



Community Environmental
Advisory Commission

CONSENT CALENDAR
February 23, 2021

To: Honorable Mayor and Members of the City Council
 From: Community Environmental Advisory Commission
 Submitted by: Ben Gould, Chairperson, Community Environmental Advisory Commission
 Subject: Prohibition on the Sale of Gasoline, Diesel, and Other Carbon-Based
 Transportation Fuels by 2045

RECOMMENDATION

Review and refer to the City Attorney for finalization the attached ordinance prohibiting the sale of gasoline, diesel, and other carbon-based transportation fuels effective January 1st, 2045.

POLICY COMMITTEE RECOMMENDATION

On January 20, 2021, the Facilities, Infrastructure, Transportation, Environment & Sustainability Policy Committee moved to send the item with a positive recommendation for Council to take no action on the item but to provide the item to staff as background for consideration, particularly as the Federal landscape changes under the new administration and to explore whether the City has the legal authority to pursue. Vote: All Ayes

FISCAL IMPACTS OF RECOMMENDATION

Some staff time for review and finalization of the ordinance. Adoption of the ordinance itself may expose the City to potential fiscal impacts, including risk of a lawsuit and, if ultimately enforced, additional fiscal impacts from impacts to sales, property, and other tax or fee revenues.

CURRENT SITUATION AND ITS EFFECTS

Numerous Berkeley businesses are fossil fuel dealers, promoting the sale and use of carbon-based transportation fuels which are known to pollute our air, water, and soil; pose major fire risks; contribute to the risk of cancer; and are either potent greenhouse gases or, upon combustion, leading contributors to climate change.

These carbon-based transportation fuel dealerships – colloquially known as gas stations – are known to cause significant traffic and congestion, generate elevated levels of carcinogenic air pollutants in their local neighborhoods, and are frequently found to have leaked toxic chemicals into the ground, contaminating our soil and groundwater.

In 2018 alone, according to California Energy Commission data, over 20 million gallons of gasoline was sold in Berkeley at roughly 15 gas stations throughout the city. Ten of these gas stations had unresolved CalEPA violations as of October 2019.

The transportation of these fuels is also extremely dangerous. Vehicles transporting or storing fossil fuels regularly collide, leading to fuel spills or leaks – further contaminating water and/or soil and/or air – and posing major risks of fire or explosion, with the potential for significant damage to property and harm to public safety. Alternatively, even if the vehicles themselves do not themselves have fuel leaks, the firefighting materials that must be used to prevent serious fires or explosions are themselves hazardous and difficult to clean up.

These fuels are typically used to power the operation of roughly 97% of all vehicles registered in the City of Berkeley. However, the City, County, and State are all working to dramatically increase the use and availability of vehicles which do not rely upon these hazardous chemicals. One such alternative – electric vehicles – are expected to reach price parity with traditional combustion-powered vehicles by roughly 2025. In addition, the City of Berkeley has adopted the goal of carbon neutrality by 2045, which – if successful – will require ending the use of these fuels.

There are also numerous other fossil fuel dealerships located outside of Berkeley, ensuring that these fuels are still accessible to anyone who is either unable or chooses not to switch to alternatives.

At a regular meeting on Thursday, November 14, 2019, the Community Environmental Advisory Commission unanimously approved a motion to send the *Prohibition on sales of Carbon-Based Transportation Fuels by 2045* recommendation to City Council (M/S/C) Gould, Hetzel. Ayes: Simmons, Varnhagen, Hetzel, Goldhaber, Gould. Abstained: De Leon. Absent: Ticconi.

BACKGROUND

Berkeley has permitted and even encouraged the sale of transportation fuels for decades. In recent years the cumulative harmful impacts of these chemicals across environmental, health, and safety impacts has become clear, and recently the City Council adopted a Fossil Fuel Free Berkeley resolution, setting the goal of eliminating fossil fuels – the majority of which are carbon-based transportation fuels – in Berkeley.

Gasoline, diesel, and other carbon-based transportation fuels are known to be harmful chemicals, posing a variety of risks to human health, public safety, and the environment,

both of their own virtue and as a result of their combustion or oxidation for powering transportation^{1,2,3}.

These chemicals have the same health and safety risks and environmental impacts regardless of the source or feedstock – benzene, found in gasoline, is a known carcinogen whether it is derived from petroleum or from corn, and biodiesel poses the same fire risks as regular diesel. As a result, truly addressing the health and safety impacts of these chemicals requires addressing the chemicals regardless of their origination source.

The hazards of these chemicals are significant and acute, and even if the chemicals themselves do not escape into the environment or catch fire, the risk of them doing so is so severe that efforts to control or prevent them from doing so is similarly damaging.

In one recent instance in Berkeley, the cargo of a recycling truck caught fire. This recycling truck was also carrying compressed natural gas (CNG), a type of carbon-based transportation fuel. In a memo by the city manager, this fire was described as “extremely dangerous,” a “highly explosive threat to nearby people and homes,” and a “potentially explosive, deadly disaster,” due to the risk of the CNG either catching fire or heating up to the point of explosion. According to the memo, a similar garbage truck fire in 2015 created “an explosion that sent shrapnel in 360 degrees, including one compressed natural gas tank that flew a quarter of a mile.”

