HISTORY SUMMARY OF GELMAN SCIENCES/PALL GELMAN SCIENCES 1.4-DIOXANE CONTAMINATION

<u>1968-1991</u>

GSI mismanages wastewater, pollutes scores of business and private wells with 1,4-dioxane. Contamination reaches 1 mile in two directions. Scio properties annexed to Ann Arbor for water; pollution continues to spread, more homes recently (1997) annexed.

GSI fights responsibility and cleanup, limiting chance for full remediation; State sues.

GSI starts dumping untreated purgewater into its EPA deep well.

uV/Peroxide destruction of 1,4-dioxane in GSI purgewater confirmed reliable to less than 10 ppb.

GSI gets Honey Creek permit for treated (100 ppb) purgewater, conditioned on proof that discharge won't enter underlying groundwater. Citizens challenge permit, get a stay of discharge.

1992-1994

Citizens find GSI study showing Honey Creek discharges to groundwater, indicating discharge permit condition can't be met.

GSI and State sign consent judgment. GSI agrees to pay for and plan cleanup, use reinjection for disposal of treated purgewater in Evergreen and Core systems (Honey Creek permit area).

Within months, GSI drops core reinjection plan, tries and fails to demonstrate groundwater safety for creek discharge.

State recommends 3 ppb limit for Honey Creek but ok's GSI proposal for 60-100 ppb experimental discharges and monitoring for 1,4-dioxane in downstream drinking water. Citizens, Road Commission deny use of property for monitoring wells. GSI sues Road Commission for access. Scio Township, Washtenaw County pass resolutions supporting citizens: no discharge to creek above 3 ppb, use reinjection, best technology for cleanup.

GSI sues to keep environmental millage supporting united government/citizen position off Scio Township ballot, fails. Spends \$10 per no vote to defeat millage.

Citizens confirm successful 1,4-dioxane groundwater remediation in N. Carolina: uV/oxidation treatment to less than 10 ppb.

DNR consultant says GSI cleanup plan flawed. DNR allows GSI to proceed anyway.

Attorney General says GSI stopping cleanup by not using reinjection, treating to 3 ppb or less for creek discharge.

GSI violates reporting requirements on EPA deep well, closes well.

DNR divided into DNR and DEQ; all public commissions eliminated, then DEQ (environmental regulation) separated, placed under governor's direction. Last public board, Natural Resources Commission, stays with DNR.

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1995-1997

Legislature weakens statewide environmental protection standards, patterned on a report written by GSI lawyer (more cancer per million people allowed). Gelman cleanup shrinks when 1,4-dioxane groundwater standard relaxed from 3 to 77 ppb.

In 1995, GSI President Kim Davis agrees to implement reinjection, 3 ppb limitation on creek discharge; signs with Scio Township for tax abatements; MEGA grant recommendation based on the agreement. Davis announces GSI's plans to stay, expand in Ann Arbor.

State approves Davis' new cleanup plans but doesn't force GSI to implement them.

1,4-dioxane confirmed in wells southwest of Wagner and Dexter Roads.

GSI penalized for violating Evergreen reinjection permit. Injection well intermittently shut down, maintenance inadequate to sustain operation.

GSI reneges on agreements, resumes plans for 60 ppb creek discharge, drops reinjection again, amends consent judgment to reduce scope of cleanup and start dumping to creek at end of 1996.

DEQ director convenes administrative rules work group to allow contaminant discharges to clean groundwater.

- GSI fails to keep Evergreen system operating, incurs penalties, loses control of contamination plume, gets city approval for 5 month sewer discharge. City imposes 3 ppb treatment for 1,4-dioxane.
- County, City, Township pass resolutions upholding earlier 1995 cleanup agreements, opposing new plan.

GSI bought by New York's Pall Corporation (now PGSI).

Local citizens and state legislators intervene to halt DEQ groundwater rules changes.

DEQ reissues Honey Creek permit reflecting citizens' evidence for lower effluent limit (10 ppb) and requiring "maximum treatment" (expected to be 3 ppb or less). GSI fails to run the system continuously to accomplish core cleanup or to meet permit limits in normal operation. Attorney General notifies PGSI of penalties/violations.

City, Road Commission rights of way and private property included in new PGSI plans for Evergreen/Scioto Hills. Local government insists PGSI work with citizens to disclose location of contamination, prove plan will correct failure to capture plume. PGSI plan includes new wells, piping and future shut down of Evergreen treatment, sending contaminated water to PGSI (S. Wagner Rd.) for disposal in Honey Creek. PGSI/DEQ don't answer questions at city sponsored public meeting.

Pall Corporation puts lawyers in charge of PGSI cleanup, ignores citizens and township officials, threatens other local governments with lawsuits if they don't approve accesses to implement unpopular Evergreen/Scioto plan.

Partnership of local governments, citizens forms to get expert advice on and oversee PGSI cleanup plans.

PGSI AANews ads threaten lawsuits, attack public involvement in the cleanup, claim technical expertise and success (while actually violating consent judgment requirements) and refuse citizen inquiries.

PGSI sues local governments for accesses, judge adjourns hearing until Aug. 25 or parties settle.