

Circuit Court for Montgomery County
Case No. 404629-V

UNREPORTED
IN THE COURT OF SPECIAL APPEALS
OF MARYLAND

No. 2450

September Term, 2015

COSTCO WHOLESALE CORP.

v.

MONTGOMERY COUNTY, MARYLAND, *et*
al.

Eyler, Deborah S.,
Leahy,
Thieme, Raymond G., Jr.
(Senior Judge, Specially Assigned),

JJ.

Opinion by Leahy, J.

Filed: April 11, 2018

*This is an unreported opinion, and it may not be cited in any paper, brief, motion, or other document filed in this Court or any other Maryland Court as either precedent within the rule of stare decisis or as persuasive authority. Md. Rule 1-104.

Costco Wholesale Corporation (“Costco” or “Appellant”) appeals from the denial of its special exception application to construct and operate a 16-pump gas station at the Westfield Wheaton Mall in Montgomery County. As we explore in this opinion, a *special exception*, while not exactly twice removed from what is permissible, as the term implies, is nevertheless a conditional allowance.

Although the record in this zoning case is voluminous, ultimately, this appeal presents two issues: (1) whether, in rendering its decision to grant or deny Costco’s application for a special exception, the Montgomery County Board of Appeals (the “Board” or “Board of Appeals”) was preempted from evaluating the potential health impacts of emissions from the proposed station based on criteria other than the National Ambient Air Quality Standards (“NAAQS”); and (2) whether there was substantial evidence in the record to support the Board’s decision to deny the special exception application pursuant to §§ 59-G-1.2.1, 1.21, & 2.06 of Montgomery County’s zoning ordinance (“Zoning Ordinance”).¹

When Costco originally filed its application in 2010, many individual private citizens and various entities opposed, including Appellee Kensington Heights Civic Association and Appellee Stop Costco Gas Coalition. Costco withdrew its original application in response to a change to the Zoning Ordinance, and in 2013, submitted a new application for a special exception. The Montgomery County Planning Board followed the

¹ The Zoning Ordinance is codified in Chapter 59 of the Montgomery County Code. Unless otherwise specified, all references herein to the Zoning Ordinance are to Montgomery County Code § 59-G-1.2 *et seq.* (2004) and in effect, as amended, at the time of Costco’s application.

technical staff’s recommendation and denied the application. Costco appealed to the Board of Appeals, which referred the case to a hearing examiner from the Montgomery County Office of Zoning and Administrative Hearings (“OZAH”).

Martin L. Grossman, the Hearing Examiner and Director of OZAH (“Hearing Examiner”), held hearings on the special exception for 37 days over a 17-month period and, in a 262-page report, recommended denial of the special exception. After considering the evidence presented and applying the prerequisites for obtaining a special exception, the Hearing Examiner found that Costco failed to demonstrate, given the particulars of the proposed station, that the emitted fumes would not constitute a nuisance under § 59-G-2.06(a)(1). He further determined that increased traffic and interactions between pedestrians and cars would contribute to the proposed station’s incompatibility under § 59-G-2.06(a)(2). Turning to the general conditions analysis under § 59-G-1.21, the Hearing Examiner determined that Costco failed to prove that the proposed station would “not adversely affect the health, safety and general welfare of residents, visitors or workers in the area[.]” and concluded that the station would not be in harmony with the neighborhood’s general character. The Board of Appeals adopted the Hearing Examiner’s recommendation and denied Costco’s petition in a final order dated April 3, 2015.

Costco filed a petition for judicial review in the Circuit Court for Montgomery County. At this point, Montgomery County intervened as a party in the proceedings. The circuit court, the Honorable Gary E. Bair presiding, affirmed the Board of Appeals. From

this judgment, Costco appealed,² presenting the following questions, which we have reordered:

1. “Did the Circuit Court err in deciding that Costco had waived its right to argue that the NAAQS preempt the ability of the County to deny a special exception based on air quality that would comply with the NAAQS?”
2. “Did the County and Circuit Court err by departing from the NAAQS standards, which are controlling state law, in finding that there was an adverse risk to health from the proposed use?”
3. “Was the Board’s finding of a potential adverse risk to health from the proposed use arbitrary and capricious, particularly where air quality would comply with the NAAQS and where it was not contested that the station contribution was less than one per cent of the total pollutant at the most sensitive neighborhood locations?”
4. “Did the Board err by finding that the congestion from traffic and parking would cause incompatibility with the neighborhood, where the air would be safe, where the traffic to the proposed station is physically separated from the allegedly impacted neighborhood, and where traffic is within long-standing allowances for Wheaton Mall?”

We affirm. As an initial matter, we agree with the circuit court that the record establishes Costco’s failure to preserve its preemption argument. We determine that the Hearing Examiner’s decision, and the Board’s order adopting that decision, were based appropriately on the Zoning Ordinance’s special exception requirements and included careful consideration of the NAAQS standards, the EPA Administrator’s guidance, and studies cited by the EPA. There was substantial evidence in the record showing that the likely levels of NO₂ and PM_{2.5} may have adverse health impacts linked to the unusual size

² Presently before this Court are Montgomery County, Maryland; the Kensington Heights Civic Association; the Stop Costco Gas Coalition; Donna Savage; and Mark Adelman, (“Appellees”).

of the proposed station and its proximity to the residential neighborhoods, the Kenmont pool, and the Stephen Knolls School. Accordingly, we uphold the Board’s decision that Costco did not establish that the proposed use would not cause adverse health effects to those in the general vicinity, as required under § 59-G-1.21(a)(8). We likewise conclude that substantial evidence supported the Board’s determination under § 59-G-1.21(a)(4) that the proposed station would not be in harmony with the neighboring residential areas due to the increased traffic and congestion.

BACKGROUND

A. The Application

On December 1, 2010, Costco applied for a special exception to construct and operate a gas station with 16 pumps at 11160 Viers Mill Road, which is the site of the Westfield Wheaton Mall (the “Mall”). The subject property was located in the C-2 Zone (General Commercial). On July 24, 2012, Montgomery County adopted Zoning Text Amendment No. 12-07, which required a 300-foot setback between a gas station “designed to dispense more than 3.6 million gallons per year” and “the lot line of any public or private school or any park, playground, [] day care center, or any outdoor use categorized as a cultural, entertainment and recreation use.” Costco determined that, as a result of that amendment, it could not place a gas station at the location as planned and withdrew its application.

Costco filed a second special exception application on November 13, 2012—No. S-2863—to construct the gas station at a different location (260 feet to the east of the original site) that complied with the setback requirement. That application, which is the subject of

this appeal, shows the subject site as approximately 36,800 square feet in size and located in what is currently a parking lot immediately west of the Costco warehouse store in the southwest quadrant of the Mall parcel. It is surrounded by a parking lot to the north and west, by a ring road to the south, and by the Costco and a drive aisle to the east. Cars would access the gas station via the southern ring road. Sales would be limited to gasoline fuel (i.e. no diesel fuel or propane gas) to Costco members only. The gas station would have no car wash, convenience store, air pumps, or service bays.

While Costco’s second application was pending, the property was rezoned GR-1.5 (General Retail) via a district map amendment adopted by the Council on July 15, 2014. The 2014 Zoning Ordinance, however, provides that special exception applications filed before October 30, 2014 must be evaluated under the provisions previously in effect on October 29, 2014. Zoning Ordinance § 59-7.7.1(B) (2014). Costco’s special exception application, therefore, was evaluated against the C-2 Zone requirements under the prior Zoning Ordinance.

B. Applicable Zoning Regulations

Costco as the applicant had the burden of proof to show that the proposed use satisfied all general and specific standards defined in the Zoning Ordinance. Portions of the applicable provisions governing special exceptions are set out here to give context to the remaining factual background that follows:

Division 59-G-1. Special Exceptions - Authority and Procedure

Sec. 59-G-1.2. Conditions for granting.

59-G-1.2.1. Standard for evaluation.

A special exception must not be granted without the findings required by this Article. In making these findings, the Board of Appeals, Hearing Examiner, or District Council, as the case may be, must consider the inherent and non-inherent adverse effects of the use on nearby properties and the general neighborhood at the proposed location, irrespective of adverse effects the use might have if established elsewhere in the zone. Inherent adverse effects are the physical and operational characteristics necessarily associated with the particular use, regardless of its physical size or scale of operations. Inherent adverse effects alone are not a sufficient basis for denial of a special exception. *Non-inherent adverse effects are physical and operational characteristics not necessarily associated with the particular use, or adverse effects created by unusual characteristics of the site. Non-inherent adverse effects, alone or in conjunction with inherent adverse effects, are a sufficient basis to deny a special exception.*

(Italic emphasis added).

59-G-1.21. General conditions.

(a) A special exception may be granted when the Board or the Hearing Examiner finds from a preponderance of the evidence of record that the proposed use:

(1) Is a permissible special exception in the zone.

(2) Complies with the standards and requirements set forth for the use in Division 59-G-2. *The fact that a proposed use complies with all specific standards and requirements to grant a special exception does not create a presumption that the use is compatible with nearby properties and, in itself, is not sufficient to require a special exception to be granted.*

(3) Will be consistent with the general plan for the physical development of the District, including any master plan adopted by the Commission. Any decision to grant or deny a special exception must be consistent with any recommendation in a master plan regarding the appropriateness of a special exception at a particular location. If the Planning Board or the Board's technical staff in its report on a special exception concludes that granting a particular special exception at a particular location would be inconsistent with the land use objectives of the applicable master plan, a decision to grant the special exception must include specific findings as to master plan consistency.

(4) Will be in harmony with the general character of the neighborhood, considering population density, design, scale, and bulk of any proposed new structures, intensity and character of activity, traffic and parking conditions, and number of similar uses.

(5) Will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood at the subject

site, irrespective of any adverse effects the use might have if established elsewhere in the zone.

(6) Will cause no objectionable noise, vibrations, fumes, odors, dust, illumination, glare, or physical activity at the subject site, irrespective of any adverse effects the use might have if established elsewhere in the zone.

* * *

(8) Will not adversely affect the health, safety, security, morals, or general welfare of residents, visitors, or workers in the area at the subject site, irrespective of any adverse effects the use might have if established elsewhere in the zone.

* * *

(c) The applicant for a special exception has the burden of proof to show that the proposed use satisfies all applicable general and specific standards under this Article. This burden includes the burden of going forward with the evidence, and the burden of persuasion on all questions of fact.

(Italic Emphasis added).

Sec. 59-G-2.06. Automobile filling stations.

