

RESPONSE TO FAST STOP GAS STATION LEAK

PRESENTATION TO LAW & PUBLIC SAFETY COMMITTEE



DISTRICT CHIEF KEN CALDWELL



DEPUTY DIRECTOR MARYLYNN LODOR

In coordination with
DOH (City & State)
OES
Ohio EPA
USEPA
BUSTR

February 17, 2021

West Price Hill Gas Leak: Agency Response

24 Dec.

Odors were reported to CFD by residents in the vicinity of West 8th Street, Overlook, Pedretti and Carnation Avenue

CFD contacted MSD & MSD began flushing the sewers on Dec. 24th with water from hydrants

CFD Environmental Crimes Unit engaged

26 Dec.

MSD resumes flushing & investigation

CFD ordered gas station to close gas pumps and empty its gasoline storage tanks.

- All gasoline removed from tanks
- Monitoring well pumped (100 gal. product recovered)

28 Dec.

Agency Coordination Meeting: MSD, CFD, DOH, OEPA

BUSTR issued notice of suspected release.

USEPA assistance

CFD began collecting air readings in homes and in the sewers, attempting to find the source through the day from W. 8th & Overlook down to Carnation

MSD continued investigations; (flushing postponed due to low temps.)

CFD continued door-to-door visits of properties in the neighborhood.

MSD checks on flushing @ 8am & determines presents of gas remains

CFD resumes checking homes for VOCs.

25 Dec.

27 Dec.

Agency Response to West Price Hill *Fast Stop* Gas Leak

Emergency Response – Led by CFD with assistance from MSD, Ohio EPA, DOH, USEPA, BUSTR

- Immediate Corrective Action – ATC overseen by BUSTR

Remedial Actions/Clean up – Led by ATC guided by BUSTR on behalf of the Owner

- Tier 1 Investigation
- Tier 1 Delineation

Repair, Replacement & Upgrade – Led by BUSTR

- On-site inspections by CFD

Operating Permit – Issued by CFD

- Currently Revoked
- Fast Stop must be in full compliance with BUSTR
- WPH Community will be informed prior to action



BUSTR: Bureau of Underground Storage Tank Regulations (BUSTR) is a state agency, managed by the State Fire Marshall under the Dept of Commerce.

Investigations of indoor air quality performed in homes and in the sewer by CFD & USEPA

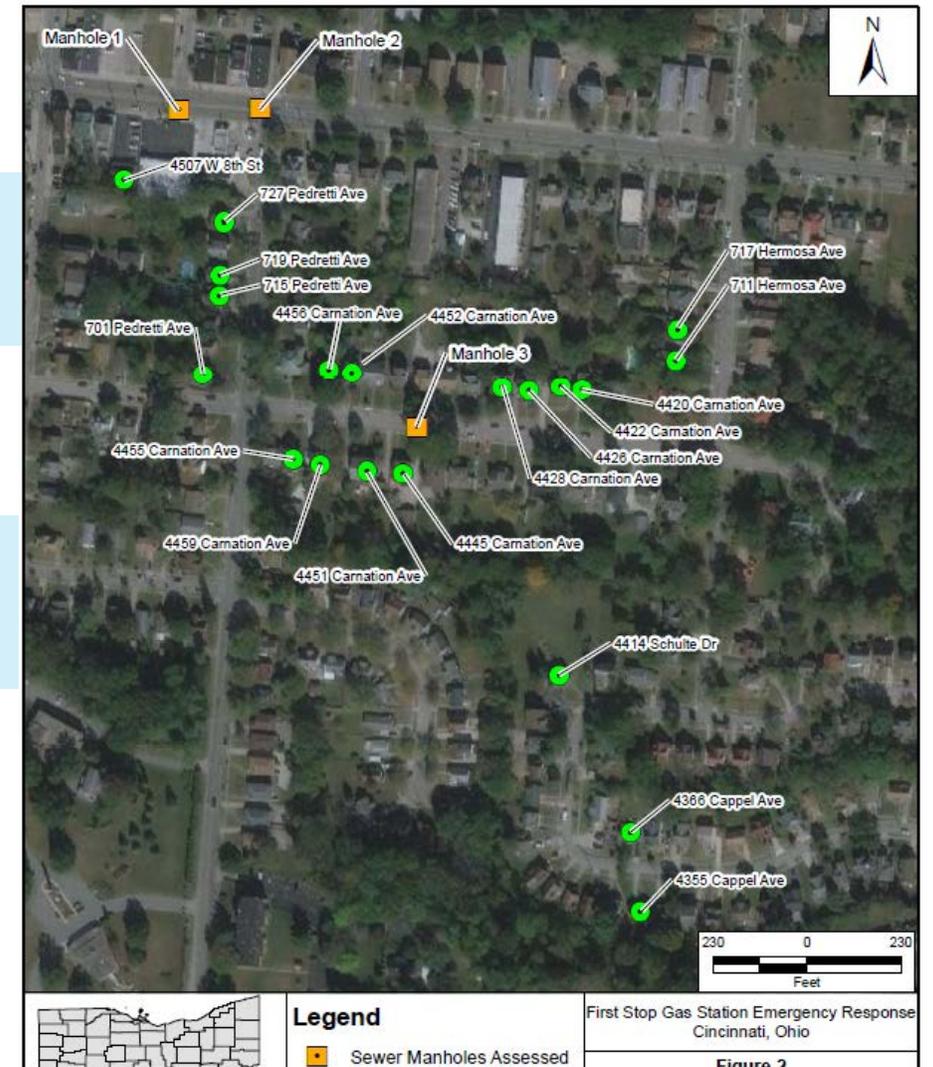
Ohio EPA was also onsite during the initial emergency response

There was no release to the environment, no release to the waters of the state.

USEPA assisted in evaluating indoor air quality

All indoor air quality data was reviewed by USEPA & Ohio DOH.

CFD performed follow-up samples to ensure levels are within safe limits. CFD remains available to collect additional samples.



Jurisdictions of USTs (Underground Storage Tanks)

CFD Responsibilities:

- Modification of Work
- Operating Permits

CFD required all fuel to be removed on 12/26 & on 12/30, revoked operating permit to sell gasoline until station gets into compliance with BUSTR.

