25 February 2024

Rodney L. Lusk Franconia District Supervisor Franconia Governmental Center 6121 Franconia Road Alexandria, VA 22310

#### RE: Community Requests Regarding Franconia Governmental Center

Dear Supervisor Lusk:

We, the undersigned associations, are aware that the Board of Supervisors would like to transfer the Franconia Governmental Center property to the Redevelopment and Fairfax County Housing Authority (FCRHA) for the purpose of building affordable housing. We are writing to share with you and the Board the community's concerns regarding the process being planned to determine this property's future use and the Board's preferred use. We have several specific requests regarding that process and the proposed development options.

#### To summarize our requests:

- 1. <u>Community engagement meetings with you (not FCRHA)</u> All parties acknowledge that the public outreach on this matter was inadequate (see the timeline of events in Enclosure 1). Therefore, extensive public engagement is needed, and we request that this engagement be organized and conducted by you not the FCRHA.
- 2. Explore all development options Alternative (non-residential) uses for this property have never been considered. Multiple community-serving organizations critical to the Franconia area are interested in this property, such as the Franconia Volunteer Fire Department and Koinonia (Franconia's non-profit food pantry/relief group). All possible uses and options for the property should be considered after meetings where other interested organizations share their vision, and the public shares their preferred uses.
- 3. Conduct a full environmental and health impact assessment before holding community meetings The public has not had a chance to review environmental concerns and any negative impacts to users; this review is important given this site's extensive history of health concerns, including high cancer rates for those working on the property (see Enclosures 2 & 3) and guidance from the Centers for Disease Control and Prevention (CDC) website as well as other prominent municipal and health organizations (see Enclosure 4). We request that the County conduct a full environmental and health assessment (including Benzene exposure) to determine all viable potential uses, including non-residential, and share all findings starting at the first official Franconia District community engagement meeting.

#### 1. Community Engagement:

As a result of the Board's discussion at the January 23, 2024 public hearing, we were looking forward to your office scheduling community meetings where members of the public could share their preferences for alternative uses for this taxpayer-owned property. We further expected any non-residential ideas resulting from that community engagement to be duly considered.

Instead, we are concerned because we have been told the FCRHA has been tasked with planning community outreach meetings regarding this property. If the FCRHA conducts the community outreach meetings, the focus of the meetings will be on using the property for a specific (residential) purpose. We believe that your office should plan and engage in the community outreach before the FCRHA has any further involvement.

We are willing and eager to work with you in scheduling robust public engagement opportunities where residents can freely share their concerns about the proposed development and offer ideas for alternative uses for this property. Those closest to a space are often best able to identify its ideal use(s) to create a win-win solution. Engaging with the community early as a partner versus an adversary will also ensure full community support in the end.

Therefore, our first request is that you (not the FCRHA) hold community outreach meetings regarding this site. We believe it would be most appropriate for you as the Franconia District Supervisor to conduct community outreach meetings as any meeting led by the FCRHA would (naturally) be focused on residential use for this property and would be perceived as such. We believe your office should plan these robust public engagements where residents can share all ideas. We respectfully request a minimum notice of three (3) weeks prior to any scheduled meetings to give us time to inform our members so that they have the opportunity to participate.

#### 2. Exploring all development options to optimize addressing the needs of the community:

While building affordable housing is a worthy goal, our objections to the current plan for this property are fourfold:

- 1. It is taxpayer-owned property. Development and use of the property should involve all members of the community and ensure that taxpayer needs are prioritized and heard.
- 2. There is evidence that the property is unsafe for residential use due to the proven health risks of benzene exposure and this property's location, as well as this site's deeply troubling history of high cancer rates. Alternative options must be weighed appropriately.
- 3. It appears that no alternative uses were considered, so we as the tax-paying members of the community are not confident that our needs have been included in the process or that the Board has examined a sufficient number of options to determine the highest and best use for the property. This particular area of the County lacks any emphasis on the many other aspects of what makes a "community" more than in name only. Facilities for recreation, education, engagement, teen activities, counseling, Franconia Volunteer Fire Department support, and charity are only some of the many possibilities. What is

particularly intriguing is that we have a ready-made complex that - for very little investment - can bring so much more to the community, so all alternatives should be considered.

4. There are already numerous ongoing projects that are either underway, have been approved, or are situated for future approval that will bring thousands of new residences (including affordable housing) into our community.

There are significant other options available to use this property for the public good. Public hearing comments revealed interest from other entities, like the Franconia Volunteer Fire Department, which is critically important to the community and currently experiencing significantly increased call volume as a result of the increasing population. As we heard, the Franconia Volunteer Fire Department is facing great challenges in their call response due to outdated facilities they outgrew long ago based on the additional staff required to man the station. In addition, members of the public have expressed interest in recreational amenities, and we believe they merit serious consideration given the rate households are being added to the area and the loss of long serving amenities like Top Golf. County agencies other than the FCRHA should be solicited to determine if they have any interest in the property.

In addition to County and quasi-County entities, there are other community-serving organizations that noted their interest in the property. Koinonia, for example, does invaluable work in the community through their food bank and other efforts; however, at this time they are critically limited in their work by their great need for additional space. Therefore, community-serving organizations like Koinonia should likewise be solicited for interest in this property.

