



October 12, 2017

Mr. Howard Melton  
St. Francis Auto Wreckers  
4043 S. Pennsylvania Avenue  
St. Francis, WI 53235

SUBJECT: Review of "Status Update"  
WI DOT Lake Arterial – Auto Wreckers, 4043 S. Pennsylvania Avenue, St. Francis, WI  
WDNR BRRTS Activity #: 02-41-000269  
FID #: 241469250

Dear Mr. Melton:

The Department of Natural Resources (DNR) has reviewed the "Status Update" (dated May 25, 2017) submitted by your environmental consultant, Moraine Environmental, Inc., for the site identified above. The intent of the "Status Update" was to present a compilation of all sample data collected at the site, demonstrate the extent of soil and groundwater contamination, and respond to DNR's comments provided to you in a letter dated June 10, 2016. The "Status Update" also provided recommendations for future work at the site including the construction of an engineered cap over residual contamination followed by the preparation and submittal of a closure request. A review fee was paid to the DNR to provide a written response regarding the information and recommendations presented in the "Status Update". The DNR therefore provides the following comments:

- 1) The evaluation of soil and groundwater contamination at the site is incomplete as the vacant northern portion of the site was not evaluated, sample data was missing from the evaluation, and the extent of VOC soil contamination at the site was not presented.
  - a. A considerable amount of contaminated soil and other waste material was removed from the northern, vacant, portion of the site. However, the DNR has not approved a site investigation for this portion of the property or made a determination that no further clean up or remedial actions (such as capping areas not addressed during the removal action) will be required. Closure has not been granted to any part of this site. The extent of residual contamination within the northern portion of the site must be assessed.
  - b. All available sample data must be considered when interpreting the extent of contamination at this site. Sample data presented in the following reports was not included in the Status Update:
    - i. Phase II Assessment, STS Consultants Ltd., April 24, 1991
      - o Soil samples collected at B-12 and HA-12 composite – located on the vacant north parcel
      - o Soil samples collected at B-13 through B-14 – located on the south occupied parcel(Only a portion of these sample locations are still within the current site boundary, you will need to determine which are applicable to this project.)

- ii. Groundwater and Supplemental Soils Investigation Report, Montgomery Watson Harza, December 2001
    - o Soil samples collected from borings HP01-HP23 that were advanced on the vacant northern parcel.
    - o Soil samples collected from SB01-SB09
  - iii. Site Assessment Report, STN Environmental, JV, June 5, 2008
    - o Soil samples SS-1 – SS-3
    - o Soil samples collected from Test Pit 1 through Test Pit 9
  - iv. Site Reassessment Report, Department of Natural Resources, June 9, 2004
    - o Soil samples collected from SF1-SF15 located on the site
    - o The DNR also collected groundwater samples from onsite monitoring wells as part of their assessment.
  - v. Final Removal Action Letter Report, STN Environmental, JV, June 30, 2009
    - o Confirmation soil samples collected under the excavation and from confirmation test pits.
- c. The “Status Update” did not provide isoconcentration maps that depict the extent of volatile organic compound (VOC) contamination at the site. These figures must be prepared to demonstrate whether the extent of soil contamination has been defined or if additional investigation will be required (Wis. Admin. Code § 716.15(4)(c)). These figures will also be used to identify areas that require groundwater sampling and to assess whether contamination poses a vapor intrusion risk.
- 2) Cross-section figures must be prepared as part of the site investigation report (Wis. Admin. Code § 716.15(4)(d)). Figures that clearly demonstrate the relationship between fill and native material, the extent of soil contamination, and the depth of the water table at this site would be useful to demonstrate environmental conditions at this site.
- 3) The “Status Update” states that PCB waste was only discharged at this site prior to 1978 and would therefore not be regulated under TSCA. An explanation as to how this conclusion was reached must be provided. If the timing of the discharge cannot be substantiated, the contamination may then be regulated under TSCA.