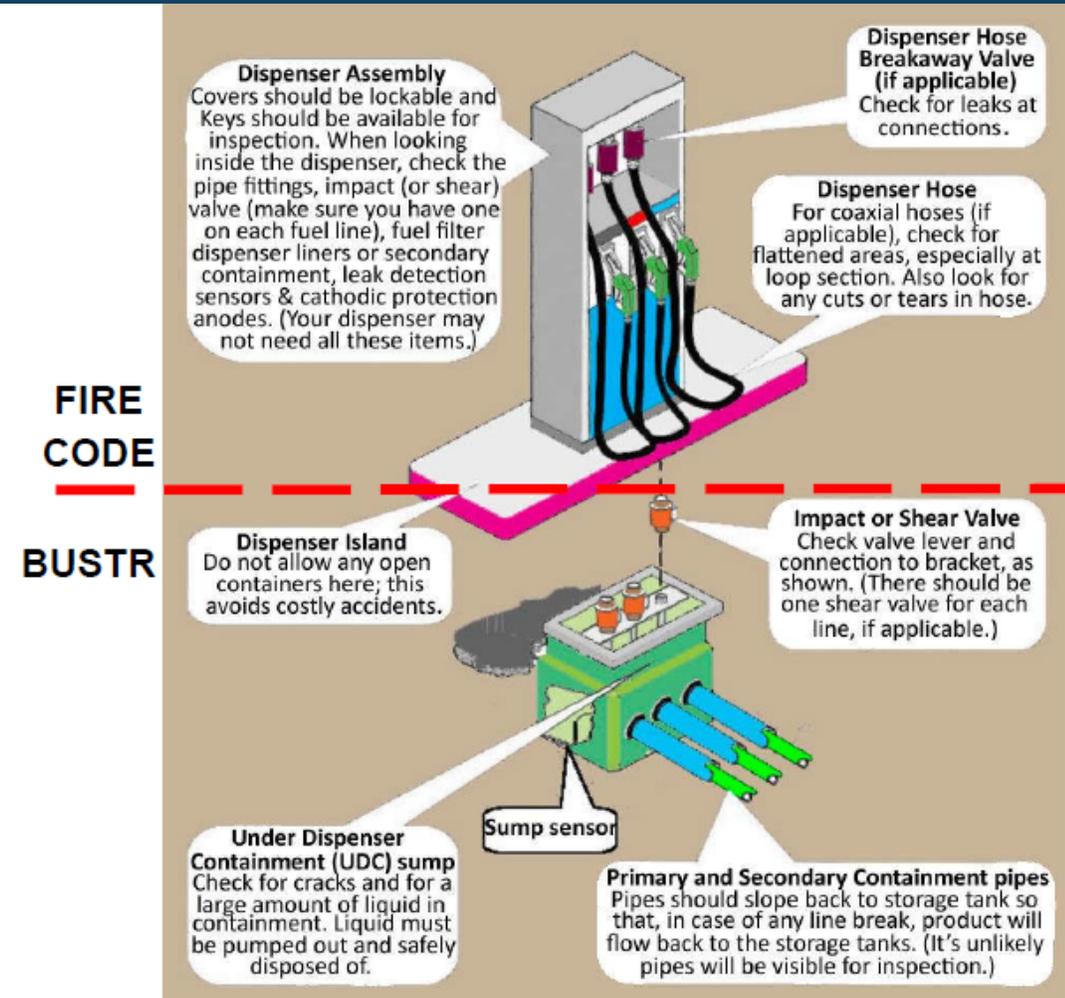
BUSTR Responsibilities:

- Determining station compliance with BUSTR regulations.

BUSTR is requiring piping to be replaced, upgrades of containment and replacement of monitoring systems as well as Tier 1 investigation and delineation.

BUSTR inspected the site on 10/30, with follow ups on 12/2, 12/15 documented deficiencies. BUSTR regs allow the station to remain operating while investigating and repairing.

These deficiencies were not shared with CFD.



Fast Stop Site work: evaluate, clean up and repair/upgrade

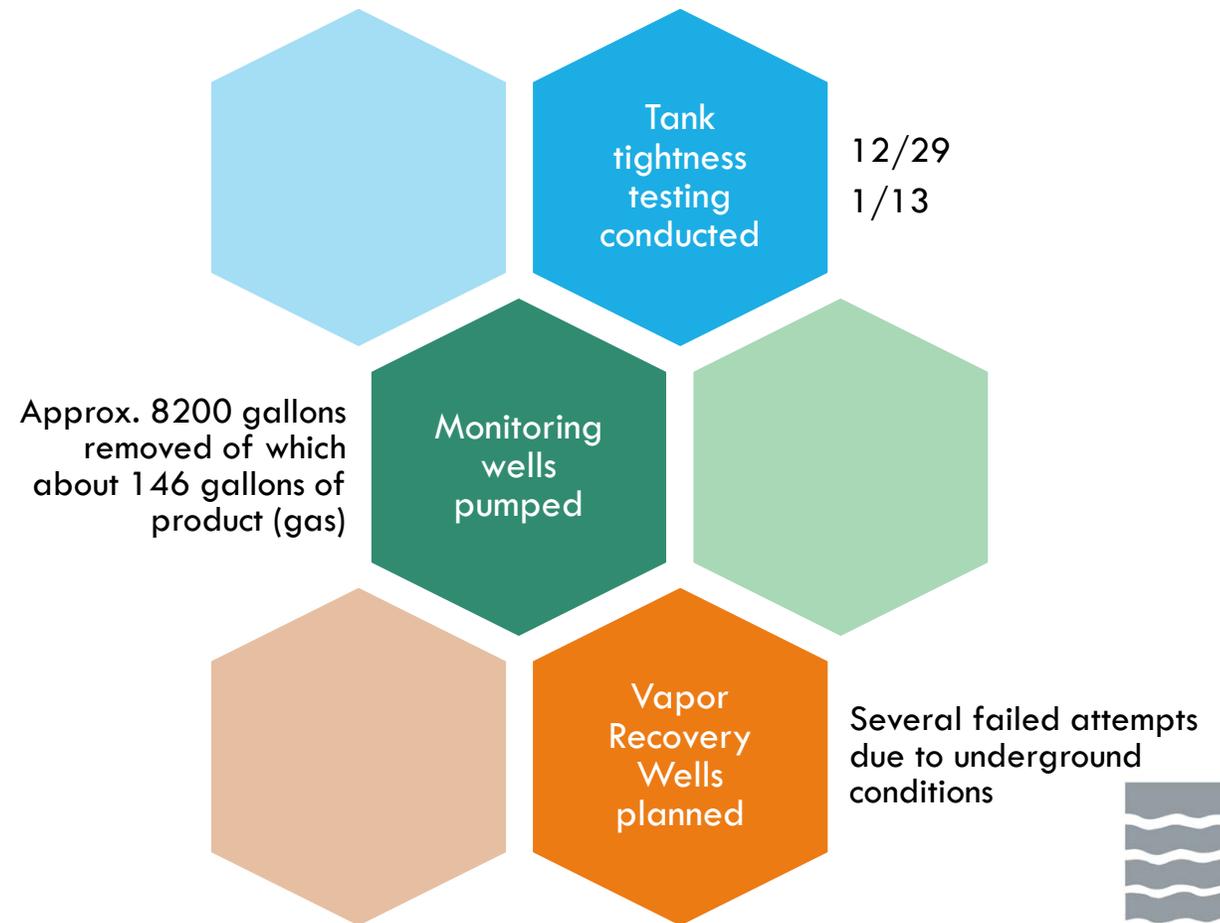
The gas station owner has hired **ATC** Group Services of Sharonville, to assist with immediate corrective actions, investigation, and cleanup of the leak.

Fast Stop owner is in the process of repairing and replacing (substantially upgrading) the piping, adding containment and upgraded monitoring systems.