We are aware that a number of outside groups with a particular interest and emphasis on housing have gotten deeply involved in the proposed plan and are proponents for turning this property into affordable housing. While those outside groups are, of course, entitled to share their opinions, we trust that you will give the proper consideration to the wishes of those of us who live closest to this property and are therefore most affected by its use.

## 3. Conducting a full environmental and health impact assessment before community engagement meetings will determine viable potential uses:

Given the history of high cancer rates in those working on the site and future health concerns (see Enclosures 2, 3 & 4), the County must conduct a full health risk assessment to determine the environmental safety/suitability of the site for residential and other possible uses <u>before</u> any community meetings are held. Reviews by the Fairfax County Health Director and Chief Equity Officer should be included to deliver the taxpayers maximum confidence in the environmental and health impact assessment, which will help inform the community meetings as to which potential development options would be safe and therefore viable.

The following site adjacencies are likely key contributors to the environmental issues:

- Directly adjoins Gas Station #1
- 100 feet from Gas Station #2
- 150 feet from Gas Station #3

- 415 feet from Gas Station #4, and
- just over 550 feet from Gas Station #5.

Completing a full health risk assessment before holding community engagement meetings will assure the public that any future use for this property will not put the community (children or adults) at risk of related future health problems. It would also eliminate any wasted effort of developing and considering uses that could later be deemed as unsafe.

Enclosure 4 is a brief summary of some research regarding the greatly increased health risks resulting from residential proximity to a gas station and the resulting benzene exposure. For example, the enclosed research contains points such as:

- Benzene is a known human carcinogen, and there are no safe levels of benzene exposure.
- Benzene exposure causes leukemia, specifically acute myeloid leukemia (AML).
- Childhood leukemia is associated with residential proximity to gasoline stations.
- The World Health Organization reports that indoor concentrations of benzene are commonly higher than concentrations in outdoor air as a consequence of the entry of benzene from outdoor sources such as gas stations.

If the plan is to use this site for affordable housing, it is even more critical to thoroughly investigate environmental health impacts given that the County's Chief Equity Officer has shared that low-income individuals have generally been more likely to live in environmentally unsafe housing conditions. We know you share our belief that Fairfax County should not create environmentally unsafe affordable housing, particularly given our One Fairfax policy where all decisions are supposed to be made with an equity lens. Therefore, we believe that both the County's Health Director and Chief Equity Officer should be involved in determining this property's suitability for various uses, including residential.

In summary, we believe your constituents will be best served by taking additional time to conduct robust health and environmental assessments and then to engage the community appropriately, which we believe will drive the best options possible for this taxpayer-owned property. We trust that you and the Board will respond in the best way possible to this letter and the requests herein.

We look forward to your response and hope that we are able to assist you in planning robust community engagement meetings after a health risk assessment has been conducted to determine the property's suitability for various uses.

Thank you very much for your consideration.

(signatures begin on following page)

Michael & Sanarche

Michael Lamarche

President, Board of Trustees

Kingstowne Residential Owners Corporation (KROC)

958 Komich

Lee Komich President

North Franconia Civic Association

Elise Sml

Elise Swinehart

President

Brookland-Bush Hill Civic Association

Carl Sell President

Rose Hill Civic Association

Gail Nittle President

Springfield Civic Association

Juliana Sharp

President

Virginia Hills Citizens Association

(Signatures continue on next page)

(Signatures continue on next page)

Kevin Chen

President, Board of Directors

Gunnell Estates Homeowners Association

Brian Haug President

Valley View Manor Homeowners Association

Eric Anderson

President, Board of Directors

Chancery Condominium of Kingstowne's Association

Michael P. Giardina

Michael Giardina President, Board of Directors Stratford Place at Kingstowne Michael Giardina

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Digitally signed by Michael Giardina

email=Mike.Giardina1011@gmail.co

Tom Sachs

Land Use Representative

Townes at Manchester Park

Jane Kelly

Land Use Representative

Hawthorne Development

(Signatures continue on next page)

Daine Audurg

Elaine Anderegg

Land Use Representative

Franconia Forest Homeowners Association

**Enclosures:** 

(1) Timeline of Franconia Governmental Center Events

(2) WJLA ABC News "Panic sets in at Fairfax County Police station after spike

cancer rates", 11 May 2015

(3) WJLA ABC News "Fairfax County Police to change health screenings after 7

On Your Side investigation", 7 July 2015

(4) Benzene exposure research

CC

**Board of Supervisors** 

Chief Equity Officer Karla Bruce

Health Director Dr. Gloria Addo-Ayensu

Redevelopment and Housing Director Tom Fleetwood

(Enclosures 1-4 start next page)

# **Enclosure 1: Timeline of Franconia Governmental Center Property Events:**

#### o Prior to March 9, 2021:

- The ad for the public hearing ran twice in the Legal Notices section of the *Washington Times*; there was no other notice provided to the community from any other source.
- No yellow sign notices were on property or letters sent to residents because such notice is not required for disposition of County-owned property (unlike a Comprehensive Plan amendment or zoning matter).
- There was no notice of the March 9, 2021 public hearing in the "Lusk Report" newsletters sent to residents.

