**State of Wisconsin**
**DEPARTMENT OF NATURAL RESOURCES**
**2984 Shawano Avenue**
**Green Bay WI 54313-6727**

**Tony Evers, Governor**
**Preston D. Cole, Secretary**
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 17, 2021

Timmy and Katherine Soper
6081 Klaus Lake Road
Gillett, WI 54124

SUBJECT: Vapor Sampling Results for 119 East Main St. - Contaminant Detection **Above** DNR Screening Level
PROPERTY: Econo Wash, 113 East Main Street, Gillett, WI
BRRTS #: 02-43-547861

Dear Mr. and Mrs. Soper:

Included are the findings of a recent investigation on your property located at 119 East Main Street, City of Gillett, Wisconsin by the Wisconsin Department of Natural Resources (DNR). This letter is a follow-up to my telephone conversation with Mr. Soper on June 16, 2021.

As you are aware, this investigation was conducted because of the potential for contaminant vapors from the nearby Econo Wash property, identified above, to migrate through soils, accumulate beneath the foundation of your business, and possibly enter the indoor air. The contaminants of concern at the Econo Wash property are Chlorinated Volatile Organic Compounds (CVOCs). The history of this site and the potential concerns to neighboring properties were described in detail in the original letter sent to you in October 2020.

On May 12, 2021, an environmental consultant, Westwood Infrastructure, Inc. (Westwood), hired by DNR collected a sub-slab vapor (air) sample. The sample was then submitted to Synergy Environmental Lab, Inc., where it underwent laboratory analysis for seven different CVOCs including 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene (PCE), 1,1,1-trichloroethane, trichloroethene (TCE), and vinyl chloride (VC).

**Your Test Results**
Attached is a copy of the laboratory report for your sub-slab air sample. The results show PCE above the small commercial vapor risk screening level (VRSL) of 6,000 µg/m$^3$ and TCE above the residential VRSL of 70 µg/m$^3$ for the sample collected during the May 2021 sampling event. The results indicate that there may be **the potential** for an indoor air exposure above allowable limits inside your commercial building. As you recall, the initial vapor sample collected in February 2021 did not show any exceedances. The table below summarizes substances detected above VRSLs for CVOCs analyzed in the 15-minute sub-slab vapor sample collected:

| Contaminant detected above Vapor Risk Screening Levels (VRSLs) | Sub-Slab Vapor Concentrations on 5/12/2021 (ug/m$^3$) | Sub-Slab Vapor Concentrations on 2/2/2021 (ug/m$^3$) | Residential VRSLs (ug/m$^3$) | Small Commercial VRSLs (ug/m$^3$) |
|---|---|---|---|---|
| Tetrachloroethylene (PCE) | 6,100 | 37 | 1,400 | 6,000 |
| Trichloroethylene (TCE) | 230 | 3.9 | 70 | 290 |

**Note:**

| |
|---|
| ug/m$^3$ = micrograms per cubic meter |
| Above Residential VRSLs |
| Above Small Commercial VRSLs |

**Next Steps**
We strongly recommend installing a sub-slab mitigation system (SSMS) to remove both PCE and TCE vapors from beneath your building. This system is similar to that used for homes where radon is a concern. The system diverts chemical vapors from beneath the home and discharges them into the outdoor air, above the building's roofline, rendering them harmless. The installation of a SSMS **is not** required as you are not considered responsible for the contamination originating from an off-site source of contamination. The DNR may be able to fund the SSMS installation at a later point in time when funds are available. Keep in mind that DNR funds are very limited and it may take longer than you wish to wait.

This sampling event concludes the proposed two sub-slab sampling events and the vapor port has now been abandoned. No additional sub-slab vapor sampling is scheduled on your property.

Please feel free to contact me at (920) 510-8294 or via email at Keld.Lauridsen@wisconsin.gov if you have any questions about these results or on the status of the on-going contamination case. Your cooperation in this matter is greatly appreciated.

For any health-related questions, please feel free to contact Curtis Hedman at Wisconsin Department of Health Services. Mr. Hedman can be reached at (608) 266-6677 or via email at Curtis.Hedman@dhs.wisconsin.gov.

Sincerely,

Keld Lauridsen
Hydrogeologist
Remediation and Redevelopment Program

Attachments: Understanding Chemical Vapor Testing Results (DNR PUB RR 977)
Figure 2, Detailed Site Map, 2/23/21
Laboratory Analytical Results

cc: Curtis Hedman, Wisconsin Department of Health Service (Curtis.Hedman@dhs.wisconsin.gov)

# Understanding Chemical Vapor Intrusion Testing Results

RR-977 October 2014

## 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.

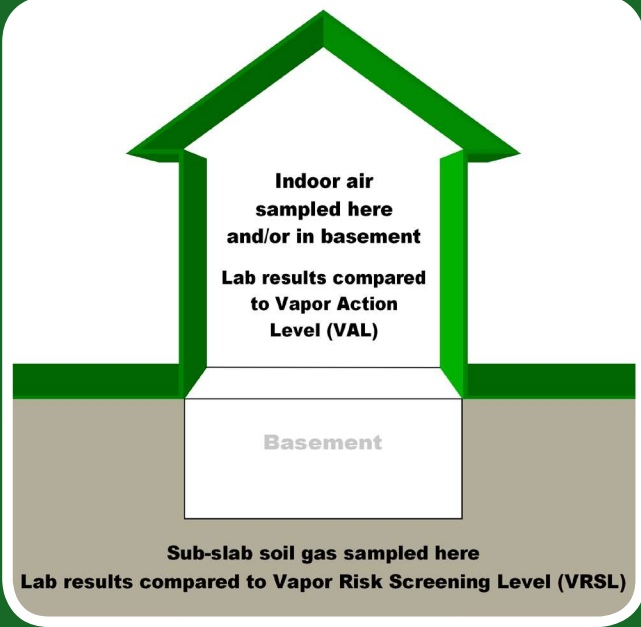
## Indoor Air Testing Results

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.




