February 11, 2025
File No. 25222269.07

C & M Investments of the Fox Valley LLC
804 7th Street
Winneconne, WI 54956

Subject: Second Request for Property Access to 201 Railroad Street, Menasha, WI
Reply Requested by **February 25, 2025**

To Whom it May Concern:

On behalf of the Wisconsin Department of Natural Resources (DNR), SCS Engineers (SCS) is making a second request for permission to access your property and test for the presence of a group of chemicals called "chlorinated solvents."

As noted in the initial Request for Property Access dated January 22, 2025, an industrial facility with identified environmental contamination historically operated near your property. It is possible that contamination from this facility may impact the indoor air at your property in a process called vapor intrusion (described below).

The DNR is investigating possible vapor contamination in your neighborhood with support from the Wisconsin Department of Health Services (DHS) and the city of Menasha Health Department. The investigation would include collection of air samples from beneath the foundation and from the indoor air on your property to determine whether contaminant vapors are present and, if so, at what levels. If contamination is found, the DHS and Menasha Health Department will work to answer your health-related questions and the DNR will work with you on steps offering protection from chemical vapors.

The DNR has hired SCS to complete the investigation. **There is no cost to you to conduct this testing**. This letter provides you with information on the contaminated site and requests permission to access your home and test for chlorinated solvents.

CONTAMINATED SITE BACKGROUND

The property at 204 Railroad Street, Menasha, Wisconsin, was historically home to a paper and plastics storage facility and, prior to that, a warehouse for a chemical company and drum refinisher and is referred to as the American Quality Fibers site (the "Site"). The property is currently owned by Winnebago County through tax foreclosure. Previous environmental testing identified chlorinated solvent contamination in soil and groundwater on and around the property, including two specific chlorinated solvents, tetrachloroethylene (PCE) and trichloroethylene (TCE).

Information about the Site is tracked in the DNR's Bureau of Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW) with Activity Name "American Quality Fibers – LGU SL," BRRTS No. 02-71-208585. Go to dnr.wi.gov and search "BOTW."

CHEMICALS AND VAPOR INTRUSION

"Vapor intrusion" is the movement of vapors from chemicals in the soil, groundwater, or utilities into indoor air. It is very similar to the way that radon gas can move from soil into buildings. The contaminants PCE and TCE can have health effects when in the air at certain concentrations.

The results from the proposed air sampling will tell us if vapors are present at your property and guide the DNR, the DHS, and the Menasha Health Department on next steps. Please see the enclosed fact sheets, for more information:

- *What Is Vapor Intrusion?* (DNR PUB RR-892)
- *TCE in the Air* (DHS)
- *Trichloroethylene – ToxFAQs*, (Agency for Toxic Substances and Disease Registry [ATSDR])
- *Tetrachloroethylene* – ToxFAQs (ATSDR)

ENVIRONMENTAL TESTING IN YOUR NEIGHBORHOOD

Besides the testing at your property, you may see technicians testing other properties in the neighborhood and collecting samples from the sewers in the road. These tests help determine if chemical vapors are a concern for others in the neighborhood and to determine next steps. Results from your property will be provided to you.

If PCE or TCE vapors are identified on or near your property, the results will be carefully evaluated for potential concern and discussed with you. Additional information will be shared with you and the DNR, the DHS, and the Menasha Health Department will work to address any questions or concerns you might have.

REQUEST FOR ACCESS FOR SAMPLING

Enclosed are two copies of an Access Permission Agreement (the "Agreement"):

- One for you to sign and return, and
- The other to keep for your records.

Please do not modify the Agreement in any way, as it may void the Agreement.

To assist our coordination efforts, please send one copy of the signed Agreement back in the self-addressed, stamped envelope no later than **February 25, 2025.** The other copy is for your records. If preferred, you can email a scan or a photo of the signed Agreement instead of sending it by mail. If you choose this option, please email the signed Agreement to Jacob Krause (jkrause@scsengineers.com).

Once received, SCS will contact you to schedule the sampling.