#### o March 9, 2021:

- Board of Supervisors voted (or attempted) to transfer Franconia Govt Center to Redevelopment and Housing Authority to be turned into affordable housing.
- This is a link to the <u>video of the March 9, 2021 public hearing</u> where the Board of Supervisors originally voted to convey the property to the Redevelopment and Housing Authority. This matter is the 2nd to last hyperlink on the agenda.
- http://video.fairfaxcounty.gov/player/clip/2019?view\_id=7&redirect=true
- The relevant portion of the video begins at 3:29:21 (out of 8:38:00). The public hearing portion ended around 3:34:41, at which point Supervisor Lusk spoke and made his motion. The entire Board voted unanimously to approve, and the entire matter was completely over by 3:40:23 (entire matter was approximately 11 minutes from start to finish).
  - There were zero public comments at the public hearing, probably because residents knew nothing about the public hearing.
  - At the public hearing, the Board of Supervisors did not consider any alternative use for the property other than affordable housing.

#### o Mid-March 2021:

- A resident read this article in the Patch, found out about the transfer, and started to spread the word.
- https://patch.com/virginia/kingstowne/affordable-housing-possible-franconia-governmental-center?utm\_term=article-slot-1&utm\_source=newsletter-daily&utm\_medium=email&utm\_campaign=newsletter
- o March 25, 2021: A then-member and current Board member of North Franconia Civic Association) called:
  - Supervisor Rodney Lusk's office and left message for Supervisor Lusk.
  - Chairman McKay's office, left message with male receptionist to have "Lindsey" return call & also left voice mail for "Lindsey."
  - NOTE: That resident never received a call back from anyone in Chairman McKay's office.

- o <u>March 26, 2021:</u> The same resident received a call from Matthew Renninger, Supervisor Lusk's then chief-of-staff.
  - During the conversation, Matt tried to assure the resident that there would be plenty of
    opportunity for public comments in the future and that it was just the beginning of the
    process.
  - The resident shared that residents wanted other uses considered and remained upset because any public comments in the future would only be allowed about \*\*\*housing\*\*\* - not any other uses for the site.
- Spring & early summer 2021: Numerous residents called and emailed to express their disapproval of the plans for the site and particularly that they received no notice about the March 9, 2021 public hearing.
- o <u>June 16, 2021:</u> North Franconia Civic Association held Zoom call with Matthew Renninger, Supervisor Lusk's then chief-of-staff, regarding the site.
  - Residents continued to express their great disapproval for the County's plan and the lack
    of notice regarding the public hearing, and residents also shared their desire for a
    different use of the site.
  - The Zoom call satisfied no one, and residents requested a meeting with Supervisor Lusk.
- August 4, 2021: North Franconia Civic Association held an in-person meeting at Franconia Govt Center with Supervisor Lusk and Franconia District Planning Commissioner Dan Lagana.
  - The crowd was very animated and delivered the overwhelming message that residents did not approve of the plan to use the site for affordable housing, that they wanted a different use for the property, and that they were particularly unhappy that they never got to share their opinions about the use of the property.
  - Residents asked for another public hearing since we didn't have a chance to speak at the March 9, 2021 public hearing.
  - Supervisor Lusk repeatedly said that "housing would have to be rejected first" before any other use could be considered because residents missed the March 9, 2021 public hearing.
  - Residents were still dissatisfied.
- September 18, 2021: North Franconia Civic Association held their annual picnic where Supervisor Lusk spoke on a variety of subjects, including the County's plan to use the Franconia Governmental Center property as housing.
- October 27, 2021: After continued complaints from residents regarding the lack of public outreach, North Franconia Civic Association held an in-person meeting with Supervisor Lusk and Redevelopment and Housing Director Tom Fleetwood at Franconia Elementary School.
  - Many residents expressed great interest in using this taxpayer-owned property for something other than housing.
  - Residents were always told, however, that the property's use as housing would have to be rejected before any other use could be considered.

- Residents were told no other uses would be considered because we missed the opportunity to comment at the March 9, 2021 public hearing,
- Residents remained dissatisfied but had no recourse other than to wait for any future public hearings.
- o <u>2022</u> and most of <u>2023</u>: No contact with residents. Franconia District Land Use Committee members were advised that the "Franconia Triangle" had been added to the SSPA process.

#### o November 21, 2023:

- At Board of Supervisors meeting held TWO DAYS before major public holiday (Thanksgiving), the Board set December 5, 2023 public hearing date to re-validate the March 9, 2021 transfer of the Franconia Govt Center property.
- The Board of Supervisors addressed the new public hearing via administrative item #16 at the November 21, 2023 meeting.
- https://video.fairfaxcounty.gov/player/clip/3117?view\_id=7&redirect=true&h=84e89ef90
   600bbd4cc61941e68990b3a (link to video)

\*\*\*Residents were never notified about the December 5, 2023 public hearing - - - despite 3 meetings with NFCA in 2021 where residents asked for another public hearing and expressed disapproval of the planned residential use and great dismay as a result of missing the March 9, 2021 public hearing where the Board originally attempted to transfer the property.\*\*\*