The air and soil gas samples from your property are tested at a laboratory. Chemical concentrations are measured and the results are compared to state health-risk numbers.

## 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.

Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "Brownfields"

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.

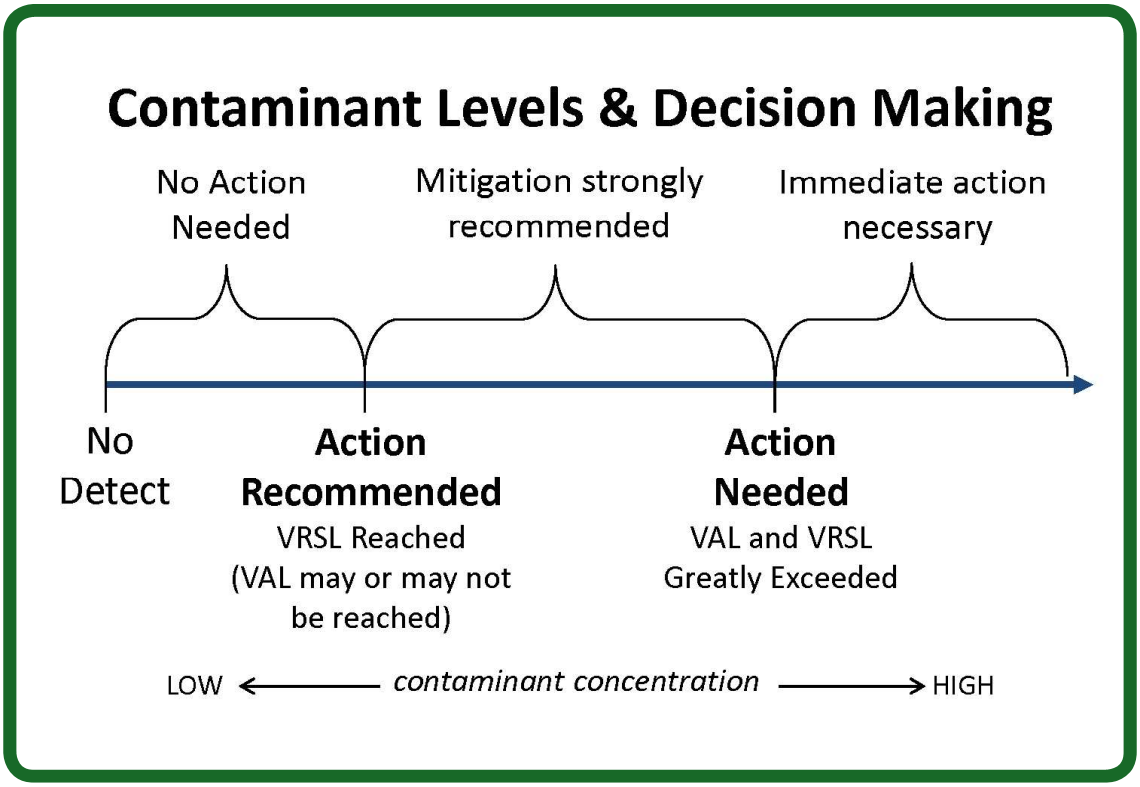
## Follow-Up Actions

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 µg/m3 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**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W E
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Project Manager:
Project Engineer: JMD
Drawn By:
Checked By:
Date: 2/23/2021

*FORMER ECON-O-WASH LAUNDRY*

**DETAILED SITE MAP**

CITY OF GILLETT
OCONTO COUNTY, WISCONSIN

Westwood
1 Systems Drive
Appleton, WI 54914
(920) 735-6900
www.westwoodps.com

SCALE:
1 " = 83 '

PROJECT NO.
**R3000914.00**

FIGURE NO.
**2**

*F:\ENVIRO\2014A09(Gillett-Econ-o-wash)\GIS\DetailedSiteMap_210215.mxd*
*Printed: JMDesharney 2/23/2021 10:39:47 AM*