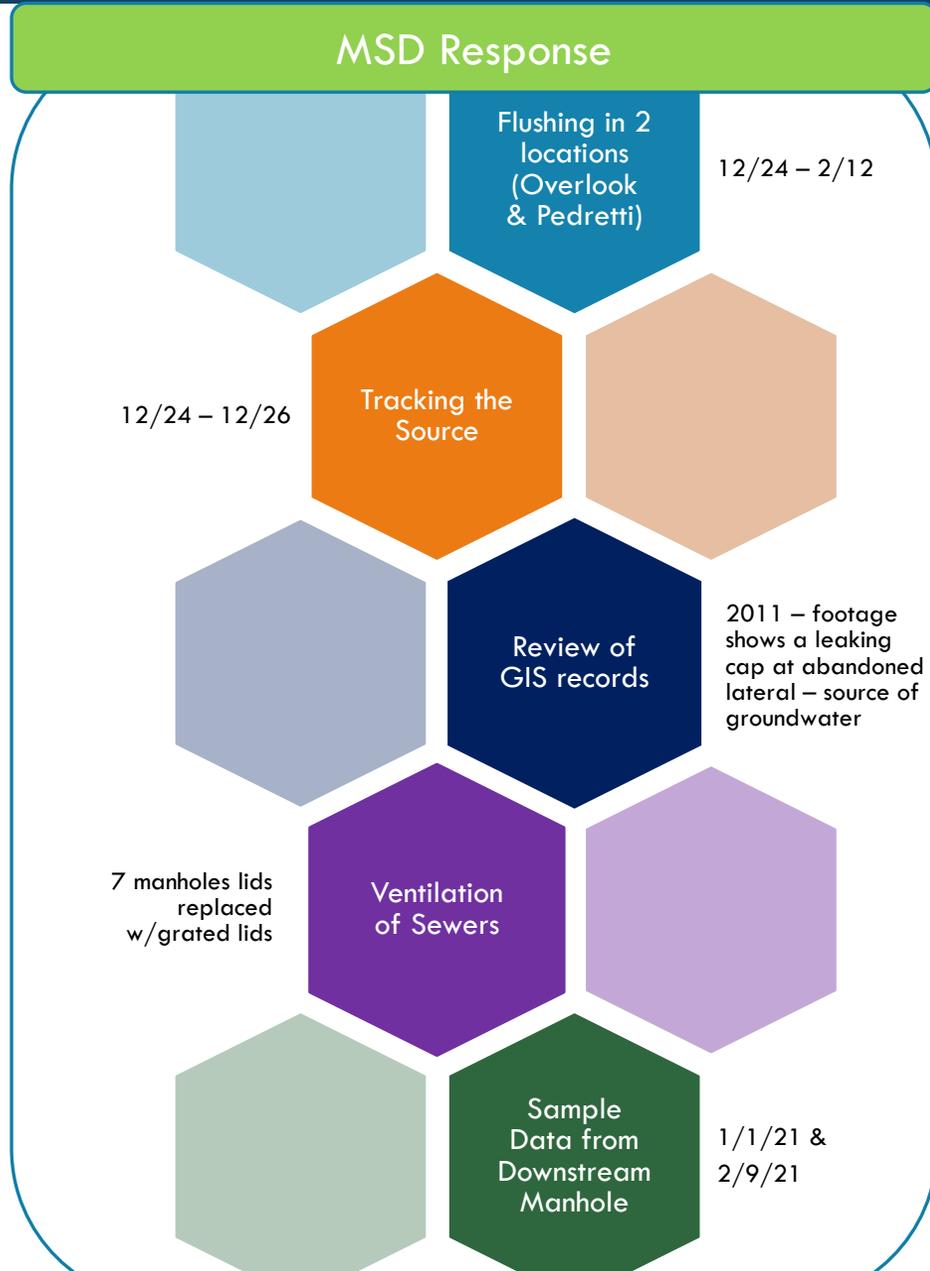
The Bureau of Storage Tank Regulations (**BUSTR**) **oversees and determines compliance** with underground storage tank regulations.

ATC is overseeing the work done by contacted company – M&M.

CFD onsite during site work of repair & modification



MSD response was quick and ongoing

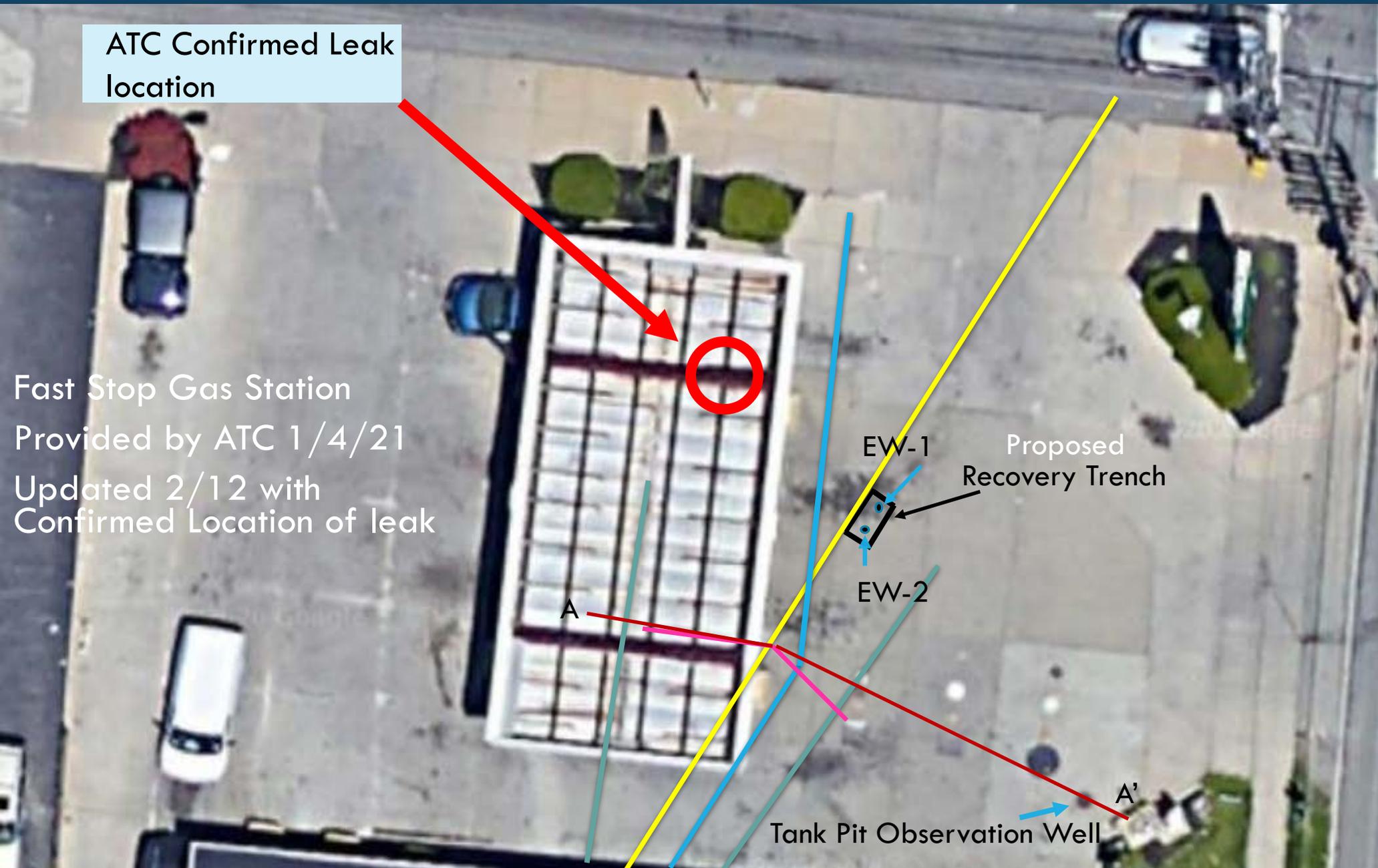


Fast Stop violated several MSD Sewer Use Rules, including:

- Pollutants that create a fire or explosive hazard
- Pollutants that result in toxic gases, vapors or fumes that may cause acute worker health and safety problems
- Malodorous liquids that cause a public nuisance, hazard to life, or prevent entry into sewers for maintenance or repair

On 2/12 MSD TV'd the sewer line & will perform some dye testing & point line the leaking cap near the site.⁷

How did the gasoline get into the sewer?



ATC Confirmed Leak location

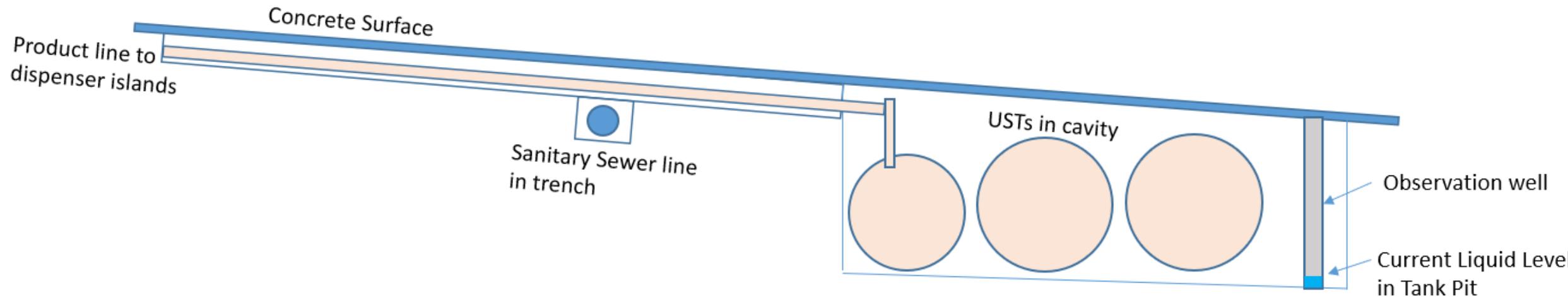
Fast Stop Gas Station
Provided by ATC 1/4/21
Updated 2/12 with
Confirmed Location of leak

- Sanitary Sewer
- Product Line To Dispensers
- Electrical
- Water
- Cross Section Location

Fast Stop
Utilities Diagram
12/31/2020

How did the gasoline get into the sewer?