- November 23, 2023: Lusk Report (newsletter) #103 contains zero notice of December 5, 2023 public hearing. https://conta.cc/3QPLDOn\_
- November 24, 2023: An alert resident of a different civic association notified a member of the North Franconia Civic Association about the announcement of a December 5, 2023 public hearing in the Legal Notices section of the Washington Times. That resident shared information with the NFCA Board members.
- Week of November 27 to December 1, 2023: North Franconia Civic Association, Kingstowne Residential Owners Corporation (KROC) and 10 other HOAs or civic associations contacted Supervisor Lusk to request a delay of the December 5, 2023 public hearing.
- o <u>December 1, 2023</u>: <u>Supervisor Lusk agreed to delay of December 5, 2023 public hearing until January 23, 2024.</u>

\*\*\*No contact with residents occurred from December 1, 2023 to January 23, 2024. KROC sent a letter on 18 January outlining community concerns supported by a survey of the North Village and requested a meeting with Supervisor Lusk on 22 January after not receiving a response. During the meeting on 22 January, Supervisor Lusk indicated that it was his plan to turn over communications for the site to Tom Fleetwood and the RHA despite local residents' concerns that other development options were not considered like nonresidential. \*\*\*

- January 23, 2024: The Board of Supervisors held a public hearing regarding the transfer of the property to the Redevelopment and Housing Authority to be turned into affordable housing.
  - https://patch.com/virginia/kingstowne/fairfax-co-defers-decision-franconiagovernmental-center-property
  - During the public comment portion of the hearing, numerous speakers expressed that:
    - This is taxpayer-owned property, and the taxpayers never got a chance to share how they want this property to be used.
    - The site is unsafe for residential use due to its location next to a gas station and near 4 others given that benzene exposure increases the risk of leukemia.
    - The Board of Supervisors should consider other uses for the property since no other uses were ever considered.
  - The Board of Supervisors voted to defer the public hearing until March 5, 2024.
    - NOTE: March 5, 2024 is Election Day (primaries), and some residents were already scheduled to work at the polls. Those residents will not be able to participate in the March 5, 2024 public hearing unless it is deferred.
- O January 25, 2024: Kingstowne Residential Owners Corporation (KROC) sent a letter to Supervisor Lusk thanking him for his support on 24 January, stated that Kingstowne looked forward to a community engagement, and offered the Snyder Community center as one of the several venues that could support an event.
- o <u>January 31, 2024</u>: Kingstowne received an email from Deborah Claire which:
  - Thanked Kingstowne for the Letter and offer for an community engagement venue.
  - Stated that a BOS decision on the site would be reschedule to later in March or early April.
  - Communicated that any community engagements for the site would be organized and led by the FCRHA.
- o <u>January 23, 2024 To Date:</u>
  - Franconia Residents have received no notification of a community engagement forum for the Franconia Government Center site.
  - There has been no mention of community engagement plans on Supervisor Lusk's Facebook page, in the Lusk Report, or any other means of correspondence.

## Enclosure 2: WJLA ABC News 7

# "Panic sets in at Fairfax County Police station after spike cancer rates" 11 May 2015

https://wjla.com/news/local/panic-sets-in-at-fairfax-county-police-station-after-spike-in-cancer-rates-113871

ANNANDALE, Va. (WJLA) - Panic has set in at a Fairfax County Police station after an alarming number of employees, including police officers, have been diagnosed with cancer.

For 16 years, Steve Szakos worked the streets of Fairfax County as a police officer. But it's the work he did inside the Franconia Police Station that's scared him most. It's a 25-year-old building that's recently earned a chilling nickname.

"The Franconia Cancer Station," recalled Szakos.
"I've never been more afraid of dying in my life."



7 On Your Side has learned that within the past five years, at least 13 people who work there have battled cancer. All under age 50, three have already died.

Catherine McGowan buried her mother last June. Officer Sally McGowan worked at the station for 15 years. She was 45.

"I don't think it's just a coincidence," McGowan said. "If my mom were still alive she'd be the one up here saying, 'It's time to get out [of that building]."

"We want transparency," stated a firm Szakos. "We want the station tested. We want the personnel tested. We need to know."

Last July, the department did test air and water. 7 On Your Side obtained the results, which called for "no corrective action." But radon, a known carcinogen, was not testedeven though Fairfax County has high levels (EPA). Benzene, a leading airborne carcinogen found in gasoline, was also not testedthis, as the I-Team found a cluster of 12 confirmed leaking underground gas tanks surround Franconia.

Dr. Don Milton studies public health at the University of Maryland.

"It's plausible these could be a cluster related to the building," he said.

Milton says while testing is important, a broader investigation looking at types of cancer and patient medical histories is needed.

"Cancer clusters are the hardest kinds of investigations to do," affirmed Milton.

And the investigation, we've learned, has just begun.

"This is of grave concern to me," said Fairfax County Police Chief Edwin Roessler, with the county health director by his side.

The Franconia Station is the only station in the county where Roessler is dealing with this problem.

With concern mounting, the county has recently stepped up its efforts to solve the mystery. Patient medical records are now being analyzed. Possible toxins associated with police equipment, like vests or gun belts, are also being studied. And three days before Chief Roessler agreed to sit down with ABC7, he sat down with all his Franconia employees to address their grave concerns.

"I've lost good friends to cancer, some of which have worked at this station," said a solemn Roessler. "I'm going to try to do everything I can to work with our partners to determine whether or not there's a problem."