# *Synergy Environmental Lab, INC.*

QUIN LENZ
WESTWOOD PROFESSIONAL SERVICES
12701 WHITEWATER DRIVE
MINNETONKA, MN 55343

**Project #** R3000914.00
**Project Name** ECONOWASH
**Invoice #** E39409

**Report Date** *27-May-21*

| Analyte | Result | Units | LOD | LOQ | Dil | Ext Date | Run Date | Method | Analyst | QC Code |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Code** 5039409C | | | | | | **Sample Type** Air | | | | |
| **Sample ID** 119 MAIN VP-1 | | | | | | **Sample Date** 5/12/2021 | | | | |
| Organic | | | | | | | | | | |
| Air Samples | | | | | | | | | | |
| 1,1-Dichloroethane | < 0.187 | ug/m3 | 0.187 | 0.596 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| cis-1,2-Dichloroethene | < 0.197 | ug/m3 | 0.197 | 0.626 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| trans-1,2-Dichloroethene | < 0.231 | ug/m3 | 0.231 | 0.734 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Tetrachloroethene | 6100 | ug/m3 | 6.95 | 22.1 | 25 | | 5/21/2021 | TO-15 | CJR | 1 |
| 1,1,1-Trichloroethane | < 0.249 | ug/m3 | 0.249 | 0.793 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Trichloroethene (TCE) | 230 | ug/m3 | 5.925 | 18.85 | 25 | | 5/21/2021 | TO-15 | CJR | 1 |
| Vinyl Chloride | < 0.148 | ug/m3 | 0.148 | 0.472 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

| *Code* | *Comment* |
|---|---|
| 1 | All laboratory QC requirements were met for this sample. |

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

**Authorized Signature** _____

**State of Wisconsin**
**DEPARTMENT OF NATURAL RESOURCES**
**2984 Shawano Avenue**
**Green Bay WI 54313-6727**

**Tony Evers, Governor**
**Preston D. Cole, Secretary**
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 17, 2021

Carrie E. Olson
P.O. Box 553
Gillett, WI 54124

SUBJECT: Vapor Sampling Results for 109 East Main St. - Contaminant Detection **Below** DNR Screening Level
PROPERTY: Econo Wash, 113 East Main Street, Gillett, WI
BRRTS #: 02-43-547861

Dear Ms. Olson:

Included are the findings of a recent investigation on your property located at 109 East Main Street, City of Gillett, Wisconsin by the Wisconsin Department of Natural Resources (DNR).

As you are aware, this investigation was conducted because of the potential for contaminant vapors from the nearby Econo Wash property, identified above, to migrate through soils, accumulate beneath the foundation of your business, and possibly enter the indoor air. The contaminants of concern at the Econo Wash property are Chlorinated Volatile Organic Compounds (CVOCs). The history of this site and the potential concerns to neighboring properties were described in detail in the original letter sent to you in October 2020.

On May 12, 2021, an environmental consultant, Westwood Infrastructure, Inc. (Westwood), hired by DNR collected a sub-slab vapor (air) sample. The sample was then submitted to Synergy Environmental Lab, Inc., where it underwent laboratory analysis for seven different CVOCs including 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene (PCE), 1,1,1-trichloroethane, trichloroethene (TCE), and vinyl chloride (VC).

**Your Test Results**
Attached is a copy of the laboratory report for your sub-slab air sample. The results show that a small amount of chlorinated compounds was detected in the sample taken from beneath your foundation. Although PCE and TCE were detected in soil vapors beneath your foundation floor, the levels at which they were detected are such that it does not pose a threat to any occupant in the building. This is called “a detection below screening level” and is explained in the enclosed fact sheet.

At this time, there does not appear to be a risk of CVOC vapor entering your business from beneath the foundation. This concludes the proposed two sub-slab sampling events and the vapor port has now been abandoned. No additional sub-slab vapor sampling is scheduled on your property.

Please feel free to contact me at (920) 510-8294 or via email at Keld.Lauridsen@wisconsin.gov if you have any questions about these results. Your cooperation in this matter is greatly appreciated.

Sincerely,

Keld Lauridsen
Hydrogeologist
Remediation and Redevelopment Program

Attachments: Understanding Chemical Vapor Testing Results (RR-977)
Figure 2, Detailed Site Map, 2/23/21
Laboratory Analytical Results

# Understanding Chemical Vapor Intrusion Testing Results

RR-977 October 2014

## 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.

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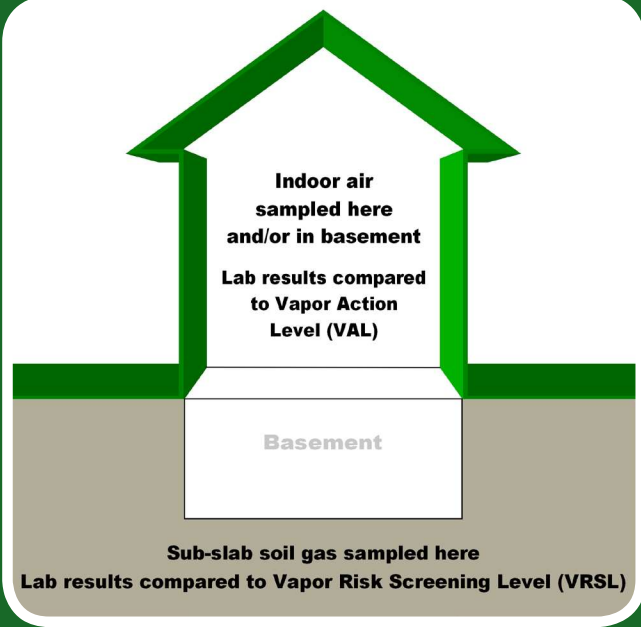


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Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "Brownfields"

