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**TO:** Ms. Deanna Ross

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**FROM:** Chad Milligan

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**CC:** Julie VanAmburg

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**DATE:** April 30, 2019

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**RE:** Swick Guth, Inc. Project ID#C5-059-71988

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Ms. Ross,

On behalf of Swick Guth, Inc. (Swick Guth), Strata, LLC (Strata) is providing this response to a letter submitted to Swick Guth by the Kansas Department of Health and Environment (KDHE) dated March 18, 2019. In that letter, KDHE cited numerous investigations identifying Swick Guth as a source of chlorinated volatile organic compounds in groundwater. KDHE therefore recommended that Swick Guth enter into the Voluntary Cleanup and Property Redevelopment Program (VCPRP) to address the contamination identified in the referenced investigations. KDHE then indicated that if Swick Guth did not respond to the above referenced letter, or chose not to enter into the VCPRP, KDHE may then assign the property to KDHE's enforcement-based program.

Swick Guth has retained Strata to evaluate these investigations and discuss this information and program options with the KDHE VCPRP unit. The following provides a brief summary of the investigations reviewed by Strata:

***United Focused Assessment of the Swick Guth, Inc. Facility. 400 North Chestnut, McPherson, Kansas, April 2005. Burns and McDonnell Project NO. 37474. Kansas Department of Health and Environment United Focused Assessment.***

During the Phase I portion of the United Focused Assessment (UFA), Burns and Mc Donnell conducted the investigation in accordance with ASTM standards and identified onsite recognized environmental conditions (RECs) related to a hydraulic lift and a concrete pit used for chrome plating. A number of potential environmental concerns were identified. One onsite concern was historical use dating to the 1920's that indicated the property had been used as a welding and machine shop. Offsite potential environmental concerns include a dry cleaner that had been enrolled into KDHE's Dry Cleaner Program, numerous leaking underground storage tank sites, and a grain elevator with no known environmental issues. Burns and Mc Donnell did not identify documentation that hazardous substances had been released on the Swick Guth property.

Burns and Mc Donnell conducted a Phase II site assessment using general CERCLA considerations in November 2004. During the assessment CVOC's were observed in groundwater at concentrations exceeding KDHE RSK levels both upgradient and downgradient of the facility. CVOC's were not evaluated in soil samples collected during this assessment. However, the source(s) of the CVOCs in groundwater were not identified due to the inability to collect a background groundwater sample, and therefore, Burns and McDonnell indicated that further investigation to identify the source(s) of CVOCs was warranted.



**Swick-Guth Site, McPherson, Kansas, Preliminary Assessment/Screening Site Investigation. KDHE Identification Number C5-059-71988, September 2005.**

In June and August 2005, KDHE conducted a field investigation to evaluate metals and VOC concentrations in groundwater upgradient of the Swick Guth facility. KDHE concluded that VOCs were observed in groundwater at concentrations exceeding KDHE RSK levels, with the likely source(s) to be the former Giant Wash and/or Copeland Supply sites.

**Swick-Guth Property, 412 North Chestnut Street. Phase I Environmental Site Assessment. GeoStat Environmental, December 2012.**

GeoStat Environmental Conducted a Phase I ESA in November and December 2012 in general accordance with ASTM E 1527-05. During that assessment, GeoStat identified concerns over open containers of volatile substances located within rental spaces on the subject property. Many of these containers were removed between site visits. Further review of known environmental data concluded that no known releases of hazardous substances had occurred on the Swick Guth property and that the Swick Guth property had not been identified as the source of known VOC contamination in groundwater.

**Swick-Guth Site Inspection 2, McPherson, Kansas KDHE October 2015.**

KDHE conducted an investigation in December 2014 and March 2015 to evaluate the source of trichloroethylene (TCE) in groundwater at the Swick Guth site. In addition, KDHE reviewed reports from other nearby sites, as well as KDHE Bureau of Waste Management, Verification of Hazardous Waste Reports. The Verification of Hazardous Waste Reports indicate a number of locations upgradient of the Swick Guth that had operated solvent tanks in which perchloroethylene (PCE) and/or TCE were used as the solvents.

Reports from the Giant Wash Laundry, located upgradient of the Swick Guth site, indicate elevated concentrations of TCE in groundwater upgradient and side gradient of the former dry cleaner, indicating a potential upgradient source of TCE. Data from the 2015 KDHE report indicate that TCE was observed in one monitor well at concentrations exceeding KDHE RSK levels adjacent to the Swick Guth property.

Soil samples collected at the Swick Guth property near historic groundwater sample locations indicate that VOC concentrations in soil were not observed at concentrations exceeding laboratory reporting limits. Direct push groundwater samples were not collected at the Swick Guth property in 2014/2015.

Under Section 4.3 *Groundwater Pathway Conclusions*, KDHE has indicated that "Releases of hazardous substances to groundwater have been documented at the site." Other than historical groundwater data in reports discussed herein, Strata has not been made aware of data supporting a release of hazardous substances at this site.