Fairfax County Health Director Gloria Addo-Ayensu is leading the investigation into what's happened. Her team is in the beginning process of solving this mystery by first analyzing current employee medical records.

"We will continue to find more information about these individuals," stated Ayensu. "The goal is to try to make a connection."

The county expects the results of the patient medical records analysis possibly by next week.

### Enclosure 3: WJLA ABC News 7

# "Fairfax County Police to change health screenings after 7 On Your Side investigation" 7 July 2015

https://wjla.com/amp/news/health/fairfax-county-police-to-change-health-screenings-after-7-on-your-side-investigation-115377

FRANCONIA, Va. (WJLA) - The State of Virginia has issued its report on the health of a Fairfax County Police Station. This comes after a 7 On Your Side investigation exposed a large number of employees inside the Franconia Police Station have recently been diagnosed with cancer.

The Fairfax County Police chief has also announced that because of this situation, the department will change how employee health



screenings are conducted and how the work place is tested for hazards.

"He wanted to be cremated so we could have him at the party after the service. So, that's what we did," said Jim Charron, who often laughs when he thinks of his brother, Matt.

"He was just that kind of guy," chuckled Charron.

Two years ago, Matt Charron, a long-time Franconia Station Police Officer died after a three-year battle with Leukemia.

In May, Jim Charron saw a 7 On Your Side story exposing a possible cancer cluster at Franconia where at least 13 people who worked at the station have recently been diagnosed with three losing the fight.

"The numbers certainly suggest there is a huge problem statistically at the station compared to the general population," stated Charron, who also served as a police officer in Fairfax County for 23 years.

One month after the ABC 7 report aired, the Virginia Department of Health released its report. Using the medical records of just seven of the station's cancer patients and no retirees, the state concluded a cancer cluster does not exist. It added the investigation was now complete and said, "a more thorough study would require work that is exacting and demanding, costly and complex."

That conclusion does not sit well with Charron.

"What if we were to say the same thing about a homicide investigation in Fairfax County? – that it was too hard and too complex. What do you think the citizens of Fairfax County would say about that?" asked Charron. "What do you think the victims would say about that? I do not think that's acceptable."

"Cost is not an issue for a human life." Fairfax County Police Chief Ed Roessler agrees with Charron.

In addition to the state report, he has ordered extensive additional testing including for radon and benzene - two known local carcinogens ABC 7's investigation found had not been previously tested. Roessler is also in the process of changing how his department keeps employees healthy.

"Based on what we're seeing a Franconia, as far as illness and death, this is something we need to get better at," admitted Roessler.

Rossler said he is currently working to find better ways to monitor work places for health hazards. He also wanted to conduct regular advanced employee health screenings to catch problems early.

As far as the current testing at Franconia Station, the county expected it last until the fall. The chief said the results will be made public.

## Enclosure 4: Benzene Exposure Research

#### **Synopsis**

- The Franconia Governmental Center property is located next to or near 5 gasoline stations.
- Benzene is a known human carcinogen, and there are no safe levels of benzene exposure.
- Benzene exposure causes leukemia, specifically acute myeloid leukemia (AML).
- Montgomery County, MD requires a 500 ft setback from homes for gas stations selling 3.6+ million gallons of gasoline/year.
- Indoor air is also contaminated from outdoor sources like gasoline stations.
- The CDC advises that people should not allow their families to PLAY near a gasoline station. Presumably it is even riskier to LIVE near a gasoline station.
- Childhood leukemia is associated with residential proximity to gasoline stations.
- Research shows that vent pipes at gas stations released 10 times the amount of benzene previously assumed in the modeling California used when determining gas stations should be located at least 300 ft from sensitive locations like daycare and schools.
- Research also shows that clusters of gasoline stations have increased cancer risk compared to a single gasoline station due to cumulative emissions from individual gas stations.

The Franconia Governmental Center property located at 6121 Franconia Rd is environmentally unsafe for residential use given its location next to or near a total of 5 gasoline/service stations.

According to the CDC, gasoline stations are a major source of benzene exposure. Benzene (in gasoline) is a known human carcinogen. Numerous studies have established the link between even low-level exposure to benzene with increased cancers, particularly leukemia.

#### **Location:**

Franconia Governmental Center shown in green box; red boxes show 5 nearby gasoline station



Google Maps reveals the following about the Franconia Governmental Center property:

- 1. It is <u>next to</u> the Shell gasoline/service station located at 6117 Franconia Rd, which is obviously a distance of 0 ft.
- 2. It is ~100 ft from the Franconia America gasoline/service station at 6134 Franconia Rd, across the street from the property.
- 3. It is <u>~150 ft</u> from another Shell gasoline/service station at 6136 Franconia Rd, which is caddy corner to the property.
- 4. It is <u>~415 ft</u> from the Liberty gasoline/service station located a few parcels away (same block) at 6149 Franconia Rd.
- 5. It is <u>just over 550 ft</u> away from a 5th gasoline/service station in the next block (a BP located at 6201 Franconia Rd).