(a) In addition to findings required in division 59-G-1, an automobile filling station may be permitted if the Board of Appeals finds that:

(1) the use will not constitute a nuisance because of noise, fumes, odors, or physical activity in the location proposed;

(2) the use at the proposed location will not create a traffic hazard or traffic nuisance because of its location in relation to similar uses, necessity of turning movements in relation to its access to public roads or intersections, or its location in relation to other buildings or proposed buildings on or near the site and the traffic pattern from such buildings, or by reason of its location near a vehicular or pedestrian entrance or crossing to a public or private school, park, playground, or hospital, or other public use or place of public assembly; and

* * *

(b) In addition, the following requirements must be satisfied:

(1) After August 13, 2012, the area identified by a special exception application for a new automobile filling station designed to dispense more than 3.6 million gallons per year must be located at least 300 feet from the lot line of any public or private school or any park, playground, day care center, or any outdoor use categorized as cultural, entertainment and recreation use.

(2) When such use abuts a residential zone or institutional premises not recommended for reclassification to commercial or industrial zone on an adopted

master plan and is not effectively screened by a natural terrain feature, the use must be screened by a solid wall or a substantial, solid fence, not less than 5 feet in height, together with a 3-foot planting strip on the outside of such wall or fence, planted in shrubs and evergreens. Location, maintenance, vehicle sight distance provisions, and advertising pertaining to screening must satisfy Article 59-E. Screening must not be required on street frontage.

* * *

C. The General Neighborhood

Costco’s land planner proposed defining the general neighborhood to include only the total 75-acre Mall property. However, the proposed gas station would be constructed on the far southwest end of that property, and vehicular access to the subject site would be from the Mall’s southern ring road. Ultimately, the Hearing Examiner accepted the technical staff’s recommendation that the general neighborhood include “all properties that may be impacted by traffic, noise, glare, vibrations or fumes associated with the proposed use . . . including the entire Mall property and the first ring of properties adjacent to the south and west of the Mall.”

To the south and west of the Mall is a residential community that has single-family detached homes and townhomes. The nearest residence is 118 feet south of the proposed station. A green buffer of vacant land with trees and greenery separates the ring road from the residences to the south. The Kenmont Swim and Tennis Club (the “Pool”) is 375 feet to the northwest of the proposed site, and the Stephen Knolls School (the “School”), a school for developmentally disabled children, is 874 feet to the southeast. The Mall itself contains approximately 1.5 million square feet of retail uses, including the Costco Warehouse.

D. Administrative Proceedings

The technical staff of the Maryland-National Capital Park and Planning Commission (“MNCPPC”) recommended denial of the special exception on February 20, 2013, based on its finding that Costco had failed to demonstrate that the gas station would not adversely impact the health of the residents and visitors of the neighborhood. The technical staff, in its opinion, stated that:

. . . the non-inherent adverse effects of the proposed use, alone or in conjunction with the inherent adverse effects, are a sufficient basis to deny a special exception. Staff has determined that three of the proposed use’s six non-inherent characteristics are cause for concern because combined, they have the potential to create adverse health impacts for residents of the area to the south of the proposed Site. These three characteristics are: location, size, and queuing of vehicles.

The technical staff also expressed concern about the levels of pollutants that the gas station would cause, including volatile organic compounds (“VOCs”), carbon monoxide (“CO”), particulate matter (“PM_{2.5}”), and nitrogen dioxide (“NO₂”). The technical staff

believe[d] that [Costco] has not met the burden of proof in this case. Three of the non-inherent characteristics of the proposed use could create potential health impacts that have not been adequately analyzed by [Costco], and not clearly demonstrated to be negligible (as [Costco] claims). [Costco] has not provided sufficient information for staff to determine that the potential health impacts associated with emissions from the proposed use (fueling, reloading and burping of storage tanks, spills, idling of vehicles) are not significantly higher than those considered to be inherent in a typical gas station[.]

On February 28, 2013, the Montgomery County Planning Board voted 3-2 to recommend denial of the special exception. But the Planning Board vote centered on the majority’s conclusion that the proposed station would not comply with the area master plan. According to a March 27, 2013 letter from the Planning Board to the Hearing

Examiner,

[The majority] found that although the current Wheaton Mall with 40-year leases is auto-centric, the overall vision of the Wheaton Sector Plan is to move Wheaton toward transit-oriented development and that any redevelopment of the mall should not perpetuate its current suburban-style land use pattern dominated by automobiles. . . .

. . . Members of the majority believe that the Plan’s vision is based on Metrorail, future bus rapid transit and other transit options. Approving such an auto-centric use at this location would prevent progress towards that end, “retard the logical development of the general neighborhood,” and be contrary to the Sector Plan’s overall goal for Wheaton to become transit-oriented.

Commissioners Presley and Dreyfuss agreed with [technical] staff’s interpretation that the Sector Plan recognizes the Mall as a regional use that is part of Wheaton[.] They believe that the proposed use is compatible with the current uses in the Mall and that the denial of the proposed use based on the vision of a transit-oriented Wheaton is not supported by the language of the Sector Plan.

Commissioners Dreyfuss, Presley, and Anderson disagreed with [the] staff’s determination that the applicant had not provided enough evidence to demonstrate that there would be no adverse health impacts. In their view, satisfying the National Ambient Air Quality Standards (NAAQS)^[3] used by

³ A brief summary of the NAAQS:

Under the 1970 amendments to the Clean Air Act, EPA is required to establish “primary” and “secondary” national ambient air quality standards (NAAQSs) for “criteria” pollutants. Criteria pollutants are pollutants which EPA has determined may endanger the public health or welfare and which result from numerous and diverse sources. The current criteria pollutants are sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, particulates, and lead. The primary NAAQS is the acceptable concentration of a pollutant in the ambient air that will protect the public health with an “adequate margin for safety.” The secondary NAAQS is set at a level to protect the public welfare, encompassing environmental and economic interests such as “soils, water, crops,” “manmade materials,” “visibility and climate,” “economic values,” and “personal comfort.” . . . Once set by EPA, the NAAQSs are then implemented in three ways: by nationwide, technology-forcing emission limitations on mobile sources such as automobiles; by nationwide technology-forcing emission limitations on new or modified stationary sources of pollution; by state implementation plans (SIPs) which implement the NAAQSs through emission limitations on stationary sources; and, to a

the Maryland Department of the Environment and the Environmental Protection Agency for permitting and regulating gas stations, is sufficient to satisfy the findings of the special exception for the proposed gas station.

Chair Carrier and Vice Chair Wells-Harley, after hearing extensive testimony from opposition, agreed with staff’s conclusion that perhaps there is an adverse effect to health even if the emissions are below the NAAQS. They cited the health experts’ disagreement about the hazards of gas station emissions and their effects relating to asthma, cancer, and other diseases. The fact that the gas station has to go through licensing requirements does not automatically provide a proof of adequate protection from adverse health impacts of prolonged exposures to the potential carcinogens associated with the operation of a large gas station.

Costco appealed to the Montgomery County Board of Appeals. The Board, in turn, referred the case to the Hearing Examiner, who held hearings on Costco’s application for a special exception for 37 days over 17 months. The principal opponents of the special exception application at the hearings were the Kensington Heights Civic Association (“KHCA”) and the Stop Costco Gas Coalition (“SCGC”) (collectively, the “Opposition”), as well as the Kensington View Civic Association, FreeState Petroleum, the Audubon Naturalist Society, the Montgomery County Group of the Sierra Club, the Kenmont Swim Club, and the Coalition for Smarter Growth. Fourteen witnesses testified in Costco’s case-in-chief, and seventeen witnesses testified on behalf of groups that opposed the petition.

E. Relevant Testimony Before the Hearing Examiner

As described by the Hearing Examiner, “the ‘health issue’ was perhaps the knottiest

more limited extent, by emission limitations on mobile sources of pollution, transportation control plans, and such other measures as may be necessary or appropriate to meet any applicable NAAQSs.

Linda A. Malone, Environmental Regulation of Land Use § 10:3 (1990 & Supp. 2016) (footnotes omitted); *see also Sierra Club v. EPA*, 705 F.3d 458, 460 (2013).

of the many issues raised in this case, and it [] occupied the greatest portion of the hearing.” The “fundamental question” was whether Costco had demonstrated that the proposed use would not “adversely affect the health of residents, visitors, or workers in the area at the subject site.” Zoning Ordinance § 59-G-1.21(a)(8). The Hearing Examiner further narrowed the issue to determining what levels of VOCs, NO_x, NO₂, PM_{2.5} and CO could reasonably be expected at various locations and at what levels they are potentially harmful to health.

The evidence before the Hearing Examiner on this issue included extensive analysis by technical staff recommending denial of Costco’s application; reports and scientific studies filed by all parties and relied upon by expert and lay witnesses; various EPA rules and regulations; EPA Guidelines on Air Quality Models; OSHA regulations regarding ambient air quality for workers; and “a host of written evaluations, comments and submissions by learned lay persons.” The evidence also included many days of testimony, summarized below.

David Sullivan

David Sullivan, President of Sullivan Environmental Consulting, Inc., provided the bulk of Costco’s expert testimony “as an expert in meteorology, air quality modeling and analysis, noise and odor analysis, and in determining potential exposure to toxic chemicals.” He related that he has been practicing as a certified meteorologist since 1980 and worked for the EPA in the early 1980s as a contractor on early toxic air pollution studies.

Mr. Sullivan testified that under the plan, Costco estimated that the station would

pump about 12 million gallons of gasoline per year and that there would be no violations or risk thresholds associated with pumping that amount of gasoline. He explained that certain factors would reduce emissions from the proposed station, including that a full-time attendant would be outside helping people pump gas, thereby reducing the number of spills, and that Costco would be installing an ARID PERMEATOR.⁴

Mr. Sullivan asserted several times that he used conservative numbers for his modeling and that the modeling employed for the project was unusually extensive. “We’re modeling the ring road, modeling the cars queuing to get their gasoline, we’re modeling where they pump their gas, where they exit the gas station, Georgia Avenue, Viers Mill, and University. We’re modeling all those things that had the background.” Mr. Sullivan took issue with the Opposition’s position that the EPA’s air quality standards were not sufficiently protective, claiming that

EPA makes decisions to protect the country. They don’t delineate different regions. You’re trying to have air quality that’s safe nationally. If it’s safe nationally, it’s safe in Montgomery County as well. . . . [R]egulatory [] land use decisions, in my judgment, need to be based upon objective facts and standards. I can’t hit a target I can’t see. . . . So if the position is, well, EPA standards aren’t acceptable enough, well, what’s Costco supposed to do? What are they supposed to look at for guidance to try to further reduce their emissions?

