

November 16, 2005

Honorable Donald E. Shelton
22nd Circuit Court
Courthouse
101 E. Huron
Ann Arbor, MI 48107

Re: Attorney General v Gelman Sciences Inc.
Case No: 88-34734-CE
Our File No: 471

Dear Judge Shelton:

This letter is intended to update the Court on the status Pall Life Sciences' (PLS) efforts to either repair or replace the transmission pipeline that brings purged groundwater from the D2 aquifer in Evergreen Subdivision area back to the PLS facility for treatment. Since our last conference call, PLS has been forced to abandon its original attempt to repair the existing transmission line, but is pursuing two replacement alternatives.

As you know, PLS initially attempted to clean the existing transmission line so that it could be lined with an impermeable sleeve. The advantage of this alternative was that it could be accomplished quickly and did not require PLS to obtain access from either the City or private property owners. Unfortunately, the line could not be cleaned despite the considerable efforts of PLS and its contractors and this option had to be abandoned. (See attached timeline of events).

PLS' current plan is to convert the northern portion of the existing horizontal well into a transmission line by placing a sleeve in this six inch line. The northern portion of the horizontal well runs between the PLS-owned lot on Porter Street to the Evergreen Subdivision in the same borehole as the transmission line. (See attached aerial photo). PLS has selected a contractor that is ordering the necessary materials and pulling together a crew (a difficult task during deer hunting season). The work should begin within a week. PLS anticipates that it will be somewhat easier to pull the liner through this six inch line than it would have been to pull it through the four inch transmission line, although the presence of water in the line may be a complicating factor. Assuming the contractor is successful in pulling the sleeve through the pipeline, the work should be completed within two to three weeks. Like PLS' original alternative, PLS will not be required to obtain access from the City or any private parties in order

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to complete this work. Even after it is lined, PLS anticipates that the six inch pipeline will have a greater capacity than the original transmission line, giving PLS additional flexibility in the future if needed.

The obvious disadvantage of this alternative is that PLS will lose the benefit of the northern portion of the horizontal well. The impact of this loss on the cleanup, however should be minimal. Although the this portion of the horizontal well has designed to purge 100 gpm, its production never fully recovered from the plugging that occurred when PLS was prevented from operating the well for 18+ months after it was first installed. Recently, its production had deteriorated further to point where PLS was only able to purge 20 to 30 gpm. Fortunately, it appears that the southern portion of the horizontal well (which runs from the PLS-owned lot on Porter street to the PLS facility) is, by itself, accomplishing the goal of capturing the most highly contaminated groundwater in the D2 aquifer before it gets to the Evergreen Subdivision.

PLS is simultaneously pursuing a contingency plan in case PLS' contractor cannot successfully line the horizontal well. The contingency plan calls for the installation of a new six inch transmission line that will follow the same path as the current transmission line. The pipeline will be installed using directional drilling to a depth of 30 feet, well below the depth of any utilities. Consequently, this option will not require PLS to obtain access from the City. Because the pipeline will be installed below the same properties as the original transmission pipeline/horizontal well, additional private access agreements will not be necessary. PLS is sending out the required notice to the homeowners and businesses with regard to the new pipeline, as well as PLS' efforts to line the horizontal well. Once the contract is awarded, this alternative should take approximately one month to complete. The availability of materials is one factor that could delay construction. The hurricane-related construction surge along the gulf coast has created many shortages in the necessary pipeline construction materials.

PLS abandoned an alternative route along City right-of-ways. PLS had several discussions with City officials that confirmed that obtaining access for such a project would, itself, be a long-term project.

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We will update the Court as soon as we determine whether lining the horizontal well will be feasible. Counsel for PLS and Mr. Fotouhi are available for a conference call if the Court has any questions.

Very truly yours,

ZAUSMER, KAUFMAN, AUGUST,
& CALDWELL, P.C.

Michael L. Caldwell

cc: Robert Reichel
Sybil Kolon
Mitchell Adelman
Farsad Fotouhi
Alan Wasserman

(Excerpt of document submitted to MDEQ)

The chronology of events set forth below verifies that PLS notified MDEQ of the problem and continued to communicate with MDEQ to advise you regarding the status of PLS' attempts to address the situation. From the beginning, the problem was not lack of communication between PLS and MDEQ, but the absence of any readily available solution. As you are aware, the NTP is installed at a depth not easily accessible by today's technologies. The well was installed in the same bore hole as the Horizontal well because the City refused to grant access to the Public-Right-of-Way more than nine years ago. Because of the location and depth of the pipeline, there is no easy way to fix the leak. It was difficult to even find qualified contractors capable of helping PLS determine the exact nature of the problem. It should be noted that, at this point, PLS had spent more than \$100,000 for numerous attempts to jet and video the north transmission pipeline.