#### Benzene is a known human carcinogen:

"The Environmental Protection Agency (EPA), the Department of Health and Human Services (DHHS), and the International Agency for Research on Cancer (IARC) have all classified benzene as a Group A carcinogen, which means that it is carcinogenic to humans." Benzene - Environmental Health (virginia.gov)<sup>1</sup>

#### There is no safe level of exposure to benzene:

The World Health Organization Guidelines for Indoor Air Quality include a specific section for benzene and includes extensive information regarding pathways of exposure, sources, health effects, health risk evaluation, etc. A causal relationship exists between benzene exposure and leukemia, particularly acute myeloid leukemia.

Interestingly, the WHO finds that "indoor concentrations of benzene are commonly higher than concentrations in outdoor air as a consequence of the entry of benzene from outdoor sources (such as heavy traffic, petrol stations or industrial sites)."

https://www.ncbi.nlm.nih.gov/books/NBK138708/

Selected excepts (emphasis added):

Health relevance of indoor air exposures

Indoor concentrations of benzene are commonly higher than concentrations in outdoor air (9) as a consequence of the entry of benzene from outdoor sources (such as heavy traffic, petrol stations or industrial sites) and the presence of dominant benzene sources indoors. Indoor sources of benzene are mainly due to ETS, solvent use, building materials, attached garages and various human activities. On the other hand, in some regions unvented heating or cooking are the dominant sources indoors.

Also, the relatively low rates of ventilation typically found in houses and offices prevent the rapid dispersal of airborne contaminants. In areas where cooking and

<sup>&</sup>lt;sup>1</sup> https://www.vdh.virginia.gov/environmental-health/public-health-toxicology/benzene/

heating are provided by open fires in poorly ventilated housing, indoor levels of contaminants, including benzene, may reach high levels.<sup>2</sup>

#### Nearby jurisdiction requires 500 ft gasoline station setback from residences:

Montgomery County, MD previously required that a large filling station that could pump more than 3.6 million gallons per year had to be located at least 300 feet from the lot line of property used for a public or private school; any park or playground; a day care center; or any outdoor use categorized as a civic and institutional use or recreational and entertainment use.

In 2015, however, Montgomery County not only <u>increased the distance between large filling</u> stations and sensitive land uses from the 300 feet to 500 feet, it also added dwelling units to the list of sensitive land uses from which a minimum distance would be required.<sup>3</sup>

#### Families should not live near gasoline stations:

Selected excerpts from the CDC's website containing a Public Health Statement for Benzene<sup>4</sup> (emphasis added):

#### Benzene in the environment:

"Benzene levels in the air can be elevated by emissions from burning coal and oil, benzene waste and storage operations, motor vehicle exhaust, and evaporation from gasoline service stations."

#### Benzene exposure:

"Exposure of the general population to benzene mainly occurs through breathing air that contains benzene. The major sources of benzene exposure are tobacco smoke, automobile service stations, exhaust from motor vehicles, and industrial emissions." ...

"People may be exposed to higher levels of benzene in air by living near hazardous waste sites, petroleum refining operations, petrochemical manufacturing sites, or gas stations."

#### Benzene health effects:

"Benzene causes problems in the blood. People who breathe benzene for long periods may experience harmful effects in the tissues that form blood cells, especially the bone marrow. These effects can disrupt normal blood production and cause a decrease in important blood components. A decrease in red blood cells can lead to anemia. Reduction in other components in the blood can cause excessive bleeding. Blood production may return to normal after exposure to benzene stops. Excessive exposure to benzene can be harmful to the immune system, increasing the chance for infection and perhaps lowering the body's defense against cancer.

<sup>&</sup>lt;sup>2</sup> https://www.ncbi.nlm.nih.gov/books/NBK138708/

<sup>&</sup>lt;sup>3</sup> Montgomery Council extends restrictions on location of large gas stations (montgomerycountymd.gov)

<sup>&</sup>lt;sup>4</sup> Benzene | Public Health Statement | ATSDR (cdc.gov)

Long-term exposure to benzene can cause cancer of the blood-forming organs. This condition is called leukemia. Exposure to benzene has been associated with development of a particular type of leukemia called acute myeloid leukemia (AML). The Department of Health and Human Services has determined that benzene is a known carcinogen (can cause cancer). Both the International Agency for Cancer Research and the EPA have determined that benzene is carcinogenic to humans.

Exposure to benzene may be harmful to the reproductive organs. Some women workers who breathed high levels of benzene for many months had irregular menstrual periods. When examined, these women showed a decrease in the size of their ovaries. However, exact exposure levels were unknown, and the studies of these women did not prove that benzene caused these effects. It is not known what effects exposure to benzene might have on the developing fetus in pregnant women or on fertility in men. Studies with pregnant animals show that breathing benzene has harmful effects on the developing fetus. These effects include low birth weight, delayed bone formation, and bone marrow damage."

#### Children:

"Children can be affected by benzene exposure in the same ways as adults. Benzene can pass from the mother's blood to a fetus. It is not known if children are more susceptible to benzene poisoning than adults."

#### How can families reduce the risk of exposure to benzene?

"Gasoline and cigarette smoke are two main sources of human exposure to benzene. Benzene exposure can be reduced by limiting contact with these sources.

