

Stop Gas Station Construction In Our Backyards



[Diana Anderson](#) started this petition to City of Eagle Mountain
Esteemed City Council Members of Eagle Mountain,

We the undersigned residents of Oak Hollow and surrounding areas, oppose the construction of the 7-11 gas station as approved by the Planning Commission and petition you not to approve its construction. While we do not oppose the construction of the 7-11 convenience store, we are greatly concerned by the presence of a gas station so close to our homes and the effects it will have on our health and safety, property values, and quality of life. Furthermore, it violates the city code regarding the location of an automobile service station on three counts. For these reasons, we urge you to not only deny the construction of the gas station as proposed, but also update the municipal code to provide specific protections for the citizens of our city against the hazards of living in close proximity to a gas station.

Current Municipal Code Requirements

The Municipal Code of the City of Eagle Mountain in section 17.75.030 states the following:

"As conditional uses, automobile service stations and/or car wash operations may be permitted only where:

A. **Nuisance.** They will not be a nuisance to residences and other surrounding uses.

B. **Traffic Congestion.** They will not cause traffic hazards or undue traffic congestion.

...

G. **Distance to Other Uses.** The minimum closest distance from the automobile gas/service station or car wash with gas pumps site to an existing school, park, playground, museum or place of public assembly will be not less than 500 feet."

Nuisance

In section 78B-6-1101 of the Utah Judicial Code a nuisance is defined as "anything that is injurious to health, indecent, offensive to the senses, or an obstruction to the free use of property so as to interfere with the comfortable enjoyment of life or property."

Numerous studies have shown the dangers of having a gas station in such close proximity to homes (links can be found at the end of the petition). A gas station in this location would therefore be in violation of city code as it poses a nuisance and health hazard to nearby residents. Proven harmful effects of living close to a gas station include, but are not limited to, the following:

- Significant increased risk of childhood leukemia
- Elevated air pollution
- Increased benzene emissions leading to:
 - Cancer
 - Anemia
- Increased susceptibility to infections
- Low birth-weight

Notably, a 2015 study researched the effects of hydrocarbons released during the storage and fueling of gasoline. The study reports that although the portion of unburned fuel released into the environment is small, the cumulative effects are indeed a public health concern. "Particularly affected are residents nearby gas stations who spend significant amounts of time at home as compared to those who leave their home for work because of the longer period of exposure."

The proposed '7-Eleven Convenience Store' will place a gas tank vent within ~220 ft of residential homes and normal gas station spills are estimated at more than 1500 liters every decade. These emissions and spills will make their way into neighboring

residential properties and homes and will have health impacts on the residents in place already.

California Air Resources Board Handbook recommended a minimum separation distance of 300 feet between gas stations and “sensitive land uses such as residences, schools, daycare centers, playgrounds, or medical facilities.” Furthermore, Community and Environmental Defense Services recommends at least 500 feet from the nearest home. And the proposed site fails to meet these recommendations. These reasons prove the proposed location to be far more than a mere nuisance, but a serious health hazard to our community, especially our children.

Additionally, it should be noted that Oak Hollow is an especially young community with many small children present. There are over 25 children currently living in homes within 500 feet of the gas station, with 5 more single family homes yet to be occupied, likely bringing even more children. The current code provides protections for children by specifically prohibiting the construction of a gas station near parks and schools, yet fails to protect these same children in their own homes. Surely this violates the spirit with which the code was written.

Traffic Congestion

Current municipal code dictates that gas stations are not to cause traffic hazard or congestion. The proposed location of the gas station would cause traffic hazards as the existing roads do not provide for a smooth flow of traffic with the addition of tankers and other vehicles entering the gas station. Traffic would be significantly impacted as residents of our community and the surrounding communities tried to use Porter’s Crossing to reach their homes. During the Planning Commission meeting, the most likely route for fuel trucks was discussed. It was confirmed by Commissioner Wood that the fuel trucks would impede and block traffic continuing south on Porter’s Crossing as the fuel trucks would not be able to move out of the through lane before making a left turn into the proposed 7-11 lot. The added traffic congestion puts this project in clear violation of another point of our city’s municipal code.

Distances to Other Uses

Lastly, the land directly behind the proposed site for the gas station has been deeded to the City and falls under the City’s definition of public space or park. Section 07.05.020 of the municipal code defines a park as follows: “...a land parcel in the ownership or under the control of the city for the use of the general public, whether landscaped or otherwise improved.” According to the plat, the land at the entrance of our community and directly behind the proposed site is “Dedicated to Eagle Mountain City to be public utility and access/pedestrian easements in their entirety.” As it was deeded for use by the general public and improved with landscaping and placement of sidewalks, this area falls directly under the city’s definition of a park. The current municipal code clearly states: “The minimum closest distance from the automobile gas/service station ... to an existing

school, park, playground, museum or place of public assembly will be not less than 500 feet.” As such, the placement of a gas station within 500 feet of this land parcel is yet another clear code violation.