TRANSMISSION LINE CHRONOLOGY

7/18/05 On behalf of Farsad (who was out of the Country), Laurel sent a note to Sybil that the (NTP) was shut down due to negative pressure.

7/18/05 Flowmeters were checked and calibrated to assure accurate flow readings between Evergreen and the Red Pumphouse.

7/20/05 PLS contacts FTC&H to consult about the pipeline pressure losses and options to address the situation.

7/20/05 FTC&H begins researching vendors with capabilities to conduct video surveillance and pipeline inspections. FTC&H finds that small diameter of pipeline coupled with the length and depth limits number of companies capable of inspecting line.

7/21/05 FTC&H provides email to PLS with information on pipeline inspection companies. FTC&H continue to have discussions with PLS regarding options for camera surveillance and repair options.

7/22/05 PLS contacted Clean Earth to see if a camera could be sent into the NTP. Clean Earth responded that they would be willing to try as early as the following week.

7/25/05 Farsad had a telephone conversation with Sybil to update MDEQ on the situation.

7/25/05 The contractor (Clean Earth) ran a camera down the transmission line from the MDOT property. The camera would not advance any further than 100 feet.

7/26/05 The contractor (Clean Earth) first jetted the transmission line and then ran the camera down from the MDOT property for the second time to approximately 270-300 feet. Clean Earth informed PLS at that time, that they did not have the technology to advance further than what they had accomplished up to that date.

7/27/05 PLS contacted IRWS to ask if they were able to or if they were aware of any other companies with the capability of jetting and/or videoing the line. IRWS informed PLS that they would get back to PLS in a few days.

7/28/05 LB-1 and LB-2 were turned on briefly (approximately 1 hr) in order to clean the debris left by the jetting process.

8/2/05 – 8/22/05 The Evergreen extraction wells were turned back on to maintain capture of the contaminant plume while research on options continued. The flow rates were: LB-1 100 gpm; LB-2 80 gpm; AE-3 32 gpm. During this period, a loss of approximately 25 to 30 gpm backed into the D₂ aquifer was noted. PLS continued to search for contractors and options for dealing with the NTP. The search included but was not limited to: consultants, internet, and references by contractors.

8/11/05 Farsad had a telephone conversation with Sybil to update MDEQ on the situation.

8/17/05 Sybil sent a note to Farsad asking if the problem was corrected.

8/17/05 Farsad sent a note to Sybil confirming that the problem was not fixed. The Evergreen extraction wells were up and running with a minimum loss of 25 gpm, and the contractor was unable to lower the camera more than 300 feet.

8/21/05 FTC&H provides email to PLS with additional information regarding pipeline inspection companies. FTC&H informed PLS that they were able to locate contractors that could penetrate to a depth of only 200 to 400 feet, which all agreed was inadequate.

8/25/05 – 9/19/05 The Evergreen extraction wells were turned back on again to maintain capture of the contaminant plume while research on options continued. Please note the flow rate dropped on 9/13/05 due to increasing flow loss (please see 9/13/05). PLS continued to search for contractors and options for dealing with the NTP.

8/26/05 A company named V-Tech Group was contacted for the possibility of cleaning and videoing the line. Like other contractors, V-Tech indicated that first they must clean and camera the line. On our behalf, V-Tech was going to speak to several equipment companies as well as local contractors that perform cleaning and videoing pipeline. Then, V-Tech was planning to spray-line the pipe with a polyurea lining system as a sealant.

8/31/05 PLS contacted V-Tech to see if they were able to locate a subcontractor for jetting and video. PLS was informed that the contact person at V-Tech had a death in the family and would be unavailable for the next week or so.

9/1/05 PLS continued its internet search, contacting FTC&H, and other consultants in an attempt to locate a company for jetting and videoing.

9/2/05 Sybil sent a note to Farsad asking for the depth of the horizontal well and status of the Evergreen system.

9/2/05 It was determined that perhaps a company named Taylor Construction Services (Taylor) may be able to perform slip lining of the NTP. Taylor provided options of perhaps slip lining or pipe bursting as options to replace or repair the NTP. It was decided that the pipe bursting was not an option due to the fact that the NTP was resting on the Horizontal Well. The pipe busting would have damaged the integrity of the Horizontal Well. In regards to slip lining, Taylor stated they could perhaps do the job if another company could jet clean and send a camera down the entire length of the NTP.

9/6/05 PLS contacted V-Tech who was in the process of preparing the procedures for jetting and videoing the NTP.

9/7/05 PLS contacted Boone & Darr to dispatch construction equipment to the site.

9/8/05 Farsad sent a note to Sybil responding to her questions regarding the horizontal well and stating that PLS was investigating the possibility of installing a 3" pipe inside the 4" transmission pipe.