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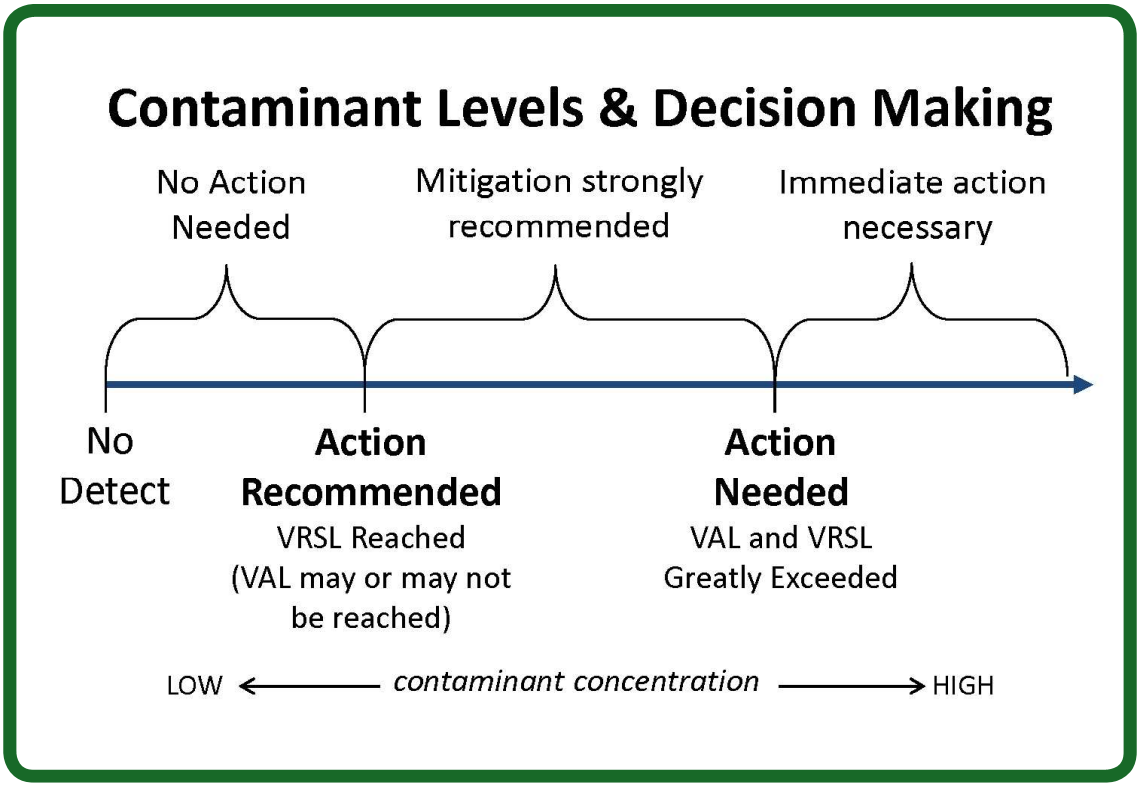
If soil gas mitigation is recommended, a representative of the party who is responsible for the soil or groundwater contamination will contact you to discuss your options.

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The concentration of gaseous pollutants in air is typically described in two different ways: 1) as units of mass per volume, where µg/m3 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**


N
W E
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Project Manager:
Project Engineer: JMD
Drawn By:
Checked By:
Date: 2/23/2021

*FORMER ECON-O-WASH LAUNDRY*

**DETAILED SITE MAP**

CITY OF GILLETT
OCONTO COUNTY, WISCONSIN

Westwood
1 Systems Drive
Appleton, WI 54914
(920) 735-6900
www.westwoodps.com

SCALE:
1 " = 83 '

PROJECT NO.
**R3000914.00**

FIGURE NO.
**2**

*F:\ENVIRO\2014A09(Gillett-Econ-o-wash)\GIS\DetailedSiteMap_210215.mxd*
*Printed: JMDesharney 2/23/2021 10:39:47 AM*

# *Synergy Environmental Lab, INC.*

QUIN LENZ
WESTWOOD PROFESSIONAL SERVICES
12701 WHITEWATER DRIVE
MINNETONKA, MN 55343

**Project #** R3000914.00
**Project Name** ECONOWASH
**Invoice #** E39409

**Report Date** *27-May-21*

| Analyte | Result | Units | LOD | LOQ | Dil | Ext Date | Run Date | Method | Analyst | QC Code |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Code** 5039409A | | | | | | **Sample Type** Air | | | | |
| **Sample ID** 109 MAIN VP-1 | | | | | | **Sample Date** 5/12/2021 | | | | |
| Organic | | | | | | | | | | |
| Air Samples | | | | | | | | | | |
| 1,1-Dichloroethane | < 0.187 | ug/m3 | 0.187 | 0.596 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| cis-1,2-Dichloroethene | < 0.197 | ug/m3 | 0.197 | 0.626 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| trans-1,2-Dichloroethene | < 0.231 | ug/m3 | 0.231 | 0.734 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| Tetrachloroethene | 129 | ug/m3 | 0.278 | 0.884 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| 1,1,1-Trichloroethane | < 0.249 | ug/m3 | 0.249 | 0.793 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| Trichloroethene (TCE) | 2.57 | ug/m3 | 0.237 | 0.754 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |
| Vinyl Chloride | < 0.148 | ug/m3 | 0.148 | 0.472 | 1 | | 5/14/2021 | TO-15 | CJR | 1 |

