed a similar pattern as previously reported; several COCs were present in elevated concentrations to the southwest and west of the site. Concentrations of 1,2-DCP were above the cleanup levels of 5 ug/L under the site and to the south in the A-zone. The concentration of 1,2,3-TCP in the A-zone was about 500 ug/L.

Eco & Associates reported the chloroform concentrations under the site and to the south was above a true cleanup level of a few ug/L. Eco & Associates, with the permission of DTSC, has reported the "cleanup" level for chloroform to be 80 ug/L. This issues has been discussed in our previous reports on groundwater sampling at the site including:

Lee, G. F., and Jones-Lee, A., "Comments on Eco & Associates, 'Final Site-Specific Work Plan [Monitored Natural Attenuation] Brown & Bryant Superfund Site in Arvin, CA,' Contract No. W912PP-10-D-0014, Prepared for US Army Corps of Engineers, Albuquerque, NM, by Eco & Associates, Orange, CA, January 26, 2012," Comments submitted to CBA by G. Fred Lee & Associates, El Macero, CA, March 29(2012).

http://www.gfredlee.com/CBA_BBSite/2012/Eco_MNA_WP_comments.pdf

The highest chloroform concentration in the B-zone in October 2011 and in April 2012 (Figure 9 was incorrectly labeled "October 2011"), found to the south of the site, as discussed in our previous reports, was not likely derived from the site.

The 1,2-DCP concentration was above the cleanup level in the B-zone to the south of the site.

The concentration of Dinoseb, the COC of primary concern, exceeded the cleanup level of 7 ug/L in the B-zone to the south of the site.

The B-zone concentrations of 1,2,3-TCP was above the cleanup level of 0.005 ug/L to the south of the site.

Concentrations of DBCP at the cleanup level of 0.2 ug/L were found in the B zone to the south of the site.

It is somewhat surprising that Eco & Associates did not provide a discussion of the April 2012 data relative to those found in previous samplings. From our perspective, the April 2012 monitoring results appeared essentially the same as those reported for the October 2011 sampling. This indicates that the location and distribution of COCs in the plume were fairly stable between October 2011 and April 2012 and were not rapidly moving. If this is an accurate representation of the conditions of the COCs at the site, it indicates that MNA may provide effective remediation for those pollutants in the groundwater at this site.