9/9/05 Farsad had a telephone conversation with Sybil to update MDEQ on the situation.

9/12/05 Boone & Darr were dispatched to the site to excavate Porter. Boone & Darr had to apply for a permit to work on the MDOT property and to have road signs placed on I-94.

9/13/05 On behalf of Farsad, Laurel sent an e-mail to Sybil stating that the flow would be reduced in the NTP to 100 gpm to begin the process of jetting and cleaning the NTP. This note also stated that PLS was in the process of hiring a contractor to install a liner inside the NTP.

9/20/05 Sybil sent a note to Farsad requesting an update on the Evergreen system.

9/21/05 Farsad responded to Sybil that a contractor (V-Tech Corp) had been secured to jet the NTP and that it was anticipated this would occur the week of September 26th.

9/22/05 V-Tech Corp was hired to work in conjunction with other contractors for cleaning, cameraing, and possible repair of the transmission line. V-Tech recommended URS for the jetting and cameraing prior to V Tech's possible repair activities.

9/23/05 After meeting with the URS, and further review of the pipeline, URS chose not to take the job.

9/23/05 URS referred PLS to EQ. PLS interviewed and hired EQ to perform the jetting and camera portion of the project with the understanding that information would be provided to V-Tac when available.

9/28/05 EQ was mobilized to the Porter lot to begin jetting of the transmission line. After mobilization was complete, the contractor was able to jet 400 feet of the pipeline.

9/29/05 EQ continued to jet the line to a total of 1600 feet. This length was run several times to achieve the cleaning of the line.

9/30/05 A camera was inserted into the southern exit of the line (near Porter) and used to investigate a 120 foot section of line. At that point, the camera became submerged and the view of the line became obscured. At a distance of 120 feet, the line would be at an elevation of approximately 890 feet, placing it approximately 30 feet above the aquifer.

10/3/05 A camera was inserted into the northern exit of the line (near Valley) and used to investigate a 470 foot section of the line. At a distance of 470 feet, the depth of the line would be approximately 855 feet above mean sea level (amsl). The top of the Unit D2 aquifer in this region is estimated to be approximately 840 to 860 feet amsl (based data from 98-02 and 96-01)

10/4/05 A camera was sent into the line from MDOT location to a depth of approximately 350 feet. The camera was submerged at 280 feet. Therefore, visual examination was not possible beyond this point. Later that day, an air compressor was used to push air through the transmission line, with a vac truck connected at Porter in hopes to remove some of the water to enable the camera to capture images. After removing 8,000 gallons of water, the contractor resent the camera into the transmission line from the MDOT property. The camera was able to travel a total of 470 feet. However, the camera was submerged beginning at 300 feet so images were unavailable.

10/4/05 Sybil sent an e-mail to Farsad requesting an update.

10/4/05 Farsad provided an e-mail update to Sybil regarding the difficulties with the jetting process.

10/6/05 A rod machine was located at Porter lot and EQ began pushing a rod through the transmission line.

10/7/05 A rod was pushed to 968 feet, at which time the rod became lodged and kinked behind the machine. The rod had to be cut from the machine. Attempts were made to splice the rod together to achieve the full length of the transmission line. All attempts were unsuccessful.

10/12/05 The rod machine was repositioned at MDOT property in an attempt to send the rod through the transmission line to attach to the rod which was then 968 feet inside the transmission line. When a total of 1,116 feet had been achieved, the rod once again kinked in the machine. The rod was cut and the contractor proceeded to hook the line to grab the line and pull it several hundred feet. However, due to the stress on the rod and the length attempted, the hook broke.

10/13/05 - 10/21/05 Attempts were made to fish this line out. We believe that the difficulties encountered at 968 feet and 1116 feet relate to the condition of the line in these areas

10/14/05 Sybil sent an e-mail to Farsad requesting the status of the NTP.

10/17/05 Farsad had a short discussion with Sybil regarding other matters but briefly indicated that there were still difficulties with pushing the rod through the system. Farsad was planning to obtain more information from the field and provide it to Sybil.

10/19/05 Sybil sent an e-mail to Farsad requesting a status update on the NTP.

10/19/05 Farsad sent an e-mail to Sybil outlining the options for the NTP. Later that afternoon, PLS and FTC&H called MDEQ and spoke with Sybil and Jim Coger, to consult about the option of allowing PLS to turn on the Evergreen System, to allow water to be reinjected back into the D2 aquifer. Sybil said PLS should prepare a written plan to request authorization to implement the plan.