CONTACTS AND PUBLIC RECORDS

At this time, only a few nearby properties are recommended for sampling in your neighborhood. The DNR is willing to schedule a time to meet with you in person to discuss this situation, if requested.

Regardless, please contact any of the individuals on the **attached contact list** by telephone or email with any questions.

The DNR is required to maintain records for the public, including correspondence and data collected as part of this investigation. Questions regarding public records, data management, and potential responsibility can be directed to the DNR contacts listed on the attached Contact List. The DNR will continue to share information with you during each step of the work.

We encourage you to take advantage of the opportunity for testing on your property. Please reach out if we can help address any questions that arise as you review this information and our request for access for sampling.

Sincerely,

Jacob Krause, PG
Hydrogeologist
SCS Engineers

Robert Langdon
Senior Project Manager
SCS Engineers

REL/AJR/JJK

cc: Jennifer Borski, DNR, Jennifer.Borski@wisconsin.gov
Alyssa Sellwood, DNR, alyssa.sellwood@wisconsin.gov
Nathan Kloczko, DHS, nathan.kloczko@dhs.wisconsin.gov
Todd Drew, Menasha Health Dept., tdrew@menashawi.gov
Ethan Hollenberger, Winnebago County Facilities Dept., ehollenberger@winnebagocountywi.gov
Mike Elder, Winnebago County Facilities Dept., melder@winnebagocountywi.gov

Enclosures: Access Permission Agreement (2 copies)
Return self-addressed stamped envelope
Contact List
Fact Sheets:
What is Vapor Intrusion? (DNR PUB RR-892)
TCE in the Air (DHS)
Tetrachloroethylene – ToxFAQs (ATSDR)
Trichloroethylene – ToxFAQs (ATSDR)

I:\25222269.00\25222269.07 American Quality Fibers\Access Requests\SCS Access Requests\250211_Access Request_201 Railroad Street.docx

Wisconsin Department of Natural Resources
ACCESS PERMISSION AGREEMENT

I, _____ hereby give permission to the Wisconsin Department of Natural Resources
(Print Name)
(DNR) and its employees, duly authorized representatives, agents and contractors, to enter upon and have access at reasonable times to the home/business located at

(ADDRESS) 201 Railroad Street, Menasha, Wisconsin 54952

and that is owned by C & M Investments of the Fox Valley LLC
(Print as Listed on Title / County GIS)

The property is located in the SE 1/4 of the NW 1/4 of Section 22, T20N, R17E, Menasha, Wisconsin. The access permission is for the DNR to investigate the property for possible vapor migration of trichloroethylene (TCE) and tetrachloroethylene (PCE) from contamination associated with the former American Quality Fibers site (BRRTS No. 02-71-208585) located near the property. This permission allows the DNR or its authorized representative to:

(1) Install and maintain sub-slab vapor probe(s) in the foundation of the residential building.
(2) Collect air samples from the sub-slab vapor probes and indoor air on each level of the building up to three times, at different times of the year.
(3) If the building has a sump, collect water samples from the sump(s) and air samples from the sump headspace, up to three times.
(4) Remove the sub-slab vapor probe(s) when no longer needed.

The permission that is granted shall remain in effect for one year. If an extension is necessary to complete the work described above, the DNR will inform you in writing.

The property owner agrees not to damage or interfere with the use of any sub-slab probe installed as permitted herein.

IN WITNESS WHEREOF:

_____ Signature of Property Owner Representative

_____ Signature Date

_____ Print Name, Title

_____ Email address

_____ Mailing Address of Owner

_____ Area Code and Telephone Number

TENANT(S) / LESSEE(S) by UNIT NUMBER, ETC.

