



State of Ohio Environmental Protection Agency

Southeast District Office

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December 2, 2008

**PIKE COUNTY
PARKER HANNIFIN
RCRA
OHD046426409**

Mr. Rick Taylor
Parker Hannifin Corporation
6035 Parkland Boulevard
Cleveland, OH 44124-4141

Dear Mr. Taylor:

Ohio EPA has completed a review of the 2008 semi annual (Ground Water Monitoring Data for 1st and 2nd Quarters, 2008) Corrective Action Monitoring Program Report for the Parker Hannifin Corporation ("Parker") Waverly Facility in Pike County, Ohio. The report was prepared by Advanced GeoServices Corp. (AGC) of West Chester, PA and was received by the Ohio Environmental Protection Agency (Ohio EPA) on September 2, 2008. The 2008 Semi-Annual Report contains information on Site History, Ground Water Monitoring Activities, Monitoring Data & Results, Corrective Action Activities and Conclusions & Recommendations. The Annual Report was accompanied by electronic (CD) copies of laboratory data reports for the 1st and 2nd Quarters of 2008. Tier I Data Validation Reports for the same time periods were also included, electronically, on accompanying CDs.

Parker is required to submit semi-annual reports to Ohio EPA as per OAC 3745-54-100(G). As per the revised Corrective Action Monitoring Plan (CAMP) for the Parker site (August 2006), the ground water sampling consists of the analytical results for fifteen VOCs and one metal site specific parameters at each of Parker's thirty nine monitoring wells, four recovery wells, sixteen piezometers and two surface water locations. With respect to ground water monitoring, the site is controlled by its CAMP and the Corrective Action rules found in OAC 3745-54-90 through 3745-54-100.

The 2008 Annual Report discusses a number of new and old issues for the period January through June, 2008. Among the noteworthy are:

- The surface water elevations listed in Table 3-3 shows the staff gauge measurements and surface water elevation data for each quarterly reading. As per past comments by Ohio EPA (noting higher surface water elevations downstream in Pee Pee Creek), AGC notes that the surveyed point of reference in the stream continues to shift as debris from Pee Pee Creek collides with the staff gauges. During future sampling events, surface water elevations at the staff gauge locations will be determined by surveying the water surface relative to a known, stable elevation marker (i.e., casing of a nearby monitoring well).

- When PCH submitted the report, PHC was still awaiting the results and recommendations from the ENSR three dimensional ground water flow model (Modflow) and accompanying contaminant transport model (RT3D) to evaluate the optimal placement and flow rates for the ground water remediation wells in the plume management area.
- AGC has begun to sample RW-3, RW-4, RW-5 and RW-6 from a tap in the treatment building for safety reasons. Each well is isolated and allowed to run for one hour before sample collection, after testing was done to determine influent line purge rates. RW-3 is not pumping on a regular basis because the portion of the plume around this well does not contain concentrations of VOCs above the gps. RW-4, RW-5 and RW-6 are pumping at a combined flow rate of approximately 163 gpm.
- In February 2008, a test of the Programmable Logical Control System (PLCS) discovered a discrepancy between the calculated flow rate measured by the PLCS and the actual flow rate. An empirical test was conducted with a graduated tank and stop watch to allow AGC to adjust the PLCS to match the actual flow rate.
- In April 2008, AGC's contractor located and repaired a leak in the underground piping for AS-4. The break was found beneath the vault for AS-3 and was repaired.
- Ground water conditions in the plume management area have not changed appreciably from past reports. Some ground water is captured by the recovery wells while some appears to pass the recovery wells and continue on towards Pee Pee Creek, as evidenced by VOC detections at MW-16 and MW-20.
- A Tier 1 Data validation report was submitted (in CD form) for each quarterly sampling event. All the data was reported as useable as qualified. The percent completeness for the 1st and 2nd Quarters of 2008 was 100%.

Ohio EPA anticipated significant decreases in ground water VOC content down gradient of the new recovery well extraction system, sometime in 2007. However, to date, the sampling results have not shown any significant decline in VOC content down gradient of the RW-series pumping wells. Ohio EPA is anticipating significant improvements in the performance of the PHC plume management remedial system following the completion of the Modflow and RT3D transport models by ENSR. Until the improvements can be realized, TCE leakage to Pee Pee Creek is expected to continue as well as TCE detections in monitoring wells MW-16 and MW-20 (down gradient monitoring wells along the edge of Pee Pee Creek).

Based on Ohio EPA's review, we found the following chronic violation of Ohio's hazardous waste laws and the DFF&Os. **Failure to satisfy the requirements of the December 27, 2007 Director's Final Findings and Orders (DFFOs), and violations of Ohio's hazardous waste laws and rules may result in escalated enforcement action for contempt of the DFFOs and/or for violations of laws and regulations, which may subject you to fines and penalties.** In order to correct this violation, you must do the following and send me the following **within 30 days** of the date of this letter.

- (1) **OAC Rule 3745-54-100(E)(1),(E)(2) and (E)(3) and section V. 2. of the December 27, 2000 Director's Final Findings and Orders (DFFOs):** (E)(1) The owner or operator must conduct a corrective action program to remove, or treat in place, any hazardous constituents in groundwater that exceed specified concentration limits between the compliance point under rule 3745-54-95 of the Administrative Code and the down gradient property boundary; (E)(2) The owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents under rule 3745-54-93 of the Administrative Code that exceed concentration limits in ground water beyond the facility boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the director that, despite the owner's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner/operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis. (E)(3) Corrective action measures must be initiated and completed within a reasonable period of time.

(E)(1) Parker has failed to control and capture the release of VOC-laden ground water between its compliance point and the facility boundary with Pee Pee Creek; (E)(2) Parker has failed to control and capture the release of VOC-laden ground water beyond the facility boundary. (E)(3) PHC has failed to initiate and complete its corrective actions within the plume management area within a reasonable period of time.

It was Ohio EPA's expectation that significant control of the VOC plume in the vicinity of Pee Pee Creek would have taken place by the end of 2006, more than a year after the installation of new corrective action remedies on site. This has not yet occurred. These violations will remain outstanding until the corrective measures have brought on-site ground water contamination under full hydraulic control.

Please submit all requested information no later than 30 days from the date of this letter. Should you have any questions, please feel free to call me at 740-380-5293 or Mr. Steve Saines at 740-380-5445.

Sincerely,



Donna Goodman
District Representative
Division of Hazardous Waste Management

DG/mlm

cc: Martha Connell, Parker Hannifin Corporation
Steve Saines, DDAGW/SEDO

NOTICE:

Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with all applicable regulations.