⁴ The PERMEATOR is a device, created by ARID Technologies, Inc., which is installed at gasoline stations to reduce vapors that are emitted when gasoline is transferred from one tank to another. ARID Technologies, Inc., <http://www.aridtech.com/index.html> (last visited Mar. 28, 2018) (stating that the PERMEATOR system uses “a patented hydrocarbon selective membrane which preferentially separates fuel vapors from air.” It “reduce[s] harmful emissions, save[s] fossil fuels, and provide[s] a safer and healthier environment for . . . service station customers and employees.”). According to Mr. Sullivan, the ARID PERMEATOR would “take out 99.27 percent of the VOCs” from the emissions coming from the underground tanks.

However, on cross-examination, Michele Rosenfeld, Esq. asked Mr. Sullivan why Costco classified the three-kilometer radius for the AUER modeling on Exhibit 189(b) using urban rather than rural modeling as recommended under the relevant EPA guidance. Mr. Sullivan responded that that exhibit in question was a very specific table and that he had shown the modeling other ways in other tables. In explaining the methods he employed, Mr. Sullivan underscored that

. . . guidance is guidance. We showed modeling, rural, in all the plots that we showed, showing the modeling concentrations, but guidance is guidance. It certainly is within my prerogative as a, as a professional air quality analyst to say that those locations close to the mall have different dispersion characteristics, and I'm going to show the modeling both ways because, in my judgment, the urban characteristics are much more accurate for those sources.

Prior to the proceedings, Mr. Sullivan submitted his first report in November 2012 and updated it twice during the following two months. To formulate his report, Mr. Sullivan used readings from background monitoring in the Washington, D.C. metropolitan region and made assumptions about local conditions in an attempt to calculate the proposed gas station's effect on the area. The initial report showed that the peak concentration of NO₂ (near the proposed site) would be 175 µg/m³ (micrograms per cubic meter), below the NAAQS one-hour NO₂ limit; the first update appears to show that it would register at 125 µg/m³; and the second update listed a highest concentration at 175 µg/m³.

During cross-examination, Mr. Sullivan conceded that he had made a large mathematical error in his preliminary report that resulted in an understatement of the area background levels of NO₂. In converting levels of NO₂ from parts per billion (“ppb”) to

micrograms per cubic meter to calculate the background level,⁵ Mr. Sullivan divided, rather than multiplied, and the Opposition discovered his error during its review of Mr. Sullivan’s work and elicited it during cross-examination.⁶

In August 2013, Mr. Sullivan then submitted another, corrected report, which initially demonstrated a peak one-hour NO₂ concentration of 388 µg/m³ at the gas station, using a rural dispersion analysis. The corrected report adjusted, however, his methods of calculation. He relaxed his earlier conservative assumptions, altering the application of background level choices, local conditions, and his dispersion model. This resulted in a lower level of one-hour NO₂ concentrations: using the urban dispersion model, he calculated a maximum of 168 µg/m³ whereas his rural dispersion model demonstrated a maximum of 217 µg/m³. Mr. Sullivan contended that the urban model was more appropriate (despite the EPA guideline) because of the Mall’s hard surface. Mr. Sullivan submitted a final revised report in February 2014, during Costco’s rebuttal. This report

⁵ The EPA refers to NAAQS standards for one-hour NO₂ concentrations in parts per billion. 40 C.F.R. § 50.11(b) (2010); *see also* 75 Fed. Reg. 6,474 (Feb. 9, 2010). It refers to the annual standard in parts per million, which is easily converted to parts per billion, and in µg/m³ but does not employ both methods of calculation for the one-hour standard. *See* 40 C.F.R. § 50.11(b)-(c). Despite the EPA’s clear preference, Mr. Sullivan chose to use µg/m³ to express his findings in one-hour NO₂ concentrations, which made it difficult to compare to the EPA standards which are expressed in parts per billion. Mr. Sullivan indicated that the NAAQS hourly limit was 190 µg/m³, a calculation that the Hearing Examiner adopted as equaling 100 ppb. However, as indicated in KHCA’s brief, and from our best research, the conversion is actually 188 µg/m³. *See* Brett Jay Davis, “Complying with 1-Hour NO₂ NAAQS”, Zephyr Env’t Corp. (Nov. 16, 2010).

⁶ The Hearing Examiner pointed out that only the reports from Mr. Sullivan that significantly understated the levels of NO₂ were available to the Planning Board when it rendered its antecedent decision.

employed an urban model and was even less conservative than the second, resulting in a one-hour NO₂ of 120.99 µg/m³—a figure that was less than the NAAQS standard at 188 µg/m³.

A similar trajectory occurred as to Mr. Sullivan’s reports on annual PM_{2.5} levels. His initial report, from November 2012, indicated a concentration near the proposed site at 12.35 µg/m³, less than then-NAAQS standard of 15 µg/m³. In January 2013, that standard was lowered, however, to 12 µg/m³. In his August 2013 report, Mr. Sullivan used less conservative figures—revising the protocol—to calculate a number of 10.83 µg/m³, which was within the new standard. In his February 2014 report, Mr. Sullivan again recalculated the level at 10.77 µg/m³.

Dr. Kenneth Chase

Dr. Kenneth Chase testified on behalf of Costco as an expert in occupational, environmental, and internal medicine. He testified generally that the proposed gas station would not adversely affect the health of the neighborhood or those who work there or visit it. He further testified that, based on his 35 years of practicing medicine, he had never seen a patient with adverse health symptoms due to exposure of a relevant pollutant at a level nearly double the NAAQS and did not believe one would present with symptoms based on exposure below NAAQS levels.

Dr. Chase filed two virtually identical health reports, one in 2012 and the other in 2013, neither of which exceeded his testimony before the Hearing Examiner. Both reports included a list referring to fifteen studies. Fourteen of the studies that Dr. Chase cited dealt with diesel fuel, however, which the proposed gas station would not be selling.

Wes Guckert

Wes Guckert testified as Costco’s expert in traffic engineering and transportation planning. He testified, *inter alia*, that the special exception would be in harmony with the general character of the neighborhood traffic and parking conditions, that the gas station would not reduce safety of drivers or pedestrians on public roads, and that it would not create a traffic hazard or nuisance. Mr. Guckert also testified that the ring road would not see increased traffic because it has plenty of capacity and that the proposed gas station would have almost no impact on the roadways outside the mall. He calculated that the Mall traffic would have “minimal or no delay.”

The Opposition disputed this testimony through lay testimony from Karen Cordry, Dr. Mark Adelman, and Jim Core. They discovered computation errors in Mr. Guckert’s traffic modeling regarding traffic patterns inside the gas station. The Opposition presented evidence that the queuing of drivers waiting to pump gas would use more space and cause more congestion than Mr. Guckert calculated.

Dr. Henry Cole

Dr. Henry Cole, the Opposition’s air quality expert, testified that for the pollutants at issue in this case, CO, NO₂, VOCs, and PM_{2.5}, emissions increase as a car’s speed decreases, which would be a concern due to number of idling cars at the proposed gas station. Dr. Cole vigorously disputed Mr. Sullivan’s methodology in his air quality modeling, contending that Mr. Sullivan’s modeling needed to account for inherent uncertainties and required a more detailed analysis regarding his calculation of NO₂. Further, Dr. Cole raised concerns about Mr. Sullivan’s third report, including questioning,

in part, its scientific validity and factual assumptions.

Dr. Maria Jison

Dr. Maria Jison testified for the Opposition as an expert physician in pulmonary and respiratory matters. She testified that one in 12 people and one in 11 children has asthma in the United States. She further testified that, daily in the United States, asthma causes 44,000 people to have an asthma attack; 36,000 children to miss school and 27,000 adults to miss work; 4,000 people to visit the emergency room; and nine people to die. She testified that asthma is the cause of a quarter of all emergency room visits in the United States each year and that it causes 10 million outpatient visits and 479,000 hospitalizations per year.

Dr. Jison testified that she lived near the site of the proposed gas station with her husband and two children, who all have asthma, and that she had concerns about potential adverse health effects on her family, should the gas station be placed there. She testified that PM_{2.5} is a particularly concerning pollutant for those with asthma and that even PM_{2.5} levels that the EPA would consider as “low” are dangerous to at-risk population groups:

So with respect to the mechanism of lung injury, fine particle pollution or PM_{2.5} is of particular concern because fine particles are the perfect size to be inhaled deep into their lungs. Because of their size and their increased surface area, they are also perfect for being deposited onto the, what’s called interstitial tissues of the lungs, the tissues surrounding the lungs in your air sacs and that are between other various anatomical parts throughout your body. But particularly in the lungs, PM_{2.5} is the perfect size for depositing there and can be translocated through into the general circulation and circulate into the rest of your body. . . .

* * *

So sensitive populations, people with asthma or chronic respiratory

disease or chronic preexisting cardiovascular disease, would be more sensitive to the effects of pollution or PM_{2.5}. Children are especially vulnerable because their lungs haven't completely developed. Air sacs continue to grow after you're born, and your lung function continues to evolve and that can be affected by exposure to pollution and particulate matter. People with chronic conditions are at increased risk because their disease is already characterized by a state of chronic underlying inflammation, particularly asthma or certain cardiovascular diseases. . . .

* * *

So with respect to the actual adverse effects that you would see from PM_{2.5}, clinical studies show that high levels of fine particulate pollution are associated with the greater odds of having asthma symptoms exacerbated, having a more severe asthma attack and increased use of rescue inhalers, medications that would alleviate symptoms of asthma. Studies show that even what would be categorized by industry and EPA as low levels of PM_{2.5} are associated with increased asthma symptoms and clinically relevant declines in lung function and increased cardiovascular risks.

Small incremental increases in PM_{2.5} . . . are associated with increased cardiovascular mortality. Studies show that central site monitoring stations may reflect fine particulate pollution levels that are below EPA limits but that the exposure to fine particulates, as a result of daily activities and point-source exposures for individual, as measured by personally worn monitors in some of these sites, may actually be far higher than what the central monitors would reflect and often exceed the EPA standards.

Dr. Jison testified further that the EPA, in creating the 2010 NO₂ Rule, cited four studies that supported short-term one-hour NO₂ standards below 100 ppb—the number the EPA agreed upon for the one-hour standard. She observed that the American College of Chest Physicians, the American Lung Association, the American Medical Association, and the American Thoracic Society all supported setting the NO₂ standard to below 80 ppb.⁷

⁷ As explained in footnote 5 above, Mr. Sullivan indicated that the NAAQS hourly limit was 190 µg/m³, a calculation that the Hearing Examiner adopted as equaling 100 ppb, although according to the Opposition, the conversion is actually 188 µg/m³ equals 100 ppb. Regardless, even assuming Mr. Sullivan's higher conversion was correct, it does not alter the fact that many of Mr. Sullivan's reports indicate levels above the EPA hourly NO₂

She explained that the EPA Administrator ultimately kept the level at 100 ppb because the concentration of NO₂ would be lower as one moves away from the 100 ppb source.

