



December 8, 2020

DAVID EARLE  
CRANKY PATS PROPERTIES LLC  
905 S COMMERCIAL ST  
NEENAH WI 54956

SUBJECT: Air Sampling Results for 905 South Commercial Street –  
Contaminants Detected Above DNR Screening Level  
DNR Site Name: Donaldson's One Hour Cleaners (Former), 110 West Cecil St., Neenah, WI  
DNR BRRTS # 02-71-110797

Dear Mr. Earle,

Included are the findings of a recent investigation on your property by the Department of Natural Resources (DNR). This letter is a follow-up to our phone conversation on December 8, 2020.

### Summary

One chemical was detected in indoor air in the basement at a level that does not pose a health risk to building occupants. Chemicals were detected outside the foundation at levels that need to be mitigated or routinely monitored until a cleanup is performed. Additional air sampling is recommended.

### Sampling Effort

As you are aware, this investigation was conducted because of the potential for chemical vapors from the nearby Donaldson's One Hour Cleaners (Former) site, identified above, to migrate through soil and groundwater, accumulate next to and/or beneath the foundation of your building, and possibly enter your indoor air. The contaminant of concern at the Donaldson's One Hour Cleaners (Former) site is the chlorinated volatile organic compound, tetrachloroethylene ("PCE"). The history of this site and the potential concerns to neighboring residents were historically described to you and, most recently, in emails dated August 6, 2020 and August 13, 2020.

On November 9<sup>th</sup> and 10<sup>th</sup>, an environmental consultant hired by DNR installed sampling devices into the floor and west wall of the foundation and collected soil vapor samples as well as indoor air samples and an outdoor air sample. The samples were then submitted to ALS Environmental, where they underwent laboratory analysis for PCE, and the related chemical breakdown products trichloroethylene ("TCE"), cis-1,2-dichloroethylene ("cis-1,2-DCE"), trans-1,2-DCE and vinyl chloride.

### Test Results

Enclosed are two tables titled *Air Data for Chemicals Sampled at Cranky Pat's Pizza, 905 S. Commercial St., Neenah, WI* for the outdoor air / indoor air and sub-slab or side-wall vapor (i.e., outside the foundation) samples. The analysis detected PCE in indoor air below the Vapor Action Level for indoor air. Although PCE was detected in air in the basement, the level at which it was detected is such that it does not pose a health risk to you or your employees. This is called "a detection below screening level" and is explained in the enclosed fact sheet.

The analysis also detected PCE and TCE at the following locations:

- Beneath the bar area (SSV-1) at concentrations below the Vapor Risk Screening Levels;
- Beneath the basement (SSV-Basement) at concentrations below the Vapor Risk Screening Levels; and
- Immediately adjacent to the west wall of your basement at four feet below ground surface (SSV-West Wall) at concentrations an order of magnitude above the Vapor Risk Screening Levels.

Cis-1,2-DCE or trans-1,2-DCE were also detected at SSV-Basement and SSV-West Wall. However, there are limited toxicity data for inhalation of these chemical vapors and thus no available Vapor Risk Screening Levels. However, comparison values from the Agency for Toxic Substances and Disease Registry (ATSDR) and the Occupational Safety and Health Administration (OSHA) can be used. Comparing these values shows that the levels of cis-1,2-DCE and trans-1,2-DCE detected are below both the ATSDR level and the level allowed in the air at a workplace by OSHA. While the ATSDR does not have a comparison value for cis-1,2-DCE, available information suggests that this form of the chemical is much less toxic than trans-1,2-DCE.

### Next Steps

Under typical circumstances, the party responsible for the contamination would move forward with installing a vapor mitigation system at your business and perform an environmental cleanup action. However, there is currently a dispute regarding responsibility for this contamination.

DNR discussed the data with the Winnebago County Health Department ("County Health") and Department of Health Services (DHS). We jointly recommend the following actions at this time:

- Collect additional routine side-wall (30-minute), sub-slab (30-minute) and indoor air (multi-day passive) sample collections.
- Maintain communications with you, DNR, County Health and DHS.

EnviroForensics will contact you during the winter to perform an additional sampling event. This allows us to assess how effectively your foundation is preventing sub-slab vapors from entering your indoor air during a variety of seasons and weather conditions.

Thank you for your continued patience and cooperation at this complicated site. Please contact me if you have questions regarding the environmental investigation or need an update on our progress. Please direct any health-related questions to Doug Gieryn, Winnebago County Health, at (920) 232-3029 or Amanda Koch, Department of Health Services, at (608) 267-2487.

