



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
JACKSON DISTRICT OFFICE



STEVEN E. CHESTER
DIRECTOR

September 14, 2006

VIA E-MAIL and U.S. MAIL

Mr. Farsad Fotouhi
Environmental Manager
Pall Life Sciences, Inc.
600 South Wagner Road
Ann Arbor, MI 48103-9019

Mr. Alan D. Wasserman
Williams Acosta, PLLC
2430 First National Bank
Building
Detroit, MI 48226-3535

Mr. Michael L. Caldwell
Zausmer, Kaufman, August
& Caldwell, P.C.
31700 Middlebelt Road, Suite 150
Farmington Hills, MI 48334

Dear Sirs:

SUBJECT: Gelman Sciences, Inc. Remedial Action
Proposed Monitoring Wells in the Prohibition Zone Area

We are writing to follow-up on recent communications with Pall Life Sciences (PLS) regarding the possible location of a new monitoring well (MW) that is needed to verify the location of the Prohibition Zone (PZ) boundary near Maple and Dexter Roads. Mr. Fotouhi, in his electronic mail note of August 14, 2006, suggested two possible locations for a new MW. We discussed this with Mr. Fotouhi on August 29 and September 6.

In addition, PLS has stated that the PZ boundary would be moved to the north only if 1,4-dioxane is detected at or above 85 parts per billion (ppb). While PLS may want to avoid expanding the PZ, as discussed previously, an adequate buffer area must be maintained between the plume (85 ppb) and the PZ boundary to provide the legal and effective protections intended by the PZ. Any decision regarding expansion of the PZ must take this into consideration.

We, along with PLS, had previously proposed to expand the PZ west of Maple Road to include MW-92. We based that proposal on the belief that the 1,4-dioxane in that well (20 ppb in July 2006) was from the Unit E plume. However, after reviewing data from MW-KD1d (122 ppb in July 2006) and MW-101 (373 ppb in July 2006) and the static water levels in the area, we believe that prior to any final decision to adjust the PZ boundary in this area, a more detailed evaluation should be done to determine if MW-92 can be relied upon to monitor the Unit E plume in relation to the PZ in this area. The data from the new and existing MWs should assist in this evaluation.

In the September 6 call with Mr. Fotouhi, we explained that based on current data, we believe the PZ boundary to the west of Maple Road should go due east along Hollywood Street, from Allison Street to Maple Road, instead of going farther north to include MW-92. We also recommended that PLS install the MW planned for the northeast corner of Allison Street and Dexter Road (PMW-107) prior to making a decision on Location 1 or 2. Mr. Fotouhi agreed with this recommendation and will finalize access in the city right-of-way. Mr. Fotouhi has informed us that a drill rig is scheduled to begin installation of the MW on September 25. This boring should be vertically profiled to bedrock, as have other recent borings. We expect that it will be necessary to install a cluster of at least two nested MWs at this location. It was also agreed that static water level and analytical results from the permanent MWs should be obtained prior to making a decision on Location 1 or 2.

Mr. Farsad Fotouhi
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If PLS interprets the results from PMW-107 to support installation of a MW at Location 1, the following are the minimum conditions that would have to be met at Location 1 for us to agree to PLS's proposed PZ expansion east of Maple Road:

- the stratigraphy of the new MW is consistent with MW-101 and MW-104
- results from the new MW are below 25 ppb and do not show an increasing trend
- concentrations at MW-101 do not continue to go up
- MW-104 remains at or near non-detect
- static water levels in the new MW and other nearby MWs demonstrate that contaminated groundwater is unlikely to migrate north of the PZ boundary

If the MW is placed at Location 2, the PZ would have to be expanded at least as far north as Haisley Street, extending due east instead of jogging south to Walter Street, as PLS has proposed. The conditions for placing and keeping the PZ in that location would be similar to those described above for Location 1. Whether Location 1 or 2 is selected, a nested well cluster may be required.

Whichever location is selected, if the results from the vertical profiling or initial results from the MW(s) indicate that 1,4-dioxane above 85 ppb has migrated beyond the PZ boundary, immediate steps must be taken to confirm that no water supply wells exist in the area outside of the PZ that are likely to be impacted and an additional MW location must be identified and installed. A process for expanding the PZ as soon as possible would also have to be determined.

In order to evaluate the need for any adjustment to the PZ, more frequent collection of data (static water levels and groundwater samples for 1,4-dioxane analysis) will be required. PLS must begin collecting data from PMW-107 within one month of its installation. Monthly data must then be collected from PMW-107, MW-92, MW-101 and MW-104 until the MW(s) are installed at Location 1 or 2. After the installation of the MW(s) at Location 1 or 2, data must be collected monthly for at least three months from: the Location 1 or 2 MW(s), PMW-107, MW-79, MW-81, MW-85, MW-88, MW-91, MW-92, MW-100, MW-101 and MW-104. PLS must then submit groundwater flow direction maps from these events to the Department of Environmental Quality (DEQ) within ten days of collecting the third month of data from the MW(s) at Location 1 or 2.

Please inform us if there is any change of the location or schedule for installation of PMW-107. Please contact me if you have any questions.

Sincerely,

Sybil Kolon
Environmental Quality Analyst
Gelman Sciences Project Coordinator
Remediation and Redevelopment Division
517-780-7937

SK/KJ

cc: Mr. Robert Reichel, Department of Attorney General
Ms. Celeste Gill, Department of Attorney General
Mr. Mitchell Adelman, DEQ/Gelman File
Mr. James Cogger, DEQ