Dr. Jison concluded:

For this particular station, it's my opinion that it will cause adverse health effects on people based on this unique aspect of the whole scenario. This station's unique. It brings a very high concentration of a large volume of cars to one area that are going to be idling for an extended period of time, is very close to homes, the school for sensitive kids, a pool where various teens come to train, and it's in the middle of a shopping mall where people will spend considerable amounts of time, both being in line getting gas and shopping and eating and, you know, many neighborhood residents go there to basically convalesce and recuperate and incorporate walking around the mall as part of their general health, daily health routine so most gas stations don't operate in this type of environment.

Mr. Sullivan and Dr. Cole testified that there's a correlation between the volume of gasoline pumped and the effects on air quality. You know, the more gas that's pumped, the greater the potential adverse health impacts so, in my opinion, **the adverse health effects of this station would go above and beyond effects of other local gas stations. This effect is compounded by the location of the station in an area that already has high pollution levels and if it's proposed in a more rural and suburban setting, it might not be an issue depending on what that alternative setting is and the characteristics of the surroundings.**

(Emphasis added). Dr. Jison concluded that “it wouldn't make sense to put [the gas station] near such vulnerable populations[,]” such as the vulnerable population at the Stephen Knolls School.

Dr. Patrick Breysse

threshold. His August 2013 report—which accounted for his previous erroneous conversion from ppb to µg/m³—using the original protocol and a rural model, indicated a peak one-hour concentration of 388 µg/m³. Accounting for his adjustments in the same report resulted in 168 µg/m³ as a peak when using the urban model and 217 µg/m³ when applying the rural model. His 2014 rebuttal report, using the urban model and making additional alterations, calculated a peak of 120.99 µg/m³. *Supra.*

Dr. Patrick Breysse testified for the Opposition as an expert in industrial hygiene, epidemiology regarding health issues from vehicular emissions, the establishment and measurement of air quality standards, and the evaluation of scientific studies and methodologies. Dr. Breysse earned his Ph.D. from Johns Hopkins University in the environmental health engineering program where he is now a full professor. During the examination of his qualifications, Dr. Breysse testified that the EPA was considering and even citing some of his studies in their ongoing NO₂ review and as part of their process in setting NAAQS.

Dr. Breysse testified that the NAAQS are not set to be zero risk standards and not necessarily set to protect particularly sensitive populations, such as the children at the Stephen Knolls School:

Well, they're mandated, the EPA, to deal with susceptible populations and that relates kind of a challenge for, well, all populations but particularly kind of susceptible population. That creates a challenge for the EPA because in even the scientific community we're not quite sure what susceptibility means. You can be susceptible for lots of reasons, but where there are obvious markers of susceptibility, like a kid with asthma, the EPA is required to try and set a standard that's going to be protective for them, but it isn't going to be protective for 100 percent of the people, including, there's going to be some people who have unique susceptibilities that are kind of unknown or not well understood that are not going to be protected.

According to Dr. Breysse, the EPA rulemaking process is always several years behind the scientific literature and the EPA standard of 100 ppb of NO₂ represents a “peak value,” rather than a standard that would be safe in every location. He stated that the NAAQS “represent targets: . . . if we bring the air pollution down, people will be better off, but it certainly doesn't imply that magically above that number is bad and miraculously

below that number is good[.]” He further testified that a goal of the EPA, in setting a NO₂ standard at 100 ppb, was to cause area-wide concentration to fall “well below” 85 ppb. More generally, in regard to the potential effects of pollutants coming from a gas station, he expounded: “So a big gas station that’s in the middle of nowhere is not the same concern as a big gas station that’s in the middle of a lot of people . . . the location of the receptors or the people relative to that [gas station] are all things you have to consider in terms of whether you think this is an acceptable scenario or not.”

In addition, Dr. Breyse questioned Mr. Sullivan’s methodology. He explained, over objection, that

the trap you get into is that a model is a representation of reality, and the question becomes how good a representation of that reality that is. And reality is not something that moves, right, with assumptions. The assumptions can move, but the reality should be kind of something you kind of fix. And when you come up with single-number estimates, you’re always going to be . . . and I’ll be honest with you, a good modeler can get you any number you want if you come up with kind of a single number, right, [] which is why I think you kind of want to avoid that trap of kind of changing your assumptions, assessing whether this is really conservative or sort of conservative or modestly conservative or this is more realistic now.

He asserted that, taking Mr. Sullivan’s reports at face value after correcting the calculations, the “exposures here that are reaching out into the neighborhood [] are well within the range of exposures that the EPA is trying to prevent by regulating NO₂ in the previous standard.” Dr. Breyse continued, saying that “there’s certainly exposure to NO₂ in this neighborhood around where the school is that are in the concentrations that we think are going to be bad for kids, particularly kids with respiratory problems.” Furthermore, he explained that “in considering specific standard levels supported by the epidemiologic

evidence, the [EPA] administrator notes that the level of 100 parts per billion, for a standard reflecting the maximum allowable NO₂ concentration anywhere in the area, would be expected to maintain the area-wide NO₂ concentrations well below 85 parts per billion.”⁸

Ultimately, Dr. Breysse concluded:

So I do not believe that this station is going to be benign in terms of the health impacts of the people who live around it. I think it’s inevitable that the type of source is going to produce pollutants that are going to raise people’s exposures to levels that I think are within the range that the health literature suggests are hazardous, are dangerous. Hazardous is probably a difficult -- certainly they’re going to increase morbidity for a variety of respiratory concerns, in particular.

So when I make that judgment, I’m not constrained by what the EPA standards are, you know. I make judgments about health, as a public health professional, based on obviously what the standards are but also what I think the literature suggests. And, you know, if someone would come to me and say is this, is this going to be a risk for me, [] I wouldn’t rely solely on whether I estimate whether it’s above or below the standard. I’d certainly look and see whether I think there’s health effects below the standard because I know they’re five to 10 years behind already and I know the literature is

⁸ To further explicate this statement, Dr. Breysse read into the record—altering the EPA’s language in nominal ways—two points from the EPA’s February 9, 2010 Rule on NAAQS standards for NO₂:

If NO₂ concentrations near roadways are 100 percent higher than concentrations away from roads, the standard level of 100 parts per billion would limit area-wide concentrations to approximately 50 parts per billion.

If NO₂ concentrations near roadways are 30 percent higher than the standard concentrations away from the roadways, the standard level of 100 parts per billion would limit area-wide concentrations to approximately 75 parts per billion.

See 75 Fed. Reg. 6,474, 6,501 (Feb. 9, 2010). Dr. Breysse continued, “So the [EPA] administrator is saying I think there’s some . . . protection here, because in reality, you know, it states elsewhere in here that this spatial heterogeneity is such that the near-roadway exposures are, you know, 30 percent to 100 percent higher than the far-from-roadway exposures. . . . So this is just a . . . regulatory monitoring strategy approach that the administrator has taken to ensure that this broad area of exposures are acceptable, not that the standard is 100 for everybody.”

suggesting that the model is, the air pollution literature, the literature is five years ahead of the EPA regulations. The EPA regulations come down; they catch up, but they're always five years behind. And so I have no reason to expect that's not going to occur, and I think that there's going to be air pollution produced by this source, it's undeniable, and I think those levels are going to put the people around there at a greater risk for health effects than they are now.

Abigail Adelman

Abigail Adelman, a resident of the neighborhood, also testified on behalf of Appellee SCGC.⁹ Ms. Adelman testified that the World Health Organization sets lower standards than the EPA's NAAQS. She further testified that pupils at the Stephen Knolls School, which serves developmentally disabled students from 3 to 21 years of age for 10.5 months out of the year, would be particularly adversely affected. She then explained:

The medical needs of the school-age children, students, include oxygen, five students are on oxygen tanks or ventilators; nursing, eight students have private-duty nurses with them throughout the day; nursing services, 28 medical treatments are provided daily; ten students have medicines regularly dispensed, and one student requires regular suctioning.

The list of student medical disabilities includes chronic lung disease, asthma, respiratory distress syndrome, environmental allergies, cerebral palsy, Down syndrome, and Rett's disease.

Representatives of the Stephen Knolls School

Mary Ann Carter, the librarian at the School, testified for the Opposition. According to Ms. Carter, the student body at the School consists of special needs students bussed in from across Montgomery County who fit into two special programs: one for students identified at a very young age as being special-needs and one for children up to 21 years old with multiple severe disabilities, many of whom cannot attend other schools due to

⁹ Ms. Adelman did not testify as an expert.

their medical fragility.

Susan Campbell and Maria Alvarez testified that they each have a child enrolled at the School. They expressed their general concerns about the potential adverse health effects that the gas station could have on the medically fragile children at the Stephen Knolls School.

F. The Hearing Examiner’s Opinion

In a 262-page opinion, the Hearing Examiner recommended denial of the special exception. He found that the proposed site would have adverse effects on “potential health impacts” and “traffic congestion, parking congestion and additional physical activity.” The Hearing Examiner concluded that the “non-inherent characteristics of the proposed auto filling station and the resulting adverse effects make the proposed use incompatible with the adjacent residential neighborhood to the south, southwest and southeast of the subject site.”

Before reaching his findings, the Hearing Examiner expressed concern with Mr. Sullivan’s “significant calculation error.” He explained that, given the quasi-adjudicatory nature of the special exception process, an expert’s “continual retreat from his previous projections when the results turn out to be problematic for his client do[es] raise credibility concerns.” But, overall, the Hearing Examiner found Mr. Sullivan to be “a generally credible witness who made an incredibly bad math error.” He concluded that he would still consider Mr. Sullivan’s findings: “While Mr. Sullivan’s late-in-the-day revisions should (and did) invite skepticism, they deserve to be examined along with Dr. Cole’s [the Opposition’s expert] criticism of them, and not rejected merely because his retreat from

conservatism was motivated by a realization that his earlier assumptions yielded uncomfortable results.” (Footnotes omitted).