Benzene is a major component of gasoline and used in many manufacturing processes. Increased levels of benzene can be found at fueling stations, and in air emissions from manufacturing plants and hazardous waste sites. Living near gasoline fueling stations or hazardous waste sites may increase exposure to benzene. People are advised not to have their families play near fueling stations, manufacturing plants, or hazardous waste sites."<sup>5</sup>

NOTE: If the CDC website advises that people should not allow their families to PLAY near gasoline stations, presumably it's even riskier to LIVE near a gasoline station.

#### Gas station setback distances due to benzene emissions:

A 2019 study by scientists at Johns Hopkins and Columbia showed that people living and working near gas stations might be exposed to a far higher level of toxic fumes than previously thought. In California, based on cancer risk estimates, the state requires gas stations selling 3.6+

<sup>&</sup>lt;sup>5</sup> <u>https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=37&toxid=14</u> For more details, see the Toxicological Profile for Benzene at <a href="https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=40&tid=14">https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=37&toxid=14</a> For more details, see the Toxicological Profile for Benzene at <a href="https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=40&tid=14">https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=37&toxid=14</a> For more details, see the Toxicological Profile for Benzene at <a href="https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=40&tid=14">https://wwwn.cdc.gov/TSP/ToxProfiles/ToxProfiles.aspx?id=40&tid=14</a>

millions of gas/year to be located at least 300 feet from daycares, schools, and other sensitive uses.<sup>6</sup>

The authors discovered, however, that <u>vent pipes at gas stations released 10 times the amount of benzene than previously assumed in the modeling used to determine how far gas stations should be placed away from sensitive sites. In fact, sensitive land uses at a distance further than 300 feet from the fence line of the gas station would still represent a health concern despite compliance with the CARB guidelines. Note that the study found that benzene emissions from underground gasoline storage tank vents were sufficiently high to constitute a health concern at a distance of up to <u>525 feet</u> (160 m). <u>Vent Pipe Emissions from Storage Tanks at Gas Stations: Implications for Setback Distances - PMC (nih.gov)</u><sup>7</sup> Selected excepts (working links included and emphasis added):</u>

In the US, approximately 143 billion gal (541 billion L) of gasoline were dispensed in 2016 at gas stations<sup>1</sup> resulting in release of unburned fuel to the environment in the form of vapor or liquid.<sup>2</sup> This is a public health concern, as unburned fuel chemicals such as benzene, toluene, ethyl-benzene, and xylenes (BTEX) are harmful to humans.<sup>3</sup> Benzene is of special concern because it is causally associated with different types of cancer. <sup>4</sup> Truck drivers delivering gasoline and workers dispensing fuel have among the highest exposures to fuel releases.<sup>4</sup> However, people living near or working in retail at gas stations, and children in schools and on playgrounds can also be exposed, with distance to the gas stations significantly affecting exposure levels.<sup>5-8</sup> A meta-analysis<sup>9</sup> of three case-control studies <sup>10-12</sup> suggests that childhood leukemia is associated with residential proximity to gas stations.

Sources of unburned fuel releases at gas stations include leaks from storage tanks, accidental spills from the nozzles of gas dispensers, <sup>13–15</sup> fugitive vapor emissions through leaky pipes and fittings, vehicle tank vapor releases when refueling, and leaky hoses, all of which can contribute to subsurface and air pollution.<sup>2</sup> Routine fuel releases also occur through vent pipes of fuel storage tanks but are less noticeable because the pipes are typically tall, e.g., 4 m. These vent pipes are put in place to equilibrate pressures in the tanks and can be located as close as a few meters from residential buildings in dense urban settings (Figure 1).

Regulations on setback distances for gas stations are based on lifetime cancer risk estimates. Several studies have assessed benzene cancer risk near gas stations. 20-25 Based on cancer risk estimations, the California Air Resources Board (CARB) recommended that schools, day cares, and other sensitive land uses should not be located within 300 ft (91 m) of a large gas station (defined as a facility with an annual sales volume of 3.6 million gallons = 13.6 million L or greater). 26 This CARB recommendation has not been adopted by all

<sup>&</sup>lt;sup>6</sup> <u>ARB's Community Health: 2005-04-00 ARB's Air Quality and Landuse Handbook: A Community Health Perspective (aqmd.gov)</u>

<sup>&</sup>lt;sup>7</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7059886/

US states, and within states setback distances can depend on local government. Notably, CARB regulations do not account for short term exposure limits and health effects. An important limitation of existing regulations is the use of average gasoline emission rates estimated in the 90's that do not consider excursions.

AERMOD air pollution modeling suggests that at GS-MW the 1-hour acute REL was exceeded at one grid point 160 m (525 ft) from the center of the gas station once in 20 days (Figure 5). This distance is larger than the 300-ft (91 m) setback distance recommended by CARB for a large gasoline dispensing facility. Assuming the gas station's fence line is less than 225 ft (69 m) from its center (where the vent pipe was assumed to be located), our study shows that sensitive land uses at a distance further than 300 feet from the fence line of the gas station would represent a health concern despite compliance with the CARB guidelines because of non-compliance with the acute REL

#### Heightened risk from multiple gas stations (2021 study):

Clusters of gas stations have increased cancer risk compared to a single station because of cumulative emissions from the individual gas stations. Cancer risk as a function of distance from gas station(s) and as a continuous function of total sales volume can be estimated from an equation the authors developed. For instance, the cancer risk at 40 m for four gas stations each dispensing 1 million gal/year is  $9.84 \times 10^{-6}$  compared to  $2.45 \times 10^{-6}$  for one gas station. From: Benzene emissions from gas station clusters: a new framework for estimating lifetime cancer risk - PMC (nih.gov) <sup>8</sup> Selected excepts (working links included and emphasis added):

During the operation of a gas station, unburned fuel is released from multiple sources, including spills, leaky pipes, leaky dispenser hoses, leaks in underground storage tanks, and underground storage tank venting  $[3-\underline{6}]$ . All of these sources of exposures can contribute to negative health effects due to the toxicity of chemicals in unburned fuel.