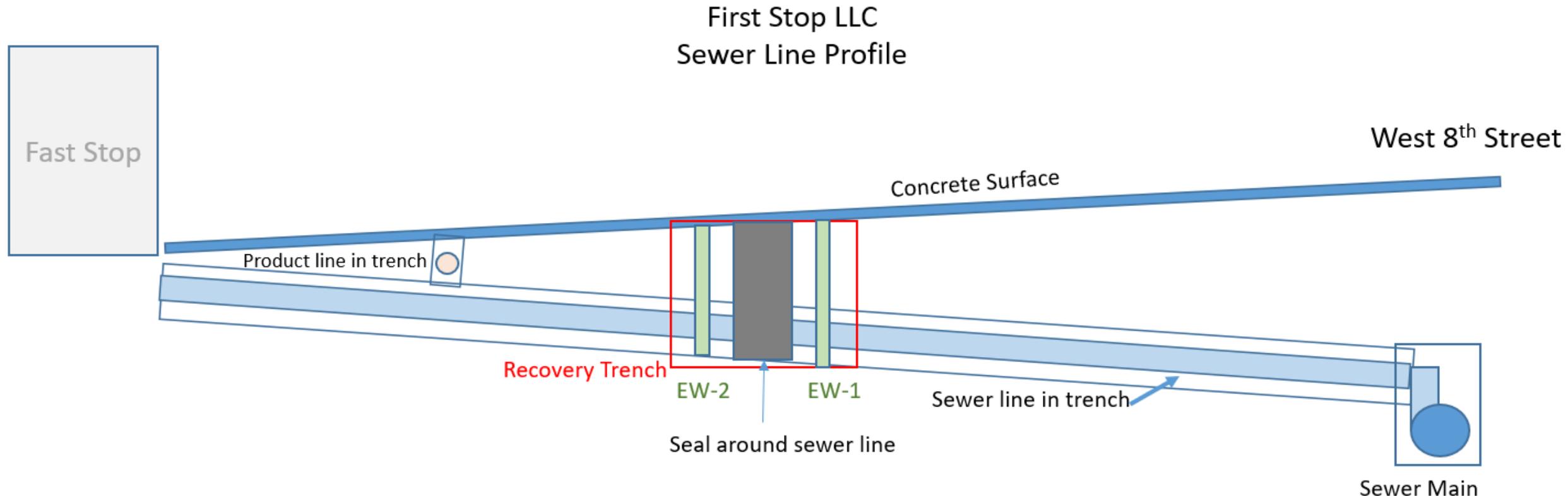
First Stop LLC
Cross Section A-A'



The “Product Line” is located above building sewer trench.

The gasoline presumably traveled in the building sewer trench into the public sewer.

How did the gasoline get into the sewer?



ATC has been working on the investigation and remediation simultaneously with several repairs authorized by CFD and required by BUSTR.

ATC is also proposing to install a Recovery Trench for vapor extraction of vapors that remain.

How did the fumes travel into homes?

Gasoline leaked from underground supply line into the ground presumably above the gas station's private building sewer.

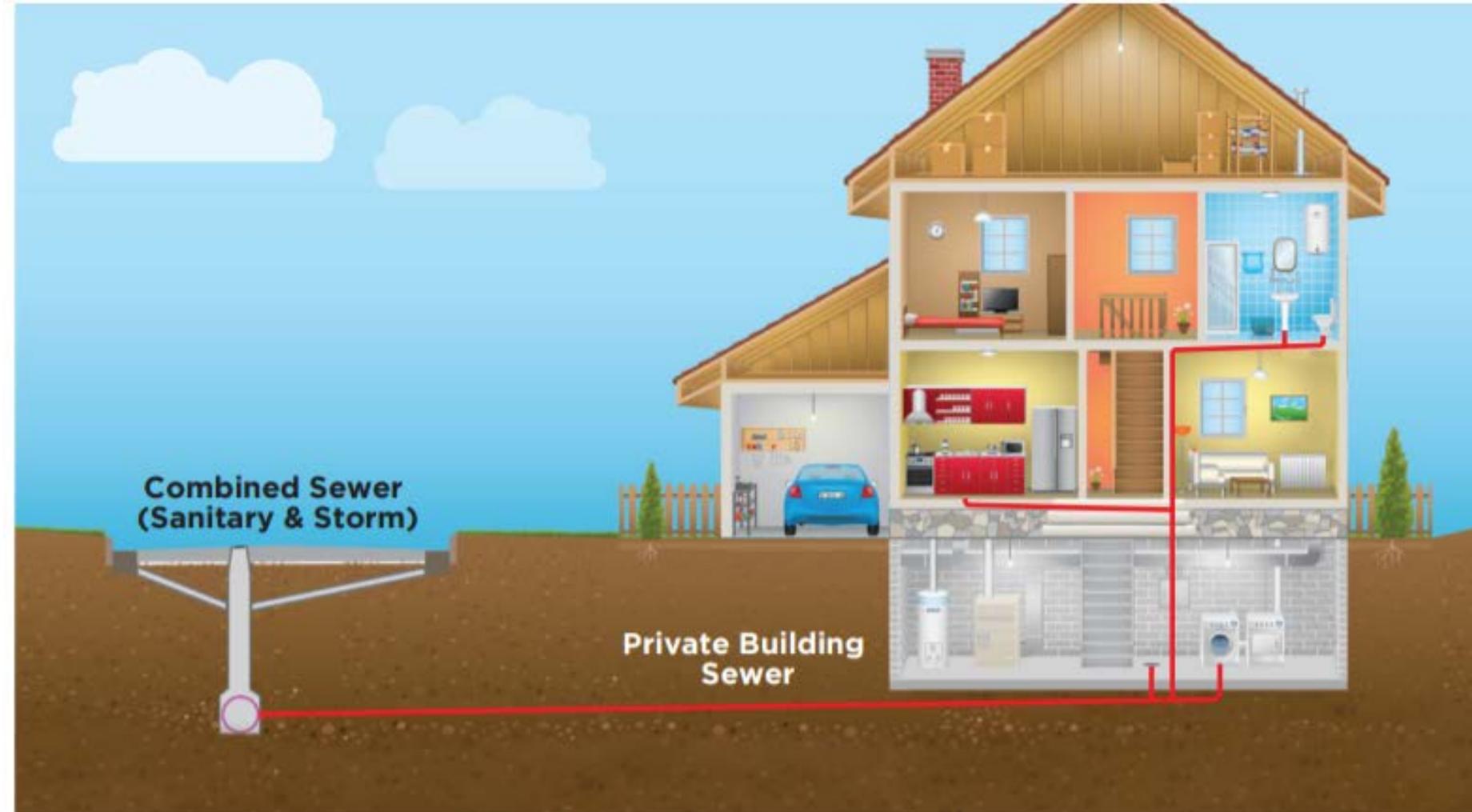
Fumes entered the public sewer through underground trenches from underground supply line.

Once in the sewer, the gasoline vapors dispersed.

Gasoline produces ignitable **vapors** that are 3 to 4 times **heavier than air** and **can travel for great distances** along the ground. Gas vapors tend to accumulate in low or enclosed spaces.

How did the fumes get into homes?