_____ Name of Tenant(s)/Lessee(s)

_____ Tenant(s) phone number

_____ Tenant(s) email address

Mail or email the signed Agreement to:

SCS Engineers
ATTN: Jacob Krause
2830 Dairy Drive
Madison, WI 53718

jkrause@scsengineers.com
Phone: 608-224-2830

Contacts for Vapor Intrusion Investigation
Menasha, Wisconsin – October 2024

If you have general questions about the contamination or investigation:

WISCONSIN DEPARTMENT OF NATURAL RESOURCES (DNR)

Jennifer Borski
Vapor Intrusion Investigation Lead
Mobile: (920) 360-0853
Jennifer.Borski@wisconsin.gov

- OR -

Alyssa Sellwood
Engineer
Mobile: (608) 622-8606
Alyssa.Sellwood@wisconsin.gov

If you have questions about the chemicals, your exposure, or your health:

WISCONSIN DEPARTMENT OF HEALTH SERVICES (DHS)

Nathan Kloczko
Site Evaluation Program Coordinator
Phone: (608) 267-3227
Mobile: (608) 867-4448
Nathan.Kloczko@dhs.wisconsin.gov

MENASHA HEALTH DEPARTMENT

Todd Drew
Registered Sanitarian
Phone: (920)-967-3522
tdrew@menashawi.gov

If you have questions about schedules for testing:

SCS ENGINEERS *(The DNR's contractor doing the testing.)*

Jacob Krause, Project Lead
Office: (608) 216-7342
Mobile: (608) 280-1630
jkrause@scsengineers.com

PUB-RR-892
Feb 2014

Wisconsin DNR vapor intrusion quick facts

What is Vapor Intrusion?

Chemicals used in commercial or industrial activities – dry cleaning chemicals, chemical degreasers and petroleum products such as gasoline – are sometimes spilled and leak into nearby soil or groundwater. When this happens, these chemicals may release gases or vapors, which travel from the contaminated groundwater or soil and move into nearby homes or businesses. This is called vapor intrusion.

The process when chemical vapors from contaminated soil or groundwater enter a home or other structure is called vapor intrusion.

Why are these chemical vapors a problem?

The chemicals that cause vapor intrusion are known as volatile organic compounds, or VOCs. Even when spilled into soil or water, these chemicals easily evaporate. They don't cause human health problems when they evaporate into the outside air, but when their vapors move into homes or businesses, they may cause long-term health problems for the people who live or work in those buildings. These vapors are usually odorless and colorless and undetectable without special testing equipment.

Why is vapor intrusion a concern?

Exposure to some chemical gases or vapors can cause an increased risk of adverse health effects. Whether or not a person experiences any health effects depends on several factors, including the amount and length of exposure, the toxicity of the chemical, and the individual's sensitivity to the chemical. When harmful chemical vapor intrusion is the result of environmental contamination, the Wisconsin Department of Natural Resources (DNR) requires that steps be taken to reduce or eliminate exposures which could be harmful to human health.

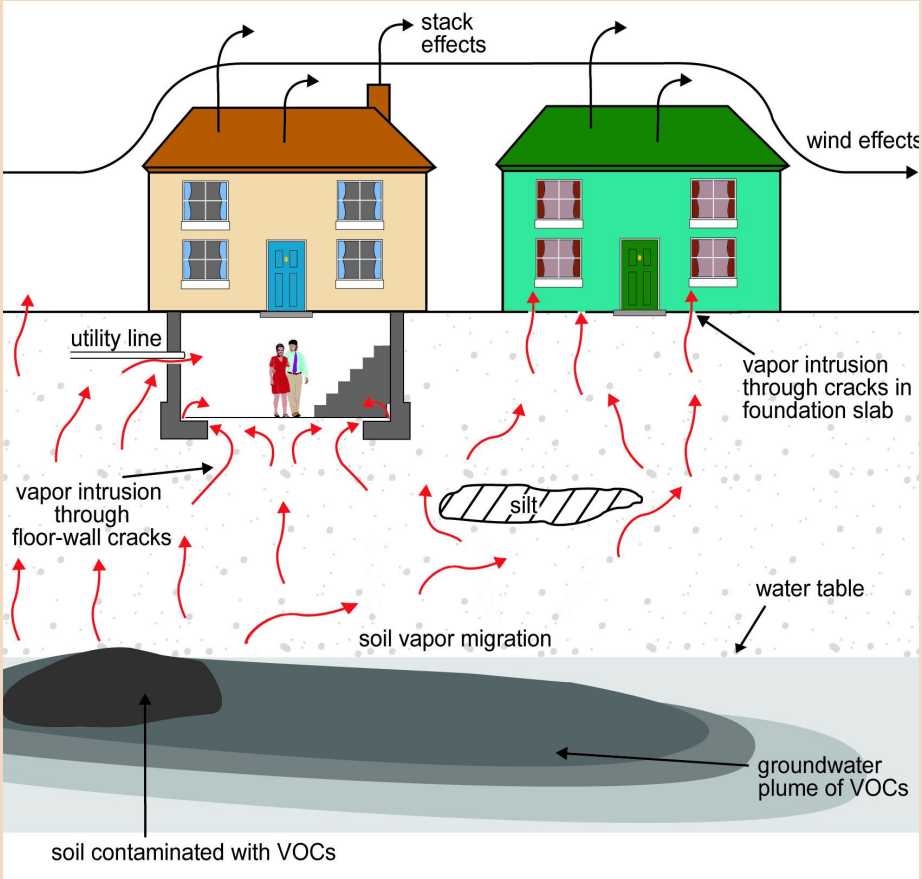
What should I expect if vapor intrusion is suspected near my home or business?