PCB waste discharged prior to 1978 may be regulated under TSCA if the DNR and EPA determine that contamination poses an ‘unreasonable risk’. Based on current conditions at the site and available sample data, the EPA and DNR will not consider the PCB contamination at this site to pose an ‘unreasonable risk’. However, this determination may be reconsidered if new information becomes available to suggest that PCB contamination poses a greater risk than currently expected.

- 4) A thorough assessment of the vapor intrusion risk posed by contamination at this site must be conducted to satisfy the requirement of Wis. Admin. Code § 716.11(5)(g). The extent of VOC contamination at this site must be determined in order to make this assessment. The location of VOC soil and groundwater contamination relative to potential receptors (including buildings and utility corridors) should be evaluated as described in “Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin” (DNR Publication RR-800). While some oils and hydraulic fluid may not pose a vapor intrusion risk, other more volatile compounds, such as chlorinated volatile organic compounds, have been identified at this site and the risk posed by these compounds must be assessed.

- 5) The potential migration of contamination off site through storm water, subsurface utility lines, and groundwater must be assessed (Wis. Admin. Code § 716.11(5)(a)).
- a. Describe how storm water is conveyed through the drainage swale near the central portion of the site. Also describe the outfall that water in the swale drains to, where stormwater flows after leaving the site, and explain whether storm water in the swale could be transporting contaminated material. Also explain if there are other storm water outfalls at the site that could be facilitating contaminant transport.
  - b. Discuss whether utility lines that run near or through the site act as preferential pathways for the migration of contaminated groundwater or vapor. Additional sampling should be proposed along these corridors if contaminant migration through these lines is expected.
  - c. Soil samples collected at this site identified significant residual contamination in unsaturated material. This contamination may have also impacted groundwater. Once the extent of soil contamination has been assessed, your environmental consultant should identify where the most significant potential for groundwater contamination exists and take steps to assess groundwater quality in these areas. Based on the soil sampling data the DNR has reviewed it would recommend that, at a minimum, groundwater samples be collected permanent monitoring wells installed at the following locations:
    - i. Near the location of HP15 at the south end of the site. Significant CVOC contamination was identified at this location. The groundwater sample collected from nearby TW-1 was also impacted with CVOCs.
    - ii. Within the central portion of the site where HP20 was advanced. Significant VOC soil contamination has been identified in this area.
    - iii. On the northern portion of the site, adjacent to former HP-10. This boring was advanced within an area where significant VOC contamination was identified. HP-10 is also on the apparent down-gradient edge of where drums and other containers were formerly buried.
    - iv. Other areas that you have identified as posing a significant risk to groundwater.

Future groundwater sampling events must include all groundwater wells installed at the site. You will need to evaluate groundwater sampling results, groundwater flow direction, and other pertinent factors to determine how much sampling will be required at the existing well network to demonstrate groundwater conditions and whether additional monitoring wells or piezometers must be installed to define the extent of contamination.

- 6) The information provided in the "Status Update" indicates that soil contamination is present throughout the site which poses a direct contact risk. An engineered barrier is proposed to address the risk posed by residual contamination at the swale and the southern portion of the site. The DNR concurs that constructing a proper engineered barrier would be adequate to address the direct risk. However, a barrier must be constructed over all portions of the site where a direct contact risk remains, including the areas of the vacant northern portion where soil contamination was not previously addressed by excavation and capping.

- 7) A request for an exemption to build at a historic fill site must be submitted to the DNR before any non-soil waste material on this site can be disturbed or built over. This includes the construction of an engineered barrier over residual contaminated waste.
  
- 8) The "Status Update" recommends a closure request be prepared upon the completion of the cap. However, the DNR will not consider closure for this site until the site investigation and any required remedial actions are completed. This would include addressing all the items summarized in this letter (groundwater investigation, vapor assessment, complete site investigation documentation, etc.).

We appreciate your efforts to restore the environment at this site. If you have any questions regarding any of the above items, please contact me at (608) 266-0941 or by email at [paul.grittner@wisconsin.gov](mailto:paul.grittner@wisconsin.gov).

Sincerely,



Paul Grittner  
Hydrogeologist  
Remediation & Redevelopment Program

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