Gasoline contains the BTEX group, consisting of benzene, toluene, ethylbenzene and xylenes, all of which are toxic [7–9]. Within the BTEX group, benzene is the sole chemical classified as a human carcinogen [10]; it is a causal agent of leukemia and is associated with non-Hodgkin's lymphoma and multiple myeloma [7, 11]. While the general population experiences low exposure to benzene at gas stations when dispensing gasoline, at-risk populations include those who are occupationally exposed, people that live near gas stations, and children in schools near stations [12–16]. People living near gas stations can be exposed to chemicals from the stations even inside their homes, as modeled by Hicklin et al. [17] in Malta and measured by Barros et al. [18] in Portugal. Additionally, studies suggest that there may be a risk of childhood leukemia associated with living close to gas stations [19–22]. Yet another study concluded that the lifetime cancer risk at and around selected gas stations in Iran exceeded values proposed by the US Environmental Protection Agency (EPA) [23].

<sup>&</sup>lt;sup>8</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8172828/

As cancer risk due to toxic evaporative emissions from a gas station is a function of distance from the gas station [24, 25], regulations in the form of setback distances have been put in place to protect people. In the US, different states have different guidelines for setback distances, and even within states different counties may set their own guidelines. Based on estimations of lifetime cancer risk, the California Air Resources Board (CARB) recommends that new sensitive land uses (such as schools and daycares) should not be sited within 300 ft (91 m) of a large gasoline dispensing facility, where large is defined as having a sales volume of at least 3.6 million gallons per year [26, 27]. On the other hand, a county council in the US state of Maryland approved a zoning amendment that requires gas stations that pump more than 3.6 million gallons of gas per year to be 500 ft. from public and private schools, parks, playgrounds, recreational areas, homes, and environmentally sensitive areas [28].

#### Particular effects of benzene in children:

Findings from the currently available studies reveal that benzene exposure is associated with abnormalities in hematologic, hepatic, respiratory, and pulmonary functions in children. Children at various developmental stages have unique physical risk factors when exposed to environmental toxins including benzene due to their levels of mobility, oxygen consumption, hormonal production, and overall growth. In addition, the toxicodynamic processes that determine exposure, absorption, metabolism, excretion, and tissue vulnerability are all age related. Moreover, children have a higher unit body weight exposure to benzene or other toxins than adults because of their heightened activity patterns and different ventilation tidal volumes and frequencies. Furthermore, children are more susceptible to leukemogenesis because their hematopoietic cell populations are differentiating and undergoing maturation. The incomplete metabolic systems, immature host defenses, high rates of infection by respiratory pathogens, and activity patterns make children more vulnerable to the toxic effects of benzene exposure.

From: Health Risks Associated With Benzene Exposure in Children: A Systematic Review Mark A. D'Andrea, MD, FACRO and G. Kesava Reddy, PhD, MHA, 2018, evaluating and summarizing published studies on the adverse health effects of benzene exposure in children. Health Risks Associated With Benzene Exposure in Children: A Systematic Review - PMC (nih.gov)<sup>9</sup> Note that 47 other studies are cited in References.

Clear association between residential proximity to gasoline stations and a higher risk of childhood leukemia. Steinmaus and Smith Respond to "Proximity to Gasoline Stations and Childhood Leukemia" - PMC (nih.gov)<sup>10</sup>

See also: <u>Parental, In Utero, and Early-Life Exposure to Benzene and the Risk of Childhood Leukemia</u>: A Meta-Analysis - PMC (nih.gov)<sup>11</sup>

22

<sup>&</sup>lt;sup>9</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6100118/#:~:text=on%20pediatric%20populations.-,Findings%20from%20the%20currently%20available%20studies%20reveal%20that%20benzene%20exposure,and%20pulmonary%20functions%20in%20children

<sup>&</sup>lt;sup>10</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6267941/#kww133C1

<sup>11</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4751231/

#### Gas station worker/cancer risk:

Note study regarding increased risk of cancer for gasoline station workers (Franconia Govt Center located next to a gasoline station). "The cancer risk was increased from  $1.35 \times 10^{-8}$  to  $1.52 \times 10^{-4}$ , and 70.67% of the workers had a lifetime cancer risk (>Inhalation Unit Risk (IUR):  $2.2 \times 10^{-6}$ ). A significantly higher risk was found in fueling workers compared to cashiers, and in workers at gasoline stations in inner-city zones (suburban and urban), compared to rural zones." Risk Assessment on Benzene Exposure among Gasoline Station Workers - PMC (nih.gov)<sup>12</sup>

<sup>12</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6678808/