For businesses or other locations where VOC contamination has been found, the DNR requires that the potential for vapor intrusion be investigated. If you live near a site being cleaned up, you may be contacted by the site owner or others working on the cleanup. Your cooperation and consent will be requested before any testing or sampling is conducted on your property. Ask the person contacting you any questions you have about the work being done, or contact the DNR for more information (see DNR contact information on reverse). For more information about testing for vapor intrusion, see DNR-Pub-RR-954, "What to Expect During Vapor Intrusion Sampling."

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

How Vapors Enter a Building

If you live near a commercial or industrial facility or landfill where VOCs have entered either the soil or groundwater, there may be a potential for those chemicals to travel as vapors into your home or business. Vapors can enter buildings in various ways, including through cracks in the foundation and openings for utility lines. Building ventilation and weather can influence the extent of vapor intrusion.



Adapted from U.S. Environmental Protection Agency (EPA) graphic. www.epa.gov/oswer/vaporintrusion/basic.html

Where can I find more information?

Health and vapor-related information can be found at the Wisconsin Department of Health Services (DHS) website at **dhs.wisconsin.gov** , search "Vapor." For other health-related questions, please contact your local health department: **www.dhs.wisconsin.gov/localhealth**.

For more DNR information, please visit the DNR's Remediation and Redevelopment (RR) Program's Vapor Intrusion page at **dnr.wi.gov/topic/Brownfields/Vapor.html**.

Additional information can be obtained through the DNR field office in your region. To find the correct office, visit the RR Program Staff Contacts page at **dnr.wi.gov/topic/Brownfields/Contact.html** or call the RR Program at (608) 266-2111.

This document contains information about certain state statutes and administrative rules but does not necessarily include all of the details found in the statutes and rules. Readers should consult the actual language of the statutes and rules to answer specific questions. The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240. This publication is available in alternative format upon request. Please call 608-267-3543 for more information.

TCE in the Air

Trichloroethylene (TCE) health effects and actions you can take to protect your home's air

TCE is a man-made chemical used to clean metal in some factories and is found in some household items like paint, spot removers, and varnishes. If spilled, it can stay in the ground for a long time.

Why should I care?

- It can enter your home through cracks in the floor or walls of your basement, and other openings.
- It evaporates quickly and breathing the vapors is not healthy.
- It can cause cancer if you are breathe it over a long period of time.

Who has more risk?

Babies whose mother's breathe in TCE while pregnant can have:

- Lower birth weights
- Heart defects
- Nervous or immune system problems

What if TCE is in my community?

If there is a known concern, environmental health professionals will ask to check your home to make sure there is no TCE inside.

They need your permission to drill in your basement and test.

If they find high levels of TCE, they will suggest that you have a special system installed to fix the problem.

Do I have to pay?

The people responsible for the spill will probably have to pay for the testing and any repairs that have to be made.

