From: Sybil Kolon

To: Gelman Information **Date:** 3/3/2006 12:27:04 PM

Subject: Gelman - Periodic DEQ Update - Unit E

Downgradient Investigation

The drilling at Glendale & Abbott is continuing. A shallow well is being installed (MW-103s) with a screen from 58 to 63 feet. This is near the top of the saturated unit where 11 parts per billion (ppb) was detected during vertical profiling.

The previous results of vertical profiling for 1,4-dioxane are included below, as well as the more recent results:

59' deep, 11 parts per billion (ppb)
69' deep, 8 ppb
79' deep, 5 ppb
89' deep, non-detect (nd)
99' deep, nd
109' deep, nd
119' deep, 4 ppb
129' - nd
139' - nd
149' - nd
159' - nd
169' - nd
179' - nd
209' - 12 ppb
219' - 8 ppb

Starting Monday, March 6, a second boring will be advanced to bedrock and a deep well installed near the base of the aquifer.

Maple Road Interim Response

The DEQ has given Pall Life Sciences (PLS) conditional approval to start the extraction, treatment and reinjection at Maple Road. The purpose of this interim response is to prevent any contamination above 2,800 ppb from migrating east of Maple Road. The highest detected concentration of 1,4-dioxane at Maple Road is 1695 ppb (Nov. 2005), which is a decrease from the highest ever detected of 2380 ppb in November 2003 (MW-85). Weekly collection of static water levels, to evaluate the effects of the interim response, will be required for several wells, in addition to the monitoring proposed in the PLS performance monitoring plan.

About 200 gallons per minute (gpm) of groundwater will be extracted from TW-19, treated to 85 ppb or less at the treatment unit near the southwest corner of Dexter and Maple, and then reinjected back into the same aquifer through two injection wells (IW-3 and IW-4) located south and north of TW-19. The treatment system uses ozone and hydrogen peroxide to reduce the concentration of 1,4-dioxane. Because of naturally occurring bromide in the groundwater, bromate is produced as a by-product of the treatment. The concentration of bromate in the treated groundwater cannot exceed 10 ppb. The effluent from the treatment system must be sampled daily, excluding weekends.

Previous updates and other details can be found on the DEQ's Gelman website, which can be accessed in two ways:

click on the following link:

http://www.michigan.gov/deq/0,1607,7-135-3311 4109 9846 9847-71595--,00.html

or enter http://www.michigan.gov/deqrrd, then scroll to "Contaminated Sites List" and click on "Gelman

Sciences, Inc. Site of Contamination".

Please contact me if you have any questions.

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