Municipal Code Modification

We also ask that the municipal code section 17.75.030-G be updated to include residential areas. The aforementioned studies as well as the Community & Environmental Defense Services recommend a minimum distance 500 feet between homes and the nearest gas station. Updating the municipal code to include protections for residential areas would conform to these recommendations and ensure the protection of residents of Eagle Mountain from the health and safety hazards related to close proximity to gas stations and storage tanks.

For these reasons, we urge you to enforce the current city code and deny the construction of the 7-11 gas station at the proposed location at Carson’s Crossing. We further request that the municipal code be revised to bar future gas stations from being constructed within 500 feet of residential areas.

Thank you.

* Below are the links to the articles previously cited with respect to the health concerns of having a gas station in close proximity to homes:

- Hydrocarbon Release During Fuel Storage and Transfer at Gas Stations: Environmental and Health Effects - <https://link.springer.com/article/10.1007%2Fs40572-015-0074-8>

- Small spills at gas stations could cause significant public health risks over time (<https://hub.jhu.edu/2014/10/07/gas-station-spills/>)

- A 2003-2004 study conducted in France documented a significant relationship between childhood leukemia and living near a gas station. (<https://pubmed.ncbi.nlm.nih.gov/19213757/>)

- A 2010 study conducted in Spain documented elevated air pollution within 100 meters (328 feet) of a gas station. (<https://pubmed.ncbi.nlm.nih.gov/20810207/>)

- In 2012, Brazilian researchers found that air quality was significantly degraded up to 150 meters (492 feet) from gas stations. (<https://www.sciencedirect.com/science/article/pii/S1309104215304384>)

- A 2018 study of two U.S. gas stations found that benzene emissions from underground gasoline storage tank vents were sufficiently high to constitute a health concern at a distance of 50- and 160-meters (162- and 518-feet).

(<https://www.sciencedirect.com/science/article/pii/S0048969718337549>)

- Benzene is arguably the gasoline constituent most harmful to human health. Adverse health effects of benzene include cancer, anemia, increased susceptibility to infections, and low birth weight. According to the World Health Organization Guidelines for Indoor Air Quality there is no safe level for benzene.

(<https://emergency.cdc.gov/agent/benzene/basics/facts.asp>; <https://www.ncbi.nlm.nih.gov/books/NBK138708/>)

The following studies document the extent of benzene releases from gas stations:

- A study published by the Canadian petroleum industry found average benzene concentrations of 146 and 461 parts per billion (ppb) at the gas station property boundary in summer and winter, respectively.

(<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1520004/>)

- A South Korean study examined outdoor and indoor benzene concentrations at numerous residences within 100 feet and between 196 to 328 feet of gas stations and found median outdoor benzene concentrations of 3.1 and 1.9 ppb, respectively. Median indoor concentrations at these locations were higher, reaching 4.1 and 5.2 ppb, respectively.

(<https://www.sciencedirect.com/science/article/abs/pii/S1352231099000977>)

- Another study found median ambient benzene levels of 1.9 ppb in houses both <165 and >328 feet from a service station.

(<https://www.tandfonline.com/doi/abs/10.1080/10473289.2001.10464339>)

- Yet, another study found that benzene and other gasoline vapor releases from service stations can be discerned from traffic emissions as far as 246 feet from service stations and that the contribution of service stations to ambient benzene is less important in areas of high traffic density. This is because vehicle exhaust is usually the most abundant volatile organic compound (VOC) in urban areas, often followed by gasoline vapor emissions from fuel handling and vehicle operation.

(<https://www.sciencedirect.com/science/article/pii/S0301479710002574>)

- The California Air Resources Board publication Air Quality and Land Use Handbook: A Community Health Perspective recommends a minimum 300-foot separation distance between gas stations and “sensitive land uses such as residences, schools, daycare centers, playgrounds, or medical facilities.” The State of California is widely recognized as having some of the most effective air pollution control requirements in the nation. Yet even with these controls a minimum separation is still required to protect public health.

Furthermore, the U.S. Environmental Protection Agency echoed the concerns about the health risk associated with fueling emissions in their School Siting Guidelines. The USEPA recommended screening school sites for potential health risk when located within 1,000 feet of a high-volume gas station. (<https://ww3.arb.ca.gov/ch/handbook.pdf>)