

December 21, 2023

Hon. William Smith Jr. Esq.

Maryland Senate

Transmitted *via* email: [will.smith@senate.state.md.us](mailto:will.smith@senate.state.md.us)

Hon. Lorig Charkoudian

Maryland House of Delegates

Transmitted *via* email: [Lorig.Charkoudian@house.state.md.us](mailto:Lorig.Charkoudian@house.state.md.us)

Re: Sprinkler Mandate

Dear Sen. Smith and Del Charkoudian:

We appreciate meeting with Del. Charkoudian, her Chief of Staff, and the Senator's Chief of Staff on December 14, 2023. We are following up with some points that were discussed and some that we did not get to, and they are as follows:

### **Architectural Firm's Estimate for a Condo Complex in Montgomery County**

We have attached an architectural firm's estimate to install the sprinkler system as currently mandated for a condominium complex located in Montgomery County containing 292 units. The attached file is called: "**4620 North Park Avenue Fire Protection Cost Estimate, Three Phases\_Redacted.**" The estimate does not include hazmat removal or the logistics and costs of displacing residents. The firm proposes a three-phase plan with price escalation and estimates \$19,185/unit including common areas and installation of pumps and other necessary equipment.

Please see our attached report to this letter entitled: "**Installing Sprinklers in Residential High-Rises-2**" for step-by-step procedures and a complete cost picture. In the slide package entitled, "**Fire and Sprinkler Statistics,**" we include cost proposals for five other Maryland properties that belong to our grass roots group, *Residents for Sprinkler Fairness*, as well as statistics on high-rise fires.

### **\$8 Per Square Foot for Installing Sprinklers**

This figure often cited by government officials is unrealistic and we believe applies to empty buildings. A more accurate figure from our research for buildings containing asbestos is \$24.50 per square foot. If the building is occupied, resident displacement costs must be added, and they are substantial!

## Costs to Estimate Sprinkler Installation Project

Our General Manager believes that the actual cost of a professional proposal assessing the cost of a study for our building is between \$50,000 - \$100,000. We prefer not being required to do this, if at all, unless and until an ultimate decision is reached on requirements.

## Reserve Requirements for Condos and Co-ops

State law requires condominiums and cooperatives to set reserves for sufficient funding of infrastructure repairs. For example, The Promenade is now going through a process of relining its 50-year-old cast iron drainpipes rather than replacing them, at a cost that now exceeds \$7 million. We recently replaced our cooling towers at a cost in excess of \$2 million. Meeting Energy Star 2035 requirements to eliminate greenhouse gases may cost \$50 million. If sprinklering is not considered a reserve requirement, then a *special assessment* will be required to comply with the Mandate.

The state law is MD Code, Corporations and Associations, Title 5, Subtitle 6b§ 5-6b-26.1 title “**Powers and duties of governing body of cooperative housing corporation,**” wherein subparagraph (f)(1)(i) states: “Subject to subparagraph (ii) of this paragraph, the governing body of a cooperative housing corporation shall provide funds to the reserve in accordance with the most recent reserve study and shall review the reserve study annually for accuracy.”

## Actual Resident Assessments

Boards of Directors are required to impose monthly fees on condo owners/shareholders to collect funds required in a timely manner. As we advised you, we believe that if mandatory sprinkler installation is required by 2031, construction must start two (2) years prior thereto. If installation including asbestos remediation were to take place, we assume the rate of \$35,000/unit (includes common areas) over a period covering January 2024 through December 2029 (72 months):  $\$35,000/72 \text{ months} = \$486.11/\text{month}$ . These are straight numbers (i.e., no administrative costs or accounting for interest accrual, etc.) and assumes the money must all be in the front, rather than continuously assessing during the 2-year construction period. If we chose to ignore what we believe are the real costs and assume that it would only be \$20K/unit, that is still  $\$20,000/72 \text{ months} = \$277.78/\text{month}$ . Therefore, when we say “impossible” to put this burden on our owners, we mean impossible.

## Sprinkler Alternatives

Delegate Charkoudian made clear that she is exploring alternatives to full sprinklering as we perceive she realizes the cost thereof. Toward her pursuit of alternatives, we present what we understand to be alternatives either accepted or proposed by other cities and groups:

