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Catherine B. Templeton, Director
Promoting and protecting the health of the public and the environment

January 2, 2014

Mr. Kenny McCutcheon
Wix Filtration Corp LLC
1422 Wix Road
Dillon, SC 29536-7939

RE: Wix Dillon Site
Voluntary Cleanup Contract 13-5996-RP
Site ID# 403139
Dillon County

Review of Remedial Investigation Work Plan, and Sampling and Analysis Plan, received October 21, 2013, and acknowledgement of receipt of Health and Safety Plan

Mr. McCutcheon,

The South Carolina Department of Health and Environmental Control (Department) has reviewed the above referenced Remedial Investigation Work Plan (work plan) and the associated Sampling and Analysis Plan (SAP), submitted pursuant to Voluntary Cleanup Contract #13-5996-RP (the Contract). The comments below were generated during this review. As outlined in Section 3 of the Contract, Wix should revise the documents as indicated below, and provide the revised documents to the Department within 30 days.

The Department also acknowledges receipt of the site-specific Health and Safety Plan. The Department does not approve or comment to health and safety plans other than those produced specifically for SCDHEC by our state contractors.

RI Work Plan:

1. The work plan leaves some uncertainty regarding whether the toluene UST has been removed from the ground, or if another possible source exists. If this is known, it should be stated in the text. If it is unknown, this should be determined during the remedial investigation. The existence and condition of any service lines from the former UST should also be determined during the investigation.

2. The work plan does not propose installation of additional monitoring wells other than replacement of MW-4. Based on the information provided, the groundwater plume has not been vertically delineated. The toluene concentrations for some wells reported here and in previous reports are at or near the solubility limit for toluene. This indicates the presence of free phase toluene, which has not been identified or delineated. While free

phase toluene is less dense than water and will remain near the water table surface, dissolved phase contamination may migrate freely throughout the water column. Vertical delineation should be conducted to determine whether the plume is limited to the uppermost portion of the aquifer.

3. Based on a review of construction details and water levels for monitoring wells 1-4, these wells are likely screened entirely below the water table. If free phase toluene is present, it will only be encountered in a well with a screened interval that brackets the water table's surface. Any shallow monitoring wells installed going forward, including MW-4R, should bracket the water table.

4. A potentiometric map should be included in the work plan.

5. Section 3.3 Geology and Hydrogeology: The work plan relies on generalized regional stratigraphy in assuming that there is no potential for shallow contamination to impact deeper drinking water aquifers. The work plan also presumes that there is no use of shallow groundwater. The nearest down-gradient water supply well (regardless of depth) should be sampled to definitively determine the presence or absence of contamination.

6. Section 3.4 Local Groundwater Use: The work plan includes a water supply well database search, which is appropriate, but as noted in the work plan, the completeness and accuracy of such databases are uncertain. In addition to the wells identified in Table 1 and Figure 7, there appears to be a well house enclosed in a fenced area immediately southwest of the facility along Wix Road. The presence of residential properties near the facility suggests that there may be additional wells that are not identified in the database. In addition to the database search, nearby homes and businesses should be contacted to determine whether there is groundwater use in the vicinity of the site.

7. Section 5.2 Toluene Source Area Characterization: The work plan indicates that site specific hydrogeologic data will be used to evaluate the transport and retardation of VOCs, however the work plan does not indicate the existence of any site specific hydrogeologic data, or activities to gather such data. Collection of this data should be addressed in the work plan. At a minimum, slug tests should be performed on source area wells to support selection of a remedial alternative.

8. Section 5.4.1 Monitoring Well Installation: The work plan does not propose installation of any new monitoring wells, but suggests that WSP has not fully evaluated the need for additional wells at this time. Please revise this section of the work plan to indicate the rationale that will be used to determine the need for additional sampling points (i.e. direct push screening, detection of chemicals of concern above a regulatory standard, etc.).

9. Section 5.4.1 Monitoring Well Installation: The work plan indicates that the depth and construction of MW-4R will be similar to that of MW-4. High concentrations of dissolved toluene and particularly free phase liquid toluene are capable of dissolving PVC plastic well materials. It is likely that the collapse of MW-4 was caused by chemical failure rather than physical failure. This can also result in creation of additional

compounds that were not released from the original source, thereby confusing the site conceptual model. The replacement well should be constructed using stainless steel or other material that is compatible with toluene. The locations and contaminant trends of MW-2 and MW-13 suggest that these wells may fail in the near future.

10. Section 5.4.2 Monitoring Well Sampling: Semi-Annual monitoring should continue as currently scheduled. The Department may be amenable to modifying this schedule if warranted by the investigation or remedial activities.

Sampling and Analysis Plan (SAP):

11. A section should be added describing procedures for conducting aquifer testing. At a minimum, slug tests should be conducted on MW-4R, MW-13, and MW-2.

12. Section II.4.3 Supplemental Well Installation: The SAP indicates that MW-4R will be constructed using the same materials and to the same depth as MW-4. As indicated above, the SAP should be revised to ensure that MW-4R is designed to allow detection of free phase toluene, and constructed using chemically compatible materials.

Please submit a revised work plan and SAP to my attention on or before February 5, 2014. If you have questions regarding these comments, or would like to discuss this project you can reach me at (803) 898-0733, or by email at hornostr@dhec.sc.gov

Regards,

Tim Hornosky, P.G.
State Remediation Section
Division of Site Assessment, Remediation & Revitalization
Bureau of Land & Waste Management

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