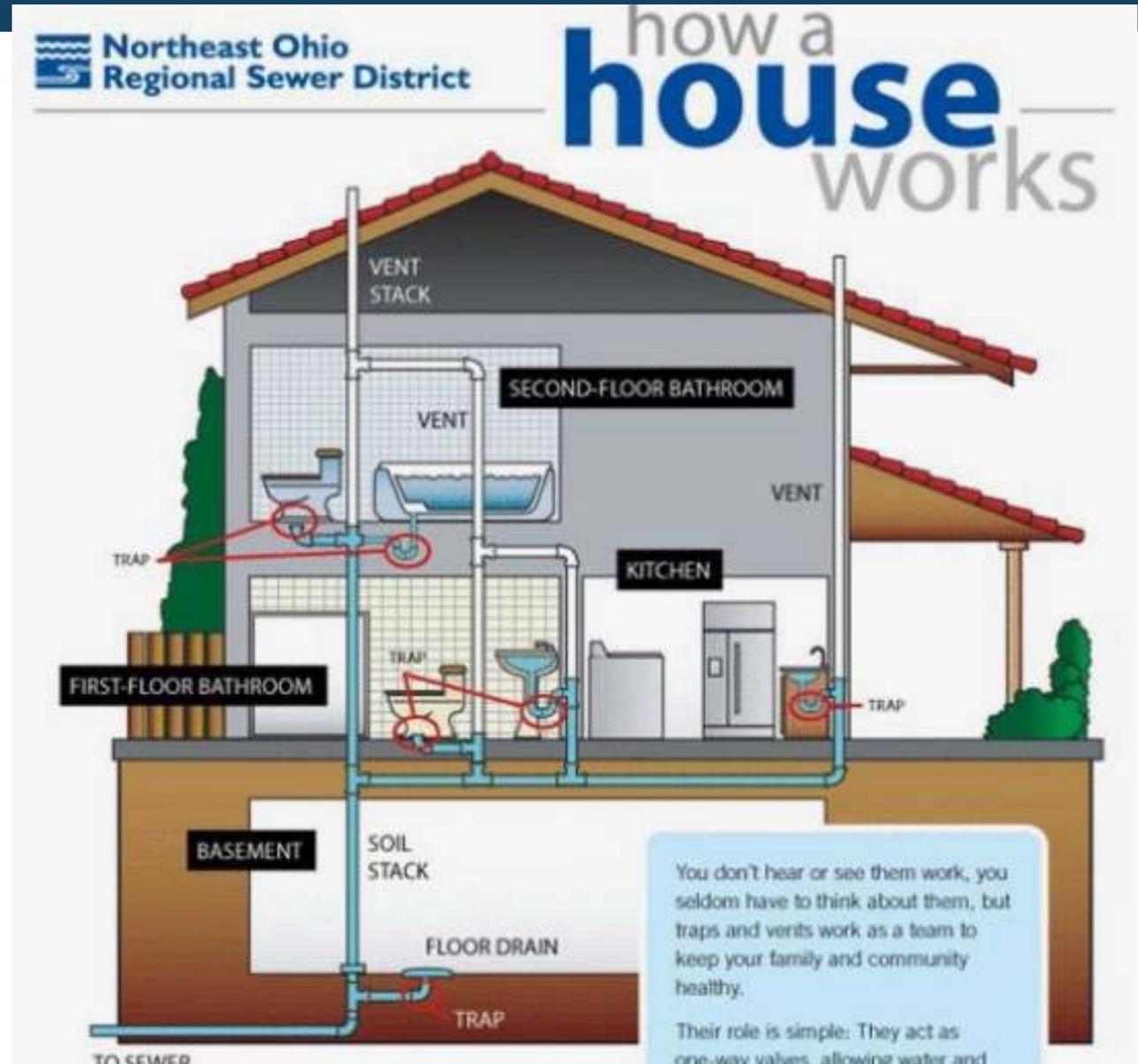
Traps & Vents
in your home
protect sewer
gas and other
vapors or
fumes to enter
homes.



PSA: Plumbing vents & traps help prevent sewer gases from entering homes

Traps – bend in the pipe under sink or toilet that holds a “plug” of water to seal the pipe.

Vents – allows air to enter pipes, equalizing pressure & ensuring that water stays in the trap.



CURRENT STATUS

4501 W. 8th Street in
West Price Hill

Outstanding Compliance Issues of Fast Stop Gas Station

Ohio Department of Commerce
Division of State Fire Marshal
Mary Marshall Hoover

Ohio Fire Marshal

December 28, 2020

BUTA SINGH
FIRST STOP REAL ESTATE LLC
4501 W 8TH ST
CINCINNATI, OHIO 45238

SITE: FIRST STOP MINI MART
4501 W 8TH ST
CINCINNATI OH
HAMILTON COUNTY
RELEASE #31000501-N00001

RE: SUSPECTED RELEASE

Dear Mr. Singh:

On December 28, 2020, the Bureau of Underground Storage Tank Regulations (BUSTR) was notified of the presence of free product and petroleum vapors on or nearby this site. This occurrence meets the definition of a suspected release (physical discovery) as defined in Ohio Administrative Code (OAC) 1301:7-9-13(G)(21) and (35), effective September 1, 2017. Therefore, you are required to perform the activities outlined below and prescribed by OAC 1301:7-9-13(F) to determine if a release has occurred.

These regulations require that you perform a tightness test, pursuant to OAC 1301:7-9-07(F), for existing underground storage tank system(s) on or before January 03, 2021. Within 24 hours of receiving the tightness test results you must notify BUSTR by telephone or fax whether the system(s) passed or failed. In addition, you must submit the complete results and any supporting data by completing and submitting a "Suspected Release – Tightness Test Form 2017" to the fire marshal within seven (7) days of performing the tightness test.

In addition, you are required to conduct a Site Check pursuant to OAC 1301:7-9-13(F)(3). The Site Check requires you to conduct either a Tier 1 Source Investigation pursuant to OAC 1301:7-9-13(H), a closure of the UST system pursuant to OAC 1301:7-9-13(F)(3)(b)(II) or source area sampling pursuant to OAC 1301:7-9-13(F)(3)(b)(III), and explained in BUSTR's Technical Guidance Manual (2017). The appropriate Site Check report must be submitted on or before March 26, 2021.

Please note that it may be necessary to receive prior approval from the fire marshal for the closure or removal of an UST system or portion of the UST system.

Evidence has confirmed that a release continues to occur, therefore, immediate corrective actions shall be performed in accordance with OAC 1301:7-9-13(G).

You may be also eligible to receive reimbursement for the costs of corrective action from the Petroleum Underground Storage Tank Release Compensation Board. Please contact that office at 614-752-9963 for more information.

Bureau of Underground Storage Tank Regulations
8895 East Main Street
Reynoldsburg, OH 43068 U.S.A.

614) 752 7978
Fax: 614) 752 7942
TTY/TDD: 800) 750 0750
www.com.ohio.gov

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BUSTR

CINCINNATI city of
FIRE & RESCUE

December 30, 2020

First Stop Real Estate LLC
4501 West Eight Street
Cincinnati, OH 45238

Buta Singh
First Stop Mini Mart
4501 West Eight Street
Cincinnati, OH 45238

Re: Repair UST Fuel Line & Permit Revocation at 4501 W. 8th St, a premise within the City of Cincinnati, OH

Dear Mr. Buta Singh,

This letter shall serve as an Order by the Cincinnati Fire Department to REPAIR the UST (Underground Storage Tank) Tank 3 Premium fuel line to dispensers located at 4501 W. 8th St. within 30 days. Stop all refueling activities immediately. In addition, the revocation of operational permit FC20200023 Ohio Fire Code (OFC) code section 105.6.16 for the storage of flammable and combustible liquids due to permittee failed, refused or neglected to comply with orders or notices duly served in accordance with the provisions of this code within the time provided by BUSTR (Bureau of Underground Storage Tank Regulations).