**Preliminary Assessment, PCE-North Highway 81 Bypass. McPherson, McPherson County, Kansas (KDHE Project Code C5-059-73524). Golder Associates Inc. November 14, 2018.**

On behalf of the KDHE, Golder Associates Inc. (Golder) conducted a Preliminary Assessment (PA) to investigate/evaluate the potential source(s) of tetrachloroethylene (PCE) and 1,1-dichloroethene (1,1-DCE) observed in private domestic wells and monitoring wells near the intersection of North HWY 81 Bypass and West Euclid Street. This assessment identified four known sources of chlorinated solvents located within the



study area, the Tidy Laundry, Giant Wash Laundry, Swick-Guth, and Chrome Plus. The Tidy Wash and Giant Wash laundries were enrolled in KDHE's Dry Cleaner Program. The Chrome Plus site is currently enrolled in the KDHE VCPRP. The report identifies the Swick Guth site as a source for TCE citing the KDHE project file (C5-059-71988).

The PA suggests that groundwater flow is generally towards the west-northwest due to the City of McPherson's Public Water Supply Well #9, which is in general contradiction to KDHE's previous understanding of groundwater flow to the west-southwest. The report concludes that "...this PA does not indicate a conclusive source of the PCE, TCE, 1,1-DCE detected in the private domestic well...or newly installed monitoring wells...".

### **Conclusion**

Based upon review of the above referenced documents, including two ASTM Phase I ESA's conducted in 2005 and 2012, and two site investigations conducted in 2004 and 2005, Strata believes that the Swick Guth property may not be a source of CVOCs observed in groundwater. Neither of the Phase I ESAs documented evidence of known releases of hazardous substances on the Swick Guth property. The 2005 KDHE report (PA/SSI) suggested that the Giant Wash was the source of observed TCE in groundwater. The Golder report cited the KDHE file for the Swick Guth site identifying the site as a known source of TCE. Strata requested this supporting data from KDHE VCPRP, however, at this time, the KDHE VCPRP was not aware of such information as the project had recently been transferred between units, and it is possible that not all data had yet been transferred or reviewed by KDHE prior to the telephone calls placed by Strata. KDHE did offer the Kansas Open Records Act (KORA) as an option for Strata to obtain this information.

The investigations discussed above have not identified either PCE or TCE use on the Swick Guth property, however, as discussed, the Swick Guth property has been identified as a source of PCE and/or TCE.

Evaluation of PCE and/or TCE source areas can be challenging due to the degradation pathways of these two industrial solvents. Strata feels that further evaluation of observed degradation daughter products is warranted to better define and identify sources of PCE and/or TCE.

In addition, the Golder report suggested that the McPherson PWS #9 dominates/redirects groundwater flow to the west-northwest, which places many of the suspected PRP's under that investigation upgradient of the observed groundwater contamination near the north HWY 81 Bypass. This well is located approximately 4,000 feet northwest of the Swick Guth site. Strata has reviewed the KGS WIMAS Mapper website (<http://hercules.kgs.ku.edu/geohydro/wimas/newmapper/index.cfm?act=N&CFID=10654262&CFTOKEN=57579411&jsessionid=5a304fd58da75921256d>) and believes that McPherson PWS #5 (Water Rights #24664 and #1311, point of diversion 29-19s-3w 5) is located within 600-900 feet (SW) of the Swick Guth site, which could control groundwater flow in the immediate vicinity of the Swick Guth site, supporting the previously understood southwest groundwater flow, potentially minimizing the migration of groundwater contaminant flow from this part of McPherson. Strata further understands that PWS#5 (as well as PWS#2) may be connected to an active groundwater treatment system removing VOC contamination from groundwater flowing beneath much of this area of McPherson, and that this system has been active since the mid 1980's.





Strata also understands that chrome plating operations were moved from the Swick Guth site to an offsite location sometime prior to the late 1970's or early 1980's when the subject property was sold by the Swick family to the Varland Corporation. During this time, S-G Diesel Power and Femco, operated at the property. Femco was a golf cart manufacture, and Strata believes that S-G Diesel Power may have been a diesel engine mechanic shop. However, Strata has not confirmed actual business operations of S-G Diesel Power.

Strata has conducted this review of data collected and prepared by others, and therefore has not confirmed the reliability of this data. Additionally, Strata offers no warranty to the accuracy of data prepared and presented by others in documents referenced herein, prepared by others. Strata is not aware of any amendments or revisions to the reports discussed herein. If such amendments or revisions have been completed, Strata may review at its discretion to revise this review.

Upon review of these investigations conducted by KDHE and others, and telephone conversations between KDHE and Strata, Swick Guth has decided not to enter into the VCPRP.

Chad Milligan, PG  
VP of Geology, Director of Investigation and Remediation Services