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

| *Code* | *Comment* |
|---|---|
| 1 | All laboratory QC requirements were met for this sample. |

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

**Authorized Signature** _____

**State of Wisconsin**
**DEPARTMENT OF NATURAL RESOURCES**
**2984 Shawano Avenue**
**Green Bay WI 54313-6727**

**Tony Evers, Governor**
**Preston D. Cole, Secretary**
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 17, 2021

Chelsea Henkel
9743 Gray Lake Road
Gillett, WI 54124

SUBJECT: Vapor Sampling Results for 121 East Main St. - Contaminant Detection **Below** DNR Screening Level
PROPERTY: Econo Wash, 113 East Main Street, Gillett, WI
BRRTS #: 02-43-547861

Dear Ms. Henkel:

Included are the findings of a recent investigation on your property located at 121 East Main Street, City of Gillett, Wisconsin by the Wisconsin Department of Natural Resources (DNR).

As you are aware, this investigation was conducted because of the potential for contaminant vapors from the nearby Econo Wash property, identified above, to migrate through soils, accumulate beneath the foundation of your business, and possibly enter the indoor air. The contaminants of concern at the Econo Wash property are Chlorinated Volatile Organic Compounds (CVOCs). The history of this site and the potential concerns to neighboring properties were described in detail in the original letter sent to you in October 2020.

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**Your Test Results**
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At this time, there does not appear to be a risk of CVOC vapor entering your business from beneath the foundation. This concludes the proposed two sub-slab sampling events and the vapor port has now been abandoned. No additional sub-slab vapor sampling is scheduled on your property.

Please feel free to contact me at (920) 510-8294 or via email at Keld.Lauridsen@wisconsin.gov if you have any questions about these results. Your cooperation in this matter is greatly appreciated.

Sincerely,

Keld Lauridsen
Hydrogeologist
Remediation and Redevelopment Program

Attachments: Understanding Chemical Vapor Testing Results (DNR PUB RR 977)
Figure 2, Detailed Site Map, 2/23/21
Laboratory Analytical Results

# Understanding Chemical Vapor Intrusion Testing Results

RR-977 October 2014

## 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.

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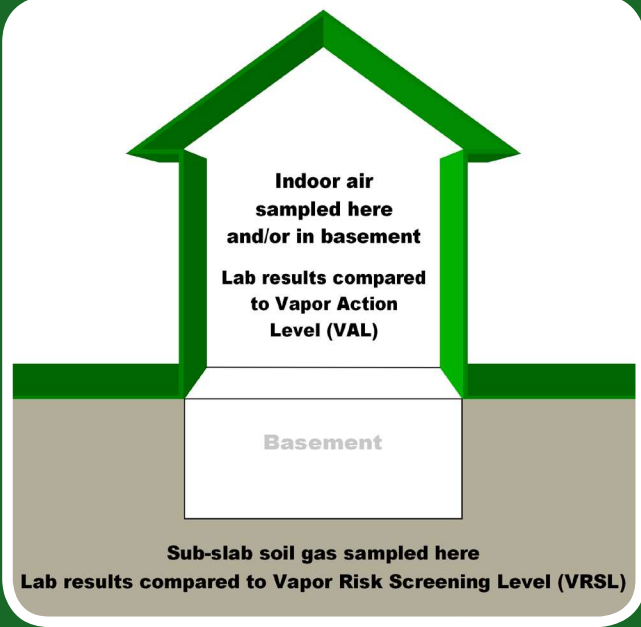
The VAL for each chemical is set by scientific research. It is protective of all people, including those who are most susceptible to adverse health effects.

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.




The air and soil gas samples from your property are tested at a laboratory. Chemical concentrations are measured and the results are compared to state health-risk numbers.

## 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.

Wisconsin Department of Natural Resources
P.O. Box 7921, Madison, WI 53707
dnr.wi.gov, search "Brownfields"

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.

