



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

February 2, 2012

Ms. Sharon Fisher
Harley-Davidson Motor Company
1425 Eden Road
York, PA 17402

Re: Approval of Supplemental Remedial Investigation Groundwater Report (Part 1) for the former York Naval Ordnance Plant

Dear Ms. Fisher:

This letter is in response to the Supplemental Remedial Investigation Groundwater Report (Part 1) for the former York Naval Ordnance Plant, prepared by Groundwater Sciences Corporation and dated September 2011. The report was prepared and submitted in accordance with the One Cleanup Program established by EPA Region 3 and the Pennsylvania Department of Environmental Protection (PADEP).

EPA has reviewed and hereby approves the Supplemental Remedial Investigation Groundwater Report (Part 1) in accordance with the provisions of the One Cleanup Program; however, in order to focus further characterization activities and remedial efforts, EPA provides the following comments to Section 8.7, Recommendations:

Section 8.7.1, para 2: EPA agrees with the need to define the lateral extent of contaminated groundwater around well MW-18D. Additional monitoring wells should be proposed, and a determination made whether changes to the groundwater extraction system are needed in this area.

Section 8.7.1, para 3: EPA disagrees with the sentence "The pathway and persistence of the elevated concentrations in the groundwater is incomplete." According to Section 7.1 Human receptors, and Table 7.1, the vapor intrusion pathway and inhalation exposure route are indicated as complete, as well as groundwater as a water supply as a potential future exposure pathway. As for the persistence being incomplete, this wording is confusing. The CVOC contamination is still present off-site above levels of concern should exposure occur, therefore it is persistent enough to be of concern. EPA agrees with the need for further investigation.

Section 8.7.1, para 4: EPA agrees with the need to evaluate off-site barriers for deep groundwater flow, and asks that you consider whether additional geophysical studies could help in this analysis, e.g. Willowstick technologies (<http://www.willowstick.com/>).

Section 8.7.2: EPA agrees with the proposed work identified in paragraphs 1 through 8. With respect to additional deep borings, consider whether Flute technologies would be beneficial

(<http://www.flut.com/about.html>). With respect to tracer testing, consider whether Willowstick technologies would assist in tracing deep groundwater flow paths.

Section 8.7.3, para 2: Sampling of residuum and sediments in karst voids is proposed to be sampled for fraction organic carbon. This sediment should also be characterized in additional ways (e.g., grain size, mineralogy, contaminant concentration, DNAPL presence, void volume, etc.) to assess significance of these materials as potential secondary sources, determine whether these potential sources should be addressed, and to evaluate potential treatment options.

Section 8.7.5: In addition to the proposed system shutdowns in the NPBA and Building 3 area, an interim extraction system should be developed and implemented to address the current offsite migration of contaminated groundwater in the southeast corner of the property.

Thank you for your cooperation in working with EPA and PADEP in the remediation of this site. We look forward to Part 2 of the Supplemental Remedial Investigation Groundwater Report and future cleanup efforts. If you have any questions, please don't hesitate to call me at (215) 814-3407.

Sincerely,



Griff Miller
LT, U.S. Public Health Service
Office of Pennsylvania Remediation
EPA Region 3

cc: Pamela Trowbridge, PADEP
Steve Snyder, GSC