- **Sprinklers in common areas only** (corridors, lobbies, stairwells) at reduced cost to owners and less intrusion
- **Wall-mounted (versus ceiling-mounted) sprinklers** for minimizing asbestos exposure (Unfortunately, our building contains asbestos in both areas, but some buildings may benefit)
- **Sprinkler heads fed by exposed piping** along the joint between ceiling and wall to avoid penetrating walls or ceilings, then hidden inside decorative pipe coverings. This strategy minimizes construction and asbestos exposure, notwithstanding some wall or ceiling penetration still required to mount sprinkler heads. Note that if pipes are visually prominent, the look may be distasteful and disrupt the appearance of rooms and lobbies.
- **Sprinklers using high-pressure mist instead of water.** The Plumis Automist UK system of wall-mounted nozzles uses water supplied from the unit's sink. Heat or smoke sensors trigger the nozzles to seek the fire source. The closest nozzle is chosen to spray the fire, utilizing 1/10 the volume of water used by sprinklers. According to one Plumis salesman, Automist has been installed in a few U.S. single-family residences and won't be NFPA-compliant until next year, indicating that availability for high-rises will not happen until a few more years. Anecdotal estimates for Automist are greater than costs for conventional sprinklers, although a capable fire pump is not required and pipe infrastructure has a smaller footprint. We have seen only wall-mounted nozzle versions with small PVC piping behind walls but have been told that pipes can be wall-mounted.
- **Install one sprinkler head inside the doorway to each apartment unit** and full sprinklering of common areas. This approach can prevent fire from exiting or entering an apartment but would not appreciably improve safety in our building. This is because our safety protocol, as prescribed by Montgomery County Fire Department officials and discussed further on in this letter, requires apartment doors to corridors be firmly closed during fires, which have 3-hour ratings, protecting occupants while inside if the fire is in the corridor, and while outside if the fire is inside.

A link to the *YouTube* video of that meeting may be found here:

<https://www.dropbox.com/scl/fi/o18rg0m9sejsf3s6ghomg/Fire-Prevention-and-Safety-for-The-Prom.pdf?rlkey=eqspgnk6accjmkj5a8gppns6z&dl=0r>

- **Fire extinguishers.** It is commonly believed that fire extinguishers inside each apartment can substantially improve fire safety. Many different types exist, including those effective against grease fires and other materials. However, during our meeting with fire officials, we were advised instead to dial 911 in the case of fire and to tell the operator where we are. Then we are to escape to safety, i.e., leave the unit if fire is inside and shut the front door. If the fire is outside the unit, we are to either go to farthest room from the front door and close the door, or go to the balcony and shut the glass doors.
- **Pressurize stairwells for safe egress during a fire.** Our study shows that stairwells of many older high-rises are composed of cement composites that do not support vertical drilling of pipe holes to carry pressurized air. See our attached report, “**Stairwell Pressurization of Existing Buildings.11.4**” for details.

### **Proof of Fire Safety Achieved with Sprinklers Not Offered by Officials**

At the August 16, 2023, meeting sponsored with the SFPC Commissioner, the State Fire Marshal and other state and County officials [ including Del. Dana Stein and representatives from various elected officials’ offices] it was made clear that government officials **could not produce** statistics regarding the following that further underpins our position that the SFPC acted unreasonably and irresponsibly:

- The number of resident lives potentially saved with full sprinklering. Although we have seen numbers from our own research, hat lives would not be lost if residents comply with fire emergency safety steps. Unlike single-family dwellers, high-rise residents can avoid death during the preponderance of fires because of our construction and monitoring (see the next section on **Older High-Rises Possess Built-in Fire Protections**), and when resident fire safety protocols are deployed, can avoid death entirely.
- The percentage of fire department budgets that would decrease because the fires would be allegedly restrained.
- The number of firefighters lives that would be saved by full sprinklering.

### **Older High-Rises Possess Built-in Fire Protections**

Older Class 1A and 1B buildings like the Promenade are constructed with substantial strategies for limiting the spread of fires within the building. The Promenade possesses:

- Fire-rated doors at each apartment, stairways, mechanical rooms, common areas, and hallways
- Fire-rated walls, asbestos ceilings, and concrete floors
- Standpipe systems in every stairway
- Fire strobes in units and common areas.
- *Sprinkler systems* in trash chutes, boiler room, garages, and the arcade shopping level where we host a grocery store, restaurant and other retail and services located below our lobby level.
- An ADT commercial monitoring system for our fire alarm system operating 24/7, where calls are placed to 911 when an emergency is detected (fire box pulled, corridor smoke detectors or sprinklers triggered)
- Fire doors activated in case of an emergency and all elevators called to the lobby
- Smoke and carbon monoxide detectors in each apartment, not connected to our fire alarm system
- A standby power system for the Promenade’s emergency lighting, exit signs, fire pump, pressure pump, air compressor, emergency command center equipment, elevators, and mechanical system for smoke control

### **High-Rise Fires Are Less Common Than in Single-Family Homes**

It is common knowledge that fewer fires occur in multi-family high-rise buildings than in single family homes. See the attached presentation “**Fire and Sprinkler Statistics**” for details, where we show that 74% of high-rise residential fires occur in the kitchens where grease is the common culprit. Yet water does not put out grease fires, so which problem are we solving here?