The Hearing Examiner applied the standard set forth in the Zoning Ordinance: “whether [Costco] has demonstrated, by a preponderance of the evidence, that the proposed use will not adversely affect the health of the residents, visitors, or workers in the area at the subject site.” He reasoned that to estimate the potential health impacts, “the EPA’s NAAQS standards are the best tool, but not the only tool. In addition to those NAAQS standards, the competing testimony of the health experts is of great importance, but so is the nature of the specific community where [Costco] proposes to locate this station.” Despite the seemingly innocuous proposed location in the parking lot of the Mall, the Hearing Examiner found “much more problematic” “the proximity of the subject site to single-family residences (118 feet), a community swimming pool (375 feet), [and] one of only two County schools for severely handicapped children (874 feet).”

The Hearing Examiner determined that Costco had met its burden as to the CO and VOCs but found that Costco “fell well short of the mark” of establishing by a preponderance of the evidence that one-hour NO₂ and annual PM_{2.5} would not cause adverse health effects. In support of this conclusion, he explained:

[Mr.] Sullivan[] constantly retreated from his initial conservative assumptions in modeling projected air quality from the proposed station, and these repeated changes, as well as inherent uncertainties in the modeling process, left a prediction of the likely levels of NO₂ and PM_{2.5} close enough to the impactful level to make the likely health effects debatable. Unfortunately for [Costco], the Opposition health experts won that debate, producing a well documented case for undue risks to the neighborhood, while [Costco]’s sole health expert, Dr. Kenneth Chase, initially misfocused on the impacts of diesel emissions, in a case involving a gas station which does not

sell diesel fuel, and at one point, resorted to anecdotal evidence.

He clarified how the NAAQS and EPA Administrator’s guidance influenced his decision:

Adding to the weight of the Opposition’s health evidence are the statements of the EPA administrator that adverse effects from short term NO₂ exposure are seen well below the NAAQS standard of 100 ppb, and the conclusion of the Technical Staff that [Costco] had failed to prove its case regarding adverse health effects.

* * *

The NAAQS standards are given great weight by the Hearing Examiner, but he cannot ignore the evidence from the EPA Administrator regarding how the one-hour NO₂ standard should be viewed (*i.e.*, as setting the appropriate level at the source, but not area-wide, where lower levels are needed to avoid adverse health effects). Nor can the Hearing Examiner ignore the uncertainty factors (up to 50%) built into the air-modeling analysis.

The Hearing Examiner recognizes that monitor readings through the country, even in high-pollution areas, seem to indicate that it is unlikely that one-hour NO₂ levels will ever get as high as the Opposition fears; however, the direct evidence pertaining to this subject site makes it too risky to allow the proposed use this close to single-family homes and the extremely vulnerable children at the Stephen Knolls School. This proposed use is just not compatible with this specific neighborhood.

The Hearing Examiner then emphasized the “perfect storm” of unique circumstances at issue:

[A] mega-gas station (easily the largest in the County in terms of gas sales), proposed to be located in an already crowded parking lot, within 118 feet of a single-family home, 375 feet from a community swimming pool, 874 feet from one of only two County schools for severely disabled children (including those with severe respiratory problems), close to outdoor restaurant seating, frequented by pedestrians and surrounded by significant existing sources of air pollution (including active loading docks, crowded major roads and the large numbers of motor vehicles already present and polluting in a regional shopping mall).

(Citations omitted). He concluded that “based on the very specific facts of this case,” the application was “too much of a health risk to warrant approval at this location.”

With respect to the adverse effects of the traffic and parking issues, the Hearing Examiner found that although the congestion and physical activity did not rise to the level of a legal nuisance, they were “linked to the unusual size of the proposed gas station.” Taking these adverse traffic effects together with “the adverse health impacts, which are also linked to the unusual size of the proposed station and its proximity to the residential neighborhood, the Kenmont pool and the Stephen Knolls School, create an incompatible situation.” This combined incompatibility, the Hearing Examiner concluded, ultimately warranted the application’s ultimate denial.

The Hearing Examiner noted that each petition must be “evaluated in a site-specific context because a given special exception might be appropriate in some locations but not in others.” The Hearing Examiner then evaluated the application’s conformity with the Zoning Ordinance’s general and specific standards for special exceptions, while also considering the inherent and non-inherent adverse effects¹⁰ on surrounding parcels.

Regarding the inherent adverse effects of fuel-filling stations, the technical staff denoted ten, which the Hearing Examiner adopted, including fuel pumps, potential queuing, noise, longer business hours, an increase in traffic, and environmental impacts such as fumes from idling vehicles. The Hearing Examiner stated that inherent adverse effects are insufficient to warrant a special exception’s denial. The Hearing Examiner also

¹⁰ As we stated above, § 59-G-1.2.1 defines “inherent adverse effects” as “the physical and operational characteristics necessarily associated with the particular use, regardless of its physical size or scale of operations.” It likewise defines “non-inherent adverse effects” as “physical and operational characteristics not necessarily associated with the particular use, or adverse effects created by unusual characteristics of the site.”

adopted the technical staff’s non-inherent characteristics (i.e., characteristics specific to this proposed fuel-filling station):

- (1) Sales to Costco members only;
- (2) Location along a private road, near houses;
- (3) Size (volume of gasoline sold, and number of pumps);
- (4) Queues and traffic volume along the southern ring road;
- (5) Type of gasoline sold (Regular and Unleaded, only); and
- (6) Payment by debit or credit card only.

Again noting the specific characteristics of this petition, the Hearing Examiner stated:

It is the non-inherent characteristics of this particular proposal, at this particular location, at the level of usage planned (12,000,000 gallons of gas sales a year), with the proposed design, and the proximity of residences, a community swimming pool, and the Stephen Knolls School which serves many medically fragile children, that create the adverse effects warranting denial of the petition.

He explained that the “compatibility issues arise in this case not because the proposal here is for a gas station, but because it is for this particular type of gas station (a very large one with lines of idling cars) located in this particular neighborhood[.]” After that determination, the Hearing Examiner turned to a consideration of the general standards, deeming that the petition met some, but not all, of the general standards. Accordingly, the Hearing Examiner found that, under § 59-G-1.21(a)(1), a fuel-filling station is a permissible special exception in the C-2 Zone. As encompassed in § 59-G-1.21(a)(2), the proposed station also met all of the applicable specific standards for fuel-filling stations, as outlined in § 59-G-2.06, *supra*, except that the fumes produced would constitute a nuisance. The Hearing Examiner disagreed with the Planning Board’s finding pursuant to § 59-G-1.21(a)(3) that the proposed station was inconsistent with the general plan but noted its importance. He determined that under § 59-G-1.21(a)(4), the use would

be in harmony with the Mall but would be out of character as to the adjacent residential neighborhoods, and he concluded that under § 59-G-1.21 (a)(5), the use would not be a detriment to surrounding properties' economic value or development but that it would be a detriment to the neighborhood's peaceful enjoyment. Regarding § 59-G-1.21 (a)(6), the Hearing Examiner noted no objectionable noise, vibrations, or odors; however, there would be an increase in physical activity and fumes. As to other special exceptions, the Hearing Examiner noted that there was no predominance of exceptions, as cautioned by § 59-G-1.21(a)(7). Considering the potential adverse health effects under § 59-G-1.21(a)(8), the Hearing Examiner found that Costco had not proven by a preponderance of the evidence that such effects would not occur. For § 59-G-1.21(a)(9), the Hearing Examiner determined that, while there would be additional cars on the road and vehicle-to-vehicle and vehicle-to-pedestrian interactions, it would not rise to a nuisance or reduce traffic safety.

Finally, the Hearing Examiner noted several additional standards, including the general development standards in § 59-G-1.23 and the neighborhood need standard that Costco was required to satisfy. He determined that, as the site would be in a C-2 Zone, the proposal met the required development standards and that it complied with parking space and minimum frontage requirements. Provisions regarding forest conservation, a water quality plan, and building compatibility in a residential zone were inapplicable, whereas any signage would require permitting and no direct light would intrude onto residential areas. Turning to the neighborhood need, set forth in § 59-G-1.24, the Hearing Examiner found that Costco sufficiently demonstrated that a need exists to serve the general

neighborhood’s population.

Accordingly, the Hearing Examiner summarized that Costco had not proven by a preponderance of the evidence that the application for the proposed gasoline station would satisfy all specific and general standards to receive the special exception. As a result, he recommended denial.

G. The Decision of the Montgomery County Board of Appeals

The Board of Appeals of Montgomery County followed the recommendation of the Hearing Examiner and denied Costco’s petition. In its April 3, 2015 opinion, the Board stated that it “concur[red] with the Hearing Examiner’s finding that [] Costco has not met its burden of proving, by a preponderance of the evidence, that the automobile filling station use would meet all of the specific and general requirements for the special exception.”

In particular, the Board focused on several of the Hearing Examiner’s conclusions. It agreed with the Hearing Examiner that the fumes produced by the proposed gas station would be a nuisance, thus violating the specific standard set forth in § 59-G-2.06(a)(1). Focusing on several findings as to the general standards, the Board likewise concurred that the proposed gas station, as required by § 59-G-1.21(a)(4), “w[ould] not be in harmony with the adjacent residential neighborhood to the south, southwest and southeast of the subject site due to the adverse effects of traffic congestion, parking congestion, additional physical activity, as well as [] potential health impacts[,]” and it would contravene subsection (a)(5) because it “will be detrimental to the peaceful enjoyment of the general neighborhood[.]” Further, given the considerable physical activity and objectionable

fumes if the gas station were approved, the Board agreed with the Hearing Examiner as to subsection (a)(6). Finally, the Board decided that Costco “failed to prove,” as required by subsection (a)(8), “by a preponderance of the evidence, that the proposed use will not adversely affect the health, safety and general welfare of residents, visitors or workers in the area at the subject site[.]”

H. The Circuit Court for Montgomery County Affirms

Costco filed a petition for judicial review in the Circuit Court for Montgomery County on April 30, 2015. The court granted Montgomery County’s motion to intervene as a party on June 10, 2015. In the circuit court, Costco argued explicitly—for the first time—that the Board was preempted by state and federal law from denying Costco’s special exception based on concerns regarding the air quality surrounding the proposed gas station, given that the gas station, in Costco’s view, would comply with NAAQS. Costco also argued that the Board’s failure to apply the NAAQS was arbitrary and capricious and that the Board’s finding of incompatibility (due to traffic, not car emissions) was not supported by substantial evidence.