A "sub-slab mitigation" system moves air from below to outside the house.

What else can I do?

- Wear protective gloves if you use products with TCE (like paint remover).
- Use only small amounts of products containing TCE.
- Use the chemical in well-ventilated areas.
- Do not stay in the room for long periods of time if you can smell the chemical while using it or after using it.

Where can I learn more?

- **Vapor Intrusion 101 (video)**: www.youtube.com/watch?v=izo0QKqCToU
- **Vapor Intrusion Investigation — Information Sheet for Neighbors**: https://dnr.wi.gov/files/PDF/pubs/rr/RR067.pdf
- **Why Test for Vapor Intrusion?**: https://dnr.wi.gov/files/PDF/pubs/rr/RR953.pdf
- **Mitigation: Protection from Vapor Intrusion**: https://dnr.wi.gov/files/PDF/pubs/rr/RR094.pdf

WISCONSIN DEPARTMENT of HEALTH SERVICES

Division of Public Health
Bureau of Environmental and Occupational Health
P-02480 (10/2020)

Tetrachloroethylene - ToxFAQs™

CAS # 127-18-4

This fact sheet answers the most frequently asked health questions (FAQs) about tetrachloroethylene. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Tetrachloroethylene is a manufactured chemical used for dry cleaning and metal degreasing and in the aerospace industry. Exposure to very high concentrations of tetrachloroethylene can cause dizziness headaches, sleepiness, incoordination confusion, nausea, unconsciousness, and even death. Tetrachloroethylene has been found in at least 949 of the 1,854 National Priorities List sites identified by U.S. Environmental Protection Agency (EPA).

What is tetrachloroethylene?

Tetrachloroethylene is a nonflammable colorless liquid. Other names for tetrachloroethylene include perchloroethylene, PCE, perc, tetrachloroethene, and perchlor. Most people can smell tetrachloroethylene when it is present in the air at a level of 1 part in 1 million parts of air (1 ppm) or more.

Tetrachloroethylene is used as a dry cleaning agent and metal degreasing solvent. It is also used as a starting material (building block) for making other chemicals and is used in some consumer products.

What happens to tetrachloroethylene when it enters the environment?

- Tetrachloroethylene can be released into air, water, and soil at places where it is produced or used.
- Tetrachloroethylene breaks down very slowly in the air and so it can be transported long distances in the air. Half of the amount in the air will degrade in approximately 100 days.
- Tetrachloroethylene evaporates quickly from water into air. It is generally slow to break down in water.
- Tetrachloroethylene may evaporate quickly from shallow soils or may filter through the soil and into the groundwater below. It is generally slow to break down in soil.

How might I be exposed to tetrachloroethylene?

- When you bring clothes from the dry cleaners, they will release small amounts of tetrachloroethylene into the air.
- When you drink water containing tetrachloroethylene, you are exposed to it. You might also be exposed to tetrachloroethylene that is released into the air during showering and bathing.
- People residing near contaminated sites or dry cleaning locations may be exposed to higher levels than the general population.
- People working in the dry cleaning industries or using metal degreasing products may be exposed to elevated levels of tetrachloroethylene.

How can tetrachloroethylene affect my health?

Breathing high levels of tetrachloroethylene for a brief period may cause dizziness or drowsiness, headache, and incoordination; higher levels may cause unconsciousness and even death.

Exposure for longer periods to low levels of tetrachloroethylene may cause changes in mood, memory, attention, reaction time, and vision.

Studies in animals exposed to tetrachloroethylene have shown liver and kidney effects, and changes in brain chemistry, but we do not know what these findings mean for humans.

Tetrachloroethylene

CAS # 127-18-4

How likely is tetrachloroethylene to cause cancer?

Studies in humans suggest that exposure to tetrachloroethylene might lead to a higher risk of getting bladder cancer, multiple myeloma, or non-Hodgkin's lymphoma.

In animals, tetrachloroethylene has been shown to cause cancers of the liver, kidney, and blood system.

