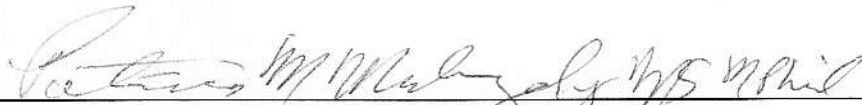


Attachment M: Lack of Adequate Disaster and Emergency Plans

A handwritten signature in cursive script, appearing to read "Patricia M. Mulready MS MPhil", written in black ink above a horizontal line.

Patricia M. Mulready, M.S., M.Phil.

LACK OF ADEQUATE DISASTER AND EMERGENCY PLANS

Patricia M. Mulready, M.S., M.Phil. for the Stop Costco Gas Coalition

Gas stations are inherently dangerous since they dispense combustible, poisonous fuels. Mega-stations compound the dangers since they are much larger—in this case dispensing three to four times what a usual gas station does. Emergencies and disasters may be unlikely; some can be planned for and steps taken to reduce their occurrence and any fallout from them. There are also unknown emergencies and disasters which can't be planned for; there is a presumption that local fire and police departments would be able to handle them.

The lack of a Disaster Management Plan has not satisfied General Conditions 59-G-1.21 (a) (9) because it has failed to prove that adequate public facilities (specifically police and fire protection) can be guaranteed or that emergencies other than small fires can be mitigated. By failing to submit a Disaster Management Plan Costco has failed to provide first responders with any data upon which to base their assessment of the scope of additional levels of protection they may be required to provide. It has also failed to provide local residents and other interested parties information they need to evaluate whether such Disaster Management Plan protections would be effectual.

Since there is no Disaster Management Plan to respond to, this testimony states some of the possible disaster/emergency scenarios. Each of these would have a serious impact on the near-by residences, the Stephen Knoll's School, and the Westfield Mall and its customers. These risks are unacceptable because there is no need for another gas station in the Greater Kensington/Wheaton area, there are other health and environmental concerns, and the area is supposed to be developed as transit-oriented (as detailed in the other filings).

Costco suggests isolated emergencies/disasters can be easily responded to by local police and fire stations. However, the realities of the Greater Kensington/Wheaton area are unusual – cascading events cause total gridlock and an inability for anyone to respond in a timely manner—or for anyone to get out of the way of a disaster.

An example is Snowmageddon, in which in the middle of January a lightning bolt directly hit a power sub-station, knocking out power in the entire area for several days. Simultaneously, cars could not navigate the roads, drivers left them where they were stuck, sometimes in the middle of the road. I personally observed the Kensington Fire Department equipment stuck behind some of these cars at the corner of Beach Drive and Knowle's Avenue. The firefighters needed to clear the road of cars in order to get back to the station. They did so in an effective manner, but this took a long time. If there had been a fire or other emergency they would not have been able to respond in a timely manner (through no fault of their own).

Fires

Fires are the most common gas station danger and they are the easily identified as such. Even with modern technologies already used to mitigate this type of danger over 5,000 fires take place each year at USA gas stations, the majority of which are caused by gasoline ignition (See Appendix A.) These fires include ones which happen at Costco stations, despite their efforts to prevent them (See Appendix B.)

In its materials, Costco says in order to mitigate fire hazards at Westfield Mall they will have clean up materials to remove small gas spills, a fire extinguisher on-site to put out fires, and will train their attendants to take care of such emergencies.

This is not enough. Once a vehicle is fully engulfed it becomes an explosive hazard. A fire extinguisher will not be able to put out such a fire (plus how many employees would be willing to risk their lives to try to do so?). Structures and loose materials are often ignited--resulting embers and loose materials can be blown towards the vegetation close by, the local residences 125' away, the Costco Tire Warehouse 80' away, the parking lots next to the gas station, and the Westfield Mall itself.

Power Outages

Power outages can be isolated to the station itself or to area-wide outages. Costco has a two-hour backup battery to run the various electronic systems connected to safety equipment, monitors, etc. This is too short a time considering the long-lasting area-wide power outages which happen several times per year.

Other Disasters/Emergencies

There are other disasters and emergencies which, while unlikely, have occurred in the Greater Kensington/Wheaton area in the past decade. These also require Disaster Management Plans to mitigate damage to neighboring residences, the Westfield Mall, Stephen Knoll's School, etc.

Extreme weather can directly and indirectly affect the proposed mega-gas station; this includes tornadoes, major thunderstorms, and winter storms (ice, sleet, snow, blizzards).

There have been a number of shootings in Westfield Mall's parking areas. Gas station queues may block persons being able to escape from such shooters and/or emergency responders access to the area.

The general DC area has been subjected to increasing recent earthquake activity. Costco claims their station and underground equipment will withstand earthquakes at the levels seen here—but future earthquakes may exceed these levels.