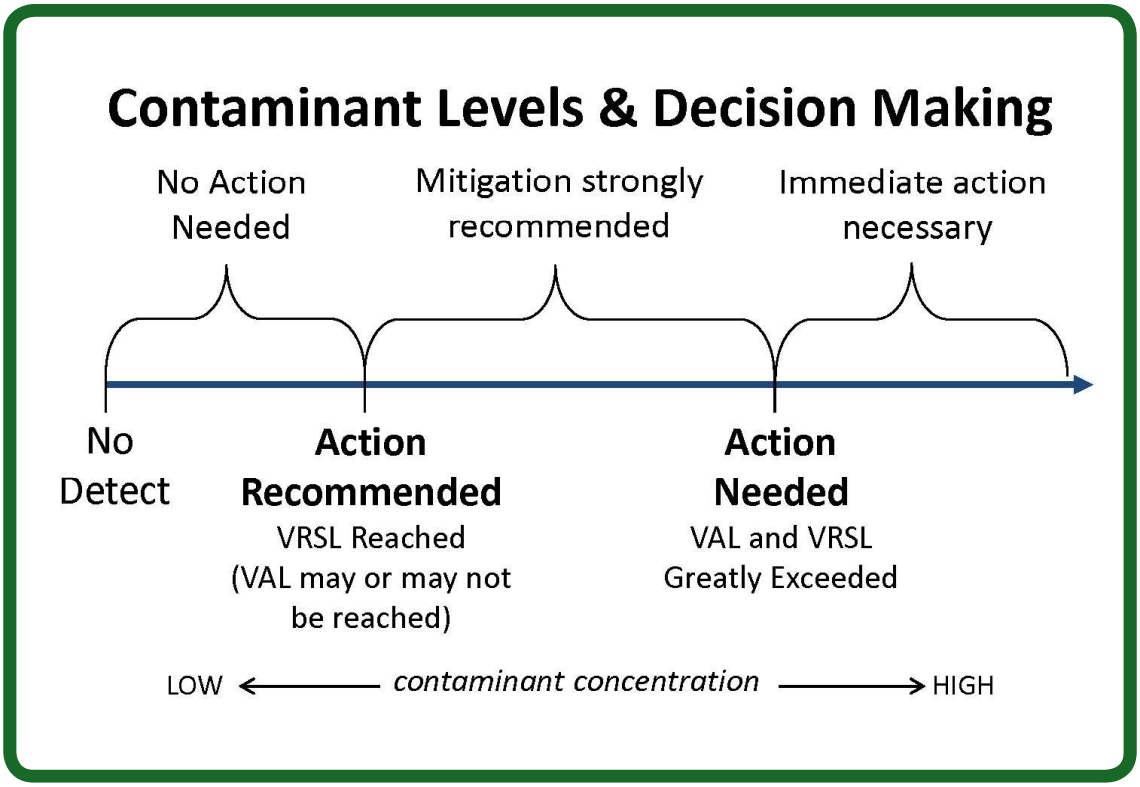
## Follow-Up Actions

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 µg/m3 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**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Project Manager:
Project Engineer: JMD
Drawn By:
Checked By:
Date: 2/23/2021

*FORMER ECON-O-WASH LAUNDRY*

**DETAILED SITE MAP**

CITY OF GILLETT
OCONTO COUNTY, WISCONSIN

Westwood
1 Systems Drive
Appleton, WI 54914
(920) 735-6900
www.westwoodps.com

SCALE:
1 " = 83 '

PROJECT NO.
**R3000914.00**

FIGURE NO.
**2**

*F:\ENVIRO\2014A09(Gillett-Econ-o-wash)\GIS\DetailedSiteMap_210215.mxd*
*Printed: JMDesharney 2/23/2021 10:39:47 AM*

# *Synergy Environmental Lab, INC.*

QUIN LENZ
WESTWOOD PROFESSIONAL SERVICES
12701 WHITEWATER DRIVE
MINNETONKA, MN 55343

**Project #** R3000914.00
**Project Name** ECONOWASH
**Invoice #** E39409

**Report Date** *27-May-21*

| Analyte | Result | Units | LOD | LOQ | Dil | Ext Date | Run Date | Method | Analyst | QC Code |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Code** 5039409B | | | | | | | **Sample Type** Air | | | |
| **Sample ID** 121 MAIN VP-1 | | | | | | | **Sample Date** 5/12/2021 | | | |
| Organic | | | | | | | | | | |
| Air Samples | | | | | | | | | | |
| 1,1-Dichloroethane | < 0.187 | ug/m3 | 0.187 | 0.596 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| cis-1,2-Dichloroethene | < 0.197 | ug/m3 | 0.197 | 0.626 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| trans-1,2-Dichloroethene | < 0.231 | ug/m3 | 0.231 | 0.734 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Tetrachloroethene | 35 | ug/m3 | 0.278 | 0.884 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| 1,1,1-Trichloroethane | < 0.249 | ug/m3 | 0.249 | 0.793 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Trichloroethene (TCE) | < 0.237 | ug/m3 | 0.237 | 0.754 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Vinyl Chloride | < 0.148 | ug/m3 | 0.148 | 0.472 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

| *Code* | *Comment* |
|---|---|
| 1 | All laboratory QC requirements were met for this sample. |

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

**Authorized Signature** _____

**State of Wisconsin**
**DEPARTMENT OF NATURAL RESOURCES**
**2984 Shawano Avenue**
**Green Bay WI 54313-6727**

**Tony Evers, Governor**
**Preston D. Cole, Secretary**
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 17, 2021

S and D Vandermause
P.O. Box 416
Gillett, WI 54124

SUBJECT: Vapor Sampling Results for 119 E. Railroad St. - Contaminant Detection **Below** DNR Screening Level
PROPERTY: Econo Wash, 113 East Main Street, Gillett, WI
BRRTS #: 02-43-547861

Dear Mr. & Mrs. Vandermause:

Included are the findings of a recent investigation on your property located at 119 East Railroad Street, City of Gillett, Wisconsin by the Wisconsin Department of Natural Resources (DNR).

As you are aware, this investigation was conducted because of the potential for contaminant vapors from the nearby Econo Wash property, identified above, to migrate through soils, accumulate beneath the foundation of your business, and possibly enter the indoor air. The contaminants of concern at the Econo Wash property are Chlorinated Volatile Organic Compounds (CVOCs). The history of this site and the potential concerns to neighboring properties were described in detail in the original letter sent to you in October 2020.