Sincerely,



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Encl. Air Data for Chemicals Sampled at Cranky Pat's Pizza, 905 S. Commercial St., Neenah, WI  
Understanding Chemical Vapor Testing Results, RR-977

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**Air Data for Chemicals Sampled at**

**Cranky Pat's Pizza, 905 S. Commercial St., Neenah, WI**

DNR Site Name: Donaldson's One Hour Cleaners, 110 W. Cecil St., Neenah, WI

BRRTS # 02-71-110797

(All data units in µg/m3)	Air concentrations on 11/10/2020	Comparison Vapor Action Level (Commercial)
<b>Contaminant</b>		
<b>Outdoor Air</b>		
PCE	No Detect	180
TCE	No Detect	8.8
cis-1,2-DCE	No Detect	No VAL (806,000 OSHA)
trans-1,2-DCE	No Detect	No VAL (790 ATSDR; 806,000 OSHA)
<b>Indoor Air - 1A</b>		
PCE	No Detect	180
TCE	No Detect	8.8
cis-1,2-DCE	No Detect	No VAL (806,000 OSHA)
trans-1,2-DCE	No Detect	No VAL (790 ATSDR; 806,000 OSHA)
<b>Indoor Air - 1B</b>		
PCE	No Detect	180
TCE	No Detect	8.8
cis-1,2-DCE	No Detect	No VAL (806,000 OSHA)
trans-1,2-DCE	No Detect	No VAL (790 ATSDR; 806,000 OSHA)
<b>Indoor Air - Basement</b>		
PCE	5.36	180
TCE	No Detect	8.8
cis-1,2-DCE	No Detect	No VAL (806,000 OSHA)
trans-1,2-DCE	No Detect	No VAL (790 ATSDR; 806,000 OSHA)

**Notes:**

Below Vapor Action Level

**Detect above Vapor Action Level (bolded)**

ATSDR = Agency for Toxic Substances and Disease Registry

cis-1,2-DCE = cis-1,2-dichloroethylene

OSHA = Occupational Safety and Health Administration

PCE = Tetrachloroethylene

TCE = Trichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

VAL = Vapor Action Level

µg/m3 = micrograms per cubic meter

**Air Data for Chemicals Sampled at**

**Cranky Pat's Pizza, 905 S. Commercial St., Neenah, WI**

DNR Site Name: Donaldson's One Hour Cleaners, 110 W. Cecil St., Neenah, WI

BRRTS # 02-71-110797

(All data units in µg/m <sup>3</sup> )	Air concentrations on 11/10/2020	Comparison Vapor Risk Screening Level (Small Commercial)
<b>Contaminant</b>		
<b>SSV-1</b>		
PCE	104	6,000
TCE	2.15	290
cis-1,2-DCE	No Detect	No VRSL (27,000,000 OSHA)
trans-1,2-DCE	No Detect	No VRSL (26,000 ATSDR; 27,000,000 OSHA)
<b>SSV-Basement</b>		
PCE	1,930	6,000
TCE	69.2	290
cis-1,2-DCE	19.2	No VRSL (27,000,000 OSHA)
trans-1,2-DCE	No Detect	No VRSL (26,000 ATSDR; 27,000,000 OSHA)
<b>SSV-West Wall (4 ft bgs)</b>		
PCE	<b>23,000</b>	6,000
TCE	<b>1,310</b>	290
cis-1,2-DCE	846	No VRSL (27,000,000 OSHA)
trans-1,2-DCE	32.5	No VRSL (26,000 ATSDR; 27,000,000 OSHA)

**Notes:**

Below Vapor Risk Screening Level

**Detect above Vapor Risk Screening Level (bolded)**

ATSDR = Agency for Toxic Substances and Disease Registry

cis-1,2-DCE = cis-1,2-dichloroethylene

ft bgs = feet below ground surface

OSHA = Occupational Safety and Health Administration

PCE = Tetrachloroethylene

SSV = Sub-slab vapor

TCE = Trichloroethylene

trans-1,2-DCE = trans-1,2-dichloroethylene

VRSL = Vapor Risk Screening Level for sub-slab vapor

µg/m<sup>3</sup> = micrograms per cubic meter



# Understanding Chemical Vapor Intrusion Testing Results

## From the Lab to You

Chemical vapor samples were taken from underneath your house or building and possibly indoors as well. These samples have been tested by a certified laboratory and a report was issued. The Wisconsin Department of Natural Resources (DNR) uses these test results to determine if people in the building are being exposed to chemical vapors coming from nearby contaminated soil or groundwater, and to decide what, if any, action is needed to prevent this exposure.