Unlikely, but possible, disasters/emergencies include terrorism activities and gang warfare.

There are also the unknown disasters/emergencies which can't be planned for. Locating a mega-gas station in such a dense residential area—when it is not needed—is inherently unsafe.

Usual and Generally Accepted Standards

There are presently no laws in Maryland which adequately protect citizens and property from the emergencies or disasters which could result from the presence of mega-gas stations. Thus it is up to the Special Exceptions process to provide adequate protections for the public by denying the Special Permit.

The problems such emergencies and disasters could have for people and property are a concern in any location there is a mega-station, but is of greatest concern in high density areas such as Greater Kensington/Wheaton (which is supposed to become even more densely populated as the Wheaton Sector Plan is implemented). The lack of adequate disaster and emergency planning is of concern not just for the immediate area adjoining the proposed station, but for the entire area since communities are so close together.

Costco asserts their mega-stations are safe and there have been no problems. Thus far. The basic nature of disasters and emergencies is they are hopefully rare – and exceedingly difficult to plan for. What are likely emergencies? What are unlikely emergencies? And what are possible disasters? What is the responsibility of an applicant to plan for – and implement strategies to overcome — both the likely and unlikely problems. There is a much higher level of vigilance required when a mega-station is located in a dense area than a rural one since the possible aggregate harm to persons and property is greater.

Standards which are “usual and generally accepted” change—and it has been decades since standards for Maryland gas stations were developed. The past 100 years of moderate weather and 200 years of no earthquakes in the Washington, DC, area have ended. What is presumed correct levels of safety may not be adequate.

A well-known example may illustrate this — standards for nuclear power plants. It is clear a mega-gas station is not a nuclear power plant, but the ways the industry standards set 30-40 years ago are considered inadequate today are known to most. These standards were set using the best data available and based on 100-200 year flood and earthquake data, weather conditions, sizes of largest planes, etc. But now better data is available. For example, it was stated there are no significant earthquakes in the DC area so the plants built here didn't need to be built to withstand them. Luckily, plants had to be built to a minimum standard -- just in case – since last year a 5.0 earthquake damaged a plant in Virginia.

What else which is accepted as impossible or unlikely will happen in this general area throughout the life span of the station? Can such emergencies and possible disasters be planned for and ameliorated? Should people living adjacent to or within the surrounding communities be subjected to the risks, especially considering the area is already well-served by conventional stations?

The Special Exception for Costco's mega-gas station should be denied.

APPENDIX A: FIRES AT USA GAS STATIONS

FIRES AT U.S. SERVICE STATIONS

Report: NFPA's "Fires at U.S. Service Stations"

Author: Ben Evarts

Issued: April 2011

Incident types and trend data are reported for fires that occurred in or at service stations. Three different types of incidents, structure fires, vehicle fires, and outside and other fires are analyzed for cause, equipment involved, and other type of material first ignited, among other relevant factors specific to each incident type. Other information relevant to this occupancy, such as the hazards of static electricity is presented as well.

Executive Summary

During the five-year period of 2004-2008, NFPA estimates that U.S. fire departments responded to an average of 5,020 in service or gas station properties per year. These fires caused an annual average of two civilian deaths, 48 civilian fire injuries, and \$20 million in direct property damage. The majority of the fires in this category were vehicle fires. Reported fires in this occupancy group fell 46% from 7,860 in 1980 to 4,280 in 2008.

According to the U.S. Census Bureau, there were 117,000 gasoline stations in the United States in 2007¹. Fires in these occupancies represent a variety of incidents, including structure fires, vehicle fires, outdoor fires and other fires. The majority of incidents are vehicle fires (61%), but the majority of the property damage (59%), results from structure fires. Outside trash or rubbish fires account for 12% of the fires reported to local fire departments at this type of property.

Twelve percent of fires reported to local fire departments in these properties were structure fires. The most common items first ignited in structure fires at service stations were flammable and combustible liquids and gases, piping or filter (22% of structure fires), followed by rubbish, trash, or waste (18%) and electrical wire or cable insulation (13%).

Most vehicle fires (82%) occurred in passenger vehicles, these fires accounted for nearly half of the total number of civilian injuries that occurred in service station fires of any kind (structure, vehicle, outside, other). The most common type of material first ignited in a vehicle fire was gasoline (28%).

Outside and other fires accounted for 15% of incidents at service stations. Natural vegetation fires accounted for 42% of these incidents. The most common heat source for outside fires was smoking materials (21%).

Twelve percent of fire incidents at service stations were outside trash or rubbish fires.

Individuals interested in keeping service stations safe from fire should consult [NFPA 30A – Code for Motor Fuel Dispensing Facilities and Repair Garages](#) for information about fire prevention in these properties.