Cincinnati Fire Prevention Code (CFPC) 1201-45. Stop Orders.
The fire chief may issue a notice to stop any work, activity or operation regulated by the provisions of this code for any of the following reasons:

- (a) Whenever there is a violation of any provision of this title, any ordinance of the city or statute of the state relating to the same subject matter;
- (b) Whenever the continuance of any work, activity or operation becomes dangerous to life or property;
- (c) Whenever there is a violation of any conditions on which the issuance of a permit was based;
- (d) Whenever, in the opinion of the fire chief, the person having charge of the work activity or operation is incompetent.

Ohio Fire Code 105.5 Revocation. The fire code official is authorized to revoke a permit issued under the provisions of this code where it is found by inspection or otherwise that there has been a false statement or misrepresentation as to the material facts in the application or construction documents on which the permit or

CFD

METROPOLITAN SEWER DISTRICT
of greater
CINCINNATI

January 26, 2021

Buta Singh
Owner
Fast Stop Mini Mart
4501 West Eighth Street
Cincinnati, Ohio 45238

Dear Mr. Singh:

Your company is in violation of the Metropolitan Sewer District (MSD) Rules and Regulations. The following table summarizes the violation(s) and proposed penalty:

Description of Violation	Proposed Penalty
10/04/2020 Section 1502.1 B.1 Prohibited Discharge Standards - discharge of pollutants that create a fire or explosive hazard	\$3,500.00
10/04/2020 Section 1502.1 B.6 Prohibited Discharge Standards - discharge of petroleum oil	\$1,200.00
10/04/2020 Section 1502.1 B.7 Prohibited Discharge Standards - discharge of pollutants that result in toxic gases, vapors or fumes that may cause acute worker health and safety problems	\$3,500.00
10/04/2020 Section 1502.1 B.9 Prohibited Discharge Standards - discharge of meteorous liquids that cause a public nuisance, hazard to life, or prevent entry into sewers for maintenance or repair	\$3,500.00
10/04/2020 Section 1506.6 A Reports of Potential Problems - Failure to notify the District of the incident immediately including corrective actions taken by the User.	\$300.00
10/04/2020 Section 1506.6 B Reports of Potential Problems - Failure to submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the User to prevent similar future occurrences within five days.	\$300.00
10/04/2020 Section 1506.6 C Reports of Potential Problems - A notice shall be permanently posted advising employees who to call in the event of a discharge.	\$300.00
Total Proposed Fine	\$12,600.00

Section 2301 of the Metropolitan Sewer District Rules and Regulations requires your company to respond to the violation described above on the enclosed form. The response is due back to the Metropolitan Sewer District within fifteen days of the date of this letter. You are required to take the actions necessary to ensure that your company complies with the Metropolitan Sewer District's Rules and Regulations at all times. Failure to do so will subject your company to escalated enforcement actions, which may include further penalties and administrative orders. The above penalties will be invoiced 45 days from the date of this letter.

The Metropolitan Sewer District has scheduled a Compliance Alignment Meeting (CAM) for February 17, 2021 at 10:00 a.m. This CAM will be held as a teleconference call. You will be contacted by your case manager at that time. The purpose of the CAM is to develop effective and enforceable compliance orders with implementation schedules containing milestone dates. In addition, your company is expected to bring to this meeting a Remedial Action Plan or a Best Management Plan with milestone and action dates that will prevent violations in the future.

Management AWARD

1600 Gest Street • Cincinnati, Ohio 45204
P 513 244 1300 • www.msdgc.org

MSD

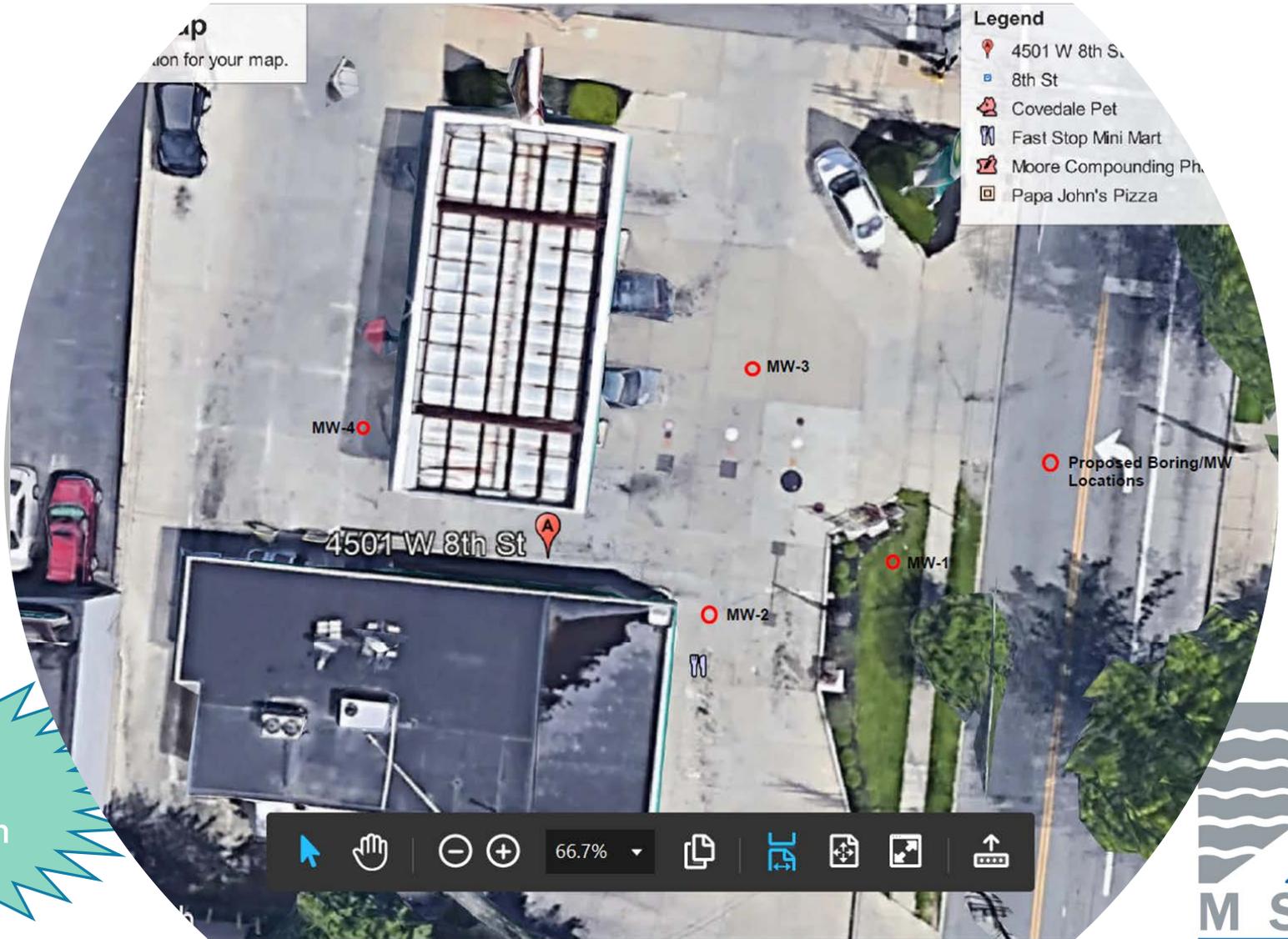
MSD issued an NOV on 1/26 & will a virtual Compliance Assurance Meeting on February 17th @10am with Fast Stop, LLC.



BUSTR Tier 1 Investigation: begun & ongoing with upgrades to station

On 12/28 BUSTR ordered tank tightness test which determined the gasoline leaked from a fuel line at the dispenser island.