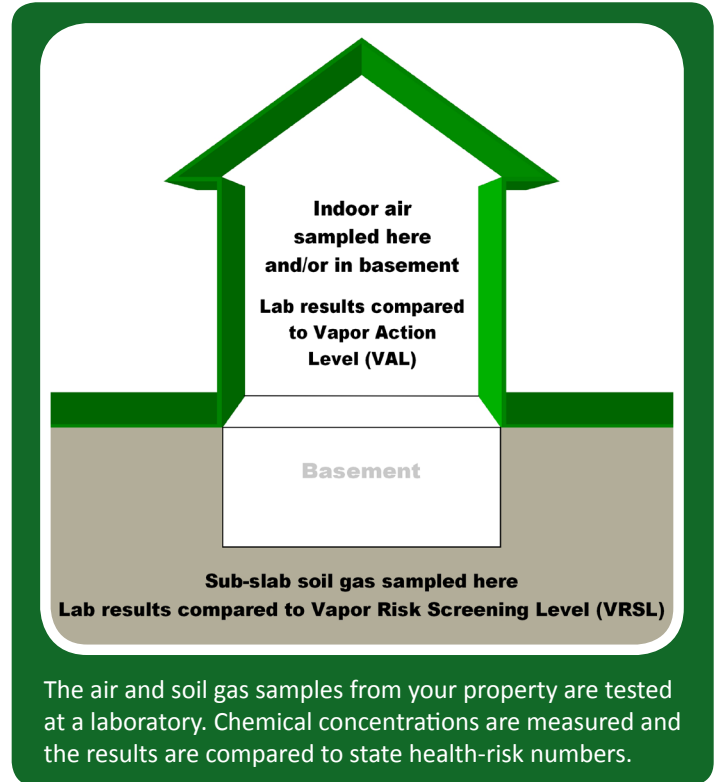
## Indoor Air Testing Results

If indoor air samples were collected in your house or building, test results from the lab will be compared to the state Vapor Action Level (VAL) for chemicals of concern. The VAL is a chemical compound's numerical value that represents a health hazard risk to no more than 1 in 100,000 people during a lifetime of exposure. If test results show chemical concentrations in your air below the VAL then adverse health effects are extremely rare, even if you were to breathe the chemical at this concentration for your entire life.

Test results showing chemical concentrations in the air at or above the VAL prompt DNR to recommend that exposure to these chemical vapors be reduced. If test results show concentrations significantly above the VAL, or more than one type of chemical vapor is identified in your indoor air, the risk from exposure increases. If the concentration of any indoor chemical vapor greatly exceeds the VAL, DNR is concerned about even short-term exposure and will typically require immediate action to address the problem.

The VAL for each chemical is set by scientific research. It is protective of all people, including those who are most susceptible to adverse health effects.

If test results identify chemicals in your air that are not present in nearby soil or groundwater contamination, it is likely that these vapors are coming from some product or activity in or near your house or building. Many everyday consumer products (e.g., cleaners, solvents, polish, adhesives, lubricants, aerosols, insect repellants, etc.); combustion processes (e.g., smoking, home heating); fuels in attached garages; dry cleaned clothing or draperies; and occupant activities (e.g., craft hobbies), also release chemical vapors into the air.



## Sub-slab Soil Gas Testing Results

Soil gas samples were collected from the ground beneath the concrete slab of your building foundation or basement. The lab measured the concentrations of various chemicals in these samples. DNR compares these measurements to the state Vapor Risk Screening Level (VRSL), which identifies the concentration of a chemical in soil gas that scientific research suggests can be a health risk if vapor enters a building. If soil gas measurements exceed the VRSL for a chemical of concern, action to reduce exposure is strongly recommended.

The VRSL is a higher number (higher chemical concentration) than the VAL because it is presumed that concrete building foundations and basement walls will prevent most soil gas from entering a building. Further, any soil gas that does enter a building through cracks, holes, sump pumps, drains, etc., will be diluted to some extent by the indoor air. So, people inside will not be breathing air that includes the full concentration of chemical vapors that exist in the ground.



DNR generally relies on the test results of the sub-slab soil gas samples when determining what, if any, action should be taken related to chemical vapors coming from nearby soil or groundwater contamination. Indoor air quality is highly variable, and it is difficult to make a definitive decision about vapor intrusion based on indoor air sampling alone.