On December 18, 2015, Judge Bair affirmed the decision of the Board of Appeals. He noted that a court reviewing an agency order will not decide matters *ab initio* when such matters are within the agency’s expertise and jurisdiction. Distinguishing between Costco’s administrative proceeding contention about following the NAAQS and its argument on appeal in the circuit court that Maryland’s adoption of NAAQS preempted consideration of any other standard, the court found that Costco had not preserved the latter argument. Costco pointed to two paragraphs from its closing argument before the Hearing

Examiner to assert that it raised the issue, but Judge Bair disagreed, stating, “As is pellucid, these arguments of counsel contain no explicit mention of the doctrine of preemption. Although Petitioner contends that it nonetheless references the substance of such an argument, the Court finds this position unpersuasive.”

The court then determined that even if the argument were preserved, “the Board was not preempted from denying the special exception application despite the State’s adoption of NAAQS.” Judge Bair concluded that the State had not acted so comprehensively so as to exert sole control over air quality, finding that pertinent state law allows local jurisdictions to exercise administrative control. Reasoning that the State’s adoption of NAAQS did not preempt the Board from denying Costco’s special exception request, Judge Bair declared:

Ultimately, while the NAAQS may serve as a tool to analyze compatibility, they do not change the broader scope of the Board’s inquiry in determining whether to grant a special exception. It is the Board’s task to look at the specific proposed use at a particular site and determine whether there would be any adverse effects. The NAAQS standards were not adopted for this purpose, nor were they adopted with a specific neighborhood (or use) in mind. Therefore, compliance with the NAAQS is not equivalent to an affirmative establishment that no adverse health effects would arise from a proposed use.

Turning to Costco’s next contention, the court found that the Board did not act arbitrarily or capriciously when it denied the special exception without stating a cognizable standard for evaluating air quality. Strict reliance on state and federal standards would impermissibly limit the Board’s consideration of potential adverse health effects specific to the area of the proposed use that the standards do not address—like protection of the “most sensitive” populations, including “the medically fragile children at Stephen Knolls

School.” Further, the court noted that the Zoning Ordinance states that a proposed use’s compliance with all specific standards and requirements to grant a special exception does not raise the presumption that a use is compatible and is not itself a sufficient ground to grant the special exception. Instead, the court reaffirmed that a special exception cannot be granted unless the proposed use complies with all prescribed general and specific standards such that mere compliance with regulations alone will not satisfy the burden of proof.

Costco claimed that if the Board’s finding was not based on emissions, there was not otherwise substantial evidence to support its decision that the proposed use was incompatible. Reiterating the Hearing Examiner’s determination that there would be an increase in delays, inconvenience to the neighborhood, and interactions between vehicles and pedestrians, Judge Bair found that these factors were separate from the consideration of emissions. He concluded that “[w]hile there is certainly some ambiguity in the record regarding the potential impact of traffic congestion and physical activity,” there was substantial evidence in the record to support the Board’s finding of incompatibility due to traffic. Accordingly, the circuit court affirmed.

Costco filed a timely notice of appeal to this Court on January 15, 2016.

DISCUSSION

STANDARD OF REVIEW

The standard of review for final decisions of an administrative agency, such as the Montgomery County Board of Appeals, ranges from highly deferential in regard to the agency’s fact-finding to without deference in regard to certain legal conclusions. As Judge

Harrell pointed out in *People’s Counsel for Baltimore County v. Loyola College in Maryland*, “[j]udicial review of administrative agency action is narrow. The court’s task on review is not to substitute its judgment for the expertise of those persons who constitute the administrative agency[.]” 406 Md. 54, 66-67 (2008) (citing *United Parcel Serv., Inc. v. People’s Counsel for Balt. Cty.*, 336 Md. 569, 576–77 (1994)). Our review is limited to evaluating whether there is substantial evidence in the record, as a whole, to support the agency’s findings and conclusions. *Halici v. City of Gaithersburg*, 180 Md. App. 238, 248 (2008) (internal quotations and citations omitted). In so doing, we inquire “whether the zoning body’s determination was supported by ‘such evidence as a reasonable mind might accept as adequate to support a conclusion[.]’” *Loyola College*, 406 Md. at 67 (citing *People’s Counsel for Balt. Cty. v. Surina*, 400 Md. 662, 681 (2007)). However, we are “less deferential in our review . . . of the legal conclusions of the administrative body and may reverse those decisions where the legal conclusions reached by that body are based on an erroneous interpretation or application of the zoning statutes, regulations, and ordinances relevant and applicable to the property that is the subject of the dispute.” *Surina*, 400 Md. at 682. In reviewing the agency’s legal conclusions, we also consider—and by that we mean we give some deference to—the expertise of an administrative agency “whose task it is to interpret the ordinances and regulations the agency itself promulgated.” *Md.-Nat’l Capital Park & Planning Comm’n v. Greater Baden-Acquasco Citizens Ass’n*, 412 Md. 73, 84-85 (2009) (citation omitted). Notwithstanding, when, for example, a case presents “solely conclusions of law respecting jurisdiction, . . . we do not afford deference to the

legal conclusions of the agency.” *Cty. Council of Prince George’s Cty. v. Zimmer Dev. Co.*, 444 Md. 490, 553 (2015) (citation omitted).

I.

Preservation of the Preemption Argument

Costco contends that Board of Appeals was preempted from applying any standard other than the NAAQS, but Appellees challenge Costco’s preservation of that issue below. The County argues that issue must be raised before an administrative agency to preserve the issue on appeal because courts review administrative decisions solely on the grounds relied upon by the agency and cannot decide issues presented to it for the first time on judicial review. Because preservation of this argument is a threshold issue, we address this issue first. *Halici*, 180 Md. App. at 250-51.

Costco insists that it preserved the issue of preemption by arguing consistently that the Board must apply the NAAQS and that the Board lacked the authority to depart from that standard. Costco maintains the issue was also preserved in its closing argument before the Hearing Examiner.

In response, the County observes that the term “preempt” does not appear in the 9,500 pages of hearing transcripts in this case. Both the County and KHCA urge that there is a distinction between the argument that the agency *should* apply the NAAQS and that preemption requires the agency to do so. SCGC offers the same argument, noting that the difference between permissive and mandatory language is “only a matter of a few letters, but that small change makes a dramatic legal difference.” SCGC adds that the relevant cases and statutory provisions on preemption “are conspicuously absent” from the record.

SCGC observes that Costco points to a single incident during closing argument on the last day of 37 days of hearing when Costco claims that it asserted that Maryland law was preemptive—a point SCGC disputes. Consequently, SCGC avers, the “few ambiguous sentences are plainly not enough to indicate to the Hearing Examiner that a novel issue had purportedly been introduced at that extraordinarily late stage of the proceedings.”

The general rule on preservation under Maryland administrative law is that a party who knows or should have known that an agency has committed error, yet fails to object “in any way or at any time during the course of the administrative proceeding, may not raise an objection for the first time in a judicial review proceeding.” *Cicala v. Disability Review Bd. for Prince George’s Cty.*, 288 Md. 254, 261-62 (1980) (citations omitted). “[A] reviewing court ordinarily ‘may not pass upon issues presented to it for the first time on judicial review and that are not encompassed in the final decision of the administrative agency[.]’” and that “‘a . . . court will review an adjudicatory decision solely on the grounds relied upon by the agency.’” *Brodie v. Motor Vehicle Admin. of Maryland*, 367 Md. 1, 4 (2001) (quoting *Dept. of Health v. Campbell*, 364 Md. 108, 123 (2001)). The primary rationale for the rule “is to give the agency the opportunity to decide an issue; when an appellate court is the first to decide an issue, it deprives the agency of that opportunity.” *Meadowridge Indus. Ctr. Ltd. P’ship v. Howard Cty.*, 109 Md. App. 410, 421 (1996) (citations omitted).

After surveying the record, we are in accord with the circuit court’s determination that the preemption issue was not preserved. There is a distinction between arguing that the NAAQS have the “force of law” and arguing that the NAAQS preempt every other

standard. If Costco had argued throughout the administrative proceeding that the NAAQS preempt every other air quality consideration, as it now claims, then, surely, as SCGC points out in its brief, the word “preempt” would appear somewhere within the transcripts of the 37 days of administrative proceedings. Costco points us to no page in which the word “preempt” appears. In fact, the strongest reed on which Costco relies stems from the following colloquy between its counsel and the Hearing Examiner during closing arguments:

[COSTCO’S COUNSEL]: . . . These are the standards that must be applied. And why is that? Well, Maryland has the opportunity to apply different standards, higher standards if it so chooses. It has no[t] done so. It has affirmatively decided to apply the EPA standards. Similarly, Montgomery County has not imposed any higher standards or any higher threshold that it would impose on the gas station. So, in the absence of any viable alternative, you have to measure the emissions by the subjective standard. To apply subjective, a discretionary standard, we believe would be arbitrary and would not be supported by the record.

[THE HEARING EXAMINER]: Let me ask you this. You argue that in your brief as well, it’s a big point you’ve made, and a point you’ve made here, is the standard the National Ambient Air Quality Standards, or is the standard here what it said in the zoning ordinance that a burden of showing that it won’t adversely affect health in the community, and would the National Ambient Air Quality Standards as a measuring tool?

[COSTCO’S COUNSEL]: Well, the code requires us to show that -- we have the burden of showing no adverse health effects. But, it provides no measuring tool. So, how do you make that determination without applying some tool? And so in the absence of the code providing it, the EPA is the standard that should be the measuring tool.

[THE HEARING EXAMINER]: But, it’s the measuring tool, it’s not the standard. I mean, we’ve used it somewhat interchangeably, and you quote me a number of times as asking the opposition well what standard do I apply if it’s not these NAAQS standards, but maybe we’ve been using that term a little loosely, and really, aren’t we talking when we talk about the NAAQS standards we’re talking about those as a measuring device for the standard

here, which is what the zoning ordinance --

[COSTCO’S COUNSEL]: Well, I think, I’m not sure if I completely understand, but I think the measuring device, and I’ll get to this in a moment, is the modeling. The modeling measures what the anticipated emissions will be. The standards -- I mean, the purpose of an act is to say at this level there will be no adverse health effects. That’s the same thing that the code asks. So that’s what we should be measure against, whether or not we violate the standards. If we comply with the standards, then we have met our burden that there are no adverse health effects. And, these are standards that are applied routinely by the federal courts. They’ve not been overturned. They have the force of law. Nothing else that’s been discussed in this case has the force of law.

Costco’s contention that the foregoing dialogue references the substance of a preservation argument is unpersuasive. We do not read Costco’s argument at closing to assert that the NAAQS preempted other standards, but rather, that the NAAQS “have the force of law” and that the County has not adopted higher standards.