### **Fire Safety Presentation by Montgomery County Fire Department Indicates that Safe Resident Actions Can Significantly Reduce Fires and Fire Death**

As we advised during our virtual conversation, representatives of the Montgomery County Fire Department visited The Promenade last October to address fire evacuation and prevention with residents. After acknowledging our building’s numerous high-quality safety measures, the firefighters advised that in contrast to the **Arrive Building** in Silver Spring, The Promenade’s smoke detection devices in each hallway would have detected

smoke particles and set off alarms to the monitoring company, who would have then called 911. In other aspects of fire safety, however, the two buildings are identical. Perhaps shoring up each building's alarm, monitoring and detection systems may be a preferred fire safety measure over installing sprinklers.

### **Spot Asbestos Treatment Versus Full Remediation**

During our conversation we heard mention of “spot” asbestos removal as a possible approach to minimizing asbestos work. Recall that asbestos abatement is an OSHA process of preparing walls or ceilings for safe sprinkler installation and resident life. Asbestos is a toxin that was used previously as a fire-retardant in many construction parts including sheet rock walls, popcorn ceilings, and concrete floors. Abatement involves discovery of its extent and the legal requirement to encapsulate or remove it completely. Installing pipes behind walls or within ceilings spans significant surface areas, making the notion of “spot” work unrealistic. Unit-by-unit inspections are required to locate asbestos. Unfortunately, the Promenade does not currently possess as-built drawings for its structures, indicating an even greater need for exploration.

### **Fully Rented Buildings Versus Condos/Co-Ops**

Note that a fully rented building owned by one entity can allow all leases to expire and to proceed with remediating asbestos and installing sprinklers throughout an empty building. This is impossible for residential condos/coops. Even if residents and their household belongings can be temporarily evacuated, residents will be forced to seek short-term housing or to sell. The ensuing situation and significant fee increases associated with sprinkler installation will exacerbate the dearth of both existing and affordable housing in Montgomery County.

### **Most Jurisdictions Exempted Residential High-Rises from Sprinkler Mandates**

A study by PBS reveals that in 2017, most jurisdictions that have faced a sprinkler mandate have *not approved it*. See the PBS article: <https://www.pbs.org/newshour/nation/u-s-cities-mandate-sprinklers-old-residential-tower>. Jurisdictions that implemented the mandate have done so in limited circumstances. Currently, organizations in Honolulu and Philadelphia are fighting the mandate, while California and Florida have laws in place with restrictions. Please review the informative Pennsylvania Apartment Association studies for the Center City Philadelphia law attached to this letter, entitled, “**Thriven Design Engineering**” and “**EConsult Solutions Affordability Study**.”

### **The Sprinkler Mandate is Impossible to Execute**

Our position is that the Sprinkler Mandate is “impossible” to execute. We garner that you now are aware of the realistic costs for performance required by the Sprinkler Mandate. While we understand the public safety angle, we believe that buildings like The Promenade should be exempt from the Mandate. In the event legislators are not ready to exempt us, then the Legislature should “toll” the imposition of a final date for performance until it has an opportunity to see what is really required rather than subjecting constituents to mandate.

We recommended that if a study is done to ascertain the real costs, perhaps The Promenade might be considered for this study.

We believe that the Board of Directors, as empowered by the shareholders of The Promenade Towers Mutual Housing Corporation (as well as shareholders/condo owners of other Class 1A and 1B buildings), are the relevant parties to best determine which, if any, additional fire prevention/suppression infrastructure should be purchased and the government, which heretofore allowed exemption, should continue this. Instead of the government mandating sprinklers in the hallways, each building should choose whether it is feasible or affordable and should be a voluntary act.

### **The SFPC Exercise of Authority is Outrageous**

In conclusion, we find the State Fire Prevention Commission’s (SFPC) exercise of authority declaring “all” pre-1974 high-rise residential buildings that are not fully sprinklered an “inimical hazard” *outrageous*. We suggest that legislation be promulgated to require the SFPC to make a finding in each individual case where sprinklers are not installed as to why that building poses an inimical hazard, for reasons other than just the lack of sprinklers.

In the event our server does not allow transmittal of all noted attachments we will send those via separate emails. We hope that this letter addresses the questions you posed to us, and please don’t hesitate to call on us if we can be of further help.

We would appreciate it if you would acknowledge receipt of this transmittal and the attachments thereto.

Yours truly,

Alan Zukerberg, Esq.

Miriam Hamilton, Ph.D.

Attachments: (May be transmitted *via* separate email)

1. **4620 North Park Avenue Fire Protection Cost Estimate, Three Phases Redacted**
2. **Installing Sprinklers in Residential High-Rise 2.docx**
3. **Fire and Sprinkler Statistics**
4. **Stairwell Pressurization Systems in Existing Buildings.11.4.docx**
5. **Thriven\_Design\_Engineer\_Report.pdf**
6. **EConsult\_Solutions\_Affordability\_Study.pdf**