The Department of Health and Human Services (DHHS) considers tetrachloroethylene to be reasonably anticipated to be a human carcinogen. EPA considers tetrachloroethylene likely to be carcinogenic to humans by all routes of exposure. The International Agency for Research on Cancer (IARC) considers tetrachloroethylene probably carcinogenic to humans.

How can tetrachloroethylene affect children?

It is not known whether children are more susceptible than adults to the effects of tetrachloroethylene.

A few studies in humans have suggested that exposure to tetrachloroethylene increased the numbers of babies with birth defects, but these studies were not large enough to clearly answer the question. Studies in animals exposed by inhalation or stomach tube have not shown clear evidence of specific birth defects.

How can families reduce the risk of exposure to tetrachloroethylene?

- Tetrachloroethylene has been found in low levels in some food. You can minimize the risk of your family's exposure by peeling and thoroughly washing fruits and vegetables before cooking.
- Use bottled water if you have concerns about the presence of tetrachloroethylene in your tap water. You may also contact local drinking water authorities and follow their advice.
- Prevent children from playing in dirt or eating dirt if you live near a waste site that has tetrachloroethylene.
- Tetrachloroethylene is widely used as a scouring solvent that removes oils from fabrics, as a carrier solvent, as a fabric finish or water repellant, and as a metal degreaser/cleaner. Follow instructions on product labels to minimize exposure to tetrachloroethylene.

Is there a medical test to determine whether I've been exposed to tetrachloroethylene?

Tetrachloroethylene and its breakdown products (metabolites) can be measured in blood and urine. However, the detection of tetrachloroethylene or its metabolites cannot predict the kind of health effects that might develop from that exposure. Because tetrachloroethylene and its metabolites leave the body fairly rapidly, the tests need to be conducted within days after exposure.

Has the federal government made recommendations to protect human health?

The Occupational Safety and Health Administration (OSHA) has set an 8-hour time weighted average permissible exposure limit of 100 ppm, an acceptable ceiling exposure limit of 200 ppm, and a maximum peak of 300 ppm (not to be exceeded for more than 5 minutes of any 3-hour period).

The National Institute for Occupational Safety and Health (NIOSH) recommends that workplace exposure to tetrachloroethylene be minimized due to concerns about its carcinogenicity.

Reference

This ToxFAQs™ information is taken from the 2019 Toxicological Profile for Tetrachloroethylene produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ on the web: www.atsdr.cdc.gov/ToxFAQs

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.

Trichloroethylene - ToxFAQs™

CAS # 79-01-6

This fact sheet answers the most frequently asked health questions (FAQs) about trichloroethylene. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

HIGHLIGHTS: Trichloroethylene is used as a solvent for cleaning metal parts. Exposure to very high concentrations of trichloroethylene can cause dizziness headaches, sleepiness, incoordination, confusion, nausea, unconsciousness, and even death. Trichloroethylene has been found in at least 1,051 of the 1,854 National Priorities List sites identified by the Environmental Protection Agency (EPA).

What is trichloroethylene?

Trichloroethylene is a colorless, volatile liquid. Liquid trichloroethylene evaporates quickly into the air. It is nonflammable and has a sweet odor.

The two major uses of trichloroethylene are as a solvent to remove grease from metal parts and as a chemical that is used to make other chemicals, especially the refrigerant, HFC-134a.

What happens to trichloroethylene when it enters the environment?

- Trichloroethylene can be released to air, water, and soil at places where it is produced or used.
- Trichloroethylene is broken down quickly in air.
- Trichloroethylene breaks down very slowly in soil and water and is removed mostly through evaporation to air.
- It is expected to remain in groundwater for long time since it is not able to evaporate.
- Trichloroethylene does not build up significantly in plants or animals.

How might I be exposed to trichloroethylene?

- Breathing trichloroethylene in contaminated air.
- Drinking contaminated water.
- Workers at facilities using this substance for metal degreasing are exposed to higher levels of trichloroethylene.
- If you live near such a facility or near a hazardous waste site containing trichloroethylene, you may also have higher exposure to this substance.

How can trichloroethylene affect my health?