Costco relies heavily on *Concerned Citizens of Great Falls, Maryland v. Constellation-Potomac, L.L.C.*, 122 Md. App. 700 (1998). In that case, the appellant objected when the Board decided that it would allow the appellee to revise its petition and introduce new exhibits on the last day of the hearing, and denied the appellant extra time to respond to the revision and new evidence. *Id.* at 750. The appellant did not renew its objection upon the close of the record. *Id.* at 728. This Court recognized that the general administrative preservation rule addresses situation in which a party fails to object ““in any way or at any time during the course of an administrative proceeding,”” *id.* at 750-51 (quoting *Meadowridge*, 109 Md. App. at 421; emphasis in *Concerned Citizens*), and concluded that the appellant’s “failure to object again at the conclusion of the hearing when the Board actually closed the record does not result in nonpreservation of this issue for our

review.” *Id.* at 751.

We find *Concerned Citizens* to be inapposite because it dealt with a party’s failure to renew an objection—that the party had made previously—at the close of evidence. *Id.* at 751. Costco, on the other hand, failed to raise its objection in the first place. A party must first raise an argument in an administrative proceeding before it we can consider whether the timing of its objection preserved the issue for our review on appeal.

Costco also argues that the issue was preserved because the Hearing Examiner raised the issue himself. Costco points to the following statements the Hearing Examiner made to Karen Cordry, the President of KHCA, during the proceeding on September 10, 2014:

I fear that you are asking me to create a scenario that is impossible for any of the parties that are regulated to ever meet. So that’s, that’s the problem with -- there has to be some level of predictability in a standard that’s set up, and you’re asking me to evaluate all the science and create my own standard that the EPA hasn’t even been able to come up with yet. . . .

* * *

. . . I think that part of the thrust of what you said is to ask me to create a standard that the experts who, generally speaking, govern these standards haven’t come up with, and I’m unwilling to march into that territory because I think it is not within my jurisdiction, nor is it wise to do it.

While Costco is correct that an issue may be preserved when a hearing examiner raises an issue, *cf. Singletary v. Maryland State Dep’t of Pub. Safety & Corr. Servs.*, 87 Md. App. 405, 415 (1991), we do not believe that text quoted above suggests that the Hearing Examiner expressed a view or questioned whether the NAAQS preempted all other standards. Rather, the quoted language reflects the Hearing Examiner’s refusal to

create a new air quality standard. Certainly, if the Hearing Examiner considered the issue of preemption, he would have mentioned it at least once in his 262-page opinion.

Because Costco failed to raise preemption “at any time during the course of the administrative proceeding,” *see Cicala*, 288 Md. at 261-62, and because a reviewing court “may not pass upon issues presented to it for the first time on judicial review and that are not encompassed in the final decision of the administrative agency,” *see Brodie*, 367 Md. at 4 (quoting *Campbell*, 364 Md. at 123), we determine that the issue of preemption was not preserved during the administrative proceeding and therefore, is not before us on appeal.¹¹

¹¹ We observe that based on the current record, we would reject the merits of Costco’s preemption argument if it were preserved and properly before us. We note, for the sake of thoroughness, that although Costco concedes that Title 2 of Maryland’s Environmental Article permits the County to depart from the NAAQS, it argues that it may do so through legislation only and not on an ad hoc basis during permitting procedures.

A State law in Maryland “may preempt local law in one of three ways: 1) preemption by conflict, 2) express preemption, or 3) implied preemption.” *Talbot Cty. v. Skipper*, 329 Md. 481, 487-88 (1993) (citations omitted). Costco argues that the first and third forms of preemption apply here.

Conflict preemption “exists if a local ordinance ‘prohibits an activity which is intended to be permitted by state law, or permits an activity which is intended to be prohibited by state law.’” *Perdue Farms Inc. v. Hadder*, 109 Md. App. 582, 588 (1996) (footnote and citations omitted). Costco points out that Env’t § 2-104(a)(1) allows a political subdivision “to adopt ordinances, rules, or regulations” regarding emission or ambient air standards. Costco also points out that the County has not enacted emission or ambient air standards. A conflict could only arise where the local law requires something that the state law does not. Clearly, therefore, there can be no preemption by conflict here because no conflict exists.

Implied preemption “occurs when a local law deals with an area in which the State Legislature has acted with such force that an intent by the State to occupy the entire field must be implied.” *Cty. Council of Prince George’s Cty. v. Chaney Enters. Ltd. P’ship*, 454 Md. 514, 541 (2017). The State adopted the NAAQS in Env’t § 2-302(c)(1), which states, “Unless a political subdivision requests a more restrictive standard under § 2-104 of this title, the Department shall set ambient air quality standards for pollutants that are identical

II.

A. The Special Exception Process

Zoning law is “premised on the central notion that certain uses are incompatible and should therefore be segregated. Most ordinances designed to achieve this end effect a system of *permissive zoning* in which the zoning ordinance identifies the permitted uses for each district” and uses not expressly permitted are prohibited. Peter W. Salsich, Jr. & Timothy J. Tryniecki, Land Use Regulation 185 (3d ed. 2015). The special exception process is designed to ensure conformance, yet afford some flexibility, with the uniformity

to the standards for pollutants for which national primary or secondary ambient air quality standards have been set by the federal government.” *See also* COMAR § 26.11.04.02 (“For the purposes of this chapter, the ambient air quality standards, definitions, reference conditions, and methods of measurement are those specified in 40 CFR Parts 50, 51, 53, and 58, as amended.”) As noted above, Env’t § 2-104(a) permits a governmental subdivision to adopt laws on air quality or emission standards so long as they are not less stringent than those adopted by the State.

On the other hand, the Zoning Ordinance, like other zoning laws, is the County’s method of regulating how a certain area of land may be used. For special exceptions, the Zoning Ordinance requires an applicant to prove, among other enumerated conditions, that no adverse health effects would arise from the proposed use. And, it requires a consideration of adverse effects, if any, at the particular proposed site as compared to elsewhere.

These laws are separate and distinct. The Zoning Ordinance was not somehow wholly subsumed by the State’s air quality standards. Merely because the State exercised its power regulating one aspect of air quality, local government is not entirely preempted from considering air quality in any other context. Here, the State contemplated local zoning restrictions. In a July 20, 2012 memorandum regarding ZTA 12-07, the Legislative Attorney noted that the State’s Air and Radiation Management Administration has authority to issue gas station permits and that it “requires evidence that the proposed station complies with local zoning requirements. In all other respects, zoning is beyond their jurisdiction.” Given the statutory language and the actions of the pertinent State authority deferring to local zoning authority, we can in no way perceive that the State has acted with such extensiveness so as to impliedly preempt the field. *See Chaney Enters.*, 454 Md. at 542-43.

of a land use plan. *Mayor & Council of Rockville v. Rylyns Enters., Inc.*, 372 Md. 514, 541 (2002) (footnote omitted). Rather than a use permitted as of right, special exceptions are conditioned upon satisfying certain criteria. See Barlow Burke, Understanding the Law of Zoning and Land Use Controls 172 (3d ed. 2013).

As compared to a permitted use, a special exception “is merely deemed *prima facie* compatible in a given zone.” *Loyola College*, 406 Md. at 71. But, there are additional strings attached, including various conditions and placing the burden of proof on the applicant. *Clarksville Residents Against Mortuary Def. Fund, Inc. v. Donaldson Props.*, 453 Md. 516, 542 (2017). A local authority may be wary of certain types of proposed uses that, although permitted under a zoning ordinance, are “more controversial or problematic uses, such as automobile service stations[.]” Salsich & Tryniecki, *supra*, at 272-73. These types of uses may be convenient for people in the area; however, resulting issues such as “traffic, hours of operation, noise, or other unpleasant side effects” could contravene the neighborhood’s general goals and harmony. *Id.*

The archetypical zoning ordinance sets forth standards for assessing an application—for example, that the proposed use’s operation will not harm public health, safety, and welfare and will not adversely affect neighboring property value. *Id.* at 273-74. Satisfying the burden is not easy for an appellant, including when the applicant must demonstrate that the proposed use will not have an adverse impact. See Burke, *supra*, at 173. One standard for demonstrating a lack of adverse effects is that the proposed use will not burden nearby property any more than a use allowed by right would whereas a more specific standard requires that the proposed use, “at the proposed location, would not have

adverse impacts *above and beyond* those impacts inherently associated with that use in the district for which it is proposed.” *Id.* at 174 (emphasis in original). For the latter, therefore, the local authority must determine “whether the adverse effects are greater here than they would be elsewhere[.]” *Id.* at 175. This question, which considers the unique qualities of the proposed site and the effects of the proposed use, requires a case-by-case analysis from the local authority according to the established legislative standards. *Loyola College*, 406 Md. at 71. As such, the depth of the authority’s consideration of adverse impacts correlates to the degree of the proposed use. *Burke, supra*, at 177. If an application meets the delineated standards and requirements, a rebuttable presumption arises that the use is beneficial to the general welfare. *Donaldson Props.*, 453 Md. at 543. Unless rebutted “by probative evidence of unique adverse effects[,] . . . it is arbitrary, capricious, and illegal for the Board to deny” an application. *Id.* (citation omitted).

With that, we turn to the specific contentions regarding the Board’s findings in the case at hand.

B. The Board’s Finding of Potential Risk of Adverse Health Effects

Costco argues that any of the proposed gas station’s contributions to NO₂ and PM_{2.5} would be *de minimis* and, thus, the Board’s decision to deny the special exception based on the potential for adverse health effects was arbitrary or capricious and not supported by substantial evidence. Costco also contends: “the Board was required to apply a standard—specifically the NAAQS—but it applied none. Where there exist legally mandated, objective standards, it was error for the Board to ignore them.” Citing *Mossburg v. Montgomery County*, 107 Md. App. 1, 26 (1995), Costco contends that the denial of a

special exception due to environmental issues not unique to the proposed use are arbitrary and in violation of the zoning authority.

Appellee SCGC responds that Costco failed to demonstrate that emission levels from the proposed station would not exceed the maximum limits set out in the NAAQS. And, even if Costco could have demonstrated the same, the “Hearing Examiner properly relied on several other factors: the analysis in the NO₂ Rule that found adverse health effects at area-wide levels below the NAAQS; the similar results in new studies on NO₂ and PM_{2.5} issuing after the current NAAQS; and studies on the synergistic effects of mixed pollutants that the NAAQS excluded.” Thus, SCGC maintains that “[a]lthough the Hearing Examiner treated the NAAQS as a valid tool, he found it was not the only relevant factor to be considered in applying the lens of Montgomery County’s special exception standards to gas stations.” Moreover, SCGC points out that Mr. Sullivan, in repeatedly contending at the hearing that Costco was not even required to conduct modeling studies in this case, made clear that the modeling provisions (Prevention of Significant Deteriorations provisions) do not apply to every new emissions source but only to certain major sources. *See* 40 C.F.R. § 52.21(a)(2), (b)(1)(i). Thus, SCGC contends, “the NAAQS,[] do not, by their own terms, have any direct application to the County’s permitting process for a gas station under a special exception request.”