### Follow-Up Actions

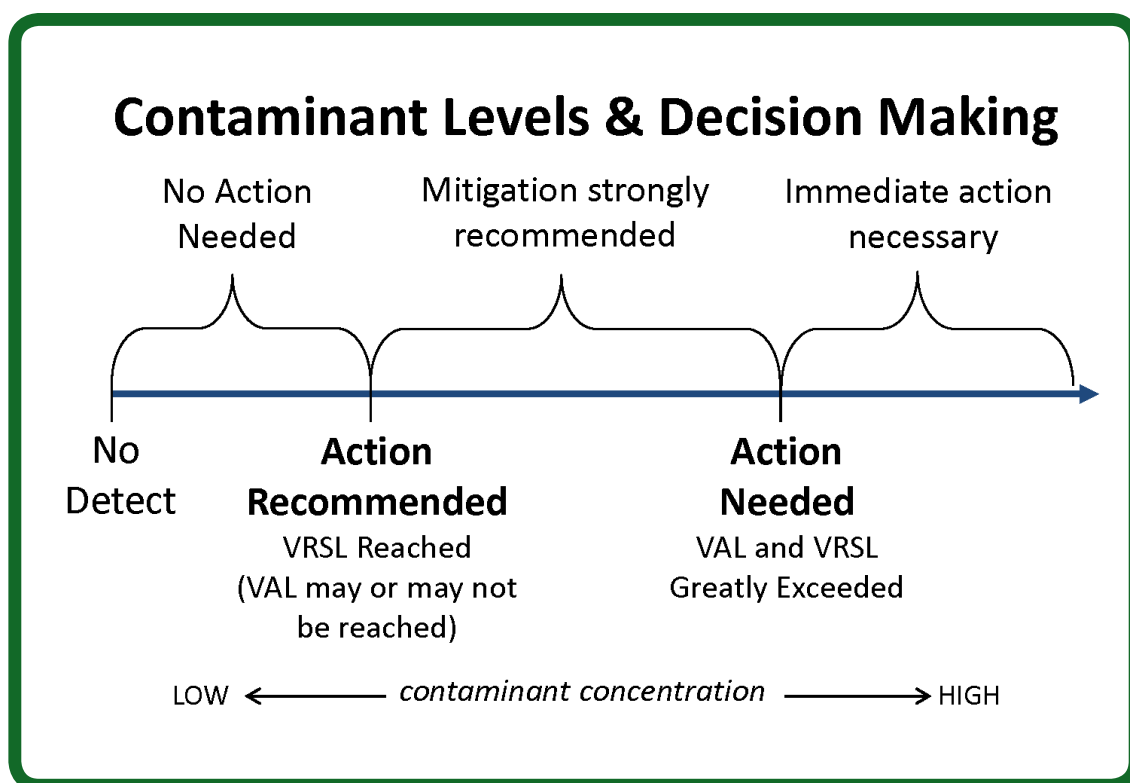
If your test results are less than a VAL for indoor air, or a VRSL for sub-slab soil gas, then the air in the house or building should not present a health concern. Follow-up sampling and testing may be necessary to confirm the results, but no other action is typically suggested.

When test results show soil gas chemical concentrations above a VRSL, both DNR and the Wisconsin Department of

Health Services recommend that owners take action to reduce potential exposure. This typically involves installing a vapor mitigation system that vents chemical vapors from beneath your home or building to the outdoors, similar to a radon mitigation system.

If indoor air concentrations exceed a VAL, but sub-slab concentrations are less than a VRSL, then the chemical vapors are most likely coming from indoor sources. Steps should be taken by the house or building owner to identify the products and practices causing the problem and implement appropriate remedies.

If soil gas mitigation is recommended, a representative of the party who is responsible for the soil or groundwater contamination will contact you to discuss your options.



**A Note about Measurement Units:** The lab report may include some unfamiliar technical language. The most important point to note is whether or not the test result for a specific chemical exceeds a VAL or VRSL, which are also sometimes referred to, generically, as “screening levels.”

The concentration of gaseous pollutants in air is typically described in two different ways: 1) as units of mass per volume, where  $\mu\text{g}/\text{m}^3$  represents micrograms of gaseous pollutant per cubic meter of ambient air; and 2) as parts per billion by volume (ppbv), where the volume of a gaseous pollutant is compared to a set volume of ambient air. These are the numbers that are compared to the VAL and VRSL.

For more information, visit [dnr.wi.gov/topic/Brownfields/Vapor.html](http://dnr.wi.gov/topic/Brownfields/Vapor.html)