On May 12, 2021, an environmental consultant, Westwood Infrastructure, Inc. (Westwood), hired by DNR collected sub-slab vapor (air) samples. The samples were then submitted to Synergy Environmental Lab, Inc., where they underwent laboratory analysis for seven different CVOCs including 1,1-dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene (PCE), 1,1,1-trichloroethane, trichloroethene (TCE), and vinyl chloride (VC).

**Your Test Results**
Attached is a copy of the laboratory report for your two sub-slab air samples. The results show that a small amount of chlorinated compounds was detected in the samples taken from beneath your foundation. Although PCE and TCE were detected at both vapor ports VP-1 and VP-2 in soil vapors beneath your foundation floor, the level at which they were detected is such that it does not pose a threat to you or any occupant in the building. This is called “a detection below screening level” and is explained in the enclosed fact sheet.

At this time, there does not appear to be a risk of CVOC vapor entering your business from beneath the foundation. This concludes the proposed two sub-slab sampling events and the vapor ports have now been abandoned. No additional sub-slab vapor sampling is scheduled on your property.

Please feel free to contact me at (920) 510-8294 or via email at Keld.Lauridsen@wisconsin.gov if you have any questions about these results. Your cooperation in this matter is greatly appreciated.

Sincerely,

Keld Lauridsen
Hydrogeologist
Remediation and Redevelopment Program

Attachments: Understanding Chemical Vapor Testing Results (DNR PUB RR 977)
Figure 2, Detailed Site Map, 2/23/21
Laboratory Analytical Results

# Understanding Chemical Vapor Intrusion Testing Results

RR-977 October 2014

## 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.

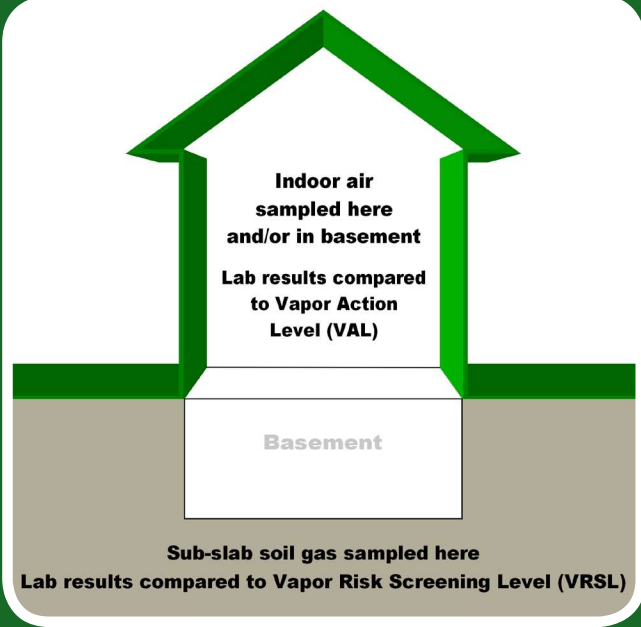
## Indoor Air Testing Results

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.

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dnr.wi.gov, search "Brownfields"

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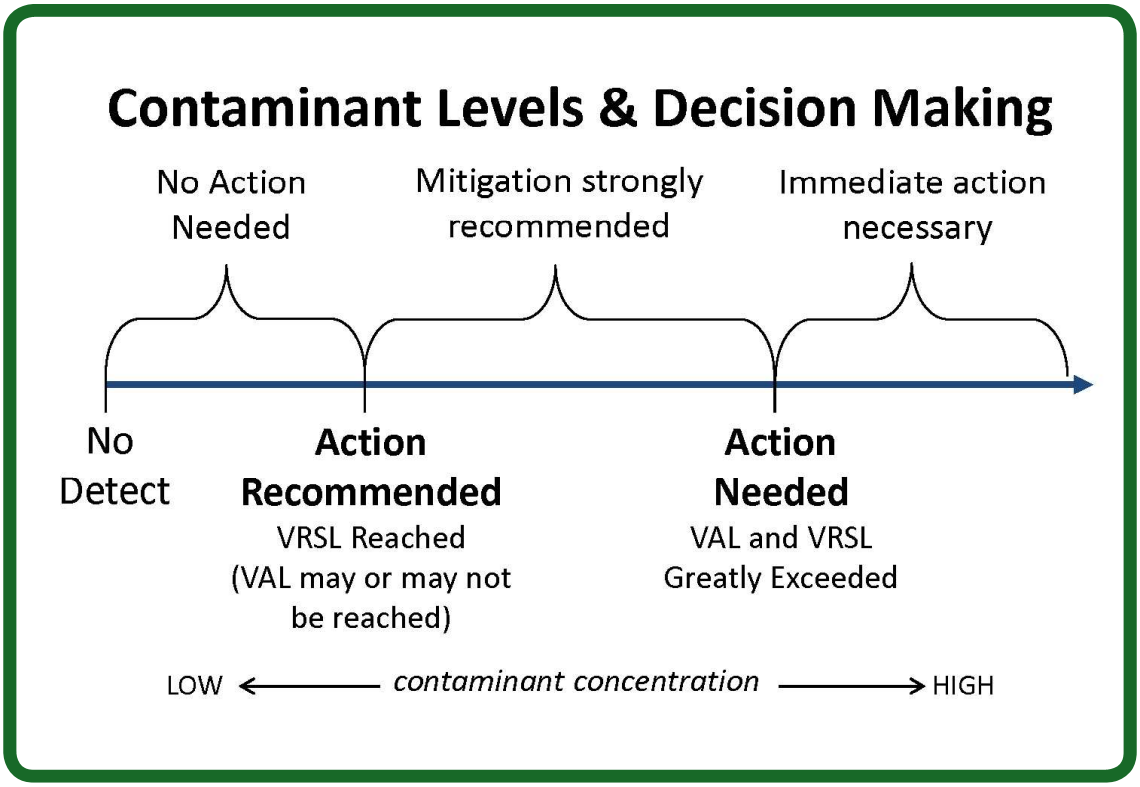