BUSTR Tier 1 Investigation Triggered



- Jan 21st-Jan 27th and 28th
 - Tank tops uncovered as a first step to repairs to tank system
 - Dispensers removed.
 - Pea gravel vacuumed off tank tops (photo to right)
 - Concrete taken off product



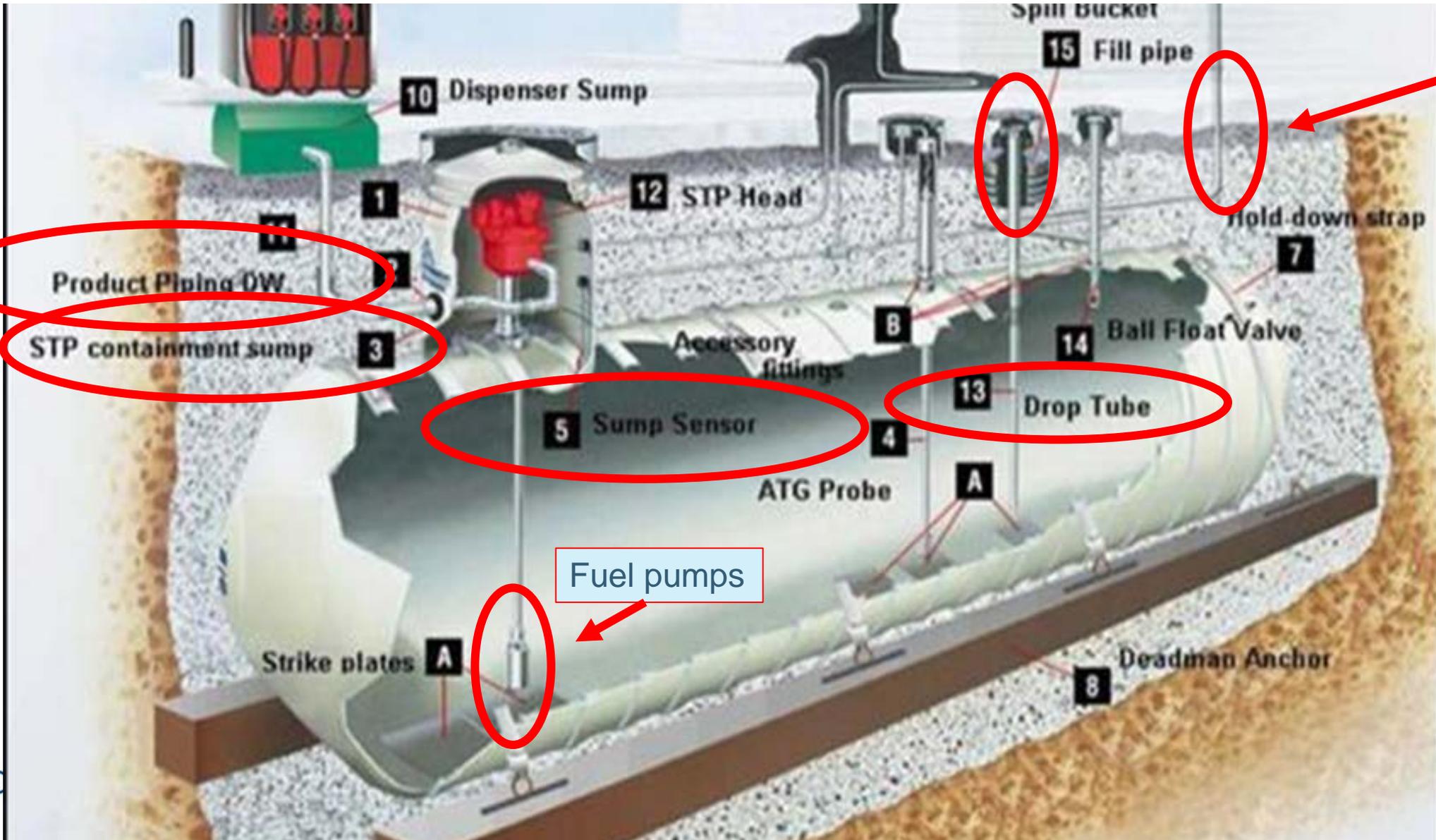


- Jan 29th: Product piping removed (photo to right).
 - Impacted soil excavated from product line trench, and soil samples from trenches submitted for lab analysis.
 - Cincinnati Fire Dept. onsite to witness soil sampling and inspect excavation.
 - Third attempt to install vapor recovery well – again, issues include slumping pea gravel and small worksite / conflicts with new piping installation.
- Feb 2nd: Impacted soil sent off-site to regulated landfill.

Cross-section of UST & monitoring systems...

New components being upgraded or added to existing tank system

New wiring and conduits to UST components and fuel dispensers



Pump, pipe, sump & monitoring system upgrade/replacement

- New (added) Double-walled Piping
- New Electric from tanks to dispensers
- New (added) containment under dispensers & spill buckets with a sump pump and monitoring components



Installation of double wall product piping and under dispenser secondary containments



Installation of Fuel Pump Secondary Containments and Spill Buckets

COMMUNITY OUTREACH & COMMUNICATION

In coordination with

CFD

MSD

CMO

DOH (City & State)

OES

Ohio EPA

USEPA

BUSTR

Community Outreach & Communication

FYI Memo: 12/29/20

West Price Hill Gasoline Leak

Community Safety

- The Cincinnati Fire Department continues to monitor the air in homes and businesses in the area upon request.
- Streets that were impacted by fumes include portions of West 8th Street, Overlook Avenue, Pedretti Avenue, Hermosa Avenue, Carnation Drive, Cappel Drive, and Schulte Drive.
- The U.S. EPA took air samples inside several area homes and businesses on December 28-29. Those properties will be receiving a letter from the Ohio Department of Health with the results.
- Drinking water has not been impacted by this leak. If you have questions about your drinking water, please contact GCWW at (513) 591-7700.
- If you are continuing to experience fumes in your home, please take the following actions:
 - Stop using ignition sources such as candles, matches, gas stoves, cigarettes, lighters, and any other flaming devices.
 - Run water in basement floor drains to reduce fumes and odors in the home. If the drains don't have a trap (U-shaped portion of the pipe), they should be plugged to stop odors from entering homes.
 - Crack windows to reduce fumes that may cause irritation.
- If you have health-related questions, please contact the Cincinnati Drug & Poison Control Center at (513) 838-5111. If you have an immediate health concern, or are experiencing symptoms such as headaches, dizziness, loss of coordination, euphoria, nausea, or disorientation, please contact your medical doctor or call 911.

Emergency Response/Immediate Corrective Action

Here is the current status update:

- Beginning the week of January 25, M&M, a local contractor, will install an upgraded piping system, including double-walled fuel lines with containment sumps at the tanks and gasoline dispensers. The sumps



PRESS RELEASE

FOR IMMEDIATE RELEASE
December 26, 2020

MEDIA CONTACTS:
Deb Leonard at (513) 316-7510 (mobile), or Deb.Leonard@cincinnati-oh.gov
Cathy Ritter at (513) 352-5248 or Catherine.Ritter@cincinnati-oh.gov

Cincinnati Fire Department and MSD Respond to Gas Spill Into Sewer System in West Price Hill. Impacted residents should take action to reduce odors and stay safe.

CINCINNATI – The Metropolitan Sewer District of Greater Cincinnati (MSD) and Fire Department are responding to a potential gasoline leak into the sewer system in West Price Hill. The fire department was alerted by area residents who noticed odors in their homes.

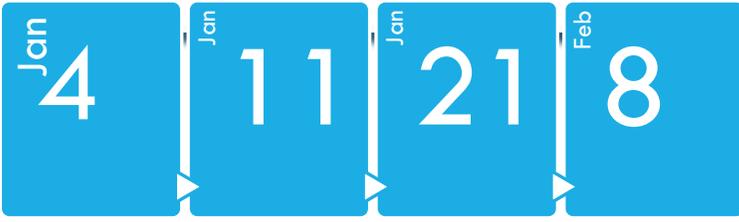
The leak reportedly occurred on December 24, potentially from a gas station. As part of an investigation into the source of the spill, the BP gas station at the intersection of West 8th Street and Pedretti Avenue is closed and is emptying its underground storage tanks. Several gallons of fuel may have entered the sewers. Impacted streets include Carnation Drive, Cappel Drive, and Hermosa Avenue.

