# **CLIMATE ASSESSMENT FOR**

# ZTA 25-09, Funeral and Interment Services – Alkaline Hydrolysis

#### PURPOSE OF CLIMATE ASSESSMENT

The purpose of this Climate Assessment is to evaluate the anticipated impact of the zoning text amendment (ZTAs) on the county's contribution to addressing climate change. The assessment will provide the County Council with a better understanding of the potential climate impacts and implications of the proposed ZTAs, at the county level. The scope of the Climate Assessments is limited to addressing climate change, specifically the effect of the land use recommendation of the ZTA on greenhouse gas (GHG) emissions and carbon sequestration, and how actions proposed by the ZTA could improve the county's adaptive capacity to climate change and increase community resilience.

#### SUMMARY

The ZTA will have minor positive impacts on carbon emissions and impacts on the county's goals of addressing greenhouse gas emissions, carbon sequestration, and ensuring resilience and adaptive capacity of our communities. There are slight negative impacts on adaptive capacity factors associated with the potential decrease in business for currently operating cremation companies. Slight positive impacts stem from the potential decreased number of vehicle trips, increased air quality, and increased business flexibility for Funeral Homes, Undertakers.

#### BACKGROUND AND PURPOSE OF ZTA 25-09

This Zoning Text Amendment was introduced by the District Council on June 17, 2025. The purpose of the ZTA is to allow alkaline hydrolysis as part of the Funeral Home, Undertaker and Crematory uses. Under the current Zoning Ordinance, alkaline hydrolysis is not listed as an allowed use, and cremation of remains is prohibited. This ZTA will allow Funeral Homes, Undertakers, to conduct alkaline hydrolysis on the premises, which is a more environmentally friendly option than cremation.

## VARIABLES THAT COULD AFFECT THE ASSESSMENT

For many ZTAs, it is difficult to determine the impacts on climate because of variables such as the scale and location of change, which may be difficult to ascertain. With this ZTA, there is a limited set of locations and situations where this activity could occur, resulting in less uncertainty.

## ANTICIPATED IMPACTS

There are both slight positive and negative impacts anticipated with ZTA 25-09. Due to the narrow scope of impacted properties with the ZTA, any impacts will be minor in their impact on the county meeting its climate goals.

#### GREENHOUSE GAS EMISSIONS, CARBON SEQUESTRATION, AND DRAWDOWN

The following variables are identified as having a slight impact on carbon emissions as determined in the assessment worksheets found in *Climate Assessment Recommendations for Master Plans, and Zoning Text Amendments in Montgomery County.* 

#### **GHG Emissions and Sequestration Checklist of Variables**

#### Transportation.

- **Number of trips**: Since funeral homes will have the ability to conduct alkaline hydrolysis on site, there will be no need to transport the deceased bodies off-site to a crematory. This may result in fewer vehicle trips needed to transport deceased bodies than is currently necessary for the cremation of deceased bodies.
- **Emissions from business operations:** There will be a decrease in GHG emissions as a result of alkaline hydrolysis taking the place of some cremation efforts. Cremation involves the incineration of deceased bodies, which releases carbon dioxide (a greenhouse gas) into the atmosphere. Additionally, incineration requires the use of fuel, which can further contribute to greenhouse gas emissions if the fuel being burned is fossil fuel such as natural gas or propane.

#### COMMUNITY RESILIENCE AND ADAPTIVE CAPACITY

Montgomery Planning anticipates that ZTA 25-09 will most likely have a net slight positive impact on Community Resiliency and Adaptation, as the decreased amount of cremation and increase in business flexibility will be a result of the environmentally friendly alkaline hydrolysis option.

#### **Community Resilience and Adaptive Capacity Checklist of Variables**

#### Sensitivity Related Factors.

• **Change to air quality**: There may be a minor to slightly positive impact on air quality. Unlike cremation, alkaline hydrolysis does not emit greenhouse gases into the atmosphere. By having the option for alkaline hydrolysis for the disposal of deceased bodies, the reliance on cremation will be reduced. This would result in a decrease in emissions that result from the incineration involved with cremation, thus positively impacting air quality.

#### Adaptive Capacity Factors.

• Change in availability or distribution of economic and financial resources: There may be both slight positive and slight negative impacts on the availability or distribution of economic and financial resources. This ZTA could positively impact Funeral Homes, Undertakers with increased flexibility as they will be able to conduct alkaline hydrolysis on deceased bodies on site and expand their business capabilities. This could negatively impact cremation companies, though, as they could potentially lose business to the implementation of alkaline hydrolysis inside funeral homes.

# RELATIONSHIP TO GREENHOUSE GAS (GHG) REDUCTION AND SEQUESTRATION ACTIONS CONTAINED IN THE MONTGOMERY COUNTY CLIMATE ACTION PLAN (CAP)

ZTA 25-09 does not involve any greenhouse gas or sequestration reductions or improvements related to the County's Climate Action Plan.

#### **RECOMMENDED AMENDMENTS**

Planning staff does not have any recommended climate-related amendments to ZTA 25-09 because it will have minor, positive impacts on the County's goals regarding greenhouse gas emissions and sequestration rates. The ZTA does not offer obvious additional opportunities for decreasing any potential negative climate change-related impacts, nor to significantly enhance positive climate change-related impacts beyond the potential benefits associated with the proposed use as discussed in this assessment.

## SOURCES OF INFORMATION, ASSUMPTIONS, AND METHODOLOGIES USED

The climate assessment for ZTA 25-09 was prepared using the methodology (tables 1, and 2) for ZTAs contained within the <u>Climate Assessment Recommendations for Master Plans and Zoning Text</u> <u>Amendments in Montgomery County, December 1, 2022</u>.