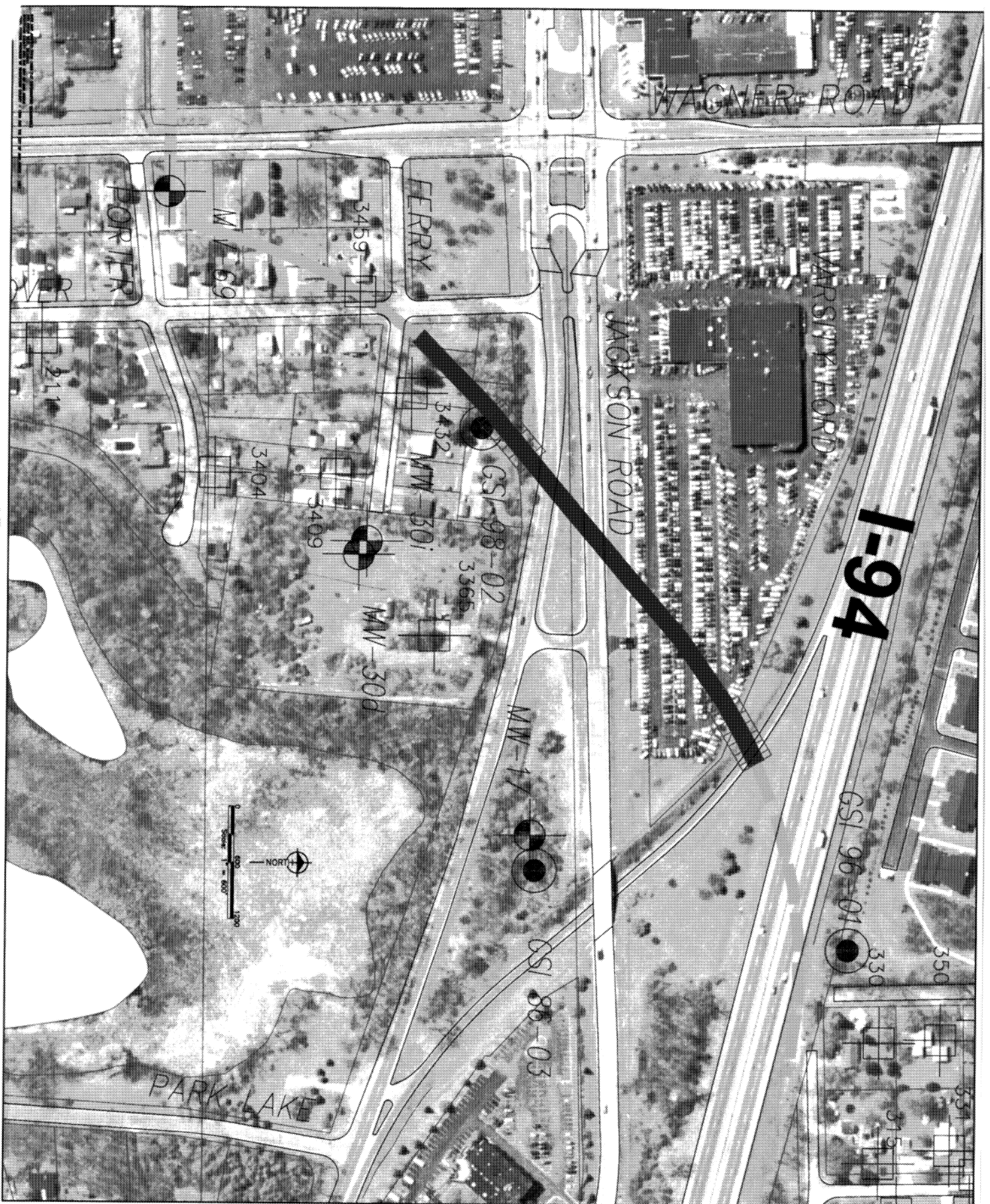
10/20/05 Farsad submitted a plan to the MDEQ requesting permission.

10/20/05 Farsad sent an e-mail to Sybil outlining the activities to date.

10/21/05 Late in the afternoon, PLS received an electronic e-mail from Sybil with a conditional approval to turn on the Evergreen System and in that letter, for the first time, MDEQ brought the possibility of enforcement action against PLS.

10/22/05 PLS sent a note to MDEQ informing them that the Evergreen System would be turned on Monday, October 24th and review all the conditions the MDEQ set forth for operations.

10/24/05 PLS sent a note to MDEQ informing MDEQ that the Evergreen System was restarted.



PROJECT NO.
1706502

FIGURE NO.
1

PALL/GELMAN SCIENCES INC.
SCIO TWP., WASHENAW COUNTY, MICHIGAN

BASE MAP

ftc&h
Fishbeck, Thompson, Carr & Huber
Engineers • Scientists • Architects
East Lansing, Michigan (517) 335-3424
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