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For more information, visit **dnr.wi.gov/topic/Brownfields/Vapor.html**


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Project Manager:
Project Engineer: JMD
Drawn By:
Checked By:
Date: 2/23/2021

*FORMER ECON-O-WASH LAUNDRY*

**DETAILED SITE MAP**

CITY OF GILLETT
OCONTO COUNTY, WISCONSIN

Westwood
1 Systems Drive
Appleton, WI 54914
(920) 735-6900
www.westwoodps.com

SCALE:
1 " = 83 '

PROJECT NO.
**R3000914.00**

FIGURE NO.
**2**

*F:\ENVIRO\2014A09(Gillett-Econ-o-wash)\GIS\DetailedSiteMap_210215.mxd*
*Printed: JMDesharney 2/23/2021 10:39:47 AM*

# *Synergy Environmental Lab, INC.*

QUIN LENZ
WESTWOOD PROFESSIONAL SERVICES
12701 WHITEWATER DRIVE
MINNETONKA, MN 55343

**Project #** R3000914.00
**Project Name** ECONOWASH
**Invoice #** E39409

**Report Date** *27-May-21*

| Analyte | Result | Units | LOD | LOQ | Dil | Ext Date | Run Date | Method | Analyst | QC Code |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Code** 5039409D | | | | | | | **Sample Type** Air | | | |
| **Sample ID** 119 RAILROAD VP- | | | | | | | **Sample Date** 5/12/2021 | | | |
| Organic | | | | | | | | | | |
| Air Samples | | | | | | | | | | |
| 1,1-Dichloroethane | < 0.187 | ug/m3 | 0.187 | 0.596 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| cis-1,2-Dichloroethene | < 0.197 | ug/m3 | 0.197 | 0.626 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| trans-1,2-Dichloroethene | < 0.231 | ug/m3 | 0.231 | 0.734 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Tetrachloroethene | 400 | ug/m3 | 2.78 | 8.84 | 10 | | 5/21/2021 | TO-15 | CJR | 1 |
| 1,1,1-Trichloroethane | < 0.249 | ug/m3 | 0.249 | 0.793 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Trichloroethene (TCE) | 6.3 | ug/m3 | 0.237 | 0.754 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Vinyl Chloride | < 0.148 | ug/m3 | 0.148 | 0.472 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

| *Code* | *Comment* |
|---|---|
| 1 | All laboratory QC requirements were met for this sample. |

All solid sample results reported on a dry weight basis unless otherwise indicated. All LOD's and LOQ's are adjusted for dilutions but not dry weight. Subcontracted results are denoted by SUB in the analyst field.

**Authorized Signature** _____

# *Synergy Environmental Lab, INC.*

QUIN LENZ
WESTWOOD PROFESSIONAL SERVICES
12701 WHITEWATER DRIVE
MINNETONKA, MN 55343

**Project #** R3000914.00
**Project Name** ECONOWASH
**Invoice #** E39409

**Report Date** *27-May-21*

| Analyte | Result | Units | LOD | LOQ | Dil | Ext Date | Run Date | Method | Analyst | QC Code |
|---|---|---|---|---|---|---|---|---|---|---|
| **Lab Code** 5039409E | | | | | | | **Sample Type** Air | | | |
| **Sample ID** 119 RAILROAD VP- | | | | | | | **Sample Date** 5/12/2021 | | | |
| Organic | | | | | | | | | | |
| Air Samples | | | | | | | | | | |
| 1,1-Dichloroethane | < 0.187 | ug/m3 | 0.187 | 0.596 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| cis-1,2-Dichloroethene | < 0.197 | ug/m3 | 0.197 | 0.626 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| trans-1,2-Dichloroethene | < 0.231 | ug/m3 | 0.231 | 0.734 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Tetrachloroethene | 25.4 | ug/m3 | 0.278 | 0.884 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| 1,1,1-Trichloroethane | < 0.249 | ug/m3 | 0.249 | 0.793 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Trichloroethene (TCE) | 0.96 | ug/m3 | 0.237 | 0.754 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |
| Vinyl Chloride | < 0.148 | ug/m3 | 0.148 | 0.472 | 1 | | 5/20/2021 | TO-15 | CJR | 1 |

LOD Limit of Detection "J" Flag: Analyte detected between LOD and LOQ LOQ Limit of Quantitation

| *Code* | *Comment* |
|---|---|
| 1 | All laboratory QC requirements were met for this sample. |

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**Authorized Signature** _____