To put out this fire fast enough to prevent this potentially deadly explosion, the firefighting team deployed special foams originally designed to fight wildfires. These foams spilled into a storm drain and polluted Berkeley’s natural waterways, leading to the death of 63 threatened Central Coast California Steelhead Trout.

Even if Berkeley’s trucks were fueled with a renewable, non-fossil CNG, this near-disaster – and the lesser disaster that resulted from it – would have happened regardless. The health and safety risk derives from the chemical nature and composition of the fuels, not the feedstock used to create them.

ENVIRONMENTAL SUSTAINABILITY

Banning the sale of gasoline, diesel, and other carbon-based transportation fuels will improve local air quality, protect our soil and waterways, and improve public health and safety.

¹ Material Safety Data Sheet: Gasoline, All Grades, Vermillion County, IL: <https://www.vercounty.org/MSDS/EMA/9950allgradesgasoline.pdf> (accessed September 2019)

² Safety Data Sheet: Diesel Fuels, Valero: https://www.valero.com/en-us/Documents/OSHA_GHS_SDS/SDS%20US%20-%20102-GHS%20DIESEL%20FUELS%20rev2%205-14.pdf (accessed September 2019)

³ Safety Data Sheet: Natural Gas Odorized, Hess Corporation: <https://www.hess.com/docs/us-safety-data-sheets/natural-gas.pdf?sfvrsn=2> (accessed September 2019)

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The proposed policy is categorically exempt from CEQA under CEQA Guidelines Sections 15307 and 15308.

RATIONALE FOR RECOMMENDATION

Eliminating the sale of these carbon-based transportation fuels will reduce one of the major environmental, public health, and safety hazards currently prevalent in the City of Berkeley.

Providing a 25-year phaseout period will ensure a smooth transition that businesses and individuals can successfully plan for without unconstitutionally taking or eliminating economic uses of property.

ALTERNATIVE ACTIONS CONSIDERED

CEAC considered taking no action, but determined that continuing to permit the sale of carbon-based transportation fuels would not achieve a fossil fuel free Berkeley, as set forth in the Fossil Fuel Free Berkeley resolution.

CEAC considered providing a carve-out exemption for carbon-based transportation fuels that are derived from non-petroleum / fossil sources. CEAC determined that such an exemption would be prohibitively difficult to enforce, and would not achieve the desired goal of reducing health and safety risks.

CEAC considered prohibiting only certain carbon-based transportation fuels, but did not find substantial health and safety, or environmental reasons which would justify permitting gasoline, diesel, or compressed natural gas but not the others.

CEAC considered a shorter phase-out period (such as 2040 or 2030) or a more extended one (such as 2050 or 2055) but determined that 2045 best aligned with other policies and programs in place, proposed, or likely at the local, regional, state, and national level to ensure that an adequate supply of vehicles and infrastructure to support non-combustion vehicles. However, it is possible that all of Berkeley's fossil fuel dealerships could go out of business sooner than 2045, due to a transition away from combustion fuel usage, in which case this policy would have no significant effect.

CITY MANAGER

The City Manager takes no position on the content and recommendations of the Commission's Report.

CONTACT PERSON

Ben Gould, Chair, Community Environmental Advisory Commission, 510-725-9176

Attachments:
1: Ordinance

ORDINANCE NO. -N.S.

AMENDING BERKELEY MUNICIPAL CODE TITLE 9 TO PROHIBIT THE SALE AND
TRANSPORTATION OF FOSSIL FUELS.

BE IT ORDAINED by the Council of the City of Berkeley as follows:

Section 1. That the Berkeley Municipal Code Chapter 9.98 is added to read as follows:

Chapter 9.98
SALE OF TRANSPORTATION FOSSIL FUELS

Sections:

9.98.010	Findings
9.98.020	Purpose
9.98.030	Definitions
9.98.040	Prohibition
9.98.050	Severability

9.98.010 Findings

A. Carbon-based transportation fuels, such as gasoline, diesel, and others, are known to be harmful and hazardous chemicals, contributing to cancer, climate change, and known to pollute our local air, water, and soil.

B. Carbon-based transportation fuels pose major fire and explosive hazards, with risk to public health and safety.

C. The transport, storage, and sale of transportation fuels exacerbates all risks associated with these chemicals.

9.98.020 Purpose

The purpose of this chapter is to promote the health and safety of Berkeley residents and visitors, and to address environmental impacts and public health and safety impacts from transportation fuels.

9.98.030 Definitions

For the purposes of this chapter, the following words and phrases shall have the meaning respectively ascribed to them by this section:

A. "Transportation fuel" shall mean any gasoline, diesel, compressed natural gas, or other carbon-based fuel which is intended to provide power or propulsion to any land motor vehicle through its combustion or oxidation.

9.98.040 Prohibition

Beginning January 1st, 2045, it shall be unlawful to sell, trade, or distribute any transportation fuel by any means anywhere within the City of Berkeley.

9.98.050 Severability

If any section, subsection, sentence, clause or phrase of this chapter is for any reason held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining portions of this chapter. In addition, the City Council hereby declares that it would have passed the ordinance codified in this chapter, and each and every section, subsection, sentence, clause or phrase not declared invalid or unconstitutional without regard to whether any portion of this chapter would be subsequently declared invalid or unconstitutional.