¹U.S. Census Bureau, Statistical Abstract of the United States: 2010, Table 740 "Economic Census Summary" (NAICS 2002 Basis): 2002 and 2007

FULL REPORT*

2011 "[Fires at U.S. Service Stations](#)" report (PDF, 222 KB)

FACT SHEET

"[Fires at U.S. Service Stations](#)" fact sheet (PDF, 34 KB)

RELATED REPORT

NFPA members: 2010 "[Selected Published Incidents Involving Automobile Repair Shops](#)" report (PDF, 57 KB)

* NFPA members can download free PDF copies of One-Stop Data Shop reports. All reports are also available for sale. To order, e-mail [Paula Levesque](mailto:Paula.Levesque) or

call [+1 617 984-7443](tel:+16179847443). Not an NFPA member? [Join today](#).

APPENDIX B: EXAMPLES OF EMERGENCIES AT/NEAR MARYLAND GAS STATIONS

Bailey's Crossroads, VA

A Picture is Worth 1,000 Words: Gas Station Fire Edition, 2012

http://dcist.com/2012/06/a_picture_is_worth_1000_words_gas_s.php



Photo by [F1.2](#)

When we peruse our wonderful [Flickr pool](#)—stocked with fantastic images from some of the city's best non-professional (and some professional) photographers—we don't often expect images of gas stations in flames. But that's what we found this morning—a [set of images](#) from Flickr user F1.2 of an SUV that had a not-so-pleasant run-in with a gas pump over the weekend.

WTOP [caught the details of the incident](#), which took place on Saturday in Bailey's Crossroads:

Main article: [Methyl tert-butyl ether controversy#Jacksonville, Maryland](#)

Phoenix was the location of a January 2006 [Exxon](#) gas leak, where over 26,000 gallons of gas slowly seeped out of a punctured pipe at a station at the intersection of [Maryland Route 145](#) and [Maryland Route 146](#). The area affected by the gas leak was about a half-mile downhill from the location of the gas station. Six wells were contaminated, and 62 residential wells

showed traces of MTBE. The state filed a \$12 million suit against Exxon in April 2006. In September 2008, the state settled case with Exxon, imposing a \$4 million civil penalty. In addition, about 300 Jacksonville residents sought compensatory and punitive damages from Exxon worth several billion dollars. In March 2009, a Baltimore County jury found Exxon liable and awarded various amounts of compensatory damages to the plaintiffs.

Some residents still seek a settlement with Exxon. 1.5 billion settlement in the second lawsuit. third lawsuit underway Read more on the exxon spill in the article Jacksonville, MD Exxon Mobile Gas Leak Case.

For more details, or if the embedded links don't work, please go here:

http://en.wikipedia.org/wiki/Phoenix,_Maryland

Vapor cloud in Kensington dissipates

By Washington Post editors

Trains traveling through Kensington have returned to normal speeds after Montgomery County firefighters determined that vapors from a nearby gasoline spill Wednesday afternoon were dissipating quickly enough to pose no danger of igniting, a fire-rescue spokesman said. Capt. Oscar Garcia, a spokesman for Montgomery County Fire and Rescue Service, said transit agencies were asked to slow down trains using CSX tracks near Connecticut and Summit avenues around 3:30 p.m. because of concerns that a spark from the metal wheels on metal tracks at high speeds could ignite vapors from the gasoline spill at a nearby Getty station. By 4 p.m., fire officials determined that the vapors were dissipating, and trains were returned to normal speeds, he said.

No one was injured, and no one was evacuated beyond the Getty station, Garcia said. A gas station contractor will clean up the gasoline spill, estimated at 25 to 30 gallons, he said. The gas spilled when a tanker truck was dropping off its load.

<http://voices.washingtonpost.com/local-breaking-news/maryland/vapor-cloud-in-kensington-diss.html>

Riverdale, MD

Shell gas station on fire, 2009

<https://www.youtube.com/watch?v=R0GgACQZiA4>

Falls Church, VA

2-alarm Shell gas station fire, 2009

<https://www.youtube.com/watch?v=Xx1a8345idI&feature=endscreen&NR=1>

Seat Pleasant, MD

BP service station burning overnight, 2010

<http://statter911.com/2010/03/07/raw-video-from-service-station-fire-in-prince-georges-county/>

Kentland, MD

Shell gas station fire, 2011

<https://www.youtube.com/watch?v=p9QOwn0eYZE>

Gaithersburg, MD

"panic at costco, gaithersburg, md gas leak, alarm when off... 2011"

<https://www.youtube.com/watch?v=6DNGLxXP4tM> **APPENDIX B: FIRES AT USA GAS STATIONS**