Trichloroethylene was once used as an anesthetic for surgery. Exposure to moderate amounts of trichloroethylene may cause headaches, dizziness, and sleepiness; large amounts may cause coma and even death. Eating or breathing high levels of trichloroethylene may damage some of the nerves in the face. Exposure to high levels can also result in changes in the rhythm of the heartbeat, liver damage, and evidence of kidney damage. Skin contact with concentrated solutions of trichloroethylene can cause skin rashes. There is some evidence exposure to trichloroethylene in the work place may cause scleroderma (a systemic autoimmune disease) in some people. Some men occupationally-exposed to trichloroethylene and other chemicals showed decreases in sex drive, sperm quality, and reproductive hormone levels.

How likely is trichloroethylene to cause cancer?

There is strong evidence that trichloroethylene can cause kidney cancer in people and some evidence for trichloroethylene-induced liver cancer and malignant lymphoma. Lifetime exposure to trichloroethylene resulted in increased liver cancer in mice and increased kidney cancer and testicular cancer in rats.

The Department of Health and Human Services (DHHS) considers trichloroethylene to be a known human carcinogen. The International Agency for Research on Cancer (IARC) classified trichloroethylene as carcinogenic to humans. The EPA has characterized trichloroethylene as carcinogenic to humans by all routes of exposure.

Trichloroethylene

CAS # 79-01-6

How can trichloroethylene affect children?

It is not known whether children are more susceptible than adults to the effects of trichloroethylene.

Some human studies indicate that trichloroethylene may cause developmental effects such as spontaneous abortion, congenital heart defects, central nervous system defects, and small birth weight. However, these people were exposed to other chemicals as well.

In some animal studies, exposure to trichloroethylene during development caused decreases in body weight, increases in heart defects, changes to the developing nervous system, and effects on the immune system.

How can families reduce the risk of exposure to trichloroethylene?

- Avoid drinking water from sources that are known to be contaminated with trichloroethylene. Use bottled water if you have concerns about the presence of chemicals in your tap water. You may also contact local drinking water authorities and follow their advice.
- Prevent children from playing in dirt or eating dirt if you live near a waste site that has trichloroethylene.
- Trichloroethylene is used in many industrial products. Follow instructions on product labels to minimize exposure to trichloroethylene.

Is there a medical test to determine whether I've been exposed to trichloroethylene?

Trichloroethylene and its breakdown products (metabolites) can be measured in blood and urine. However, the detection of trichloroethylene or its metabolites cannot predict the kind of health effects that might develop from that exposure. Because trichloroethylene and its metabolites leave the body fairly rapidly, the tests need to be conducted within days after exposure.

Has the federal government made recommendations to protect human health?

The EPA set a maximum contaminant goal (MCL) of 0.005 milligrams per liter (mg/L; 5 ppb) as a national primary drinking standard for trichloroethylene.

The Occupational Safety and Health Administration (OSHA) set a permissible exposure limit (PEL) of 100 ppm for trichloroethylene in air averaged over an 8-hour work day, an acceptable ceiling concentration of 200 ppm provided the 8 hour PEL is not exceeded, and an acceptable maximum peak of 300 ppm for a maximum duration of 5 minutes in any 2 hours.

The National Institute for Occupational Safety and Health (NIOSH) considers trichloroethylene to be a potential occupational carcinogen and established a recommended exposure limit (REL) of 2 ppm (as a 60-minute ceiling) during its use as an anesthetic agent and 25 ppm (as a 10-hour TWA) during all other exposures.

Reference

This ToxFAQs™ information is taken from the 2019 Toxicological Profile for Trichloroethylene produced by the Agency for Toxic Substances and Disease Registry, Public Health Service, U.S. Department of Health and Human Services, Public Health Service in Atlanta, GA.

Where can I get more information?

For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Human Health Sciences, 1600 Clifton Road NE, Mailstop F-57, Atlanta, GA 30329-4027.

Phone: 1-800-232-4636

ToxFAQs™ on the web: www.atsdr.cdc.gov/ToxFAQs

ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.