Montgomery County also responds by first stating that, according to the Zoning Ordinance, the Board must not grant a special exception unless there is a finding that the proposed use would comply with all general and specific standards that the Zoning Ordinance sets forth, and that the burden of doing so is on the applicant. The County notes

that the Board found that Costco did not meet several general conditions, including a showing of a lack of adverse health effects. The County further observes that non-inherent adverse effects alone are a sufficient basis to deny a special exception under § 59-G-1.2.1. The Board denied the special exception in this case because it found that three non-inherent effects stemming from the proposed use—location, size and queuing—were adverse. More specifically, the County avers that the “Board found that the non-inherent characteristics of [Costco]’s proposal, at this particular location, at the level of usage planned, with the proposed design, and the proximity of residents, including a swimming pool and the Stephen Knolls School, created adverse effects warranting a denial of [Costco]’s special exception.”

The County also contends there is substantial evidence in the record demonstrating that the proposed gas station would have adverse effects on people in the area, citing to Dr. Jison’s and Dr. Breysse’s testimony before the Hearing Examiner. The County maintains that Costco failed to carry its burden below because the credibility of its own air quality expert, Dr. Sullivan, was undermined after he changed his testimony so frequently. The County finally posits that compliance with the NAAQS was not enough, that Costco also “has the burden to prove that it met the general and specific standards to be granted a special exception and . . . compliance with national or state regulations is insufficient to meet that burden.” KHCA and SCGC are in accord with the County on this point.

Appellee Dr. Adelman points out in his brief that “in setting NAAQS standards, the EPA establishes an upper bound for acceptable levels of various air pollutants. It does NOT state that levels below this upper bound are acceptable/desirable . . . [n]or does the

EPA address how close to the standards one can come in a ‘microenvironment’ such as the region” where the proposed gas station is sited.

As discussed *supra*, Montgomery County Code § 59-G-1.2.1 provides that, in its special exception inquiry, the Board of Appeals must consider both inherent adverse effects and non-inherent adverse effects of a proposed use and that “[n]on-inherent adverse effects, alone or in conjunction with the inherent effects, are a sufficient basis to deny a special exception.” *See also Montgomery Cty. v. Butler*, 417 Md. 271, 290-91 (2010) (citation omitted)). Section 59-G-1.21, in turn, sets out nine criteria that the petitioner must prove, by a preponderance of the evidence, before the Board of Appeals can grant a special exception. Even if proven, however, “[t]he fact that a proposed use complies with all specific standards and requirements to grant a special exception does not create a presumption that the use is compatible with nearby properties and, in itself, is not sufficient to require a special exception to be granted.” § 59-G-1.21. Thus, as the Court of Appeals has said, “presenting a prima facie case meeting the [Montgomery] County Code’s standards and requirements applicable to specific special exception use does not ensure the approval of the special exception application.” *Butler*, 417 Md. at 291.

We note the Hearing Examiner’s decision and, in turn, the Board’s final decision and order are undergirded by substantial evidence that was adduced over the 37 days of hearings. Without repeating that voluminous testimony, we point to just some testimony demonstrating the adverse health impacts of the proposed station *at the proposed location* in such proximity to peoples’ homes, a swimming pool and the Stephen Knolls School. Dr. Cole testified that levels of the relevant pollutants emitting from vehicles increase as a

car’s speed decreases, which would be a concern with the number of idling cars attendant to the proposed Costco gas station. Dr. Jison testified to the deleterious effects of PM_{2.5} on the lungs of people with asthma and that even “low” levels of PM_{2.5} could be dangerous to at-risk groups (some of whom are at the Stephen Knolls School). Dr. Breyse testified that the children at the Stephen Knolls School were particularly susceptible to the pollutants that would issue from the proposed gas station and explained that the EPA standards were guideposts, but not magic bullets. Further, residents of the neighborhood, School faculty, and parents of children at the School testified as to the disabilities of the children at the School and their concerns as to the potential adverse effects of the gas station on the children.

Against this stood the testimony of Mr. Sullivan and Dr. Chase. Mr. Sullivan’s testimony was undermined by computation errors that he had made in his initial report that were brought to light during cross-examination. Dr. Chase placed reliance on anecdotal evidence and articles addressing diesel gas, which the gas station would not sell.

We agree with Appellees that the Hearing Examiner did not ignore the NAAQS standards in making his decision.¹² He astutely recognized that the EPA’s standards, as iterated in its February 9, 2010 rule, were set on a gradient—that peak NO₂ levels would be set at 100 ppb but that area-wide concentrations were significantly lower because the

¹² As stated previously, the Clean Air Act requires the EPA to set the NAAQS for various harmful pollutants, including NO₂, PM_{2.5}, and CO. *Sierra Club v. EPA*, 705 F.3d 458, 460 (D.C. Cir. 2013) (citing 42 U.S.C. §§ 7401, 7409). The States, however, are tasked with the primary responsibility of implementing the NAAQS, and they must submit to the EPA a State Implementation Plan (“SIP”), explaining the manner in which the State will achieve compliance with the NAAQS. *Id.*

EPA sought to “ensure lower pollution away from the source.” (Emphasis by Hearing Examiner). In a highlighted passage, he seemingly recognized that the EPA sought to set a standard “neither more nor less stringent than necessary.” *See* 75 Fed. Reg. 6,474, 6,502 (Feb. 9, 2010). This is because the standards are not designed “to protect the most sensitive individual[]” but are to “reduce[] risk sufficiently so as to protect the public health with an adequate margin of safety.” *Id.* Thus, despite contentions to the contrary, the Hearing Examiner did not ignore NAAQS; instead, he based his review on evidence presented about the proper reading of the NAAQS standard as well as additional information related to the health effects of the projected emissions in the immediate neighborhood. The NAAQS standards are not meant to govern over specific conditions in specific locations—these blanket standards simply cannot account for localized issues, such as placing a massive gas station in a location near highly sensitive populations.

The special exception should not be evaluated against one air quality standard, but rather, on the criteria in the Zoning Ordinance, including whether the adverse effects at the proposed location would be greater than they would be elsewhere. *See Loyola College*, 406 Md. at 102-06 (interpreting *Schultz v. Pritts*, 291 Md. 1 (1981)). Indeed, Judge Bair’s determination on this point is spot on:

Ultimately, while the NAAQS may serve as a tool to analyze compatibility, they do not change the broader scope of the Board’s inquiry in determining whether to grant a special exception. It is the Board’s task to look at the specific proposed use at a particular site and determine whether there would be any adverse effects. The NAAQS standards were not adopted for this purpose, nor were they adopted with a specific neighborhood (or use) in mind. Therefore, compliance with the NAAQS is not equivalent to an affirmative establishment that no adverse health effects would arise from a proposed use.

Accordingly, the Hearing Examiner’s summation reflects the proper analysis in denying Costco’s application:

[My] evaluation leads to the conclusion that this particular proposal, at this particular location, at the level of usage planned (12,000,000 gallons of gas sales a year), with the proposed design, and the proximity of residences, a community swimming pool and the Stephen Knolls School which serves many medically fragile children, is, on balance, not a compatible use. It should be emphasized that this determination is based on the very specific facts of this case, and should not be taken as a finding that all auto filling stations of this size are problematic.

Based on the evidence presented, the issue of adverse health effects was at least “fairly debatable.” *Butler*, 417 Md. at 284. It is not the function of an appellate court to “engage in an independent analysis of the evidence[.]” *id.* at 283 (quoting *White*, 356 Md. at 44) (other citation and quotation marks omitted), and we do not second guess the Hearing Examiner or the Board of Appeals. Thus, we hold that there was substantial evidence in the record to decide that Costco failed to carry its burden “of going forward with the evidence, and the burden of persuasion” that the special exception “[would] not adversely affect the health, safety, security, morals or general welfare of residents, visitors or workers in the area at the subject site[.]” *See* Montgomery County Code § 59.G-1.21 (a)(8) & (c).

IV.

The Board’s Finding of Incompatibility

Finally, Costco contends that the Board’s finding of incompatibility based on traffic and congestion was erroneous. Costco submits factual arguments that the proposed station would not cause a noticeable increase in traffic in the neighborhood, citing Mr. Guckert’s testimony before the Hearing Examiner. Costco observes that the technical staff stated that

the traffic would be compatible with the site, and the Board made several findings of compatibility; therefore, the Board’s determination that traffic impacts from the proposed gasoline station would be incompatible was internally inconsistent, arbitrary and was not supported by substantial evidence.

Montgomery County responds by noting that, while the Hearing Examiner did not find that the additional traffic would constitute a hazard or a nuisance, he did find that it would add to the incompatibility of the proposed location. The County further observes that the traffic concerns were not a standalone reason for denial of the special exception and that they add just one more reason for a finding of incompatibility. The County contends that the Board had substantial evidence before it to find incompatibility and, citing to *Butler*, 417 Md. at 291, states that, even if Costco had fulfilled the statutory criteria for a special exception, there would still be no presumption that Costco was entitled to its special exception. KHCA and SCGC also contend that there was substantial evidence to support the Board’s decision.

We agree with Montgomery County on this point for the same reasons that we did on the adverse health effects issue—substantial evidence in the record supports the Board’s conclusion. Although Mr. Guckert testified that there would be a negligible addition of traffic to the site if the proposed use were granted, the Opposition undermined his testimony by finding an error in his calculations, as was the case with Mr. Sullivan’s testimony.

Once again, we note that it is not our function as an appellate court to second guess the fact finder and perform an independent, *de novo* review of the record. *Butler*, 417 Md.

at 284. Even if we would make a different decision if originally presented with these facts, we must say that the issue was “fairly debatable[.]”¹³ *See id.* In sum, we conclude that there was substantial evidence in the record to support the Board’s finding of a lack of compatibility.

**JUDGMENT OF THE CIRCUIT COURT
FOR MONTGOMERY COUNTY
AFFIRMED. COSTS TO BE PAID BY
APPELLANT.**

¹³ Even if we were to agree with Costco on this ground, this would not independently support a reversal. We observe that, although the Board did not make this distinction itself, the Hearing Examiner noted that his finding of potential traffic and congestion issues would not independently warrant denial of the special exception.