MSD has been flushing the sewers with water since December 24 to try to knock down the odors and dilute the spill. Flushing was temporarily halted on December 25 due to cold temperatures but resumed today and will continue into the evening and beyond if needed.

It is advised that homeowners on the identified streets above should take the following precautions:

- Limit ignition sources such as candles and any other flaming devices.
- Run water in basement floor drains to reduce fumes and odors in the home. If the drains don't have a trap (U-shaped portion of the pipe), they should be plugged to stop odors from entering homes.
- Crack windows to reduce fumes that may cause irritation.

West Price Hill Gasoline Leak Community Zoom Meeting 1/21/21



Next Zoom Q&A: March 8

Webpage created 1/4/21
www.msdbg.org/gasleak



Community Outreach & Communication

Ohio EPA was onsite on 12/28 as part of initial response and brought in USEPA to assist with indoor air quality assessments & assist with ventilating the sewers.



Volatile Organic Compounds

Volatile organic compounds (VOCs) are a class, or group, of chemicals that evaporate easily. Exposure to certain VOCs may cause harmful health effects.

What are VOCs?

Volatile organic compounds (VOCs) are potentially hazardous gases that are emitted into the air from products or processes. Most VOCs have a strong odor that can be sweet and pleasant or foul and unpleasant. At room temperature, VOCs are usually a colorless gas.

VOCs are emitted, or released, by many common household products such as paints and stains, pesticides, new carpet, wood floors, cosmetics, and hairspray. VOCs are also released by gasoline, burning wood and other fuels, and by smoking cigarettes. Some common VOCs include:

- Acetone, found in nail polish remover, furniture polish, and some hobby chemicals.
- Benzene, found in paint, glue, and carpet. It also is released by gasoline and smoking cigarettes.
- Formaldehyde, found in flooring and some cosmetics.
- Ethanol, found in household cleaners and laundry detergents.
- Naphthalene, found in mothballs and other pesticides. It also is released by smoking cigarettes.
- TCE, found in degreasers, fabric cleaners, glues and markers.

For more information about individual VOCs, visit [ATSDR's Toxic Substances Portal: "Volatile Organic Compounds"](http://www.atsdr.cdc.gov/substances/) at www.atsdr.cdc.gov/substances/.

Can VOCs cause harmful health effects?

Yes, exposure to VOCs can cause a range of possible harmful health effects.

VOCs are a class of chemicals, not a single chemical. The health effects they could cause will depend on the exact exposure. Some VOCs are known to be highly toxic while others have no known health effects.

Because VOCs create strong odors, even relatively low levels can cause eye, nose and throat irritation, headaches, nosebleeds, fatigue (tiredness), nausea, and dizziness. Some people may experience an allergic skin reaction, such as itching, rashes or hives. People with asthma and other lung illnesses may have their conditions aggravated by exposure to VOCs.

Exposure to very high levels of VOCs may cause damage to the liver, kidney, or central nervous system (brain and spinal cord). High levels may also cause vision and memory problems.

VOCs are a class of chemicals, not a single chemical.

Some are known to be highly toxic while others have no known health effects.

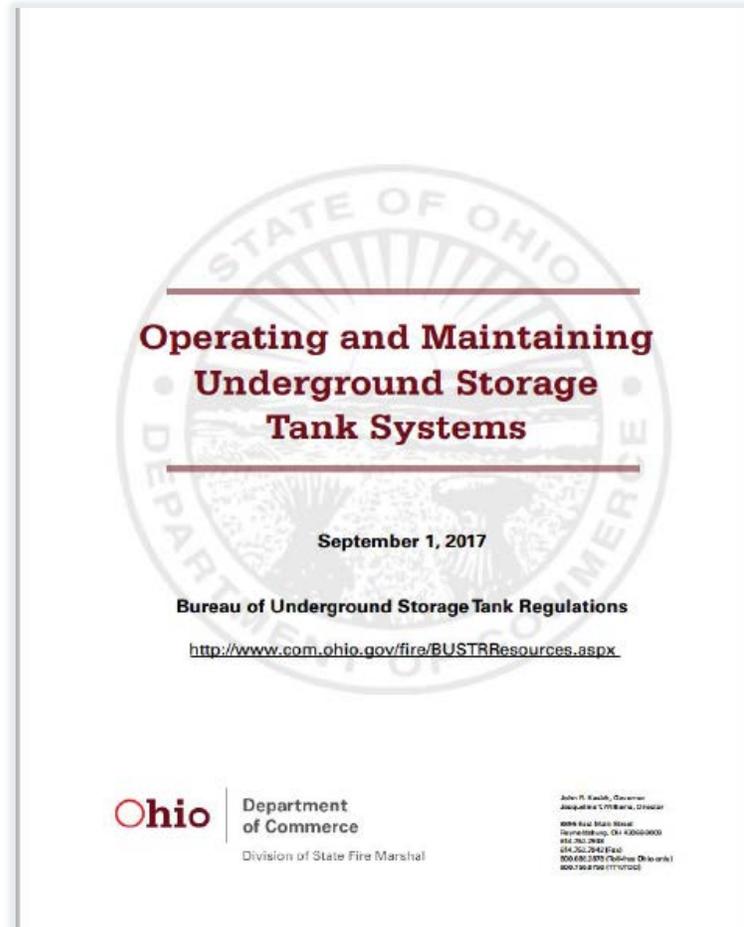
Bureau of Environmental Health and Radiation Protection

Ohio Department of Health

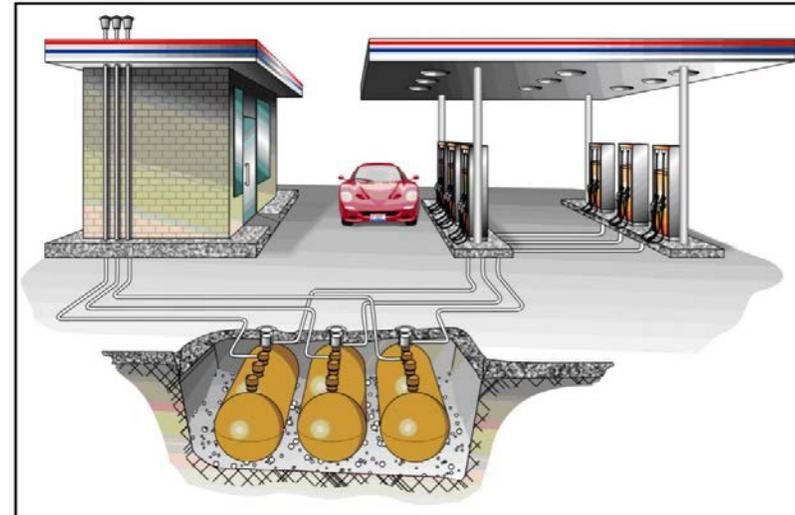
City & Ohio DOH were onsite and available to assist residents to discuss air quality levels & consider options.

- A VOC factsheet was developed and is posted online.
- Residents were given contact info to follow up with DOH.
- Sample data was provided verbally upon request.

Proper Operation & Maintenance of System is critical



BUSTR developed guidance for Gas Station owners on property O&M. Resources like this should be more widely known and used by station staff.



Next Steps

- BUSTR is responsible for determining station compliance with BUSTR regulations when work is complete, including tightness testing. ATC anticipates another 3 +/- weeks of work.
- CFD continues to be onsite to inspect all work completed when repairs or replacements are being made. CFD remains available for checks on indoor air quality.
- MSD will hold a Compliance Assurance Meeting on the discharge of flammable materials, etc. outlined in NOV on February 17th
- CFD has committed to inform the Community prior to issuance of operational permit.
- After action evaluation/report to capture lessons learned and areas of improvement.



Next Zoom Meeting: March 8



Questions?

For updates and more information, please visit:

www.msdbg.org/gasleak

End of slides